UNDERGROUND STEROUND HANDBOOK

UNDERGROUND STEROID HANDBOOK II

Incorporating material from the original Underground Steroid Handbook, Ultimate Muscle Mass, and the USH Updates #1-10

by

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REVISED EDITION

FIRST PRINTING

Printed in the United States of America

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Cover art by Tara Lee Torburn

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CHAPTER ONE

PREFACE TO THE SECOND EDITION

Honesty, I never, never thought about doing a second edition to the UNDERGROUND STEROID HANDBOOK. There should be many more interesting, socially acceptable things for me to do, and life is so short, even if I didn't use steroids. If you never heard about or read the first edition of the UNDERGROUND STEROID HANDBOOK let me give you a little background. I wrote the original Underground Steroid Handbook (USH) early in 1982. It was essentially a 'how to' course on steroids, written over a two week period under the influence of a megadose of Testosterone Cypionate.

Let me be the first to tell you about the recent hormone research: a high testosterone level does not impair your verbal skills, it just makes them seemingly unintelligible (read: warped and sick) to people with high estrogen levels. The USH crammed 18 pages with tiny, almost impossible to read type and tried to touch all the bases about the real world use of anabolic/androgenic steroids as I know it then, in 1982. The pamphlet was easy to understand by the average athlete, combining medical research, anecdotal information, personal experiences, and instinctive hypotheses, interspaced with cartoons in extremely poor taste. Running throughout the text was a jaded, pessimistic, and sometimes overtly cruel streak of humor.

Although the USH ended up becoming a subculture sensation to hardcore muscleheads, I never made a lot of money on the thing; didn't make the cover of Time or Newsweek either. Athletes who used steroids embraced the schizoid dictum with a collective mutter of, 'Finally, someone said itl' The medical community was predictably miffed, and inadvertently I evolved into a kind of cult crusader, although anti-steroid people like Dr. Bob (Death in the Locker Room) Goldman might consider me the Jim Jones of such a cult. I've been labeled the bad boy of bodybuilding, the renegade researcher; 'steroid guru' is popular lately.

The USH never sold well because basically I was a lousy salesman. The book wasn't copyrighted and it was easy to photocopy. It was sold by direct mail order through specialty magazines and most of the magazines pulled the ad out as soon as it was apparent that the book was advocating DRUG USE. This does not mean that the book didn't get around. I must have sold at least 40.000 copies over the years. I've seen tons of photocopies. I own various foreign language editions of the USH. It has been rewritten and passed around in France, Germany, Holland, and Sweden, along with bootleg copies sold mail order in two British bodybuilding magazines. Just last month I saw an ad for it in a newsletter originating in Canada. Over the six years that this crude pamphlet has been circulating around, it has been guoted on CBS's 60 minutes, in Sports Illustrated, the Los Angeles Times, the New York Times, and in just about every major (and minor) bodybuilding magazine. If on one day I wasn't hounded by the BBC, I was followed by the FBI. I don't know just how many federal agencies picked through my trash for over three years, but I know they did. Someone from the FDA told me how frustrated they were that I shredded all the really important trash with the same type of shredder that they used.

I'm pretty much ambivaient about this continuing notoriety, mostly because I never imagined that the USH was going to be considered all that great or cataclysmic a book about steroids. I still wonder, why is the general public SO interested in these drugs; very few people use them. I was always a little embarassed in calling it a 'book', as short as it was. I'm a college graduate but the only college science courses I took were in Astronomy. I never worked with a medical doctor, nor are there any pharmacists in my family. Actually I never took any medical or biology courses in high school or in college. I did dissect an earthworm in elementary school. In spite of all this (maybe because of it?) I will say with complete confidence that I have turned out to be the most competent expert on practical steroid use. No doctor, researcher, coach, or also-ran guru can match what I (sometimes accidentally) accomplished over the years. Sorry if I sound arrogant, but I have encountered no one having my abilities in counseling athletes (both male and female) on improving their size, strength, appearance and performance without compromising their health. Let me be the first to prick my ballooning ego by saying that I have gotten to this position passively and by default.

I do believe that the USH, yes, even the old one, is still the best practical text on steroid use only because all the others are so bad.

Oh, they've been written by MDs and PhDs, and were printed more attractively, but as far as a manual that an average athlete can read, understand, and use for immediate, discernible benefit, the ratty, outdated, little USH still has no peer. Let me confess that I don't feel all that swell about being the de facto steroid guru. There certainly are more knowledgable people able to do the work. I guess that my combination of being smart and knowledgable and creative along with the correct temperament (also known as a morbid fascination) for the work has kept me unique in this field so far. The other major reason I have become the harbinger of hormonious truth is simply because I have the least to lose in confronting the self-appointed medical authorities with three unthinkable words: You are wrong.

But, as I've implied, I'm not perfect, which is a graceful way of admitting I've not always been right. As I learned more about the idiosyncrasies of steroid use in athletics, I realized that I had made some bloopers in the original USH.

Granted, sometimes I knowingly bent the truth a bit to make it easier to understand, but occasionally I was flat out wrong. Not so seriously that the information would endanger someone's health, but details here and there needed to be corrected. Also, new products had hit the black market, the designer steroids, and were being used with no guidance or rationality. So, motivated by a sort of skewed sense of moral obligation, I began to publish sporadic Updates which corrected any boners I had made in the first USH, along with reviewing the new and fashionable steroids that athletes were using. However, I ran into trouble here too; sometimes the Updates contained errors, mostly apparent only to myself and a handful of anabolic adepts as more information accrued.

The years rolled by and I realized that I really should update the Updates. However, at this time the media covering athletics in America became rampantly anti-steroid. The megalomaniac of muscle, Ben Weider (who, inarguably, owns the sport of bodybuilding), and his idiot-savant Bob Goldman, pumped up all the Weider specialty magazines (Muscle & Fitness, Flex, Shape, Men's Fitness) with relentless anti-steroid propaganda, spreading it from these specialty periodicals, to newspapers, and on to television. The

the federal government jumped into the misinformation spree, abandoned their usual laissez-faire attitude and started cracking down on the relatively benign-but-illegal black market steroid trade.

At this point I said to myself, Time to make that mid-life career change, do something really unusual, like pursue what you spent six years in college for.' But then it happened: I got pissed, I stayed pretty calm when I was arrested. I didn't got too upset when they set my bail at one million dollars. I view the two months I spent in jail as a rewarding experience. But I had a very hard time staying nice and complacent when, knowing the subject intimately, I knew I was being lied to. And I'm going to tell you with all intellectual and heartfelt conviction that the government, the Weider Media, Dr. Bob Goldman, and just about all other media writers (Alfano and Janotsky of the N.Y. Times excepted) have knowingly lied to you about steroids.

I have never lied about steroids, and I'm not going to now.

Look, I'm not an altruistic person; things like plain, ordinary lies don't hurt me; hey, we're in America, we should be used to stuff like this, happens every day. No, I'm pissed because this anti-steroid propaganda has resulted in a lot of excellent steroids going off the market and too, too many fake, dirty, and potentially dangerous drugs replacing them.

I choose to live my life in an enhanced metabolic state because I function better this way. I'm stronger, more attentive, less lazy, and yes: healthier while using anabolic steroids. I don't want to go without them for the same reasons that, for example, some particular person wouldn't go without thyroid, or another wouldn't go without, say, Valium: if the drug doesn't damage your health (and I assure you, I am very healthy while using steroids) and improves your day to day life, why not take advantage of what science and technology has created for us?

I am going to tell you some very disturbing things, the truth about the propaganda campaign against steroids because this campaign has compromised the quality of my life and many of my friends' lives. I'm going to get as close to legally naming names that I can and certain people are going to get supremely distressed. In fact some may have to make their own mid-life career changes.

They can try to sue me, but all they'll accomplish is to make me more of a martyr than I've become already. I never used to grant interviews. Now I do. I never would confront doctors on radio and television. Now I relish the debate. Granted, it's not 'good clean work'. By the time you read this I may be incarcerated again, so let's not talk about job security. So? So, alright, let's all get some grubbles on 'cause it's time to sling some dirt!

CHAPTER TWO

WHY THIS BOOK HAD TO BE WRITTEN AGAIN

Do I have to remind you that the federal government wants a drug free America? As I wrote this chapter the Surgeon General came out with a strong public announcement proclaiming that the nicotine in cigarettes is an addictive drug with more severe withdrawal symptoms than heroin. We know that recreational drugs such as alcohol, nicotine, marijuana, etc. are harmful to your health, and also can cause death. Doctors are now more hesitant to prescribe many drugs that were thought to be acceptable therapy in the past.

Ritalin, an excellent CNS (central nervous system) stimulant was perceived as being over-prescribed to hyperactive children (it wasn't). Public outrage pressured the FDA to bump it to a more restrictive schedule 11 class. If you don't know, the lower the number, the more danger or abuse potential there is associated with the drug. Schedule I's are mostly experimental and 'dangerous' drugs. Most diet pills are IVs, amphetamines are IIs. Valium is a IV. On the national level, anabolic steroids are not scheduled by the FDA. Individual states may schedule a drug differently than its FDA schedule. In California steroids are now a schedule III drug. Florida has them as a schedule IV. Scheduling a drug involves more paperwork for a doctor or pharmacist to obtain it. Also scheduling can define criminal sentencing and fines if the drugs are used illegally.

It is, at least outwardly, fashionable to be 'natural', drug free. We are barraged with constant media public service announcements, even advertisements ranging from health foods to hairspray, conditioning us to this way of thinking. Right now 'natural' is still a powerful selling attribute. A friend of mine, rational in most other aspects of his life, proclaims that he is against drug use of any kind. Let me put this puritanical ideology in a realistic light. When I have a tooth filled, I ask my dentist for Novacaine. When I have a headache, I take an aspirin. I didn't balk at my polio vaccination when I was a kid, and I'll stand in line for it if ever an AIDS vaccine is discovered. If I'm sleepy while driving, I'll drink some coffee for its caffeine content. I put Clearasil on my pimples when I was a teenager, and yes, I use Retin-A now that I'm middle-aged. Am I that much different from you, or for that matter, my puritanical friend?

So, agreed, it's unfashionable to advocate drug use, and (putting it mildly) very unhip lately to be an athlete found using steroids. Please, please realize that this stance, this belief, is dogmatic, arbitrary and capricious. To illustrate how you have been conditioned, let me have you think about contraceptive steroids for a moment.

A contraceptive steroid, in America, is essentially just another recreational drug. Simply put, contraceptive steroids make sex an act of recreation rather than its primary purpose of procreation. Contraceptive steroids do have deleterious side effects, some very similar to anabolic steroids. The difference is that contraceptive steroids are somewhat socially acceptable. I say 'somewhat' because most of the American pharmaceutical companies making contraceptive steroids have recently curtailed ongoing research to improve their products. Many companies have shut down their research facilities entirely. All the progressive new contraceptive methods are being developed and used in

Europe with no plans of FDA approval. But, aside from this recent development, you must grudgingly admit that contraceptive steroids have a majority of the general public's approval.

In a convoluted way, I'm making the point that steroid use in athletics is unfashionable simply because of the negative propaganda mounted against it. The socially accepted recreational drugs such as alcohol, nicotine, and contraceptive steroids have documented evidence to be life threatening; however, the anti-steroid view is essentially an arbitrary one based on moral arguments, and also hypocritical, because in the researchable body of medical literature, there is only one documented case of a healthy athlete dying from steroid use.

You may find additional allegations in various newspapers and magazines, but in the way scientists acquire statistical evidence, steroid use in athletics has come out as an unusually safe endeavor. I'll interject a little anecdote: When I was interviewed by the head coordinator of the Federal Steroid Task Force (yes there is such a thing), I noticed that he was a chain smoker, drank scotch daily, was overweight, didn't exercise, and usually had dinners dripping with saturated fats. When he self -righteously asserted that steroids were dangerous, I silently wondered what his cholesterol level was (mine's 193 while on steroids), what his blood pressure was, what the tests would show his liver functions to be, and what his lung capacity was.

I was ethically compelled to rewrite this book because you are being lied to about steroids. I know the truth and I want you to know it also. That's it. I'm not going to advise you to use them; I am not a steroid advocate; I am a truth advocate.

I will tell you what can be beneficial about steroid use and what could harm you physically, emotionally, and even socially. In fact, I'll probably do a better job of educating you about the dangers of steroids than Dr. Bob ('no he-shes for me') Goldman. Before I get into the technical aspects of steroids, let me do what I promised, sling some dirt by pointing out some so-called truths, which are outright lies.

Lie #1: Anabolic steroids do not enhance athletic performance. Doesn't this just have to be absolutely true? All the drug companies include this statement in all of their steroid product inserts. The American College of Sports Medicine supports this statement. Well, if they didn't work, why do we have to test for them in amateur competitions? If they really don't make a difference, why go to all the bother? The average cost of a urine test for steroids is \$170 per sample.

Lie #2: Steroids will kill you. Okay, maybe, but as prescription drugs go, steroids are amazingly safe. If I lined up a bottle of Dianabol (a still popular steroid, generic name: methandrostenolone), a bottle of Lasix (a popular diuretic), a bottle of Valiums, a bottle of Aspirin, and a bottle of, say, Slow-K, a prescription potassium supplement, and said 'Which is the one you could swallow all 100 tablets of and be absolutely sure you wouldn't die", could you pick the safest one? I'd pick the D-bol, and so would any good doctor. Aspirin? Hey, you could burn a hole in your stomach and hemorrhage to death. The others? At least a coma, cardiac arrest, probably death soon to follow. The D-bol? A slight fever, oily skin, upset stomach, maybe; you can live with that.

<u>Steroids are prescription drugs. They have some dangerous side effects</u>. These side effects are not unknown. Not all steroids have the sarne side effects, and of course, some people may be more sensitive than others. But death? That risk has been virtually non-existent in healthy athletes.

Bottom line? Some steroids are more harmful than others; educated athletes know which ones are the harmful ones. Also, most athletes have absolutely no health problems while on steroids, some do. Some steroids are safe to use by women and children; we know which ones are. Many are not; these are also known along with their specific side effects. Accept this promise, please: do not judge steroids as a genre, but on an individual basis concerning physical health hazards. But yes, I can and will play the devil's advocate about the psychological damage that all steroids inflict. I'll get to that later.

Lie #3: You can get the same results without steroids, you just have to work longer and harder. Haupt and Rovere, two MDs writing in a 1984 American Journal of Sports Medicine laid that to rest. Well trained athletes will always encounter the ultimate performance wall, the catabolic effect of cortical steroids, secreted in response to a certain high level of training, allowing the body to get no stronger. Anabolic steroids are the only drugs which overcome the catabolic effects of cortical steroids and allow the body to break through this performance wall. Steroids increase muscle mass and strength past what they would naturally be as limited by the body's own secretions.

Lie #4: Everybody at Weider Communications (this company controls the sport of bodybuilding and bodybuilders are the highest profile steroid users) is against steroid use. Ha-ha-ha. Shall we get to the point: Ben Weider (who controls the company) is against steroid use. Most everyone who works for him, along with even some members of the IOC, think he is, well, let's be kind and settle on 'dogmatic'. How do I know this? Employees and former employees tell me stories and send me letters. A Weider employee asked me to procure Sustanon 250, a Mexican testosterone blend, so he could give his boss a weekly injection in the office. A former member of the editorial staff of Muscle and Fitness wrote me a letter (stupid Mr. Confidentiality shredded it) asking where he could procure steroids for 'Joe's favorites' now that Zak Nathan, at the time a mail order steroid dealer, was busted. One of the freelancers remembers seeing Thiomucase, the European 'cutting' drug, stacked up on office shelves with the note 'for Bertil' stuck on them. A former editor of one of the magazines swears that all those invoices from Zak's Fitness World paid with Weider checks weren't just for T-shirts. Don't get upset. You see, it just is good business these days to be anti-steroid. It sells magazines; it sells health food supplements. If you were in the Weiders' positions and wanted to be a good businessman, you'd probably give lip service to being anti-steroid, too. So as long as anti-steroid propaganda in the media keeps selling, you'll keep seeing it.

Lie #5: Bodybuilders who pass the drug tests at contests are 'natural'. That's as true as any pro bodybuilder, male or female, proclaiming that he/she never took steroids. Give me half a day and I can find out who he buys his steroids from. I probably know already. Most of the girls who pass the drug tests do it like this (hey, one top pro, one top amateur told me the same things): 21 days out they stop their Winstrol and their Anavar. They test clean. 21 days seems to be as close SO FAR as the girls dare to get to the test, although one pro girl said, off the record, that she does it in 11 days. Goldman

would have an easier time finding out who really was natural by drinking the urine samples.

Lie #6: All counterfeit steroids are fake, dirty, and dangerous. So says the government. If this were true, counterfeit steroids wouldn't be a problem. They wouldn't work, people would got sick, and very few people would buy them. The insidious nature of counterfeit steroids is that some ARE real, others are not, and they are all beginning, to the neophyte's eve, to look alike. To give an example, many of the Mexican steroids out of Tijuana are reasonably well made. When I asked the government rep to give me his test results, chemical analyses of the Mexican counterfeit steroids, he refused. From carefully questioning him, it appears that what the Mexicans mostly did wrong (other than allegedly smuggling them into the country) was put take (or real) company names on the steroids and were a bit off on their milligram dosages on some of their products. Were they dirty? The government never made that claim in their indictment. Fake? The 'old standbys' appear real, but how do you determine whether an exotic designer steroid which never commercially existed in the first place is a fake? The Dihydromesterone was originally Equipoise, then was Nandrolone mixed with Anadrol. Testosterone Enanthate was once Testosterone Cypionate. The Finajet could have been Parabolan or vice versa. Everything else seemed to be what it said it was, and subjectively appears clean. So does this give the Mexican fakes a clean bill of heafth? Of course not. I'm just illustrating that you shouldn't take to be true accusations that are not be backed up with facts, research, and documentable data, no matter where the accusations come from. By the way, American counterfeiters like to copy the Mexican D-bol because it has such a good underground reputation.

Lie #7: Ad copy: picture of a top bodybuilder or powedifter saying, 'I did it all with Weider (or any other deserving supplement company) health food supplements and you can too.' Is this a hoot or what? No, it's just business as usual. Wouldn't you like a certified 'negative' urine test dated when the ad photo was taken along with the ad copy? Sorry, that's not good business, because in the real world, these athletes try everything to get big and lean enough to be featured in the magazine, then are seduced with promises of fame and fortune to endorse So & So's Kinetic Life Ca-ca Essence and swear, 'That's what did it.' It just blows my mind that these bodybuilders use steroids to get good enough to get in the magazines and then are exploited to make money for Weider Inc. (*1 offenders) selling bupka. I'll let you in on one of the BIG secrets in bodybuilding. The great bodybuilders rarely use supplements. Just steroids. Remember: steroids are drugs; supplements are food. Food doesn't act like drugs. Drugs act like drugs.

Lie #8: Anything US Research has to say. Hey, they wrote a shitty steroid book, and now they have a bogus steroid replacement kit. Look people, take it from someone who knows, not even Growth Hormone replaces what steroids do. You still want to send these bozos money? Wipe your ass with it first. At least I'll feel a little better. But are they good businessmen? I'll be the first to say it: FIRST CLASS! I can think of no other company that plays the game as well as Weider than US Research. And no one in the health food biz writes as effective, seductive and exploitive ad copy as L&S. Just remember: they're seducing and exploiting...you!

Does it appear that I'm venting my spleen? You betcha. Am I jealous and bitter that all these people make money by lying to you? No. I made money, too (not as much, though). But I did it the honest way. I sold the goddamn steroids and made no bones

about it. When I was a steroid dealer, I believed that I was selling an honest, real product for a fair price. Sure, I broke the law, and yes, I'm waiting to go to jail. And no, I wouldn't do it again because things are much different and more dangerous now. But my conscience was clear. Why? Because I never lied to you or myself. So if you think you can stand some more truth, read on.

CHAPTER THREE

BEFORE YOU READ ANYMORE

I know that this book, just as the first edition did, will make a lot of enemies for me just because I address the topic of steroid usage realistically. Although I'll antagonize many of you, it is more important now, today, to tell the truth about steroids than it was six years ago when the first USH appeared. Back then there was just general ignorance, alchemy, and a little voodoo. Now you are subjected to a carefully orchestrated anti-steroid propaganda campaign based on hypocrisy, misinformation, and lies. Hypocrisy about steroids is relatively harmless, but lies aren't. Yes, it's true: what you don't know can hurt you. It would be an understatement to say that I have done exhaustive research on real world steroid use. For six years I've gone up and down all 12 floors of the UCLA Medical Library. I've interviewed hundreds of athletes, both male and female, from all over the world, I've queried and debated doctors and pharmacists. I've interviewed steroid dealers. I became a steroid dealer. I've been a consultant on designer steroid projects, their bottles, labels, even the shape of their tablets. I've been arrested, put in jail. I guess I know every minor authority on steroids, and have dealt with every major black market dealer. I go where no doctor or researcher ever goes: to the real world.

No matter how anti-steroid the sentiment is in the athletic world, lots of athletes still take steroids, probably as many or more now than when the original USH came out, six years ago. The government indictments have not lessened availability of steroids on the black market. Prices have not gone up. What the legal crackdown has done is lower the overall quality of the product that is out there and this development truly is a steroid problem. Many naive athletes (still) use steroids incorrectly because no one, not even doctors or pharmacists, will act pragmatically and tell them the truth.

In their defense, this is mostly because they don't know the truth. The ignorant athlete will buy the wrong drug for his purpose or health level, pay too much for it, and hope that it is not one of the numerous 'take' steroids so prevalent on the American black market. He'll get poor results or none, compromise his health, and if any progress was made, lose it all as soon as he gets off the drugs.

Of course, the easiest advice is, 'Just don't use steroids, especially now that you don't really know what you're using.' But most athletes will just nod their heads, go home, and start injecting into their bodies what they bought out of the trunk of a car anyway. To not address their problems is as morally callous as telling the hungry to 'Eat' and the poor to 'Make money.'

It would be nice it we were all so naive that we never even heard the word 'steroid'. It certainly would make athletics a lot simpler. But the word is here to stay; so are the drugs, as are the problems surrounding them. Before you read any further, I'm going to state my position on a few things. I like steroids. I also like Aspirin and Atka Seltzer. I use steroids; I have also, in the past, abused them (an aside here: using large amounts is not necessarily abusing them). I use steroids to improve my performance, my appearance, and also my health. That's right: steroids can improve your health. I use steroids in a therapeutic manner.

You hear horror stories about high cholesterol and blood pressure, impaired liver and kidney functions? Maybe so, but that's not my medical history. The answers I have arrived at don't come from controlled research studies. Sure, I've talked to doctors, pharmacists, along with the top athletes in the strength sports. When I was very young I would listen, enraptured, to anyone who claimed with enough conviction that he had found THE SECRET. Almost all of them were wrong. Let me tell you why.

Most of the legitimate, scientific, controlled steroid research done on athletes has resulted in conclusions stating that steroids are not effective in stimulating muscle growth. Of course I know that these conclusions are invalid, grossly so, as the most recent research grudgingly concludes that steroids do work. The trouble with these earlier studies was that the steroids were not administered in a realistic manner, and not always to well trained athletes. Dosages and frequency of use were too conservative. The athletes' diets were not adjusted, controlled, and monitored. Dr. Bob Goldman will propagate wild speculation about steroid side effects.

There is no proof that steroids cause liver tumors, or cause cancer in healthy athletes but those beliefs are prevalent, even among professionals who should know better. Sure, I could be cruel and stack the dock by recommending that some frail, non-athletic person who has a family history of heart disease take massive dosages of a known-to-be toxic steroid and yes, I imagine something very bad might happen to him. But here's the clincher: there is just as much of a chance that it might not. I work with the assumption that steroids are serious medications and can compromise your health if used incorrectly. On the other hand, and this is the issue I seem to stand alone on, I know that proper steroid therapy can enhance your health; it has enhanced mine. So who can you believe? Do you believe someone just because he has an MD or PhD stuck onto the end of his name? Hey, I've read articles where these 'experts' don't even spell the name of the drug correctly!

I would like you to have an open mind when you read this book. Sure I am biased toward the use of steroids. I believe in their benefit and I don't put a negative moral, political, or social judgement on their use. The general opinion of our society is that there is nothing extremely physically dangerous happening to women using contraceptive steroids, and that oral contraceptive use is socially acceptable also. Well, what can you say when I tell you that there is also nothing physically harmful for some women to use certain anabolic steroids? Steroids help performance. In bodybuilding, track and field, tennis, even mountain climbing (!) winning has no sexual preference. Granted, women do have it tougher than men in steroid use because there are not as many, in fact there's very few, steroids that don't produce socially and sexually undesirable side effects.

When an athletic endeavor changes from simple recreation to all out competition, winning becomes more important than those initial goals of health, relaxation, and camaraderie. If you morally don't accept the use of drugs in competitive athletics you shouldn't have bought this book and you shouldn't be reading it now. Look, I'm trying to help you, enlighten you, improve your health, not piss you off. Don't get your blood pressure up over me. Sure, sure, there are always athletes who are so genetically gifted and perfectly tailored for their particular sport that victory might come without drug use. Understand though, a reported negative on a urine test does not mean that the athlete has been, or is, drug free.

It just means that the governing body has announced that he passed the piss test. Steroids are the biggest help for those individuals (myself included) with poor or just so-so genetic predispositions toward athletic endeavor.

The first BIG TRUTH that you'll encounter in this book is this: If used correctly (but most athletes still don't use them correctly, doctor supervision or not) anabolic/androgenic steroids can give you permanent weight gains and significant increases in athletic performance even after stopping the steroid therapy.

Please notice that I differentiate 'use' from 'therapy'. 'Use' concerns performance only; 'therapy' balances performance with good health. This may surprise you: most steroid users never compete. So why do they use them? Simple. They use them as recreational drugs. Steroids make them feel better. And so far, the research has shown that they're safer recreational drugs than alcohol, cigarettes, marijuana, cocaine, or heroin. Almost as safe as contraceptive steroids.

I am a stickler about the truth, facts, and details in anything that piques my interest. I happen to know a lot about steroids (and I may agree with my critics that perhaps I know too much). Steroid pharmacology is one of my areas I am 'good' at; for what it's worth, there are three or four areas I'm better at than preaching about the correct applied use of steroids. People seem to be more interested in what I know about steroids because I am a unique voice in the field.

This book is giving you real world information incorporating the latest developments and advances in practical steroid use in athletics. Many of these advances have been instigated by me. Love me or hate me, you may not care for my sense of humor, or my (a)moral attitude, but frankly there is very little to argue about in the factual information presented. I happen to be a bodybuilder, train and socialize with my peers, so you will see me slant the information toward that activity. But no matter how ignorant and uneducated I find most bodybuilders to be, they appear comparative Rhodes scholars when I survey steroid knowledge and use in powerlifting, track and field, football, (even) bicycle racing, etc. . And here's what's really important about everything I say: I am my own lab rat, and I have a close circle of friends, both men and women, who also choose to be lab rats. It is a bond, arguably a sick one.

I have used every drug I'll talk about in this book. Other 'lab rats' who are objective, inquisitive, and perhaps masochistic have also used these drugs and reported their assessments. There will be no "I" heard about's concerning the hard core technical information. Yes, the last two chapters scattered some hearsay about. No, I was not in the room watching the Weider executive being injected with a cc of Testosterone. But

since I did sell it to the man who supposedly gave the shot to his boss, and he still works for Weider Inc., why would he lie? Okay, I strayed a bit. Bottom line: You should know how a drug really works, and not rely entirely on what the label, the doctor, or the pharmacist says. Ask us lab rats.

I have to shout this part: I AM NOT A DOCTOR. I AM NOT WRITING PRESCRIPTIONS FOR YOU. I am not the Physicians' Desk Reference, I am not the oral 'Goodman and Gilman' pharmacology text. This is not a 'how to' book. It is a reference work for information acquisition only.

There is a very good reason why this has to be this way, and I will get into it in the next chapter. However self-deprecating I may sound after that disclaimer, I'm convinced that I am smarter than most doctors and pharmacists about steroids (and I know what you cynics are thinking: The mason will be chiseling that statement on my gravestone very soon). But I can't counsel you, personally, from this book. Spicy foods, even reading this chapter could give you acute gastritis; who knows what a prescription drug will do to your metabolism? For all I know you may be crazy too; a hair-trigger psychotic waiting for some drug, any drug, to trip the psychosis. So remember, you're not reading advice, you're acquiring information.

Shall we discuss danger? To say that steroids are dangerous is like saying skydiving is dangerous, or skateboarding, or taking a bath in your bathtub is dangerous. The poor guard in the back of the Brinks truck realized much too late how dangerous \$100,000 in quarters was (crushed to death when the driver slammed on the brakes). The potential for danger is always there. Steroids require more smarts to realize what the dangers are because they are not immediately self-evident. Generally women and children have more trouble with the drugs than full grown men do.

I don't think children (teenagers included) should take steroids because all but one or two of the drugs can stop bone growth prematurely. Short people are usually unhappy about their stature, and who wants a world with even more unhappy people?

Frail, sickly, and skinny (and there's a world of difference between 'skinny' and 'lean') individuals usually will not have a tolerance for even small dosages of any steroid which is only moderately toxic. Usually if you are considered an athletic person, your blood pressure, triglycerides, and cholesterol are 'normal', and you don't have a family history of heart disease, there is a good chance that you will not have any significant adverse side effects while using steroids in a therapeutic manner. But before you commit yourself to steroid use you should be aware of the new legal ramifications of steroid use.

Do not skip the last chapter in the book. In fact, read it twice, It may indeed concern you.

CHAPTER FOUR

ABOUT STEROIDS IN GENERAL

It wasn't too many years ago that if you told a doctor that you were on steroids, he probably would assume that you were using cortical steroids, a group of hormones mimicking those which are naturally occurring in the body, act as anti-inflammatories and have an analgesic (and catabolic) effect. The three classes of commonly known steroids are estrogens (aka female hormones), androgens (the male hormones), and cortisones. Contraceptive steroids for women are derivatives of estrogens. Androgens are secreted in the largest amounts by men, although women do produce small amounts of androgens in the ovaries and adrenal glands, as men conversely secrete minute amounts of estrogen. Both sexes produce cortisone. Anabolic steroids are considered a subgroup of androgens. The role of androgens in the male is primarily to, well, establish the sexual characteristics that make him a male. Estrogen dominates androgen in women, and likewise instigates and establishes sexual characteristics that define the female gender.

Although there are many variants naturally produced, the most abundant androgen in men is testosterone, produced primarily in the testicles.

Testosterone, as well as estrogen, is a powerful regulator of metabolism, and for athletic endeavors, testosterone is considered a beneficial hormone because it influences the metabolism of the body to increase muscle mass, muscular strength and recuperation, and also regulates less accumulation of bodyfat. Men are generally bigger and stronger than women because of testosterone. Men have more body hair because of testosterone. The smell of their sweat, the oiliness of their skin, and sadly, the balding of their heads is all attributed to testosterone. Men's higher incidence of heart disease is also because of testosterone, So testosterone's profound influence on a man's metabolism has both good and bad aspects.

Anabolic steroids are a group of hormones which were created by scientists to duplicate the good aspects of testosterone, those concerning muscle growth and recuperation, while downplaying the bad aspects, the gender setting characteristics such as oily and acned skin, body hair, baldness, etc.

Scientists differentiate male steroids as being either primarily androgenic, which means that their predominant therapeutic use is to instill male gender characteristics, or anabolic, for use of tissue growth and repair such as wound healing after an operation, building up red blood cell counts, or accelerating muscle growth and recuperation.

Although the classic textbook definition of an anabolic steroid is being 'a synthetic derivative of testosterone', this is not perfectly true. There is a small group of anabolic steroids which are derivatives of estrogen and there also happens to be an anabolic steroid which is a progesterone (another female hormone) derivative. But primarily, scientists have analyzed the testosterone molecule and have created steroids with a resemblance to it, but do have differences which can either make the new steroid either more androgenic, or more anabolic, or less androgenic. Some steroids have been designed to be both more androgenic and more anabolic at the same time.

Most athletes assume that what they want to increase muscle mass and better their performance is an anabolic steroid rather than an androgen because excessive body hair, acne, and baldness are socially unacceptable. However, nothing is quite so simple. Most androgenic steroids are also correspondingly highly anabolic as well.

Let's classify testosterone as a baseline androgen. Any steroid which is less powerful androgenically is classified as an anabolic steroid. The exception here is an odd class of androgens which, while less androgenic than testosterone, have little, if any, anabolic activity, so by default are classed as 'weak androgens'. Steroids which are at least as androgenic as testosterone or more so are considered androgens. But even though a steroid is considered anabolic it may not, and usually doesn't have as powerful an anabolic property as testosterone. It is classified as an anabolic simply because it is less androgenic than testosterone. An anabolic steroid may have rather weak but still stabstically significant influences on muscle growth and recuperation, much less than what testosterone can accomplish, but because it doesn't cause excess body hair growth, baldness, deepening of the voice, etc. we call it an anabolic steroid.

Many athletes use powerful androgenic steroids, thinking that they are anabolic steroids, and use these particular ones because they do a better job anabolically than the so called anabolics. This must be confusing to many of you reading this, but it just illustrates that the whole steroid controversy is not so simple. In fact anabolic steroids have mistakenly gotten a bad reputation of having harmful side effects, but the truth is that it is mostly androgenic steroids with the bad side effects. If I seem to be overly picky on this point, I assure you that later on I will illustrate that this identity problem becomes more serious than mere semantics.

The media has never gotten this technical. Here's a game of warped logic: morphine, a narcotic, is classed as an analgesic; so is aspirin. You may say that morphine is addictive, a dangerous drug. Aspirin is not. You cannot say that analgesics in general are dangerous. And it is incorrect to state that all anabolic steroids are dangerous, because, as with analgesics, some are dangerous and then again, some are not. What I just told you is the real world truth, but you couldn't discern this truth without knowing the details.

Media propaganda is not concerned with details; it is concerned with its ultimate effect. My goal is to make you think, not necessarily to change your way of thinking. I am trying to tell you everything I know about steroids; I have no secrets. Whether you decide to use them or not, think their risk is acceptable or not, this choice should come from analytical and rational thought, not through 'gut feeling'. Please don't exasperate me by saying, 'I know in my heart. . .'

If your view on anabolic steroids has become a little unfocused, I'm afraid that I will have to disorient you a bit more. An athlete can take what is known to be a predominantly anabolic steroid in such large amounts, that the cumulative dosage of the androgenic content of the steroid (which on a milligram per milligram basis is less than that of testosterone) makes his metabolism have a higher androgen content than what his own body would naturally produce while not using steroids. Simply put: anabolic steroids will act as androgenic steroids if taken in large enough dosages. This is important to know because, as I mentioned before, many of the undesirable and harmful side effects that both men and women using steroids experience result from excess androgen.

The average athlete has no idea how, in the biochemical sense, steroids work. He just knows that they do indeed get the job done, and the more seasoned steroid user has a short list of rough and tumble real world steroid use 'rules'. Crude though they may be, the rules generally work out to be true.

RULE #1: The more steroids that you take, the more you will grow (sidebar: if you eat enough and train regularly).

RULE #2: Some steroids work a lot better than others.

RULE #3: Oral steroids do more damage to your liver than injectables do.

RULE #4: The less toxic an oral steroid is to your liver, the less effective it is for growth.

RULE #5: There is no such thing as taking too much steroid; it varies from person to person. 'Too much' for one may not be enough for another.

RULE #6: 'Too much' is only related to your health. No doctor, no researcher, nobody has determined the optimal dosage for athletic performance.

RULE #7: Most of the people who have taken massive amounts of steroids don't get sick, don't die, and don't go crazy.

RULE #8: (thank God, a sane one) Never assume that you are like 'most people' until you prove it.

Don't blame me, folks, I didn't make them up. The only rule I totally agree with is, of course, #8. This just illustrates the mentality of the average steroid user; it was like that six years ago when I wrote the original USH, and it really hasn't changed. There seems to be a quasi-concern with the individual's health, but compared to, say, winning, it's just lip service.

Yes, I agree that many steroid users seem irresponsible towards their health. I guess I would put them in the same class as free form rock climbers, who don't use safety ropes, or those idiots who like to parachute off bridges and buildings. They are not like race car drivers, who at least take every safety advantage they can. So are we talking about athletes here, or daredevils?

I have always been hostile to this type of sloppy steroid use, and I have been almost as critical toward so conservative an approach as to be a caricature of caution. I once filled a steroid mail order from a man who ordered 1 bottle of Anavar, the least toxic of the oral steroids, 5 bottles of injectable HCG (which keeps your testicles functioning while on steroids), and 2 bottles of Nolvadex, an estrogen antagonist. This guy was afraid he was going to lose his liver, lose his erection, and grow tits. As Anavar neither stops natural testosterone production, nor turns to estrogen; it seemed sad that this well meaning man was so pathetically ignorant. No, he didn't harm his health doing all this, but he certainly paid seven times the price of the steroid, about \$220 for needless safeguards simply

because he couldn't get a straight answer about Anavar; he obviously didn't read the original USH.

As to how steroids work in a biochemical manner, for once I will try to keep the lesson simple. The body is composed of myriads of living cells; they as groups have different functions; they grow at different rates. We're concerned with muscle size and strength so I'll discuss how steroids affect a muscle cell.

Steroids are molecules, complex ones, and travel in the blood as moving 'messengers'. The active messengers are in a so called 'free' form, they are floating in the blood not chemically bound to other molecules. The dormant messengers are inactive toward cells because they are bound to a protein also in the blood called an androgen binding globule. On a muscle cell, actually in the amino soup surrounding it are literally millions of tiny things called steroid receptor sites. These sites are where the steroids attach themselves to, and deliver their message by being transferred into the nucleus of the cell. Before I get into what the message is, let me point out an important precursor: how well the message is delivered. The more free steroid there is in the blood, of course, the more will be available to get to the receptor sites. Some steroids bind very tightly to the ABGs (remember: androgen binding globules) and very little stays free. In most cases the majority of the steroid (over 90%) at any one time in the bloodstream is in the bound to ABGs. Some other steroids bind so tightly at the ABGs as to knock a weaker-bound steroid into the free state.

But it's not just a matter of how free the steroids are, there is a relationship between steroids and steroid receptor sites. They have to like each other; efficient steroids have high affinities to the receptor sites; they are round pegs in round holes. Also, some people are gifted with more receptor sites than others; that's a genetic plus, and if steroid receptors are overworked, they close down for business.

There also is evidence that young people, teenagers, have certain unique receptors that specific synthetic steroids have high affinities for, and the affinity lessens markedly as they grow older. It is my observation, and not backed up by any real scientific research, that some very gifted athletes have special receptors which stanozolol (Winstrol) has a high affinity for. Winstrol as a rule shows very little anabolic activity in most normal people.

You would think that knowing all this, scientists must have come up with the perfect steroid. Perfectabol would be existing totally free, have a high receptor affinity, and is more anabolic than testosterone, and less androgenic. I wish. The few totally unbound steroids commercially available happen not to have high receptor affinities.

The small number of steroids that have a higher affinity to receptors than testosterone have less anabolic activity than testosterone, and can actually block the access of steroids which are more anabolic but have less affinity. No room at the inn, so to speak. I'm throwing all this trivia at you now so that when I talk about specific steroids and how well they work, you will have an orientation as to why they do or don't work well in the biochemical sense.

Now that the steroid is at the nucleus, let's look at the actual message, the directions it gives the muscle cell. Steroids deliver many messages, and not only to muscle cells. There are steroid receptors in the sebaceous glands, skin, hair follicles, red blood cells, the brain; I'll touch on all these but now let's concentrate on two primary messages given to the muscle cells. One is to increase protein synthesis, and this is generally thought to be the number one function of anabolic steroids. Increasing protein synthesis allows the muscle to recuperate faster, and grow bigger. Steroids also increase creatine phosphate synthesis in the muscle. For a muscle cell to make mechanical energy, it needs a fuel and the final end product fuel for a muscle is ATP, adenosine tri-phosphate. ATP becomes reduced to ADIR and this basic process is what makes muscle move. Only the process is not so basic.

There are so many metabolic pathways and loops and cycles that finally turn the food you eat into ATP, it's mind boggling. To avoid getting into a quagmire, I'm just going to tell you that creatine phosphate is an energy buffer that helps replenish ATP. Short and sweet: high creatine phosphate levels directly relate to high ATP levels and the more creatine phosphate you can synthesize the stronger (but not necessarily bigger) the muscle is. Steroids make other things happen in the muscle. Muscle cells store carbohydrate in the form of a starch called glycogen. Steroids not only increase glycogen storage in the cell, they increase the accompanying fluid storage as well. Both these factors increase muscle strength and size. Steroids allow the muscle to take up nutrients, mostly glucose, but also amino acids without as much dependence on the hormone insulin. Less insulin needed is less insulin secreted, and as insulin can also drive glucose into a fat cell where it transforms to glycerol and finally to triglyceride, the end result is a bigger fat cell. So, the less insulin the better. By the way, insulin is considered a very anabolic hormone, it just also can make you fat.

Once the steroid has entered the nucleus and transferred its data, it is released back into circulation and can be reused until it metabolizes into other compounds, including other (very weak) steroids that are ultimately excreted in the urine. Some steroids convert to other active steroids before they attach themselves to the steroid receptor sites. Testosterone converts to a variant called Dihydrolestosterone. DHT has a higher affinity to steroid receptor sites than regular testosterone, and also binds easily to receptors in the sebaceous glands and hair follicles. Steroids other than testosterone also can convert to DHT. There is still scientific debate over the possibility that DHT is more anabolic than regular testosterone.

Steroids can also convert to estrogen. The conversion process is called aromatization. The estrogen molecule is very similar in structure to testosterone so the aromatization process is not as bizarre as it first appears. Aromatization is on the list of undesirable side effects that steroids have, which I will go into detail on later. The other metabolites of steroids are not as active on the metabolism as either DHT or estrogen. Some are weakly anabolic and are excreted out of the body in a matter of days. Some have no activity but may stay in the body for months. The first steroid made in America was a weakly anabolic metabolite of testosterone derived from concentrating gallons of dog urine into what I imagine to be an absolutely disgusting injection given to lab animals in the 1930's.

Testosterone today is derived from a South American plant, Mexican Sasparilla, so I guess if you're a vegetarian steroids are now okay. I've thrown a lot of details at you in

this chapter, and you might want to put the book down, take a break, and then read this particular section over again. Look on the bright side: this was the toughest chapter to understand; now you get into the fun stuff.

CHAPTER FIVE

THE VARIOUS KINDS OF STEROIDS

Synthetic steroids can be administered through a variety of routes. Some of the more novel ones are skin patches, rub-on creams, or suppositories (brand name Rectosterone, I swear). Most steroid users, though, will be familiar with only two kinds of steroids: orals, which you swallow in the form of tablets, capsules, or elixirs; and injectables, which are injected with a hypodemic needle into the muscle, usually in the side of the buttocks. Injectable steroids make all the muscles grow, not just the area where you inject the drug into, although that area can swell up if the steroid contains an irritant.

Steroids entering the body through the mouth have been designed to travel the gastrointestinal tract, especially the final pass through the liver without the dosage degrading significantly from the digestion processes. The easiest way of protecting oral steroids from destruction is to add a carbon atom off a certain position, the 17th carbon position, on the steroid molecule.

The extra carbon atom could string off on either of two distinct pathways, Alpha or Beta, and scientists have determined that the steroid is more sturdy with the carbon atom in the Alpha position. The majority of oral steroids (all but three) are designed as 17 Alpha Alkylateds. Although the alkylation process does a very good job of preserving the steroid, some of the drug does get destroyed, which has lead a few of the clandestine underground steroid labs to develop injectable forms of the oral compound. You will also occasionally see injectable forms of oral steroids for veterinary purposes, because it is more efficient to, say, drug a horse with an injection compared to convincing it to eat a hundred tablets.

The alkylation process which protects the steroid from degradation is the primary cause of the temporary stress (or in severe cases, damage) to the liver. At moderate dosages for healthy athletes, liver functions measured in blood tests as LDH and Alkaline Phosphatase are slightly compromised; some sensitive people can get vastly reduced (elevated blood levels) liver functions on even small dosages of oral steroids. High dosages show severe impairment of the two liver functions on blood tests, but it is curious that most people on such high dosages don't appear ill, do not get jaundice, nor does the liver get enlarged.

Most of the time after stopping the steroid usage, blood test results of liver functions drop back to the normal range. Although it is specifically the alkylation process which does most of the 'textbook' damage to the liver, not all oral steroids are equally toxic. Some are known to be very harmful, especially to the person as he or she gets older, and some seem to be extraordinarily safe. Which is which seem to be better known among the athletes than among many doctors.

The majority of oral steroids have a half life, where they reach their peak strength, within 12 hours. Most athletes take oral steroids on a daily basis, sometimes twice a day. Some try to make them more effective by taking them sublingually, placing the tablets in the buccal cavity under the tongue, hoping that the steroid will be absorbed into the bloodstream from that area. Most steroids were not designed to dissolve at the faster sublingual rate and the majority of steroid users just swallow the tablets, not wanting to wait hours for the pill(s) to dissolve.

In America, the few remaining oral steroids legally available are packaged in either plastic or glass bottles in counts of 100. In Europe, Mexico, and South America the tablets are individually encased in foil or a foil/plastic combination and each foil strip holds 10 tablets. These other countries usually don't give a 100 count. Boxes of 30, three 10 tablet strips, are common. For the few steroids that are bottled, it is common to see counts of 25 or 30 tablets per bottle, sometimes 60, never more.

Injectable steroids always are injected into the rnuscle; there is no anabolic steroid designed for intravenous use. The majority of injectables are oil based, meaning that the steroid is totally dissolved in an oil. Sesame oil has the least allergy potential, but cottonseed oil is cheaper. The bottle's label should say which oil is used, but if it doesn't, you can train your nose to tell the difference as sesame oil has a sweetish scent to it. Steroids don't dissolve well, if at all, in water, although there is one fully dissolved water based steroid (Esiclene), but only because it has a strength of 2.5 milligrams per milliliter of water. Oils will hold up to 250 milligrams per milliliter. The few remaining water based injectables are steroid powders ground up to a very small crystal size, the range being .106 to .250 millimeters, so that the suspension will not clog the average sized hypodermic needle.

Water based steroids are technically called aqueous suspensions because you have to shake the steroid sediment up from the bottom of ft bottle so that it is homogeneously floating around as you draw it into the syringe. It is easier and cheaper to make an oil based steroid than a water based one. The grinding of the steroid powder must be done with a very expensive air grinder, so that the steroid does not get overheated and lose its potency. It is also hard to keep a water based steroid bacteria free because water based bacteriostats are not as effective as oil based ones. Most athletes self inject their steroids, sometimes daily. The incidence of infection at the injection site is astonishingly low and the few people I've known to encounter this trouble have always gotten the infection with a water based steroid. I should point out that the steroid in the bottle was not tainted, the people using them were not familiar with the extra precautions needed when using water based steroids.

Although Americans generally seem to hate shots, injectables are thought to be less harsh on your liver because most are not 17 Alpha Alkylated. Different compounds are added to the steroid to slow its solubility. Making a steroid more insoluble allows its dissipation from the injection site to be slowed. This dissipation rate determines how long a steroid lasts in the body. Water based steroids dissipate fast because you have a water/water partition at the injection site of muscle with good blood circulation. An oil based steroid injected into a slab of fat will take many months to dissipate from the site because you have reduced blood circulation to fat cells. It is possible for a water based steroid to stay in the body longer than it should if the crystal size is unusually large, or if it has been injected into (muscle) scar tissue, which has reduced circulation. Once the steroid gets into circulation, it is as the basic steroid (without the added compound) that is in your blood. For example, testosterone can come with Cypionate, Enanthate, or Propionate added to its molecule. Each one affects the solubility and absorption rate of testosterone, but once it is bound or free in the blood it is simply testosterone.

Injectables are not always safer than orals. Some may be more toxic to your kidneys. Some are just injectable versions of an oral steroid. And of course, even the safest of injectables will become problematic when taken in too high a dose. And let me remind you that what is safe and acceptable for men doesn't apply to most women.

Injectable steroids are packaged three ways. The most common in America is the multiple use vial. This is a bottle ranging in size from small ones holding 2cc's to large veterinary use bottles holding 100. The two most common steroid sizes for injectables are 2cc and locc. Athletes do use veterinary steroids and the two common sizes here are 30cc and 50cc. A rubber plug, thin in the center, is held very tightly to the top of the bottle by a crimped aluminum band around the edge. Usually you can tell if an injectable steroid is made in a real pharmaceutical house by trying to twist the crimped plug. Black market garage and basement steroid makers use a hand crimper and this never seem to crimp tight enough. Many times you can tug the entire rubber plug out of a fake with very little effort. These bottles are called 'multiple use' because you can push the needle through the center of the plug a number of times with little contamination to the contents.

Europeans consider the multi-use vial unsanitary and relegate it to veterinary use only. The majority of European injectables, and a few American ones are packaged as single use ampules. The common sizes are made to hold 1 or 2ccs and are hermetically sealed thin glass containers shaped somewhat like bowling pins. The top of the ampule is snapped off by hand, the contents drawn into the syringe, and the ampule is discarded. Some ampules use a heavier weight glass and the necks have to be scored with a miniature file included in the packaging. A common fingernail file works too, if the original is lost. This is the ideal container for water based steroids because you only use it once. Bacteria can breed on top of the rubber plug of a muth-use vial.

Both in America and Europe injectables also come in pre-loaded syringes. Generally athletes don't favor pre-loads, because they are usually only familiar with the Sustanon 250 pre-load from Mexico, which is tipped with a very large, dull needle. Standard procedure has been to transfer the contents into a quality American needle/syringe. Some pre-loads are very elegant. Organon's pre-loaded Deca-Durabolin comes in a beautiful glass syringe with a natural rubber needle cover. Other than the aesthetics involved, there is no advantage in using such an expensive package.

Athletes in America use steroids from all over the world, They do not discriminate against veterinary steroids, and sometimes will hold a designer steroid in high regard. Athletes do seem to discriminate against Mexican steroids, but not as much as they used to because of the recent counterfeit problem. European steroids are held in the highest regard and if a steroid user thinks he can obtain an East German steroid, he can become obsessed.

Six years ago the majority of steroids used both legally and illegally came from legitimate pharmaceutical laboratories, usually ones making generic copies of brand name

steroids. The next largest amounts used were smuggled-in European steroids, which until 1985 were good buys because the dollar in Europe was worth almost twice as much as it is now. A small amount of Mexican steroids were used, mostly by powerlifters. In late 1982 the black market designer steroids, supposedly East German, but made secretly in California, gained wide popularity despite their high (\$250-\$500 for a 30cc botfie) prices. In 1986 two events happened that changed steroid use, probably forever. First, the dollar dropped to 50% of what it was worth against European currencies. Second, the federal government began a coordinated effort to arrest and prosecute black market steroid dealers along with increasing Customs seizures of product mailed in from Europe.

These two events created a new type of steroid black market. Because the dollar stayed very strong against the Mexican peso, more Mexican steroids came into the country to fill the void. Also, a laboratory in Mexico started making almost exact copies, down to the labels, boxes, and inserts, of all the major American and European steroids. Some black market steroids used by American athletes today are produced in Mexico, no matter what the labels say. Generally these steroids are hygenic, and the basic 'American favorites' usually have contents that generically match the labeling.

These steroids are classified as fakes or counterfeits because the companies labeled as making the steroids either don't, or the companies don't even exist. The steroids sometimes have slight variations from the specified milligram amount; it may be higher; but it usually is lower. Overall, the Mexican products, whether you know them to be or not, are acceptable products with little health risk beyond the steroids they replace. In fact, the Mexican counterfeits are so highly regarded that there are now American made counterfeit versions of the Mexican steroids, which, to make things a real mess, are visually indistinguishable from the Mexican products, but of vastly reduced quality.

This other aspect of the new steroid black market disturbs me deeply. Originally mass produced in the San Jose area, an illegal lab began playing the same game as the Mexicans. The American packaging and bottling was outstanding, very professional looking. Unfortunately, the ingredients did not measure up. Some injectables were unsanitary. The Organon HCG fake was both dirty and had no HCG in it. Some steroids were substituted for others. The Anavar fake, labeled Nelevar, was really Nilevar (norethandrolone), which worked the same as Anavar, but was more androgenic. Although both the American and the Mexican labs were doing illegal things, the American outfit was much more irresponsible.

After the San Jose operation was shut down, lots of small operations making even dirtier and more bogus products started up and are still in business. The San Jose lab appears to have reorganized and moved to northern Colorado. An astute and seasoned steroid user can usually spot a fake; can actually identify it as a benevolent one or garbage. Unfortunately, the majority of steroid users are not so educated, nor ever will be. I hope that this book will help them.

As I go through and discuss the individual drugs used, I will point out which are the fake versions, both good and bad. But I can't keep up with everything being sold on the black market. Some things I'll never see. It used to be that readers of the original USH could and would send me samples of questionable steroids for my judgement on them. I offered this service for free. However; with the new changes in my legal status, as well

as yours, I cannot do this anymore. Sorry, because I learned as much as you when I did this.

One area I have avoided discussing in this chapter is what the scientific community considers ideal, safe, powerful, or harmful about steroids. There is an established anabolic: androgenic index created from research done on castrated rats. This ratio, determined by how well a steroid makes a rat muscle grow versus how well it makes a rat's prostate grow, used to be the way doctors thought they should pick steroids for athletic use. The scientific determinations never coincide with real world results on humans, so the less said about this index, the better. Just forget about it. I will tell you on a steroid by steroid basis what is androgenic, what is anabolic, and even what is a waste of time and money. Trust me. Trust the human lab rat (but, no, I'm not castrated).

CHAPTER SIX

ABOUT BLOOD TESTS

If you are fortunate and find a doctor willing to prescribe anabolic steroids, I assume that he will be responsible enough to recommend some blood tests. Many of you will have chosen black market sources, and will be self administering steroids, but it is still just good common sense to see where your health is by getting some blood tests done. With the advent of the spread of the AIDS virus, many large metropolitan areas offer walk-in service blood testing labs, where you do not need a doctor to order the tests.

If you are reasonably intelligent, you can do a pretty good job interpreting the results yourself, as the individual value of each aspect of the tests usually is accompanied by a minimum to maximum 'normal' range as a comparison to your specific value. Initially though, I don't recommend you going it alone on blood tests; neither you nor I are doctors and could very well miss something important concerning your health. Also, you should know that some chiropractors are extremely qualified at reading blood tests, and can charge less for an office visit than an MD or an Osteopath would.

Unfortunately, most doctors do not use the blood test results to their full advantage, or can misinterpret them. This is because strength athletes, even those who are not on any medications, will have very different values, especially In the area of liver and kidney functions compared to normal sedentary people.

Bodybuilders and powerlifters usually are in the 'high' normal range, and sometimes could be off the scale. Strength athletes eat more protein than normal people, also eat more food, period, and of course do break down a lot of muscle tissue. For example, two liver functions, the Transaminases, SGOT and SGPT are always high with bodybuilders and powerlifters; it is because of the metabolic changes induced by heavy weight training. Only two specific liver function tests are directly affected by steroids: lactic dehydrogenase (LDH) and Alkaline Phosphatase. Knowing this, it would be wise to find a doctor or a chiropractor familiar with treating strength athletes. Just realize that when a doctor is in medical school he cannot major in sports medicine. Legally any MD can call himself a sports medicine doctor, even though he may be registered as something else. In the chiropractor's favor, he may be more willing to explain the tests to you, as

chiropractors are the underdogs of the medical world and always seem to work a little harder just to prove to people that they ARE just as smart as MDs.

You will want a CBC (complete blood count), which will indicate whether you are anemic, or whether your immune system is weak. You'll also want an SMA-25 which is a bargain for all the information it gives you. This lots you know how your liver and kidneys are functioning; if they are weak and deficient you are going to have to be very careful about the type of steroids you take, if you are able to take any at all (usually you can). Specifically on the liver function tests, steroids elevate lactic dehydrogenase (LDH) and Alkaline Phosphatase.

Most of the other liver functions, such as SGOT and SGPT would also be elevated simply from heavy weight training exclusively. Many doctors, even sports medicine specialists, are not aware of this. I have seen blood test results of a steroid user with highly elevated SGOT and SGPT, but with LDH and Alkaline Phosphatase in the normal range. So as far as steroid specific elevated functions, his steroid medications did not put him in a risk category.

In the area of kidney functions, a doctor will look at Creatinine levels, along with BUN. Again, intense workouts will raise Creatinine levels. The best way to interpret normal kidney function is to look at the BUN/Creatinine ratio. Increased ratios indicate normal kidney function. BUN fluctuates with protein intake; Creatinine does not. Also realize that high blood pressure may adversely effect some kidney functions.

An SMA 25 test usually includes your cholesterol level, which should be ideally, even while on steroids, under 200. If you are on a low calorie diet when the test is done, your cholesterol will be lower than it would than if you were eating more food, even if it is all 'good' low fat food. I personally withhold judgement on the value in HDL/LDL ratios, as there are conflicting opinions both based on solid medical research as to whether high HDL levels are actually beneficial. Most doctors like to see the HDL ratio, so don't argue that it's not important. I'm harping on cholesterol (and also high triglyceride levels) because I won't dispute that most steroids will elevate these levels, and I'd rather be safe by assuming that high serum cholesterol levels will lead to heart disease. If your cholesterol is naturally high while on a maintenance calorie, low fat diet, realize that by taking steroids you will be endangering your health. You may be able to safely use anabolic steroids while on a low calorie diet and find that your cholesterol and triglyceride levels are acceptable.

I would also recommend a thyroid assay, which will measure free T_3 , T_3 uptake, T_4 , and probably TSH (thyroid stimulating hormone). We are lucky in this area because generally deficiencies of the thyroid are easy to correct. Mostly you should be concerned with the free T_3 levels, as this specific thyroid hormone is the one the body uses.

I believe that you should have the T_3 in the high normal range to have an anabolically optimal metabolism, and if it is not, should be adjusted with a synthetic T_3 or T_4 thyroid drug (T_4 converts to T_3). Brand name T_3 , Cytomel or T_4 , Synthroid should be used because of superior absorbtion as generic versions are quite inferior. Most doctors are not familiar with T_3 or T_4 therapy; they will prescribe a natural pork or beef thyroid. Sports medicine doctors have usually prescribed Cytomel to men and Synthroid to women

(don't ask me why), although recent research shows unconverted T_4 to actually be more anabolic than T_3 .

Both men and women should pay the \$70 and get a serum estrogen RIA. This shows what the estrogen levels are in the blood, and for athletes, both men and women, estrogen should be in the very low normal range, and with bodybuilders could slightly be off the low end of the scale for cosmetic benefit. High estrogen levels don't allow efficient conversion of food to muscle tissue; with high estrogen you will have a propensity to be fat, and additionally, the fatter you are, usually the higher the serum estrogen reading will be.

The majority of ordinary doctors haven't a clue about the importance of low estrogen levels for the athlete, let alone expecting them to know how to adjust it downward. Some creative endocrinologists believe in balancing estrogen/androgen levels in women; I have never seen them work with men in such a capacity. The standard therapy in adjusting estrogen down in athletes is by using an estrogen antagonist, preferably tamoxifen citrate (Nolvadex), usual dosage being 10 milligrams for men, 20 for women. The dosage may be adjusted upward in the case of steroid usage, as many steroids convert to estrogen. The average cost of a CBC, an SMA 25, thyroid assay and serum estrogen RIA will be around \$200. Most doctors will be familiar with the first three tests, but as to serum estrogen RIA, even sports medicine doctors may be unfamiliar with the test, especially if a male asks for it.

Of course, your blood pressure and heart rate should be checked. I think that monitoring and controlling your blood pressure is as important as watching liver and kidney functions. High blood pressure can alter normal kidney function, sometimes irreversibly. Strength athletes generally don't have very low heart rates, 60 is considered quite good, and somewhere in the 70s is normal.

Although doctors don't like to see blood pressure climb over 120/90, I'm afraid that male strength athletes tend to have high blood pressure, especially while they are trying to gain weight. I don't think that these athletes should just 'live with it' because they could very likely die with it. **High blood pressure will lead to kidney damage. Have I repeated this enough? It's important.**

There are a number of very good high blood pressure medicines available; the choice of athletes has been clonidine (brand name Catapres) because it has a dual nature: its most interesting side effect is to elevate your own natural growth hormone output. I cannot tolerate the sleepiness and lack of libido that goes along with Clonidine therapy. The most popular blood pressure medicine for ordinary people is Dyazide, which now is available as a generic. I view it as ideal by default for athletes.

I am not going into more detail about blood tests. Although I personally think that monitoring all these internal functions is important, the truth of the matter is that most athletes who take steroids never get blood tests taken. If they did, they'd find that the tests might show them to be extremely unhealthy compared to normal people. But athletes have been using anabolic steroids for almost 50 years. Most athletes have abused them. Their cholesterol, blood pressure, everything, many times is off the high end of the scale for years. By all accepted medical logic many athletes should have become very ill, some should have died. Curiously enough we have no statistics. What

we have is hearsay and anecdotal evidence which seems to indicate that no matter how ill athletes on anabolic steroids seem to be in the textbook, or on paper, the vast majority of them have lead extraordinarily healthy lives, all things considered.

There are no large volumes containing case histories of liver turnors, liver cancer, kidney failure, strokes, heart attacks, etc. Yes, if you search long enough, as Bob Goldman did, you will find isolated, sensational examples, but no medical researcher has found a discernible pattern of large numbers of athletes suffering as a result of steroid use, and remember, thousands of athletes have been taking anabolic steroids, abusing anabolic steroids for over 50 years. I think that you definitely should be concerned with your health, with blood test results, and that you should make every effort to insure your present and future well being. Most users of steroids don't, yet we have no significant statistics showing actual real world severe health problems despite the fact that in a classical medical sense, many, many steroid users should show severe health deterioration. The whole health issue concerning steroid use is, ironically, its greatest conundrum.

More important than the number of tests done on the athlete is simply when to run what I call 'baseline tests'. It seems absurdly logical that baseline tests should be run when all medications are completely out of the body, and the athlete is engaging in hard training. This way when medications are introduced the doctor will see, perhaps, that SGOT and SGPT, though elevated, remain unchanged.

By tracking LDH and Alkaline Phosphatase the physician can 'negotiate' with the athlete an acceptable milligram amount of specific oral steroids. Cholesterol may be lowered with additional medication such as Nolvadex and thyroid. The baseline tests are supremely helpful. Do not get false results by having them taken while on steroids. And just as misleading: don't have tests done while off steroids and at the same time taking a break from training. Although some sports medicine doctors have generated an ideal list of tests for steroid users, the sheer number of tests done (as many as 23) along with their costs (\$800+) financially deters the average steroid taking athlete from getting all the work done. I would recommend the following:

Baseline tests:

Complete physical exam including prostate check and semen analysis for men, PAP for women.

CBC & SMA-25 including Cholesterol with HDL

Thyroid assay including free T3, free T4, and TSH

Serum Estrogen RIA

If you are extremely concerned with liver and kidney function, then introduce injectable steroids only after the baseline tests, then redo the SMA-25 after a month. Depending on the LDH and Alkaline Phosphatase, you may introduce orals such as Maxibolin, Prirnobolan, and Testosterone Undeconoate first, as these will have less effect than the other orals on the liver and kidneys. Run the SMA-25 after a month on these orals. If the physician finds the liver and kidney functions acceptable, then you could gradually

switch to or add the 17 Alpha Alkylated orals. Milligram for milligram, steroids like Anavar and Winstrol usually elevate liver functions as much as Dianabol and Anadrol. Athletes usually use less overall milligram amounts of Anavar and Winstrol.

This may seem like a lot of testing initially, but it really is the only way you can determine what the specific steroids are doing to you. Once you have adjusted your steroid intake to what either your doctor or you determine to be acceptable healthwise, then an SMA-25 and a CBC should be run any time you drastically change your medication, your calorie intake, or your training schedule.

If somehow you never vary your medication, diet or training, a quarterly SMA-25 and CBC is a reasonable testing frequency. Women on diets should monitor blood pressure and red blood cell count, as they tend towards anemia. Men trying to gain weight should monitor blood pressure and cholesterol. If we had more athletes following this simple blood test schedule, then one day I might have a chart in this chapter showing you the how specific steroids will vary the specific test results. I wish it were now.

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This lessens the possibility of these sensitive chapters being read without reading other essential parts of this book!

CHAPTER SEVEN

The Drugs In Particular

This probably is the chapter that most of you bought the book for. If you haven't read the chapters before this one, the discussions of the drugs, especially the counterfeits and designer steroids, it won't make sense. I have also included prescription drugs sometimes taken with steroids, because they are used to reduce or eliminate unwanted side effects.

I've listed the drugs alphabetically as they are commonly known by athletes. Sometimes this is a brand name. It could be the generic one. I'll consider the imaginary generic names on some of the designer steroids as brand names. Brand names will be fully capitalized. Whenever I can, I'll give the year of the steroid's commercial introduction, and you'll see that there's very few new steroids.

Dosages are derived from real world usage by both men and women. Duration of activity is not determined by the steroid's actual biological half-life, but by the frequency of administration in real world use. Orals are taken every day. Injectables can be administered daily, weekly, or anywhere in between. I'll be more specific on dosages in the chapter. "Using the Drugs". I'll try to point out the counterfeits as I know them, but I can't keep up with all of them. I have no lab reports guaranteeing whether a counterfeit contains what its label declares. As some counterfeit steroid labs have changed the ingredients or actual milligram amount of the same product from lot to lot, a lab report wouldn't help you. If I mention that a counterfeits is considered to be acceptable, this is general acceptance by steroid users and not a personal judgement by myself. I will define "acceptable" as anabolically effective, visually clean and well make, and agreement among steroid users that it 'feels' (main effects, side effects, and potency) like the real drug. In the case of designer steroids acceptance hinges on whether the drug lives up to the claims its proponents (which could be the markers, the users, or both) have put out for it.

In parentheses you will find: whether the steroid is: oral (o) or injectable (i), if it is available as a cheaper generic (g), if the brand name steroid has a counterfeit (c), if the generic has a counterfeit (cg), or if the steroid ever existed commercially in the first place (n = new counterfeit). Finally, if a counterfeit of the steroid is available in injectable form, and the steroid is not commercially available as an injection you will see (ci). An * means that the steroid does not have current FDA approval for human use. It may have veterinary approval, or be acceptable for human use in another country. For example, seeing this: (o-g-c-cg-ci-*) would tell you that the drug is an oral steroid, a generic version is available, there are counterfeit versions available on the black market (brand name, generic, and injectable) and the steroid does not have FDA approval.

All counterfeit steroid is a felony. Buying a non-FDA approved steroid is also a felony.

The company making the brand named product will be identified; some designer labs have names associated with them. An 'NLA' after the brand means 'no longer available'; the steroid is not being made legally or illegally. For the oral drugs, I've identified with a

"#" the number imprinted on the brand name tablet or capsule. It may help to identify whether an oral steroid is real or not, although sophisticated labs have the capabilities to duplicate any tablet exactly. Searle has found that out with its Anavar. And now on the the individual drugs:

ACCUTANE (o) Roche: isotretinoine. 10, 20, 40 mg capsules. Accutane has become a godsend to the heavy duty steroid user. This Vitamin A derivative is the most powerful acne medicine commercially available. It is related to the topical Retin-A cream and gel. Accutane shrinks the sebaceous glands and channels, severely curtailing oil production. For normal people, a few months of Accutane treatment will clear up severe acne. The acne usually never returns. However, heavy steroid users find that the acne does return whenever using steroids known to cause acne. Standard Accutane treatment is uncomfortable. The skin, lips, eyes and mucus membranes become dry. Flaking and peeling around the lips is extremely common. Night vision is impaired. Since steroid users usually have the acne return whenever the offending drug is used, a different therapy for them has evolved. Instead of using high dosages of Accutane in the 40-80mg per day range as Roche recommends, the steroid user will take only 10 or 20mg a day just while he or she is on the acne-causing steroid. The skin stays normal; usually no acne results. The over drying effect, including flaking and peeling, does not happen. Accutane is expensive and if the acne is not severe, Retin-A cream will clear the problem up. Not only is Retin-A cheaper, but the topical treatment has less side effects. If a steroid user gets acne over most of his/her skin and heavily on the chest and back. Retin-A won't work.

ALDACTAZIDE (o-g) Searle: Spironolactone/Hydrochlorothiazide. 25 mg/25mg and 50 mg/50mg. 25mg: # 1011. 50mg: #1021. This is Aldactone with a diuretic added. See ALDACTONE.

ALDACTONE (o-g) Searle: Spironolactone. 25mg: #1001, 50 mg: #1041, 100mg: #1031. Aldactone is an aldosterone antagonist. Aldosterone is a hormone your body makes and it controls water retention in the body. Aldosterone levels should be low to keep water retention down. Elevated estrogen levels in women automatically raise aldosterone levels. Stress (for both men and women) also causes a rise. Both Aldactone and Aldactazide are used by women bodybuilders for contest preparation. Few men need it, unless they have a water retention problem at contest time.

ANABOLICUM VISTER (o-*) Parke Davis (Italy): Quinbolone. 10mg/capsule. 20 caps/bottle. This is Italy's most popular steroid. Chemically it is similar to methandrostenolone, but it is not 17 Alpha Alkylated, nor does it aromatize. Nor does it work very well on athletes. In Italian pharmacological magazines the advertisements for Anabolicum Vister are slanted toward geriatrics. Athletes I've interviewed have gotten no effect from this drug. That's too bad; every steroid using athlete would appreciate a safer Dianabol. However, the very safe steroids don't usually work as well as the harsher ones. Anavar is an exception, and only women actually put on significant muscle mass from its use.

ANADROL 50 (o-c-ci) Syntex: Oxymetholone. 50mg; #2902. Originally developed by Syntex Mexico, commercially introduced in the US in 1960 as Androyd by Parke-Davis and Anapolon by Syntex UK. It has been marketed in America as Anadrol by Syntex since 1961. Anadrol is the most effective oral steroid commercially available. It gives

more size and strength gains than any other oral steroid. Exceptional at building up red blood cell levels, its approved use is for combating anemia. It is a borderline androgen, converts to both DHT and estrogen easily, has low receptor affinity and is the second most liver toxic oral steroid. Average oral dosages for men at 25 to 150mgs(+) per day. It can cause baldness, gynecomastia, high blood pressure and nausea. Men become more sensitive to its side effects as they age. Very few women use Anadrol because of its masculinizing effects. Anadrol users comment that although they are very strong while on the drug, they usually feel sick at the same time. Syntex Anadrol is packaged in glass bottles. Counterfeits are in plastic and glass. The plastic-bottled counterfeits are acceptable. The counterfeit 'Andriol' (red box, glass bottle) from Syntex Ireland (sic) is of unknown quality. An injectable version (Crown Labs) has recently hit the black market. Anadrol is also marketed by Syntex, Sao Paulo, Brazil as HEMOGENIN, in boxes of 10 tables. It is now on the American black market. In Europe, oxymesterone is in Switzerland and West Germany as Plenastril.

ANAPOLON 50 (o) Syntex: Oxymetholone. This is the English version of Anadrol. Originally packaged in a small aluminum can about the size of a 35mm film container, it now comes in an updated plastic tub. It was popular here when the dollar was high against European currencies.

ANAVAR (o-q-c-cq-ci) Searle: Oxandrolone. 2.5mg #1401. First marketed in the US in 1964, this is the steroid most favored by women. It has no discernible side effects for the majority of its users, although some women have reported facial hair growth and deepening of the voice. Anavar increases strength more than size. Its primary effect is to increase creatine phosphate synthesis. Anavar does not aromatize and does not shut down a male's natural testosterone production. It will not cause premature bone closure in children and is not considered toxic. It sometimes imparts a feeling of fullness in the stomach. Searles' recommended dosage is .125mg per pound of bodyweight for children and .125mg per kilo of bodyweight for adults, daily. Athletes use the children's recommendation, but I have seen even that dosage doubled. Oxandrolone is also produced in Italy by SPA Milano. Searle's Anavar is a white plastic bottle which has increased in size recently so that it can be differentiated from a very well done counterfeit copy. SPA's product is packaged in foil and plastic strips of 10 tablets, 3 strips to a box. There are counterfeit versions of Searle Anavar, and SPA Oxandrolone (in a plastic bottle). Both are acceptable, though subjectively appear be light in milligram amount per tablet. Searle also manufactures oxandrolone tablets in Brazil under the brand name Lipidex. Lipidex is packaged in boxes of 30, 3 strips of 10 tabs, but on the American black market 100 strips are usually jammed into the box. Lipide is the least expensive version of oxandrolone. Another counterfeit, Nelevar, is not oxandrolone. An injectable version of oxandrolone is available on the black market. Other (real) versions available: ANATROPHILL (Searle, France), VASOROME (Kowa, Japan).

ANATROFIN (i-*) Syntex: Stenbolone Acetate. 25mg/ml(?). Originally introduced by Schering AG in Germany in 1961, then by Syntex UK in 1963. The last I heard of it, Anatrofin used to be available in Mexico in a 100mg/ml ampule. It was recently available in Spain as STENBOLONE by Farmacologico Latino in the 25mg strength, although even this has disappeared lately. It builds red blood cell counts up almost as well as Anadrol does. It is not toxic nor androgenic and doesn't aromatize. It is not currently available on the black market. This is an excellent steroid to use while dieting, especially for women. Dosages are 100-200mg per week spread out in 3 injections.

ANDROID F (o-g) Brown: Fluoxymesterone. Brown's version appeared in 1981. 10mg: #998. See HALOTESTIN.

Androstanolone (i-*) Various. Androstanolone is one of the synthetic dihydrotestosterones, similar to MASTERON, but faster acting. It is used to cheat at drug tested events because 1) it clears the system fast, 2) it doesn't upset the testosterone/epiandosterone (6:1 maximum allowed) ratio, and 3) its metabolites are similar to natural testosterone. Available as PESOMAX (Boniscontro) in Spain and GAZZONE in Italy.

ASSELACRIN (i-*) Serono: Human Growth Hormone. 10iu. This product was taken off the American market as was all naturally derived HGH. There is a risk of death from tainted HGH and death may occur up to 10 years after use of the drug. Note: Growth Hormone is not a steroid.

BOLASTERONE (ci) DDR: unknown mixture. 30 mg/ml 30 ml vial. Bolasterone was the first designer steroid to hit the black market. It was supposed to be an East German modified copy of Upjohn's original Bolasterone, trade named Myagen, introduced in 1967, which was quickly taken off the market because of liver toxicity. Bolasterone had the reputation of being the most powerful steroid ever available in America. The designer version was a simple mixture of three common steroids: a testosterone, a nandrolone, and possibly oxymethelone. Only a few people actually knew what was in the formula and they have not told me what it really was. Once the DDR operation was closed down by the government, other underground labs started producing 30cc vials labeled Bolasterone, but none are copies of the original Upjohn steroid. In some situations athletes benefited from using the DDR Bolasterone because when used as directed (1cc per day) there were few side effects associated with it. It wholesaled from the lab for \$150 a bottle (in quantity). End users paid as much as \$300 for it.

BOLFORTAN (i-*) Lanniker Heilmittel (Austria): Testosterone Nicotinate. 50mg/ml, 1ml/ampule. An odd ester of testosterone developed in the US in 1962, this water based testosterone rapidly gets into circulation but lasts longer than simple Testosterone Aqueous Suspension. The crystals are large and a 20 gauge needles is needed to inject the suspension. It had the nutball, false reputation of making the arm and leg muscles grow. It is not on the black market now, nor is it anything special.

CATAPRES (o-g) Boehringer Ingelheim: Clonidine Hydrochloride .1mg: #6, .2mg: #7, .3mg: #11. Catapres is a high blood pressure medicine. A few athletes use it because the .3mg amount taken before bedtime elevates natural growth hormone output, documented by medical research. It makes you feel groggy and subdues libido.

CHECQUE (o-*) Upjohn: Mibolerone. 100mcg/ml, 55ml bottle. Upjohn developed this for commercial introduction in 1962, and to this day all Mibolerone sold is from this original lot! Checque drops is a veterinary steroid used to prevent female dogs from going into heat. It is the most powerful androgen sold in America. Powerlifters substitute it for methyltestosterone. Some inject it. Mibolerone is insoluble in both oil and water and is dissolved in propylene glycol, which makes it a very painful shot.

CLENBUTEROL (o-*) Various. Introduced commercially in 1977. Clenbuterol is a European asthma medication (technically a beta andrenergic agonist) that also acts as an anabolic. Studies have shown an increase in Type II muscle fiber cross sections of 40% over a twelve week period. The drug does this by increasing the number of T_4 receptors in the muscle cell. Unconverted T_4 thyroid acts as an anabolic agent. The drug also reduces fat stores by up to 20% by increasing brown fat thermogenesis. Human dosage for anabolic effect is estimated at 1mg per day. It is available in Germany as SPIROPENT (Thomae), MONORES (Valeas) and CLENASMA (Biomedica) in Italy. Clenbuterol is not (yet) banned in drug tested competitions.

CLOMID (o) Merrell-Dow: Clomiphene Citrate. 50mg: #226 or #50 (revised). Clomid was originally developed as an anti-estrogen (see NOLVADEX). It was found to stimulate ovulation in women, and is occasionally used to stimulate testosterone production in men. HCG does this better and cheaper.

CRESCORMON (i-*) Kabivitrum (Sweden): Human Growth Hormone. 4iu/vial. This product was one of the two original naturally derived GHs. Kabivitrum now markets Somatonorm and Genatrophin, their genetic GHs. See the chapter on GROWTH HORMONE.

CYTOMEL (o-g-c) Smith, Klein, and French: Liothyronine Sodium. 5mcg: #D14, 25mcg: #D16, 50mcg: D#17. Cytomel is synthetic T_3 the form of thyroid that the body actually uses. Absorption from the intestine of synthetic T_3 varies from person to person. Tablet formulation also is a factor in absorption. Brand name Cytomel appears more potent than the generics. This drug is used to adjust an athlete's serum free T_3 level to the high normal range. Some bodybuilders use it for precontest preparation to lose weight faster. Stopping Cytomel usage must be done gradually because sudden termination of its use can result in hair loss.

DANOCRINE (o) Winthrop-Breon: Danazol. 50mg: #D03, 100mg: #D04, 200mg: #D05. Danocrine is a synthetic androgen used to suppress ovarian function in women. It has no anabolic activity, though at one time it was thought to be a new 'find' in the steroid subculture. It is both expensive and worthless for athletic performance.

DECA-DURABOLIN (i-g-c) Organon: Nandrolone Decanoate. 50ma/ml-1ml ampules/2ml vials/1ml preload, 100mg/ml-2ml vials/1ml preload, 200mg/ml-1ml vials/1ml reload. Organon, Holland developed this steroid in 1962. It is technically a 19nortestosterone although it is derived from alkyl esters of Estradiol an estrogen. Pregnant women actually make their own nandrolone during pregnancy! Most athletes call all nandrolone decanoates 'Deca'. Deca is the most popular injectable anabolic steroid in America, with Testoterone Cypionate right behind it. Although the scientific research doesn't show Deca to be special, all athletes do well on it. It is not toxic, and if taken in reasonable dosages, does not raise blood pressure significantly. Because the brand name Organon product is so expensive, the majority of Decas used are the generics. No one has ever complained about pharmaceutical generics, although in the last year a few counterfeits appeared either weak or totally inactive. Deca gives a nice combination of strength, size and recuperation without the androgenic aspects of the testosterones. It also loads more fluids in the connective tissues and eliminates a lot of joint aches which would otherwise have to be either endured or treated with cortisone. Men take Deca at least once a week, although it is supposed to be effective in the body for at least two weeks. Average low dosage for men is 200m/week when it is being used with another injectable steroid. Most bodybuilders I know use 400mg/week. I have also encountered a few men using 200mg/day. Past 400mg/week you may encounter elevated blood pressure along with some side effects associate with androgens, mostly oily skin and acne. Deca does aromatize to estrogen, but not significantly.

Although women use Deca, most have trouble with it. Its major side effect for them is water retention, quite noticeable in the face. It also acts as an androgen on many women, with facial hair, deepening of the voice, and clitoral enlargement fairly common on dosages over 100m/week. Although Deca is an outstanding anabolic, its use slowed because of drug testing. Deca's metabolites, though inactive can stay in the body for many months, showing up on the urine analysis used in drug tested athletic events. Most athletes getting a positive on the test got caught by the presence of Deca metabolites. The most popular brand of generic Deca sold on the steroid black market was the Lypho-Med brand. This was not because it was exceptionally potent, but because the product was packaged in cellophane wrapped boxes of 25 vials, making it a compact and easy to handle package for steroid dealers to ship. Other generic Decas are packaged one 2ml vial to a box, taking up more space and rattling about more than the Lypho-Med. Of the Lypho-Meds, the favorite was the orange topped vial, which coded it as 200mg in 1ml of oil; the green top had 100mg/ml with 2ml per vial. Lypho-Med is now scarce on the black market because the steroid dealers who had enough savvy to somehow buy direct from the factory have been arrested and are out of business. Now we settle for any Deca though Lypho-Med, Rugby and Schein are most trusted. Steris Laboratories in Phoenix, Arizona is the actual producer of many individually boxed Decas. Both Rugby and Schein's Decas are made by Steris. Steris also markets Deca under its own name. Counterfeits to watch out for are the IPE brand and weird Canadian generics in strange looking bottles. Other counterfeits started off being light in dosage, even in oil content. There was a Lemmon (Lemmon hasn't produced nandrolone decanoate for 3 years) brand counterfeit which got better as time passed, but since it is so easy to change labels and most 2ml Deca bottles look alike, I cannot tell you which is a fake. Try rotating the crimped rubber plug; it shouldn't move. Most of the 'Organon' Deca on the black market is relabeled Lypho-Med.

DEPO-TESTOSTERONE (i-g-cg) Upjohn: Testosterone Cypionate. I won't go in to how this particular steroid is packaged, as the majority of Cypionate used is generic and have no quality complaints raised against them. The brand name can cost \$40+ per 10ml vial (200mg/ml) while the generics are priced at \$20 or less at the retail level, even on the black market. See Testosterone Cypionate.

DIANABOL (o-g-c-ci^{*}) Various: Methandrostenolone. 5mg oral 25mg/ml injectable. Introduced by Ciba, America in 1960, Dianabol is the most used oral steroid, and probably the best known to the general public. It was developed by Dr. John Ziegler in the late 1950's expressly to increase athletic performance. It is a simple derivative of methyltestosterone. Its generic name in America is methandrostenolone, but in England and Europe is usually called methandienone. For many years Ciba held the patent to it and accordingly only the brand name was available in America. When the patent rights ran out the generic companies Parr, Barr, Bolar, and Rugby sold a lot of D-bol (I'll call it that, its most popular monicker). Ciba had been accused of marketing Dianabol as an appetite stimulant, as well as supposedly selling the drug to famine ridden third world countries to make available protein use more efficient. Ciba never considered Dianabol a major moneymaker, and because of the negative publicity, withdrew it from the world market, with the exception of the veterinary injectable version available in Mexico. Even that went eventually. The FDA then announced that generic Dianabol had no approved medical use anymore and ordered all generic labs to cease production toward the end of 1985. Now that there were no real American pharmaceutical labs making D-bol, the black marketers took over.. The top steroid dealer in the world, now retired, who had been importing the small white PRONABOL tablets along with TRINERGIC capsules and injection from India, steroid to ship massive amounts of PRONABOL rebottled to look like a German generic. All D-bol in America, even the Trinergic was a gorgeous product, bright red capsules containing methandrostenolone and B vitamins; the 25mg ampules were excellent quality also.

For a while, the white PRONABOL was the only D-bol available in quantity. It was rebottled and shipped in from England, and athletes just couldn't get enough of the product. D-bol was then tableted in an underground lab based in Georgia; the raw powder was smuggled into the country as plant fertilizer. This also was an acceptable product. The best of the new Dianabols generally available in America comes out of Tijuana. It is packaged in a tiny light blue bottle with a white cap. A foam plug rather than cotton keeps the tablets from rattling. From the beginning this D-bol was designed for the black marketer who had to ship thousands of bottles at a time so the packaging took up the least amount of space possible. The quality of the product is acceptable. Because most athletes hold Mexican made steroids in low regard, the bottle may be labeled as a German product (Ludwig Heun GmbHKG). All the other counterfeit D-bols readily available on the American black market are deficient in various areas. Some tablets are too soft and break easily (IPE brand). Some have incorrect blue coloring, and most have a lower than 5mg/tab dosage. Some have no methandrostenolone at all. The hottest fake out now is what appears to be the last lots of Rugby Methandrostenolone. The bottle is shrink wrapped and each tablet has an imprinted 'R'. Besides knowing that Rugby never shrink wrapped their product, and never imprinted their tablets, the color is the wrong shade of blue. Users of this version report it being weak. The only oral D-bols to trust is the one in the small blue bottle, whatever the label happens to be, the Indian Trinergic capsules, Pronabol, and the white Nerbol from Hungary, which comes in strips of 10. Trinergic, Pronabol, and Nerobol are the only three D-bols coming from real pharmaceutical labs.

There is a counterfeit Nerabol now made in Germany. Injectable D, as it was called, came originally in 10, 25, 50 and 100 ml vials from Ciba-Geigy in Mexico. When that disappeared an American black marketeer had a generic injectable made in Germany. It was a well done product and is still in production. The current 10ml injectable D labeled Ciba-Geigy is a counterfeit. Although a clean product and effective, I do not know if it is truly methndrostenolone. No more than 25mg of methandrostenolone can be dissolved into 1ml of oil. With injectable Dianabol the same effects of increased size and strength can be duplicated by blending Deca with testosterone and most people would not know the difference. As the oral version works so well, I see no practical reason to use the injectable form. Ciba's research indicated that a minimum of 10mg per day of Dianabol is needed for nitrogen retention. 10mg per day is also as androgenic as a day's supply of a
male's natural testosterone. Most male athletes do not see benefit on less than 20mg per day, so 4 tabs a day is an average dosage. A high dose is considered 10 tab a day (which is still not uncommon) and beyond. D-bol is an excellent size and strength builder and works for everyone who tries it. Although it has a reputation of being liver toxic, very few side effects are encountered on 20mg per day. At 50mg+ per day high blood pressure and acne can result, along with increased aggressiveness. D-bol also causes mental euphoria. Women are afraid of Dianabol because of its masculinizing effects although women powerlifters use it frequently. Women will use 10mg per day and get astounding gains in muscle mass. Some encounter too much water retention. If used for more than a few weeks at a time, the masculinizing side effects do occur.

Dianabol aromatizes to estrogen, more than deca does, less than Anadrol. It has a higher receptor affinity than Anadrol, so less milligram amounts per day are needed. Although the scientific research indicates that Dianabol should not be an exceptional steroid, real world evidence has proven the contrary. An old time bodybuilder once said" "If you can't grow on Deca and D-bol, you're not gonna grow on anything, no matter how fancy it is." He was right. For men, the safest steroid combination that gives maximum results is 20mg of D-bol a day with 200mg of Deca a week. Athletes could take more better results. but be compromising and aet mav their health.

WARNING: The Mexican product has such a good reputation that there are now (October, 1988) two counterfeits of it. One is in the small blue bottle, white plastic cap, with largish, soft tablets having a slight lip around the tablet edge. The other is in the identical bottle, white metal cap, but the label is extremely dark blue compared to the Mexican. The tablets are well made except the color is not uniform, a mottled blue and white.

NOTE: RESTAUVIT by Industrial Farmaceutica Remir (Mexico) has 2.5mg of methandrostenolone fortified with vitamins. Also METBOLINE by Desbergers (Canada) has 2mg of methandrostenolone fortified with vitamins and aminos. As a tantalizing end to this entry, the best version of methandrostenolone available period is the 'fake' generic methandrostenolone packaged in strips of 10 tablets by International Pharmaceuticals in Germany. The tablets are consistently 2 to 3 mg over the specified 5mg dosage per tablet. This very capable underground lab also makes a nice injectable, for what its worth.

DIHYDROLONE (nci) DDR/NLA: Mibolerone. 30m/vial. The same designers of modified Bolasterone repackaged Checque drops as an imported East German injection. It may have had some Anadrol in it also. It was a clean product, as propylene glycol kills bacteria. As with all the DDR steroids, it is not available now. It caused male gynecomastia quite easily.

DIHYDROMESTERONE (nci) Various: varies. 15mg(?)/ml, 50ml. Dihydromesterone was originally made by a Baltimore steroid dealer by mixing Deca with Anadrol. I believe he ground up Anadrol tablets, put the powder in Deca and probably added some propylene glycol to make the binders (talc, etc.) dissolve. It was a painful shot. The Propylene glycol gives a burning sensation immediately upon injection and the Anadrol is irritating at the injection site for a few days. Some athletes really liked this drug. It was effective, but its cleanliness was always questionable. You could hold the bottle up to the light, shake it, and see lint and dust floating around. We all hoped it was clean lint and dust.

Another Dihydromesterone surfaced when the Baltimore dealer was arrested, but it turned out to be (we think) Equipoise. The Dihydromesterone available now appears to be a clean, well made, effective drug. I have no idea what is in it, though it doesn't have propylene glycol. It works extraordinarily well on women. I have never seen women transform themselves on steroids as fast as on Dihydromesterone. The dosage for women has been 1ml every other day, and no more than 4ml per week. Above this dosage, hair loss becomes rapid and noticeable. Because the current Dihydromesterone irritates and swells up the injection site, the injections are given with an insulin needle just before a workout in the muscle group that is going to be trained. Key injection areas are biceps, triceps, front and rear delts, and calves. The injection site is sore for a day. Dihydromesterone is not suitable for all women because we just don't know enough about it. If there's Deca in the compound, the metabolites will show up on a drug test. I will just say that Dihydromesterone shows the most dramatic gains in women while being at the threshold of serious masculinizing side effects.

DROLBAN (i-g) Lilly NLA: Dromostanolone Propionate. 50mg/ml, 10 ml. Drolban was originally developed jointly by Lilly and Syntex Mexico and commercially introduced in 1961. This synthetic dihydrotestosterone was recently dropped from the Lilly line. It is available in Europe as Masteron and Permastril. For discussion see MASTERON.

DURABOLIN (i-g) Organon: Nandrolone Phenpropionate. 25mg/ml-5ml vials, 50mg/ml-2ml vials. Older than Deca-Durabolin and introduced in 1959, Durabolin is a shorter acting Deca, requiring smaller dosages injected 2 to 3 times a week. I don't know why, but it does not have as many side effects as Deca, especially for women. Water retention is reduced significantly. Women who don't tolerate Deca well, do better on Durabolin. It is not used much because athletes are used to shooting Deca more than once a week anyway. It is also not considered a good value because a 50mg/ml 2ml vial of Durabolin costs about the same as 100mg/ml 2ml vial of Deca. For women it is a verv worthwhile injectable to take; also for men who tend towards high blood pressure. Most male athletes like the water retention that Deca brings on compared to Durabolin because increased fluid levels in the body can cause strength increases. Durabolin probably has the same metabolites as Deca. I've not heard of anyone tested positive for Durabolin, but we should assume until proven otherwise that it has the same metabolites as Deca. Durabolin is a good substitute for Deca in the older athlete, as from middle age onward steroid side effects appear faster and are magnified. Durabolin is one of my personal favorites. It is extremely hard to get on the black market because only one generic lab makes it, though it is sold by a variety of generic companies, such as Rugby in New York.

EQUIPOSE (i-c-g-cg-*) Squibb: Boldenon Undecyclenate. 25mg/ml, 5omg/ml (c-cg), 10 & 50ml vials. Ciba patented Boldenon as Parenabol in 1949, so it predates the nandrolones. Deca-Durabolin is not an approved steroid for horses in America, although Deca is used on animals for other ailments (feline leukemia). So Equipoise is used in horses legally in place of Deca Durabolin, although in most instances, Deca would be a better choice drug. In humans Equipoise acts somewhat like Deca, but we do not know how long the metabolites stay around. It feels, at the same milligram dosage, weaker than Deca. Many male athletes routinely use over 10cc's a week. Some athletes, both men and women, have gotten 'steroid fever' a pyrogenic reaction, when first using Equipoise. This phenomenon mimics flu-like symptoms. The sickness goes away in a

week, sooner if the dosage is reduced at the first sign of this strange effect. Equipoise does not show as much water retention, especially in women. Women do well on Equipoise, not needing nearly the large amounts as men. I've seen women grow and recuperate very well on between 50 to 100 milligrams of Equipoise per week and not showing as much water retention as with equal amounts of Deca. It may not aromatize as much as Deca but that is just taken for granted because women don't get as puffy on it. It is more androgenic than Deca, though only women notice it. Women on higher than 10mg/week of Equipoise exhibit increased irritability, oily skin, and acne, but not excessive hair growth. Boldenon Undecyclenate used to be available in Europe for human use, but now is not. Squibb used to market Equipoise in Canada and it is common to see counterfeit Canadian Equipoise on the American black market. All Squibb-labeled Equipoise is now made in Mexico, whether it is sold in America or Canada, and is labeled as Mexican made in both America and Canada. The new Mexican Squibb Equipoise only comes in the 25mg/ml strength, although the earlier American and Canadian products were 50mgml. Squibb also makes Equipoise for Solvay Veterinary, using their labeling, but with the Equipose name. It is available in a clear 50cc vial in the 50mg/ml strength. There are both good and bad fakes of Equipoise being made. The acceptable one is labeled as a Canadian Squibb product. The bad fake is dirty (lint and dust in the oil) and usually specs out to be some type of testosterone. Both the Squibb and the Solvay product have been copied. The bad fakes have an end cap that can be twisted by hand, usually an indication of a hand crimping process.

ESICLENE (o-i-*) Lab Prod Biol Bradlia/LPB (Italy): Formebolone, aka Fromyldienolone, 2mg/ml, 2ml/ampule – 6 ampules/box. First introduced in 1969. Although Esiclene is the American bodybuilder's favorite Italian steroid. As an anabolic it is virtually worthless. It has an interesting side effect of swelling up the muscle, but not the skin, at the injection site. It is a painful injection, and contains 20mgs of Lidocaine per ampule to compensate for the pain but the area still aches for a few days. Bodybuilders use Esiclene during the last 7 to 10 days before a competition to sculpt and bring up lagging muscle groups. Esiclene is injected with insulin needles. Key areas are biceps, triceps, rear delts, and calves. It is purely a cosmetic drug, and the effect is temporary. Within a week the area will go back to normal size. Some bodybuilders will use two ampules in each individual body part and do two or three separate body parts for the contest. Esiclene is the professional male bodybuilder's best kept secret. I know of one pro who will use two ampules in each bicep, tricep and calf every day for two weeks before the contest. Esiclene can add over an inch to the arms and calves, all temporary as explained. As an anabolic steroid it is useless. As a contest preparation drug it can mean the difference between winning and losing. Incidentally, the new black market versions of injectable Anadrol and injectable Anavar have the same swelling effect. Esiclene is not readily available in America now because of a weak dollar and strong Customs.

FEMEDROL (i-nc-*) Crown Laboratories, United Kingdom (sic): ?. 100mg/ml, 10ml/vial. This is a new designer steroid for women's use only. I have absolutely no idea what is in it. None of the lab rats has used it yet.

FINAJET 30 (i-c-*) Hoechst (England): Trenbolone Acetate. 30mg/ml, 50ml bottle. Although not marketed until the early 1980's, trenbolones have had patents since 1963. This veterinary steroid was also marketed in France as Finaject by Roussell. Roussell AG (Germany) is the parent company to both Hoechst (England) and Roussell (France). Both companies had taken it off the market up until October 1988 although old, soon to expire lots of Finajet were still available on the black market in England. The unsubstantiated story is that a French politician was selling Finaject on the black market to finance his re-election campaign and was caught at it, politically necessitating the stopping or production. However, in talking with major European steroid dealers, much of the Finajet was sold directly to them from the 'back door' of both Roussell and Hoechst. Trenbolone is the generic name for Parabolan, which is marketed for human use in single ampules containing one and a half ml of product. Finajet has been the only new steroid that all American strength athletes agree to be highly effective. Finalet is technically an androgen and its use will cause oily skin, acne, aggressiveness, etc. It's uniqueness as a steroid is based on its ability to give very noticeable strength gains with very little muscle mass growth. Powerlifters having to stay in a weight class will use Finajet. It is also popular with bodybuilders because its cosmetic effect on a lean physique is to impart a dramatic visual harness and density to the muscles. It will generate more strength gains than Anavar. It is as effective for strength as Anadrol but does not appear to cause water retention. Finalet does not make you look puffy, as Anadrol and the Testosterones can. However, this is not an ideal steroid. It is harsh on the kidneys, and though body fluid levels aren't elevated by Finajet, people do get an increase in blood pressure. As with many powerful androgens, reports of headaches have been common. Some people are allergic to acetates and consequently get a swelling and a rash at the injection site. This is an infrequent occurrence which never happens with Parabolan, which is trenbolone without the acetate added. The cautious dosage of Finajet has been 1ml injected two or three times a week. Men using 1ml injected every day have reported tremendous strength and size gains. Finajet is one of those steroids which justifibly alarm the general public. It is a European veterinary injection, very toxic, and very mood altering. Although Finajet is an outstanding performer, both its physical and psychological side effects require more than a casual decision to use it. It is not a recreational steroid. Men become irritable and short tempered while on it. Someone on Finajet is no fun to be around. Finajet causes male gynecomastia easily. Although Finajet is not supposed to aromatize and do this, some of the lower priced American counterfeits are rebottled with small dosages they have encountered nausea and fever. I consider it definite 'Do not touch' drug for women. This is a competition only oriented drug. There are at least two counterfeit finajets on the black market. It is very hard to tell which is a fake because the counterfeits are done extremely well; even the label, box, and insert are excellent copies. Very few have complained about the quality and effectiveness of the product. Also, the English version is almost non-existent on the American black market because of its high price and the new aggressive Customs confiscations of steroids from Europe. I would guess that 98% of all Finajet sold in America is counterfeit. Actually, some of the Finajet sold in Holland is counterfeit also, just being rebottled 50mg/ml Laurabolin.

Fluoxymesterone (o) Generic name for Halotestin. See HALOTESTIN.

FURAZABOL (i-*) Various. This is an extremely short acting synthetic dihydrotestosterone. It was a significant steroid used to cheat the drug test as the 1988 Olympics, especially in the track events. This steroid has all the attributes of Androstanolone. Most used band is MIOTOLON by Daiichi Labs, Tokyo, Japan.

GENATROPHIN (i-*?) Kabivitrum: genetic HGH. 4iu/2ml. This is the original 192 sequence genetic HGH, recently replaced by the superior SOMATONORM.

GROCORMON (ci) Lab. Chim. G Pharvigor S.R.L. Firenze (sic): Synthetic Growth Hormone. I cannot believe this to be real. See PROTROPIN.

HALOTESTIN (o-g) Upjohn: fluoxymesterone. 2mg: #14, 5mg: #19, 10mg: #36. Upjohn introduced Halotestin to the US in 1957. Halotestin is a powerful and toxic androgen. It does not show any anabolic activity, to the contrary of scientific research done on rats, but does impart some strength gains without bodyweight gains. It has been used primarily by powerlifters who have to stay within a weight class. It is very liver toxic, more so than any other steroid in America. It can cause oily skin, acne, headaches, aggressiveness, and extreme irritability. It is not recommended for women athletes because of its androgenicity. Many generic brands are available. Halotestin does not aromatize and when used as a pre-contest bodybuilding drug imparts a cosmetic density to the physique. It has fallen out of use because the European trenbolones (Parabolan and Finajet) do the same things as Halotestin and are in fashion. The Trenbolones are almost as toxic as Halotestin, but to the kidneys, not the liver.

HEXALON (ci) DDR/NLA: Unspecified metabolic elevator. 30ml/vial. This was not generally distributed to dealers on the black market because it was so dangerous to use. It was bright translucent orange in color and used propylene glycol to dissolve whatever the solid was. It raised your body temperature, allowing you to burn more fat. Very select bodybuilders used it for final contest preparation. All I know about Hexalon is that its main ingredient was a type of poison which destroyed white blood cells and had the curious side effect of raising your body temperature. The use of certain poisons to enhance athletic performance is not a new idea; powerlifters have in the past used strychnine in small doses for more explosive lifts. No athletes should use poisons for performance enhancement. The main side effect is death (but, yes, I have used both Hexalon and strychnine).

HCG (i-q-c) Various: Human Chorionic Gonadrotrophin. 1000iu/ml, 10ml/vial. HCG is marketed as a fertility drug for women and does an excellent job of inducing ovulation. Whenever you encounter media coverage of multiple births, the mother usually had been on HCG. HCG has also been administered to women as a dieting aid. It has no effect on weight loss. It also causes elevated testosterone production in men, but causes no performance benefits in women. HCG is used by male athletes to keep their own production of testosterone going while on steroids, or to start it up again when coming off the drugs. Most steroids interrupt testosterone production in the testicles, and consequently they shrink in size because of disuse. This troubles men to no end. Most athletes, knowing that the atrophy is temporary and reversible, just accept this side effect as something they have to live with while taking steroids. It seems that the media holds a man's testicles as something almost sacred because they routinely latch on to this side effect and hype it to castration equating gualities. This much is true: when a man's natural production of testosterone shuts down and his testicles atrophy, his sexual interest usually goes away almost to the point of impotency. In some case of extremely high dosages used, the man is temporary impotent. Seasoned steroid users don't seem to be bothered by this, but the problem is serious. Yes, gonadal function and libido can be rectified but the damage to the personal relationship between the athlete and his sexual partner sometimes cannot. HCG therapy during steroid use is important because sexual apathy is a very bad habit to get into. Eventually the athlete will psychologically suffer for his (in)actions. HCG is not a steroid. It is a hormone derived from the urine of pregnant women. It is packaged in two parts, unreconstituted freeze dried HCG and 10ml of water. It can either be packaged in two separate bottles, or in one hourglass shaped bottle with a stopper in the middle keeping the two components apart. After reconstitution, HCG should always be refrigerated. HCGs in Mexican pharmacies usually have added B vitamins. The fake Organon HCG from the San Jose area was totally bogus and dirty. HCG has been known to cause acne. It also elevates a male's natural production of estrogen as well as testosterone, and gynecomastia has been associated with its use. Smart athletes will use Nolvadex in conjunction with it. Usual practice has been to use 500 to 1000iu's once or twice a week, either while using steroids, after using them, or both. This is not the ideal way to use HCG. I will discuss HCG use more in the chapter 'Getting Off Steroids'. Briefly though, it entails small amounts injected subcutaneously every two hours, twelve times a day. The impotency problem is essential to correct because on the personal and social level it gives legitimate ammunition to the anti-steroid media. The problem can be corrected and should be dealt with. Not to do so is an ethnical irresponsibility.

HUMAN GROWTH HORMONE: See Growth Hormone chapter.

HUMATROPE: See Growth Hormone chapter.

L-DOPA (t-g) Various: Levodopa. L-Dopa is a prescription amino acid which is available in tablets and capsules. Its approved use is to combat Parkinson's disease. Athletes use it to raise natural growth hormone output. Usual dosage is 1gm before bedtime. It may have scientific research showing the GH elevating effects, but most athletes found no benefit in its use. Some people get extremely nauseous while using L-Dopa. EINMET by Merch, Sharp, & Dohme, a combination of Carbidopa and L-Dopa is supposed to not cause the nausea, although I have known athletes to get sick on that one, too. L-Dopa does not have any anabolic effect in real world situations. Because of stricter drug testing, its popularity is growing out of simple desperation.

LAURABOLIN V (i-g) Intervet Inertnational (Holland): Nadrolone Laurate. Laurabolin is a European veterinary steroid available in large multi-use vials, usually in a 50mg/ml strength. Most Nandrolones are only available in the 50mg/ml strength, consequently the American Decas in the 200mg/ml strength are highly sought in Europe. Laurabolin is a longer acting Deca, and is comparatively cheap in Europe. It shows more water retention than regular Deca and I assume would show the same metabolites in a urine test. Most European athletes don't knowingly use Laurabolin, but there is a small counterfeit lab in Holland making fakes such as injectable Dianabol, and usually the steroid turns out to be a combination of Laurabolin and Finajet or testosterone. Laurabolin is also a veterinary steroid produced in Montreal Canada. Deca is not in short supply in America, so I would not consider Laurabolin anything special to use.

LIPIDEX (t-g-cg-cgi) Searle: Oxandrolone. 2.5mg, 30/box. This is a genuine Searle oxandrolone, but made in Brazil. See ANAVAR.

MASTERON (i-g) Syntex: Dromostranolone Propionate. 50 mg/ml-2ml/amp, 2amp/box. Masteron is synthetic dihydrotestosterone. It does not aromatize and does not appear to cause water retention. Although some researchers think dihydrotesterone to be more anabolic than regular testosterone, Masteron does not show these properties. Masteron shows more androgenic properties than anabolic. Relative to the trenbolones and fluoxymesterone, its toxicity is low. This steroid is popular with male bodybuilders who

want to harden their physiques for a contest by increasing their androgens. The trenbolones have become the choice steroids to use for this effect, however, Masteron is preferred by bodybuilders with gynecomastia, or who fear the toxicity of the trenbolones. Dihydrotestosterone is thought to accelerate male pattern baldness, and I have witnessed this happening in athletes using large amounts of steroids which readily convert to DHT, notably Testosterone Cypionate and Anadrol. I have not seen this effect with Masteron, but then Masteron is usually used for shorter durations and in lesser amounts. NOTE: It also is marketed in Germany as MASTERID by Gruenthal.

MAXIBOL (o) Roussel (Mexico): Co-enzyme B-12. 1000mcg/capsule, 16 caps per box. Co-enzyme B_{12} is also generically known as dibencozide and is considered a non-steroidal anabolic. It is not on the IOC banned list. If Co-enzyme B_{12} really does work as an anabolic, the oral route is effective only in dosages of 10mg per day in two divided 5mg dosages. Popular in America now as non-prescription DICOBALENE-V (Jenapharm USA). See NEUROFOR.

MAXIBOLIN (o) Organon: Ethylestrenol. 2mg: #685. Introduced in 1964 as Durabolin-O(ral), by the time you read this Maxibolin will be off the general American market and will only be readily available in Europe as Orabolin in 25 tablet bottles. It is a very interesting steroid. A yellow triangular tablet, Maxibolin is an anabolic steroid derived from Progesterone, a female hormone. It is not 17 Alpha Alkylated (technically a 19nortestosterone), not very androgenic, and does not aromatize significantly below 10mg/day dosages. It is an ideal steroid for women, both physically and, if you take that stance, ethically. Usual dosage has been 5 to 10 tablets a day. No one I know has ever seen the elixir, which supposedly came in 120ml bottles, 2mg/5ml. Do not confuse Maxibolin with Maxibol from Mexico. Maxibol is not a steroid.

MEGAGRISVIT (o&i-*) Farmitalia (German): Clostebol Acetate (fortified). Oral/15mg, inj/10mg. Clostebol is a popular anabolic in Germany, and recently MEGAGRISEVIT has become popular with powerlifters in the US. This steroid is fortified with B_{12} , Niacin, and other various B vitamin derivatives. The injection is packaged in two ampules; one contains the B_6 and B_{12} .

"60" KG METHAFURIN (o-nc-*) Lugwig Heun GmbH (W. Germany): Methandrostenolone (10mg) with Furosemide (10mg) and Silymun Marianum (40mg). 60mg (combined)/tab, 200 tabs/bottle. This is a very worthwhile new designer steroid, the first oral one in America. Each tablet contains the equivalent of 2 Dianabol tablets, along with a small amount of diuretic, and a large amount of liver anti-toxin. The drug has been designed with a diuretic for athletes who tend to get water retention and/or high blood pressure from Dianabol, along with Silymun Marianum which has an international reputation as an effective liver anti-toxin. This drug is ideal for sensitive men, some women, and all older male athletes.

Methandriol (i) NLA. A water based, shorter acting Methandriol Dipropionate. See next entry.

Methandriol Dipropionate (i-g) NLA. 50 or 100mg/ml 10ml, 30ml vilas. Organon introduced the Methandriols commercially in 1951 as STENEDIOL. Methandriol Dipropionate was taken off the American market around 1982. Generic labs produced it, though it was once marketed toward its end as the brand name ANABOLIN. It stayed on

the American veterinary market for a year or so after 1982, but is gone now. I am discussing it for two reasons. First, it seems that whatever is gone from the steroid market develops a cult following. Second, some steroid blends from Australia (Drive, Geldabol, Filibol Forte) contain this steroid so you should know why it is considered special. Methandriol was never thought to be an effective steroid by itself, but had to be used with other steroids for benefit. The popular theory proposed by Jeff Feliciano (considered in the past as the 'other' steroid guru), is that Methandriol acts as a potentiator of other steroids. It does this by binding so tightly to the androgen binding globules that it displaces whatever steroid active available than without Methandriol. Is he right? Haven't the foggiest. The care 'lab rats' determined that Methandriol Dipropionate did not work well alone, but seemed to add anabolic effect when used with other steroids are oddities on the black market.

Methyltestosterone (o-g) Various. 5mg (buccal), 10mg, 25mg. Methyltestosterone is the crudest, oldest oral form of testosterone known. It is mostly destroyed in its initial pass through the liver and has an extremely short effective life, less than an hour, in the body. Upjohn does produce a more refined micronized testosterone in bulk for European markets. Powerlifters use 'methyl-tes' just before a workout or competition for a boost, most likely a psychologically aggressive one, it has no practical anabolic value. The buccal versions are most effective. It is very cheap to make; I used to pay \$1 a bottle for it when I was a steroid dealer. Brand name methyltestosterone is ANDROID-5, ANDROID-10, and ANDROID-25 by Brown labs. Don't confuse it with ANDROID-F (fluoxymesterone).

NEROBOL (o-g-c) Gedeon Richter (Hungary): Methandrostenolone. See Dianabol.

NEUROFOR (i) Roussel (Mexico): Co-enzyme B_{12} . Unreconstituted 5000mcg/ml-5ml vial, 5000mcg/ml-10ml vial. This non-steroidal anabolic is routinely used by most athletes who are to be drug tested for a competition. It is reconstituted like HCG, and should be refrigerated thereafter. 1ml (5000mcg) is usually injected daily with a 28 gauge insulin needle, and sometimes is administered with 500mcg of B_{12} along with the additional B vitamins. In the past bodybuilders and powerlifters never considered using Neurofor, but that was before drug testing. Now they'll use anything for an 'edge'. The legality of buying Neurofor in Mexico and bringing it to America is in limbo. Although marketed as a drug and packaged as such, Co-enzyme B_{12} is a vitamin derivative. A smuggler probably will get the product confiscated if caught with it at the border. You will see increasing use of this product in the years ahead.

NILEVAR (o-c) Searle: Norethandrolone. Nilevar, introduced by Searle in 1956 was the forerunner to Anavar. Nilevar was taken off the market in America voluntarily by Searle once Anavar was developed, although it became available in Switzerland in 1985. Nilevar has the same effects as Navar, but is more androgenic and will aromatize. The counterfeit Anavar labeled Nelevar from the Colorado lab is not Oxandrolone; it is Norethandrolone. Mot men using this fake never notice the difference because they use it in conjunction with other steroids whose side effects overlap and mask Nilevar's. Women, however, would notice the difference because of Nilevar's masculinizing effects.

NOLVADEX (o-q-c) ICI: Tamoxifen Citrate. 10mg 38 600. This pretty tablet with a female head profile imprinted on the American version is an estrogenic steroid that works as an anti-estrogen. Its primary use is to bind at estrogen receptor sites without instilling estrogenic effects to the cells. This makes Nolvadex useful for controlling tumor growth in the breast and its approved use is as a therapeutic for female breast cancer. I proposed in 1981 that Nolvadex should be used along with steroid that aromatize to minimize the side effects that excess estrogen imparts to the metabolism. Nolvadex is effective for male steroid users to prevent or control gynecomastia. It is effective in both men and women as a dieting aid. Fat loss is faster when using 20mg of Nolvadex a day. Nolvadex also gives the lean physique a denser look for both sexes. Although women can experience menopausal type symptoms when using Nolvadex, I rarely find female athletes complaining of this effect. Nolvadex comes in bottles of 60 in America and retails for over \$1 per tablet. Recommended dosage is 10-20mg per day for men and 20mg per day for women. Nolvadex is also manufactured in Mexico by ICI and is considerably less expensive. It comes in a box of 30, 3 strips of 10 tablets, no lady on them. In Europe it is available as a 20mg and occasionally a 40mg tab. The counterfeit Nolvadex is of fair quality, has the ICI markings on the packaging and comes in a white plastic bottle of 60 tabs. The counterfeit is the Nolvadex most used by American athletes and has had no quality complaints, until the summer of 1988, when the dosage appeared significantly light. It also has the best price. Steroid dealers don't make much profit on Nolvadex, considering it a benign charity drug, one that should be used to ensure good health, but would not be used if the price was too high. I am delighted that my recommendation of Novladex use by steroid taking athletes has been accepted by many sports medicine doctors. I am more pleased, though, that it has improved the athlete's health while on steroids.

NOTE: Although ICI sells most of the Nolvadex throughout the world, generic versions are available in England for a vastly reduced price.

NORMETHAZINE (i-nc) Crown Laboratories, United Kingdom: ?. 12.5mg/ml, 2ml/vial, 10 vials/box. I have no information on this new designer steroid. It appears to contain 10mg of Testosterone Proprionate and 2.5mg of Oxandrolone per 2ml. I believe it is a copy of Dr. John Perzick's Dihormonal injection, available only to his patients. It seems to work well on women when used once (all 2ccs) every two or three days.

NOTE: There is no Crown Laboratories anywhere in the United Kingdom.

OXANDROLONE (o-g-c-ci) SPA Milano (Italy). Commercial introduction. 1979. See ANAVAR.

PARABOLAN (i-c) Negma (France): Trenbolone. 76mg/ampule. Parabolan went on sale in France in 1980, so it is a new steroid, although it's been around experimentally since 1963. Whatever was said about Finajet mostly holds true for Finajet's effects but do not like frequent injections. Parabolan, however, is actually a shorter acting Finajet, as the acetate added to the trenbolone extends its half life in the body. Parabolan could be injected daily. Dosages has averaged 1 or 2 ampules per week. This is an effective and toxic steroid. Counterfeits contain 2ml rather than one and a half. There is also a 4cc multi-use vial counterfeit. Also, the early fakes could be identified by being able to scrape off the ampule's silkscreened printing with a fingernail. The new counterfeits are now harder to identify simply because they have been around so long that not many people are familiar with the original. No athlete has complained about the new counterfeits' effectiveness, but most may never have used real Parabolan. Because American counterfeiters don't have the ability to package steroids in ampules, counterfeit Parabolan in ampules are manufactured out of the country. Some athletes are switching their use of Finajet to Parabolan in hopes of lesser incidences of 'bad fakes' among the Parabolans.

NOTE: The 4cc Parabolan is an American counterfeit. The 2cc one is Mexican. Real European Parabolan contains 1.5 ml per ampule.

PERIACTIN (o-e-g) Merck, Sharp, and & Dohme: Cyproheptadine Hydrochloride. 4mg: #62. Periactin is an antihistamine which has a side effect of increasing one's appetite. Some strength athletes find it difficult to eat enough food to make the size and strength gains they expect. A few steroids affect appetite. Dianabol has been known to increase it. Anavar, both oral and injection, can give the sensation of fullness in the stomach. Anadrol has made people slightly nauseous. As an appetite stimulant, for which Periactin has not been FDA approved, no one has determined an effective dose. For antihistamine purposes the dosage averages between 4 to 16mg per day. Periactin also makes some people drowsy and irritable (traits that steroid taking athletes don't need with the 'steroid psychosis' theory floating around). I don't see its use as much as I did six years ago. It also is available as a syrup, and as with Maxibolan, I've never seen that version.

PERMATRIL (i-g) Cassene (France): Dromostanolon Propionate. 50mg/ml-2ml/amp, 3 amp/box. Cassene has been selling Permastril since 1969. This is another European version of the elusive Drolban. It offers an extra ampule per box over MASTERON at the same price. See MASTERON.

PRIMOBOLAN (o-c) Schering: Methenolone. 5mg-10/strip (Mexico), 25mg-50/bottle (Europe), 50mg-30/bottle or box (Europe and counterfeit). Patented in 1959, Schering Germany marketed it originally in 1961. Primobolan is the most popular steroid in Europe. Primbolan in tablet form certainly is the #1 steroid for European women bodybuilders, possibly because it is available in more countries than the more effective Oxandrolone. The oral versions of Primobolan is actually Primobolan Acetate. Some tablet literature has the word 'buccal', misleading as they are not sublingual tablets. 'Buccal' simply means 'oral' in French. Europeans don't use small dosages of Primobolan, and 4 5mg tabs a day is a common dosage for a female bodybuilder. In America women seem more cautious with the drug, as 25-50mg per day is the common dosage here. Primobolan has never been known for having bad side effects. It is 17-Beta-Alkylated, not as harsh as the 17-Alpha-Alkylateds. In Europe it is prescribed to women and children. The Primobolans do have FDA approval, although Schering has never marketed the drug in America. An MD may legally import Primobolan, and prescribe it, although I know of no MD doing this anymore. Americans never considered the Primobolans as size building steroids and usually use them while dieting. There is no water retention or aromatization evident with the drug's use. Primobolan's reputation as a steroid varies from country to country. The tablets generally are considered to be used while dieting. The 5mg Primobolan tabs from Schering Mexico are inexpensive, but not in demand in America. The 50mg counterfeit is now seen on the black market more than the actual European product.

PRIMOBOLAN ACETATE (i) Schering AG: Methenolone Acetate. 20mg/ml-3 ampules/box. This short acting injectable form of Primobolan has a cult following of competitive bodybuilders in America. It is now only manufactured in Germany. European athletes used to regard Primo Acetate injection to be for children because the dosage is so small. Now that it is so hard to obtain even in Europe, it is once again gaining in cult status. Although an American bodybuilder (male or female) will inject a 20mg ampule every other day for contest preparation, I have always questioned Primo Acetate's effectiveness as an anabolic, especially while dieting and in such a small dosage. American women prefer the tablets. I don't consider Primo Acetate injection effective for anyone unless used in large dosages. There are other steroids just as safe to use and more effective, especially considering that Primo Acetate injection goes for \$12-\$15 per ampule on the American black market. As with Trenbolone Acetate, some people are allergic to acetate compounds, especially when injected.

PRIMOBOLAN DEPOT (i) Schering: Methenolone Enanthate. 50mg/ml (Mexico), 100mg/ml (Europe). This is a longer acting Primobolan than the Acetate and is usually taken weekly. It is thought to increase muscle size by decreasing muscle density, although this view is held by athletes, not scientists. European male athletes are not used to frequent injections and it is common to see them break open ampules of various steroids and pour them into 10cc syringes, taking one BIG injection weekly. For weight gain Germans use a lot of testosterone and it can be seen in the amount of acne and bloatedness associated with German strength athletes. The Dutch and the French men prefer Primobolan Depot to gain weight on, along with some Deca. In America Primobolan Depot, while attractively priced from Schering Mexico, has no big following. Its side effect are less than Deca's; it may not raise blood pressure as much as other injectables. Primobolan Depot in America is an 'l'll try it for a while' kind of drug. It also is used by older athletes both in Europe and America who become concerned with their health, but still want to use steroids. As side effects heighten with the aging of the athlete, the safer steroids become more popular.

PRIMOTESTON DEPOT 100 (i) Schering (Mexico): 25mg Testosterone Propionate with 110mg Testosterone Enanthate/ml, 1ml/amp. Neither of the Primotestons are special, however, you wouldn't believe the number of bodybuilders I've encountered who thought that Primoteston is needed to 'balance out' Sustanon 250. I traced this theory back to a steroid dealer who had a phony doctor's degree and yes, was sitting on a few thousand ampules of Primoteston and didn't know how to move them.

PRIMOTESTON DEPOT 250 (i) Schering: Testosterone Enanthate. 250mg/ml, 1ml/amp. A year ago I would have said that Primoteston Deport was not worth considering, as we have perfectly good Enanthates in this country. Well, there are so many fakes around that are either not really Enanthate, or are dirty, and/or under strengthened, that the idea of a sealed ampule of guaranteed pharmaceutical quality Testosterone Enanthate makes sense. In theory, both these products should have FDA approval, but without a prescription, transporting this product over the border is illegal. Note: There are no known counterfeits of this product, making it a safe buy.

PROTABOL (o-*) A.B. Draco (Sweden): Thiomesterone. This is the elusive oral thiomesterone, always written up in research as the most promising, most potent anabolic with no androgenic side effects. Let me know if you ever find any. Also marketed as EMDABOLIN by Chugai Labs, Tokyo, Japan.

PROTROPIN (i-cg-) Genentech: Synthetic Growth Hormone. 1iu/ml, 10ml/vial. This and Lilly's Humatrope are the only GHs legal for sale in the US. Lilly's is the better product. See chapter on Growth Hormone.

PROVIRON (o-*) Schering: Mesterolone. 25mg, 50 tab/bottle (Europe), 16 tab/box (Mexico). Proviron is a non-toxic, non-aromatizing androgen. It has no anabolic properties, but does have higher receptor affinities than almost any other steroid. Although Proviron has been used to combat the aromatization of high mg amount steroids such as Anadrol and the testosterones. I believe that its blocking action at the steroid receptor sites outweigh its usefulness, if it indeed has any. It has been proposed by Jeff Feliciano that Proviron blocks the aromatization process at the Cytochrome P-450 ring. I can think of no legitimate use for Proviron in enhancing athletic performance. Whether you want it to do for you, another steroid or anti-estrogen will do it better.

QUINOLONE (nci) DDR/NLA:? Quinolone was marketed as a steroid for women. I believe it contained no anabolic steroid in it. No one thought it to be effective.

RALABOL (o-i-*) Commercial Solvents, New York; Zernol. Ralabol and Ralgro are both veterinary pellet implants for use in cattle in America. Zeranol is also available in tablet form as RALONE in Italy and Spain. See Zeranol.

RETIN-A Ortho Pharmaceutical: Tretinoin. .0255 gel-15gm/tube & 45gm/tube, .01% gel-15gm/tube & 45gm/tube, .1% cream-20gm/tube, .05% cream-20gm/tube & 45 gm/tube, .05% liquid-28ml/bottle. This is a powerful topical prescription acne medicine, the next best thing to Accutane. Used regularly while on moderate dosages of steroids, oily skin and acne is controlled. It also is reported to repair sun damaged skin. The liquid is now being used in conjunction with Minoxidil for male pattern baldness therapy. Most athletes use either the .1% cream, or the 05% cream. Many find the .1% (red and white tube) to cause too much dryness and flaking. It is not advisable to use Retin-A if you plan to do tanning, as you can burn easier. This product is also available in Mexico, though its quality has been questioned.

SOMATONORM (i-*?) Kabivitrum (Sweden): genetic HGH. 4iu/2ml. This is the correct 191 amino sequence sold in Spain and Sweden by Kabivitrum. See chapter on Growth Hormone.

STEN (i-*) Atlantis S.A. (Mexico): Testosterone blend. 20mg DHT, 25mg Testosterone Propionate, 75mg Testosteorne Cypionate/2ml. 2ml/amp. This is a low dosage testosterone blend from Mexico. It is not popular with American athletes, although it is just as good a product as Sustanon 250. As no counterfeits of this one exist, it is a safe buy.

STROMBA (o-g-c) Winthrop: Stanozolol. 5mg/tab. Introduced as an injection in Germany (Strombaject) in 1961 and in tablet form in America in the same year. Sterling Drug in America actually developed the steroid. This is the European or counterfeit version of Winstrol tabs. Winthrop has trademarks on both names. See WINSTROL.

STROMBA JET (i-g) Winthrop: Stanozolol. 50mg/mg, 1ml/amp. The European version of Winstrol V injection, although the crystal sizes are a bit smaller. See WINSTROL V.

SUSTANON 250 (i-c-*) Organon: Testosterone blend. 30mg Testosterone Propionate, 60mg Testosterone Phenlypropionate, 60mg Testosterone Isocaproate, 100mg Testosterone Decanoate/ml, 1ml/amp or 1m/preload. This timed-release testosterone injection was designed by Organon to give an even release of testosterone over a month's time. Athletes inject Sustanon 250 at least once a week. This is a very popular testosterone, and is preferred by bodybuilders over Testosterone Cypionate and Enanthate. It works extremely well as an anabolic. Although it is androgenic as all the other testosterones, it doesn't seem to show as much water retention or aromatization as Cypionate. Granted, this testosterone works well. If you are concerned with water retention and estrogen, regular Testosterone Propionate has even less of these side effects than Sustanon 250 does, but has to be injected more often. I consider this a good testosterone to use only when taking price into consideration. At its introduction into the steroid black market a few years ago, it would retail for \$20 per ampule, and at this price it is not worth considering. In 1986, Sostanon 250 preloads were being smuggled in from South America and could retail for between \$2-\$5 per preload. At this price it is definitely worth considering. The way the steroid black market is, Sostanon (South American spelling) 250 could be more available than Testosterone Propionate. Just remember that Propionate is FDA approved. Sustanon 250 is not. There is no guarantee that the counterfeit Sustanon 250 exactly matches the brand name one. The counterfeit one comes in an ampule and is indistinguishable from the original. I would trust the preloads only.

TESLAC (o) Squibb: Testolactone. 50mg: #690. Teslac is an estrogen antagonist no athlete seems to use. It is expensive and the effective dosage is between 250mg to 1gm daily in order to get the same benefits as Nolvadex.

Testosterone (o-g) Various. Straight testosterone with no esters added to extend is activity is not used much by athletes. It is available as an oil based injection, or a water based one, neither have activity of more than a few hours. Some powerlifters will inject straight testosterone in small amounts to try to sneak by the urine test. Since testing on men involves the testosterone/epiandosterone in correct ratios to get a negative, but this goes beyond the skill of most American athletes.

Testosterone Cypionate (i-g-c) Various. 200mg/ml, 10ml/vial. 'Cyp' is the most popular testosterone in America, and is even valued in Europe. Its popularity comes from its instant gratification status as an anabolic. It gives discernible size and strength gains to all athletes and gives both relatively fast. Although many athletes do well on just 200mg per week, it is not uncommon to see very high doses in the 2000mg-4000mg per week used (conveniently, 1 or 2 10cc bottles per week). Mostly powerlifters and football players are using these mega doses. We have been reading about 'steroid psychosis' in the general media lately, but might do better to rename it 'mega dose androgen psychosis'. Most athletes using this much Testosterone Cypionate are actually ashamed to be known to use so much, and consequently lie, alleging a much lower dosage. I've never seen harmfully aberrant behavior by men on 400mg of Cypionate a week. I have seen aggressive behavior on more than this amount. I don't do well in lecturing the offending athletes about mega dose dangers because 1) I can't recommend other things less harmful that make them as strong. 2) They mostly don't care about their health only their strength, and 3) They like being aggressive assholes. This combination of three factors makes the mega dose Cypionate man (and he's probably taking lots of Anadrol also) a very dangerous steroid user, not only to himself, but to all of us. I used to think that Cypionate was a good buy as a steroid. I now think that it is too cheap. It's very tempting to take 1 or 2 bottles of Cypionate a week when it retails for between \$15-\$20 per bottle. Cypionate is an effective drug even when used conservatively. Its effectiveness and its bargin price give it a high abuse potential. High dosages of Cypionate can lead to hypertension, baldness, acne and all the bad side effects. Even the stupidest of athletes at least knows this much. He just doesn't care.

Testosterone Enanthate (i-g-c) Various. 200mg/ml, 10ml/vial. Testosterone Enanthate is favored by athletes wanting a Testosterone Cypionate without as much water retention. Most men cannot differentiate between the two testosterones. They are both usually injected on a weekly basis, a duration shorter than either drug's length of activity. Unless the athlete has a known sensitivity to the water retaining drugs, Enanthate and Cypionate are indistinguishable. So indistinguishable, that some counterfeit Enanthates are simply relabeled Cypionates.

Testosterone Propionate (i-g) Various, i.e. Rugby, Lilly. Testosterone Propionate users tend to be more analytical and cautious with their steroid use. This is a short acting testosterone, requiring an injection at least every third day. It also is a painful shot, the pain coming on a few hours after the injection. Dosage seems to be in a conservative 25mg to 50mg per injection range. Propionate is the preferred testosterone for people concerned about all the bad side effects associated with the testosterones. They are all at a lesser degree with Propionate because of a combination of the more benign nature of the drug along with the conservative nature of its users. Propionate has even been used with little side effects by women. To minimize its side effects in women it is used over a longer duration than the drug's activity to avoid a buildup of androgen in the metabolism. Women seem to be able to tolerate small amounts of fast acting androgens if they are taken every 7 or 10 days. I've known women to use 25mg to 50mg of Propionate once a week with a balance of increased recuperative ability which non-androgens don't support as well and no masculinizing side effects.

Testosterone Undecanoate, aka TU (o-*) Organon: RESTANDOL (England), UNDESTOR (Scandinavia), ANDRIOL or ANDROXON (Europe). 40mg capsules: #DV3. One of the truly new steroids, marketed in Germany in 1978. TU is the most sophisticated oral testosterone available. It is not 17 Alpha Alkylated and is not destroyed by the liver because TU is absorbed from the small intestine into the lymphatic system, bypassing the liver. Once in the lymphatic system, 60% of the TU converts to DHT. Only 1%-2% aromatizes to estrogen. Up to 240mg/day in divided dosages can be used without interrupting a male's natural testosterone production. TU does not affect liver and kidney functions and is not known to cause gynecomastia. The capsules are extremely heat sensitive, leaving a bottle of them in direct sunlight or a hot car will melt them into a large unusable brown glob. Other than TU's rather high price, it appears to be a very safe and effective androgen to use, especially as it does not usually shut down testicular function.

TRIACANA (o-*)?: Lyothyronine Acetate (TA₃). Triacana is the European version of Cytomel, though TA₃ is no longer acting than T₃. It perhaps is better absorbed than our T₃s. Each Triacana tablet equals about 5mcg of Cytomel so it would not be unusual to see an athlete use 20+ tablets per day.

TROPHOBOLENE (o-*) Theramex Monaco: 80mg Nandrolone Undecanoate with 80mg **Hydroxyprogesterone/ml**, 1ml/amp. Only French bodybuilders still use this odd anabolic, although it had a cult following in the US about 5 years ago. Trophobolene is simply a small amount of Deca with added progesterone to combat its masculinizing side effects. I do not believe that progesterone is a hormone that will benefit athletes, as water and fat retention are associated with it. This steroid will probably cause more problems than benefits.

WINSTROL (o-g-cg) Winthrop: Stanozolol. 2mg #W53. Winstrol is the steroid that many non-steroid strength athletes use (yes, especially track athletes), as well as any athlete too afraid to take other steroids because of side effects. Not many people do well on Winstrol tabs. Some women have grown on them. It seems that it takes a special athlete to benefit from Winstol; perhaps he/she has a unique steroid receptor sensitive to this kind of steroid, because those who respond, do so phenomenally well. Most athletes report no benefit whatsoever from this steroid. Winstrol is also available as Winstrol V tablets, in bottles of 50. These are the same quality as human Winstrol tablets, but tend to be cheaper. Stanozolol in Europe usually comes as a 5mg white tablet. Winstrol is popular with textbook experts, those coaches or doctors who look to medical research alone for a clue as to what is 'best'. Most of the very favorable studies with Winstrol were with injected stanozolol on rats. Monkeys did not respond well at all to this anabolic. The majority of humans don't either.

WINSTROL V (i-g-c-*) Winthrop: Stanozolol. 50mg/ml, 50ml/vial. Contest bodvbuilders. both men and women have an unnatural attraction to Winny-V. It doesn't aromatize or cause water retention, and is a water-based injectable. Bodybuilders love anything water-based because it is supposed to be 'fast'. Although it is water based, being a veterinary drug in America, the particle size is not ground particularly small. Insulin will pass through a 28 gauge needle, but Winny V needs a 22 gauge otherwise it will jam in the smaller gauge needles. Winny V is fat acting and as fast 'unacting' as oral Winstrol and should be injected on a daily basis. I have seen women have trouble with Winny V because they would take 1ml, 50mg every third day. Although Winstrol is not an androgenic drug, putting 50mg of it all at once into a woman's body can result in an androgenic metabolism, with masculinizing side effects appearing. I do not find Winstrol V injection to be an effective steroid no matter how it is used. Besides the problems of daily injections with too large a needle and the high cost of the steroid, it has the reputation of being a dirty steroid, one that causes infections. This is not entirely true, although water based injections tend to be more pyrogenic than oil based ones. Water based steroids will breed bacteria easier than oil based ones, but unless the bottle is cracked, the problem is at the outside top of the rubber plug. Athletes rarely clean the white residue off the stopper with alcohol, and it is this residue exposed to the air that has the bacteria problem. A needle passing through the residue can pick bacteria up and deposit it in the user, the bottle, or both. Extra cleanliness is needed with water based steroids.

WARNING: Counterfeit Winny V sludges deep at the bottom of the bottle and needs a good snappy shake to dislodge it into suspension. The fakes just leave about a quarter of their volume clear water (real V has three times the clear water after settling), and the white particles don't stick. Also the fake Vs are a lot cheaper.

Zeranol (o-i-*) Commercial Solvents. Zeranol is a refinement from resorcinol lactone, a highly estrogenic fungus that grows on corn. The refined Zeranol is an estrogenic anabolic, used in feed animals. See chapter on 'Drug Testing'.

CHAPTER

EIGHT

Using the Drugs

I know of no scientific or medical research done anywhere in the world that has determined the best way to use anabolic steroids for athletic enhancement. Consequently there is an enormous amount of mystery, secrecy, trendiness, and even a bit of voodoo and houcus pocus surrounding steroid use. Bodybuilders and powerlifters seem to be somewhat sophisticated in steroid use but this is only relative to the other sports. To understand steroid use in athletics you first have to have a grasp of the jargon, the cliquish language that has evolved not from doctors and medical books, but from locker room conversations and black market dealer's shop talk. Before we delve into the use and dosages of specific steroids you should know the key words and phrases of the steroid lingo.

STEROID POWER WORDS

AROMATIZE This denotes whether a steroid is prone to convert to estrogen. Although excess estrogen in men and women causes metabolic problems, you'll find that the really effective steroids for growth and recuperation are the ones which aromatize the most. Nolvadex, for both men and women, reduces the estrogenic side effects, but Novladex also compromises the steroid's anabolic ability. I am guessing that Nolvadex also binds at some androgen receptors, as not only size and strength gain is slow when Nolvadex is added to the steroid array, but androgenic side effects such as increased body hair growth and oily skin are also diminished.

ARRAY This is a more sophisticated version of the term 'stack'. An array is the group of steroids and related drugs used in combination. Athletes use the word 'stack'. Experts use the word 'array'.

BITCH TITS This is a crude and cruel way of describing male gynecomastia, the swelling of male breast tissue and associated benign tumor growth that the general public associates with heavy steroid use.

BULK CYCLE A bulk cycle is a grouping of steroids used for a certain duration (usually between 8 to 12 weeks) for the single purpose of gaining weight. Bulk cycles are usually androgen based, and side effects of hypertension, edema, and acne are usually expected and tolerated during the time allotted for the steroid use.

CYCLE This is a general term for any combination of steroids over a time period of some kind of predetermined duration. I believe the word originated with the logic that an athlete would start using steroids at a low dosage, gradually increase the number of steroids used and/or the dosages and then taper the drugs/dosages down to nothing. Also if asked 'What kind of cycle are you on?', an answer of either a bulking cycle or cutting cycle will inform the questioner generally about what type of steroids, diet, and

workouts the athlete is using. For example, most knowledgeable steroid users know that a bulking cycle will involve androgens, eating a lot of food and striving to lift extremely heavy weights in the gym workouts.

CUTTING CYCLE This is a grouping of steroids used while on a calorie restricted diet. The cutting steroids tend to be less androgenic, have little estrogen conversion and do not 'hold water'. Non-osmotic, non-aromatizing androgens are also used in cutting cycles

DART This is a code word for a needle/syringe used around non-steroid taking people so they don't get upset about the thought of their healthy friends sticking needles through themselves.

DESIGNER STEROID A class of steroids originating in America that never actually were on the commercial market. Although they have exotic names, most designer steroids are simple combinations of two or three ordinary steroids in an injectable form.

OSMOTIC This term designates if a steroid is known to 'hold water' loading sodium and water in the body, inducing a puffy look and high blood pressure. Loading extra water into the tissue will usually guarantee a strength increase. Note: Osmotic steroids usually are ones that are also highly aromatic.

PIN This is just another term for a needle/syringe.

PLATEAU To plateau on a steroid is to stop experiencing progressional size and strength gains. At the plateau the steroid user usually makes a choice of either getting off the drugs, increasing the dosage, changing the steroid used, adding another steroid, or a combination of the last three actions. I should point out that steroid users concerned with plateauing are usually taking the drugs for only a few months out of the year. Continuous users of steroids (as in 'all year') don't concern themselves too much with the plateau effect.

POINTS Yes, yet another term for a bunch of needles. Steroid users hate to use the word 'needle' because only interrogating KGB agents and heroin addicts use needles, right?

POPPED A verb usually used in the passive voice describing the arrest of a black market steroid dealer, as in 'So and so got popped last week'.

PRODUCT Steroid dealers never refer to what they sell as steroids or drugs, it is always simply called 'product'.

RECEPTOR MAPPING This is a quasi-scientific way of optimally adjusting the dosage of a steroid to an individual. I believe the concept originated with Jeff Feliciano. The idea (admittedly a good one) is to carefully monitor the steroid dosage by starting low and gradually increasing it until spillover happens. Spillover is supposed to occur when the receptors at the muscle cells cannot hold anymore steroid and the excess steroid spills over to other receptors, such as contained in the skin sebaceous glands, and hair follicles. Receptor mapping is supposed to optimize the dosage of the steroid and result in maximum muscle size and strength gains with minimum side effects. This strategy works well only with steroids with high receptor affinities. Using receptor mapping with steroids such as Anadrol, which by its low receptor affinity, will, de facto, spill is worthless.

'ROIDED OUT This is a derogatory term, indicating either that the athlete's looks and performance is so enhanced as to not be a product of simple hard work and good food, or that the athlete is a deluded, fat, ugly, worthless piece of shit who uses too many steroids considering he/she is just a born loser and shouldn't even be an athlete at all.

SHOTGUNNING Shotgunning is using every steroid you can get your hands on, figuring if you're not sure which is the best, then use all of them and something has to happen that will make you grow. This technique is used by very impatient, insecure (read many) athletes who want results immediately and damn the side effects.

STACK This is a very old steroid term. Stacking steroids is using more than one steroid at the same time, usually for a synergistic effect. Popular stacks (which will be discussed later) are Deca/Dianabol and Testosterone/Anadrol.

STAGGER To stagger a steroid is to use just ones steroid at a time, then switch to another one, usually when a plateau is reached. Actually, whole steroid cycles are usually staggered back and forth i.e. bulk-cutting-bulk-contest.

SUB-Q This is a subcutaneous injection, usually done with an insulin needle between the skin and the muscle. The only drugs that steroid users will sub-q are HGC, B_{12} and Growth Hormone, all water based.

THE BEST ACCORDING TO WHO?

Now onto the hard question: What's the best way to take steroids? Most doctors won't give you an answer because they have not committed themselves to the concept of using medicine and prescribing drugs to enhance performance. Doctors who are adept at this, getting their experience from working with professional athletes, are not about to give up any secrets. Some countries have medical programs to assist their athletes. Spain, also associated with Argentina, was the most notorious during the '88 Olympics, but Italy is better know in the long run. East Germany, which works with Cuba, is the most mysterious. From the 1988 Olympics we've see seen that Bulgaria has been the most inept, getting positives on some of their lifters from the use of diuretics. In America, a veterinarian familiar with horse or dog racing has a better grasp of this concept of enhancement than most sports medicine doctors.

Because of the lack of creative medical guidance, each sport has had its athletes, through trial and error, tailor steroid usage to the sport's particulars. The best way to use steroids? If you ask a powerlifter, you'll get a different answer than from a bodybuilder. Middle distance runners' steroid usage would be looked upon as baby stuff by most strength athletes. Runners of whatever distance seem fixated on Winstol, and have been for many years. Men will do things with steroids that women would never dare do. Some athletes want to use steroids just before a contest or event, others use them all year long. Many athletes just will not tolerate injections. And of course, none of use want to break any laws, do we? So you begin to understand that no one method will be perfect for everyone.

I will limit the following information to that being relevant to athletes who want to primarily gain size and strength or at other times simply maintain both while leaning the body out. Non-strength athletes may benefit from many of the following arrays, but at a markedly reduced dosage so that extreme weight gain does not happen, but increased performance and recuperation does. What may be considered not potent for a national caliber bodybuilder or powerlifter should be considered more than adequately potent for middle and long distance runners or cyclists. Track cyclists, and many of the strength track and field athletes show patterns of steroid use like those of lighter weight class powerlifters. As mentioned before, runners like Winstrol, period.

Because of the recent controversy and interest in the phenomenon dubbed 'steroid psychosis', I have chosen not to discuss steroid stacks whose primary purpose is to increase aggression along with strength. Granted, many combat sports athletes seem to appreciate and tolerate exaggerated aggressive behavior, and I cannot argue that this increased aggression does not create a better athletic performance. Markedly aggressive behavior, and beyond the small clique of appreciative athletes and fans, is socially unacceptable behavior. Any athlete with the desire can use the information in this book to put himself in such a state, but by guiding him to do so I feel I would do a great disservice to the majority of steroid users who do not need to be so aggressive.

CATEGORIES OF STEROID USE

It's easier to answer the question of practical steroid use by breaking things up into categories. Let me tell you, though, that for every steroid combination I will chart, you'll find someone to argue and addend me. So, to justify and defend my choices beforehand, I'll describe the rules I go by in judging which steroids, dosages and combination go in what categories.

First, the steroid or steroid stack has to be anabolically effective in real world terms. The steroid(s) should generate discernible growth, and strength gains for the majority of athletes, both men and women. For example, most athletes do not get much effect from Winstrol (either oral or injectable), so I won't mention Winstrol often, especially near Ben Johnson. Next I deal with the question of the steroid's legality. Is it FDA approved; can a doctor prescribe it? This never used to be too important, but many of the black marketed non-FDA approved steroids available currently are counterfeits of real European or South American steroids. Just the act of buying and using non-FDA approved steroids can make you a conspirator to defraud the government, a conspirator to smuggling, etc., etc. Using non-FDA approved steroids puts you in legal jeopardy. You may think that a single user of steroids is hurting no one (other than perhaps himself) and will never be arrested or prosecuted. This is the same thinking that the small black market steroid dealer had, and many have been arrested. The head of the steroid task force indicated that the government was interested in prosecuting a few high profile end users as examples.

So legality of the steroid use is definitely an issue now, and will be a greater one in the future. By the way, many FDA approved American steroids are faked also, which would put the user in the same legal jeopardy. I would estimate that 90% of all the black market steroids sold are counterfeit and whether they are good fakes or bad, they're all illegal to use.

After the legality issue, I decide if the steroid is safe to use. In doing this I have made two assumptions: that not all steroids are de facto dangerous drugs, and that most steroid side effects are temporary and reversible. With these assumptions as a given, I estimate (and 'estimate' is very correct usage, here) safety in two parts. First, I determine if the actual steroid compound has evidence, either from medical research or overwhelming subjective findings, showing it to have too many negative side effects for its intended user. Remember, some steroids used are veterinary, and never had human research done with them, so anecdotal experience is all you can go by. And secondly, does the actual product, which could very well be counterfeit, have acceptable quality standards of accurate dosage, cleanliness, and purity of ingredients. There may be several counterfeit versions of the same brand of steroid and even a good counterfeiter can make a bad run of a particular steroid.

Although many athletes have done well on the newer designer steroids, you'll not see many in the following stacks. I'm more concerned with safety than legality as one counterfeiter, for example, Laboratories Milano in Mexico, may assemble a very clean Dyhidromesterone, but the counterfeit operation based in Colorado may distribute an identical looking bottle with questionable contents. Can an athlete really know what version he has? Usually not.

The following stacks are the optimal steroid combinations in their categories. Something can always be added, changed or adjusted to make each combination more potent, but such changes would bump them from the categories they have been put in. These arrays are not recommendations; they are determined from the rules applied to them as well as a lot of trial and error by many strength athletes. Most of the stacks were not created by myself, but evolved over the years from trial and error usage in the strength sports. The changes I do to a well known combination usually are to make it legal. Most athletes are not yet concerned with the legality issue, but then most have not done any iail time. Some steroids go in and out of fashion just like clothing does. Mostly a steroid's fashionability is determined by rumors of what the top bodybuilders or powerlifters are using. Drug testing at events also has curtailed the use of some very safe and effective steroids, and increased the use of others. Dosages for both men and women were determined by surveying athletes over the years and discerning patterns showing a minimal dosage that caused a noticeable strength and size gain. Doctors may be more conservative with their recommendations, even more so than the dosage recommendations in the Physician's Desk Reference.

CATEGORY:

#1) LEGAL AND SAFE FOR MEN Anavar (1 tab per 20 lbs of bodyweight, daily) Durabolin (50mg twice a week), Testosterone Propionate (25-50mg twice a week).

COMMENT: Oddly enough, this stack was recommended by the producers of the DDR designer steroids as a cost effective alternative to their Bolasterone. This array could currently be prescribed by a doctor and the drugs bought in any pharmacy. It also is a very safe stack for long term (all year long) use. This is an ideal stack for non-competitive strength athletes, especially those middle aged and on. It is probably not potent enough for national ranked competitive athletes. Anavar induces increased strength through accelerated creatine phosphate synthesis (its major effect): Durabolin is a nice anabolic for protein synthesis, and the androgen of the Propionate will allow

greater recuperation than the other two steroids would. Major arguments against this choice are the high cost of the Anavar (\$40-\$60 per 100 tabs) and the twice weekly injection schedule. If the array is used while dieting, 10mg of Nolvadex can be added, as Novaldex accelerates fat loss. However, Nolvadex as mentioned before, will compromise this stack's anabolic activity which is, because of the stack's lack of side effects, only moderately potent. The short acting esters of injectable steroids don't seem to generate as many negative side effects as longer acting ones.

NOTE: Generic Durabolins are acceptable substitutes. Counterfeit Anavars are usually light in dosage. Some men may need HCG therapy to maintain full testicular function, although this particular stack is known to usually increase libido.

#2) LEGAL AND SAFE FOR WOMEN Anavar (1 tab per 20 pounds of bodyweight daily) Durabolin (25-50mg once a week only).

COMMENT: The secret in minimizing the androgenic effects on women is to use orals with virtually no androgens, and use the short acting anabolics on a weekly rather than the usual 2-3 day schedule. Durabolin is not considered androgenic and has anabolic activity for 3 days, but if administered to women every 3 days, the net androgen ratio of the body raises so that the classic androgenic side effects develop. Granted, administering Durabolin on a weekly basis compromises its full anabolic potential, but also minimizes its androgenic one as well. If this stack is used while dieting, 20mg of Nolvadex could be added daily. A few years ago, Maxibolin could have been substituted for the Durabolin. Unfortunately, Maxibolin is now off the American market. This is a desirable array for the non-competitive female strength athlete and can be used for a fairly long duration (months). Libido may increase and long term use of this stack will slightly enlarge the clitoris, resulting in the woman having an easier time at achieving orgasm. This steroid array may stop monthly periods.

NOTE: The counterfeit oxandrolone labeled 'Nevelar' is androgenic and should be especially avoided by women.

#3) LEGAL FOR MEN Anadrol (1-3 tabs daily), Testosterone Cypionate (400mg per week), Nolvadex (10mg/day).

COMMENT: This is the most effective steroid combination that a doctor would feel comfortable to prescribe. Of course, higher dosages of both steroids have been used, but I doubt that a doctor would prescribe the higher dosages. Blood pressure and acne should be monitored and death with, as these side effects will occur. This has been a popular and effective stack for younger (up to 30 years) bodybuilders and powerlifters as a bulk cycle. Because Anadrol is so liver toxic, the array usually is used for a short duration, 4-12 weeks. This combination is considered to be reasonably potent.

NOTE: Injectable Anadrol is real, clean, and appears to be three times as potent as the oral. It is not legal. The red boxed 'Irish' Andriol is a counterfeit of unknown nature.

NOTE: Some doctors do not understand Nolvadex's function in a steroid array, and might be hesitant in prescribing it. If the male has had an incidence of gynecomastia during puberty (many men do), this stack will in all likelihood start this condition up

again, even with the use of Nolvadex. Also, men with male pattern baldness, or a family history of it, may want to avoid this stack.

#4) LEGAL FOR WOMEN Anavar (1 tab per 20 lbs of bodyweight daily for 6 days), Anadrol (25 mg every 7th day), Durabolin (50mg every 2 weeks), Testosterone Propionate (25mg every 2 weeks, done alternately with Durabolin), Nolvadex (10mg daily).

COMMENT: This is the most effective steroid combination that a doctor would ethnically prescribe to a woman. A shot of Durabolin is alternated with a shot of Propionate every week. The Anadrol day should be 3-4 days away from the injection days. Nolvadex also seems to bind at the androgen receptors and although compromises a steroid's anabolic properties, does minimize body hair growth, voice deepening, and clitoral enlargement at the same time. This is an effective stack for all women strength athletes who do not seem terribly sensitive to androgens and hold no irrational fears of steroids. Anadrol is exceptional at building up red blood cells, and androgens in general do better at recuperation than the anabolics do. This array is not designed for long term use, the outer limits being 8-12 weeks. It has enabled many women to get maximum results from steroid use with minimum androgen damage. Women using Durabolin have tested clean after stopping the Durabolin for 6 months. This stack is not considered potent enough for competitive women in the heavier weight categories.

#5) SAFEST FOR MEN Orabolin (10-20mg daily), Primobolan Depot Injection (200mg per week).

COMMENT: Although Anavar is considered a mild steroid, it is 17 Alpha Alkylated and does disrupt liver functions just like Dianabol does. Orabolin (formally Maxibolin) is not 17 Alpha Alkylated. Primobolan Depot does not aromatize and is not androgenic.

NOTE: Maxibolan is still available in Europe and the Philippines as Orabolin; do not mistake Roussel's Maxibol sold in Mexico to be Maxibolin as some unscrupulous Tijuana pharmacists will tell you that they are the same. Also, Schering of Mexico only makes 50mg ampules of the Primo Depot. Men don't seem to benefit from the Primobolan tabs like women do.

#6) SAFEST FOR WOMEN Primobolan tabs 50-100mg per day).

COMMENT: Not liver toxic, not androgenic not 17 Alpha Alkylated, and more effective for most women than Winstrol tabs. I don't think Winstrol tabs or injection to be an effective anabolic because most women get little if any anabolic effect from the tablets, and the dosages and frequency of administration of the injection generates androgenic side effects. Primobolan seems no more or less androgenic than Anavar. Although Anavar disrupts liver functions more than Primobolan does, hardly any athletes, men or women, have had liver related health problems from Anavar. So, in the real world sense, Anavar seems as safe to use as Primobolan. This category is for women who have a real fear of steroids, but are compelled, for whatever reason, to use them. Primobolan tabs are considered less potent than moderate dosages of Anavar, and less androgenic than Orabolin. Straight oral Primobolan or Anavar (or both) are the most popular steroids for dieting women bodybuilders. However, neither is the ideal choice while dieting, as these anabolics do not adequately combat diet and overtraining induced anemia. NOTE: Schering Mexico manufactures only the 5mg Primo tabs, and it is easy to mistake them for the 25mg or 50mg ones.

#7) MOST POPULAR FOR MEN Dianabol (4+ tabs daily), Deca Durabolin (200+mg per week).

COMMENT: This is still a very popular and desirable stack because it is consistently very effective, relatively safe, and inexpensive to use. So-called sophisticated athletes speak derisively of this ancient stack, but since most steroids were all developed by the early 1960s, just what exactly works better and quicker without the side effects of Anadrol and Testosterone? This combination started as a short (8-12 weeks) bulk cycle but now is used long term (years) by some athletes. This is not an optimal long term stack, but its simple and inexpensive nature along with its greater potency has turned it into one. This array is not considered potent enough for national level competitors in the heavier weight classes. There is a high probability that HCG use will be necessary to maintain libido and normal testicular function.

NOTE: Most Methandrostenolones are fakes. None have FDA approval. The Laboratories Milano product in the small blue bottle with the white metal cap has been of consistent quality. All others have had complaints of being seriously light in dosage, especially the shrink-wrapped Rugby brand with the off color blue tablets imprinted with an 'R'.

#8) MOST POPULAR FOR WOMEN Anavar (2-4 tabs daily), Winstrol V injection (50mg once a week).

COMMENT: I didn't create this stack, I just call it as I see it, and I have a dim view of this stack. Most women don't use enough Anavar according to Searle's recommendations, and use too high a per injection dosage of Winstrol V, which, as you know, I don't consider a good general anabolic. All of the other arrays for women in this list are more potent

NOTE: Stromba injection (50mg/ampule) from Europe is an accepted substitute for Winstol V. Also beware: some counterfeit Winny Vs are very light dosage testosterone aqueous suspensions. Very cheaply priced V is always suspect, as is any V whose crystals don't settle or stick well at the bottle's bottom.

#9) MOST EFFECTIVE FOR MEN Anadrol injection (50mg per day), Sustanon 250 (500-1000mg per week), Parabolan (2-3 ampules per week).

COMMENT: I've not encountered any other stack that will put weight and strength on like this one. The 50mg Anadrol shot is as potent as 3+ oral tabs a day. There are so many counterfeit Cypionates around that the Sustanon 250 preloaded syringe should be a guarantee of contents and dosage. Since Finajet has not been manufactured in Europe for a year and there are at least 3 different fakes out (and all look the same), Parabolan is preferred now, although real Finajet (30-60mg every other day) used to be more potent. This is usually considered a competitive strength athlete's bulk cycle, I hope lasting no more than 8 weeks. This array generates too many undesirable side effects for the casual, non-competitive steroid user. It is a potential home wrecker. Accessory drug use to combat side effects can be at its maximum. HCG, Novladex,

Accutane and an antihypertensive could be needed.

NOTE: Injectable Anadrol is best injected locally with insulin needles (See the 'Needles Aracna' chapter) as the accumulated pain and welling associated with its use will cause extreme discomfort if concentrated in the glutes exclusively.

#10) MOST EFFECTIVE FOR WOMEN Dianabol (2-4 tabs daily), Deca Durabolin (100-200mg pr week).

COMMENT: Well, sure, the 'most effective for men' would work on women with the dosages adjusted downward, as a lot of androgen, especially Parabolan usually will make girls sick. You'd have to really not care about the woman as a person to recommend something like this. Having lived and worked with many female bodybuilders, the practical limit of tolerable (tolerable to both the user, myself, and the rest of her friends) side effects versus rapid size gains comes with the array I just outlined. Two Dianabol tabs per day and one 100mg injection of Deca per week is the most I hope a woman will use if she lives in the same household as myself. Sometimes a recommendation of any half that is necessary, like 1 Dianabol a day and 50mg of Deca a week, because it's highly likely that they'll seek more without telling anyone. This should be considered a short term bulk cycle for women, with a duration for between 4-6 weeks. Healthwise, longer durations are possible, but androgens do seem to make their presence known after two months. This stack can be cycled with the SAFE or LEGAL & Safe stacks (for women). Drug testing at athletic events has made Deca Durabolin use a liability. Winstrol V and Testosterone Aqueous have been substituted. I am not happy with women using either.

#11) CURRENT FADDISH SHOTGUN FOR MEN The pre-contest weight loss shotgun stack is different from the off season shotgun stack. Having just witnessed the men prepare for the USA and the Olympia, here's the scoop:

Pre-contest :

Protropin (1-4 IU daily), Winstrol V injection (50mg daily), Masteron or Permastril (50mg daily), Anavar (15-30 tabs daily; most can't get the new injection), Nolvadex (20mg daily).

Off season shotgun stack:

Dianabol (10+ tabs daily), Anadrol (2-3 tabs daily), Sustanon 250 (1+ shot a week), Testosterone Cypionate (400+mg per week), Finajet (30mg injection every other day).

COMMENT: Again, I didn't create either stack, I'm just calling them as I see them. I think that there are more effective pre-contest stacks, especially as I have not found GH to be anabolically effective. By the way, the new Lilly Humatrope is preferred over Genetec's Proptropin. Most of the pro bodybuilders use GH simply because, well, since most are,

can they gamble not to? They appear to be in a state of mutual consent paranoia. I don't know how Masteron or Permastril got so popular, Drolban never was. It's probably because dromostanolone is a non-aromatizing, non-osmotic androgen that has not been counterfeited, so its quality is not suspect. The off season stack is rather common, although the counterfeited Finajets may very well be just another testosterone if analyzed. This stack gets the weight and size up pronto, but don't expect the user to be pleasant to be around.

#12) CURRENT FADDISH SHOTGUN FOR WOMEN:

Dianabol (2+ tabs daily), Anavar (8+ tabs daily), W Winstrol V injection (50mg every other day), Deca Durabolin (200mg per week), Equipoise (100mg per week).

COMMENT: Women don't tend to shotgun as much or as heavily as men, but once a girl has gotten her voice deep, and accepted body hair growth and clitoral enlargement from previous (unsupervised) steroid sessions, then she can get an attitude of 'Oh fuck it, let's go for it'. The majority of women who shotgun do so in the off season as a shot duration bulk cycle. As for this shotgun, there's just too much androgen contained in this array for women I'd care to be around. Drug testing at contests has severely curtailed the shotgun approach, especially the use of oil based injectables. This would be considered a serious stack for women bodybuilders, as I've known women powerlifters to do much more androgenic damage to themselves than with this combination. This cycle is what a conservative female steroid user would consider to be bordering on insanity, but still understandable and justifiable for national level competition. Some of our top pro women bodybuilders who now regularly pass the drug tests at contests and appear very feminine have used Testosterone Cypionate, Anadrol, and Finajet/Parabolan early on in their training careers. What you don't realize is that they still go through a lot of shave cream and razor blades even though the androgen days are over.

GENERAL DISCUSSION

At this point I suspect that some of you are thinking, 'Okay I'll just plug myself into Category # (_), and wonderful things will finally happen. What could go wrong? The author certainly makes it clear that steroids aren't that dangerous.' Yes, I've proposed that healthy athletes using steroids looked on as a group don't statistically show the health problems over other kinds of people have with steroids. *The question is: should you automatically treat yourself as a non-statistic?*

Let me make believe that I am talking to someone who never has taken steroids, even though many of the readers of this book will have been familiar with steroid use already. I'm going to propose a series of questions that someone should ask him/herself and then me before even deciding to use steroids.

Why do I want to use these drugs?

The standard answers of getting bigger, stronger, better, more competitive really all boil down to this: I think that using steroids will make me happier. This happiness has to be

gauged very carefully. Once you use steroids your whole outlook on your sort changes, usually irrevocably. You will find a pessimism, a cynicism about the sport and its athletes that you probably didn't have before. This negativism has a way of sometimes creeping into your view of other things in your day to day life. Granted, this changed outlook is probably closer to actual reality than your previous mental state, but I've not seen athletes happier because of it.

When someone asks me why I, the steroid svengali, choose to use steroids, then that's a bit different. Do steroids make me happier? No. I was, from a very early age, a rather inquisitive, pessimistic individual, so steroids didn't instill the sometimes great personality changes as it does in others. Using steroids makes me less unhappy. But then, I have an advantage over many steroid users. My natural (unenhanced) metabolism has always been substandard for an athletic lifestyle. Steroid use has evolved, in my case, to a point where I am actually a healthier athlete when enhanced with steroids, than when I am not. Of course, if I chose to become a sedentary person, I probably would be healthier in the classic textbook sense without them. Can steroids make you healthier; can they be therapeutic for people other than myself? If I thought not, then I would not have rewritten this book. If Dr. Bob Goldman is considered the antisteroid spokesman, I think that I have moral obligation to take a pro-steroid stance so that there is an even debate on the subject. I've been accused of being passionate about steroid use. Actually, I'm passionate about the truth, and always have been.

Am I healthy enough to take steroids?

Most athletes have been; if they weren't we would see more statistics of severe health problems. Never assume that you are just like most athletes. For all the money athletes spend on steroids, it's curious that very few bother to get a yearly physical, and at least twice a year some blood tests. But then, I have gone without medical supervision for a six year stretch once; I'm not proud to say that. One of my closest friends, a steroid user, when asked why he didn't get blood tests to see where his health was, confided: "I'm afraid to see how bad off I am; I just don't want to know.

You know my view of this attitude: it not only endangers the individual, it endangers all steroid taking athletes.

In the unenhanced state, the ideal athlete should have normal blood pressure, cholesterol below 200 unimpaired liver and kidney functions (with these values adjusted from a strength athlete's metabolism), no incidence of pubescent male gynecomastia, no high incidence of male pattern baldness. Only with knowledge of these values can you estimate whether you are healthy enough for steroid use.

Am I psychologically strong enough to use steroids?

Will you be like Ponce De Leon, ever searching, ever experimenting to find your personal fountain of youth? Most of the consistently successful bodybuilders and powerlifters have a simple outlook on steroid use. They found what worked for them early on in their athletic careers and kept with it. No experimentation. No doubt. Athletes who have trouble mentally with steroids usually also will have trouble with their physical health as well, because they always seem to be searching for the best and not even care about their health. Addictive or abusive personalities have trouble with steroids. I've

often thought that each individual has his own personal narcotic. Sometimes it's a real narcotic, for others it could be another drug, including steroids. It could be food, alcohol, money, power or sex. Whatever eases the pain.

Okay, if I start, how do I start using steroids? (Whoa, Am I being asked advice, here?)

Once you have made that mental leap, how do you actualize it? When I first wrote this book seven years ago, I lamented the lack of doctors who would prescribe steroids. It has gotten markedly worse. Not only is it 99.9% impossible to find a doctor willing to work with an athlete, it's now 90% impossible to find real pharmaceutical steroids. Always try to get a doctor to prescribe steroids. At least make the effort.

When that doesn't work, do your best to find steroids that came right from the pharmacy, no matter what they cost. If you can't be sure that the American product is absolutely legit, then try for European, Mexican, Canadian, or South American products that I've previously pointed out to be in all probability real, not counterfeit. If you don't have access to this second string, and you are going to gamble with a known counterfeit, well, I will tell you what I would do. I would stick to the basic drugs like Dianabol, Deca, Testosterone, and Anavar. Esoteric drugs like the designer steroids, or even Finajet or Equipoise may not have that actual steroid in the bottle. I would lean to the Laboratories Milano products from Tijuana because at least they are clean and consistent, made under pharmaceutical conditions as outlined by the FDA. All counterfeits seem to be light in dosage. I can't vouch for all the Mexican products, but the basics are at least clean and, whatever the actual milligram amounts may be, are consistent, lot to lot, in dosage.

I should point out an unsettling new development: some American counterfeiters are copying the Mexican copies, only with no quality control. If I suspected that the steroid was bogus, and I couldn't determine who made it, I'd pass, wouldn't buy it, wouldn't use it.

I realize that I may have advocated illegal acts, but given the choice, I think you would rather spend time in jail than time in the hospital. Ideally, you should not be put in a position of either possibility. But, alas, we're talking reality here.

Which specific ones should I take and how much, and for how long?

I am always bemused at how often this is asked of me when the questioner really doesn't want an answer. Mostly, the athlete wants me to vindicate his pre-determined choice. His (or her) mind is already set: he's just asking for approval. Since it is another person's body and life I'm dealing with, I'll admit that I'm cautious. I could spew out stacks and arrays that would give instant gratification, but I won't.

Stock answer? Try a legal, safe array and determine if it generates enough gains to make you happy. If you are unhappy with your performance on a steroid combination, analyze your training and eating before jumping to something else. The more potent in the array, the more you will encounter negative side effects. Yes, the side effects can be avoided, but do you have access to the medication to counter them, and can you financially afford the counter-medication? Nolvadex is \$1.50 to \$2 a tablet. Most men would need 2 tabs a day. Accutane can be \$3 a tablet. It is also a daily expense. Harsher steroids would dictate more liver and kidney function monitoring, meaning

frequent blood tests. I'm assuming that you are a responsible person and care about your health. I could be wrong.

How long should I stay on steroids?

If you have picked a 'light' stack, low dosage, low toxicity, very little side effects, and you train consistently thoughout the year, then it's possible to use steroids on a year-round basis. If you are on and off, erratic in your training, I don't think it is beneficial to use steroids when you know you are just goofing. The more potent cycles should be of a short duration, 6-12 weeks, either cycled back and forth with the safer stacks, if you are a year 'round competitor, or perhaps only once a year if you are a once a year competitor.

Realize, though, that ethical steroid use is at times a big financial commitment. I've seen more athletes adjust their steroid dosages according to their paychecks than according to what the medical research has recommended. A good general rule to go by is this: The more potent, the more side effects; the more side effects, the shorter the duration. With drug tested events becoming more common, steroid use and duration has changed. Before drug testing, the largest incidence of steroid use was just before the event, for perhaps 8 to 12 weeks. Now athletes will use steroids for most of the year except the last 3 to 4 weeks before the event.

Drug testing has actually made the pattern of steroid use less safe than before.

What steroids do you take?

A bad, bad question to ask a lab rat. I use steroids sometimes that I wouldn't want anyone else to use. Testing steroids, good, bad, real or fake is my job. It used to be an easier, safer job than it is now. Today I heard that someone on the east Coast had Roxilon (generic name Dimethazine) from Italy for sale. Dimethazine has been regarded as the holy grail of steroids for a few years now. Actually something called Thimesterone looks much better on paper, but the old DDR people were hyping Dimethazine until they were shut down. The hype stuck. Roxilon has not been made in Italy for perhaps 20 years. If it were out of Italy (which, admittedly has lots of odd, little nutball steroids) it would be packaged in individual ampules, one to two milliliters per ampule. This new Roxilon is in a 20cc multi-use vial. A fake? Highly probable. Who's going to use it? I will. Why don't I just get a lab analysis done? Things are so wild on the steroid black market that from now on I would be negligent not to. Remember though, Roxilon this month, may not be the same Roxilon next month. Also, Laboratories Milano is fully capable of having real Dimethazine made. Within a year you might have three Roxilons, all looking alike, with completely different contents. So, it doesn't matter what I use, I'm the lab rat.

Can't you give a straight answer, what do you think are good steroids?

Well, certainly you'll get a straight answer, now that I have gotten a straight question. First, let me just tell you that the top strength athletes, national or international caliber, especially bodybuilders and powerlifters are virtually advice proof, so what I like, what I think are good steroids may not be considered potent enough for such competitors. So, in order of preference:

DIANABOL: A good quality one, like the Mexican, or Pronabol or the counterfeit German generic. Not the injectable. Dianabol works well in as little as 10mg amounts, or even 5mg for women. At moderate dosages it delivers a lot, usually without health risk. And it's a bargin.

DURABOLIN: Yes, inconvenience of frequent injections make Deca the favorite, but Durabolin works so well for both men and women, and the safety record is good; the cost reasonable.

TESTOSTERONE PROPIONATE: This is my favorite testosterone, mostly because I can use a lower overall accumulated dosage per week than with Cypionate, and also, it doesn't bother my blood pressure as much. The shots are painful, if you didn't know.

ANAVAR: A nice steroid, especially for girls, but why does it have to cost so much in America? In third world countries the Searle oxandrolone retails for about \$10-\$15, while it is \$50-\$60 here. I would put it higher on the list except for its cost.

ANDRIOL (Testosterone Undecanoate): I can't think of a nicer stack for a man than Anavar and Andriol. They both are extremely safe, aromatize so little as not to need adjunctive amounts of Nolvadex, nor do either depress libido or testicular function. Andriol would be above Dianabol in preference if it were readily available at a decent price in the states. Right now, this steroid is scarce. It was supposed to be marketed in Mexico as Sustanon Oral, but that never happened.

MAXIBOLIN (Orabolin): A nice pie in the face to Dr. Bob Goldman, this one. Not 17 Alpha Alkylated, so it is quite safe as orals go, and although slightly androgenic in dosages over 10mg, it is a progresterone based steroid, dealing the morality question of women using male hormones a severe blow. Other steroids work better, but none stand up to the medical and ethical arguments like this one.

METHAFURON 60: This tweaked Dianabol makes it a better choice for older men and all women wanting to use the regular, straight Methandrostenolone. Although it is a counterfeit, the manufacturers don't expect to make a financial killing on this one, just to improve an athlete's health. Since no one knows about it, it's hard to get.

OXANDROLONE INJECTION (aka injectable Anavar): A very painful injection, with the possibility of muscle scar tissue and nerve damage, but milligram for milligram, much more potent than oral Anavar, meaning that you can use much less than the oral compound. Ideal for a bodybuilding pre-contest array.

OXYMETHOLONE INJECTION (aka injectable Anadrol): I don't like oral Anadrol, although I won't be so foolish to say it doesn't work well, and at times it can be useful. I just think that it is an unhealthy steroid for healthy athletes to use. However, oxymetholone really does a wonderful job combating anemia, which is a common ailment among athletes dieting severely and overtraining at the same time. The low dosage of 25mg every other day usually ends up helping in this case. I find that the trouble with this new steroid is that the end users will use it too often, for too long, and too much. That's whv iť s down SO low on the list. use

ANATROFIN: A sentimental favorite, Anatrofin was Syntex's answer to the critics of

Anadrol. Safer and less androgenic, Anatrofin was outstanding in a cutting stack. It's low in standing because we can't quite figure out where it's made anymore.

NOLVADEX: Last only because it's not technically an anabolic steroid, Nolvadex should be considered as a daily medication for the rest of the athletes' life, whether on steroids or not if the athlete has an unusually high serum estrogen level, or has fat accumulation at the classic female areas such as the hips and buttocks. Long term Nolvadex therapy can completely eradicate this problem. Too pricey in America, the 10mg English generic tablets seem to be the bargin.

What about steroids that you don't like?

I usually don't like certain steroids because they don't work well, or work well in too high a dosage, or you have to pay too much for them for an effect that a cheaper steroid can impart just as safely. So this time, in no particular order:

PRIMOBOLAN ACETATE INJECTION/PRIMOBOLAN TABS: Too weak, too expensive. European women use them so much because Oxandrolone is hard to get.

WINSTROL: Both oral or injectable. I just don't see it work well on many people. Track athletes love it (well, maybe Ben Johnson likes it less than I do).

FINAJET/PARABOLAN: Too androgenic, toxic, too unknown, faked too much, just nasty stuff. Pretty potent, though, with anecdotal evidence of amazing strength gains.

MASTERON/PERMASTRIL: Drolban was no great steroid in my book; it seemed too weak to me. A little Propionate will do the same cosmetic hardening, once you get over the fear of its water retention.

EQUIPOISE: Too weak, too expensive; if you use Durabolin correctly, you'll get the same effects with a lesser milligram dosage. And doesn't Squibb get bent out of shape when it learns that its product got on the black market!

THE POCKET SUMMARY

Learning how to use steroids is a balancing act of sorts. The athlete has to decide what he can tolerate physically, mentally, and financially. He has to balance performance with health and behavior. Then he has to decide (and this is the new aspect) what is real and what is not, which is a good fake, and which is the bad. It's not simple; androgens are usually more anabolic. Androgens usually convert to estrogen easily.

Women have a hard time with androgens. So-called anabolics don't recuperate you as well as androgens. The more powerful the steroid, usually the more androgenic and the more toxic. The more toxic, the less time used the better. But the competition is using toxic androgens all year long and she(!) looks awesome; she certainly doesn't look unhealthy, Let me put a few fears to rest. Yes, there is a marked difference in performance and appearance between a steroid using athlete and a natural one, even

when both test clean at an event. But, if you concentrate on the steroids that are known to be effective, you'll not notice great differences in performance and appearance among the various stacks. Sure there are differences, especially appearance ones with the osmotic steroids, but overall, the differences are not of great magnitudes.

The outcome of an event would probably not change if you changed the steroids used, unless you happened to use known ineffective steroids in the first place. Your training and eating schedules are more important than steroids. Yes, we've all seen athletes who change dramatically when off steroids. But don't think that the changes came just because of the drug (or lack of it). The athlete's nutrifion and training changed also. Steroids allow the body a lot more slack in nutrifion and training.

These sloppy habits usually continue even after the steroid use has stopped. In some cases they get worse. I know that most of you wanted a step by step how-to guide in this chapter. Well, in a sense you've got it, although I've probably emphasized what not to do more than what to do. I'm not trying to be cryptic, but you are going to have to do some work to break the code that's right for you.

CHAPTER NINE

STEROID SIDE EFFECTS

There are two district sets of side effects associated with anabolic/androgenic steroids. The majority of severe, life threatening ones happen to hospitalized, non-athletic people whose doctors have prescribed anabolic/androgenic steroids to combat serious illnesses which they already have. As a sidebar I'd like to point out that androgenic steroid therapy has recently replaced some tradition forms of chemotherapy as treatment for some types of cancer. The reason for this changeover is that the medical community has determined that the steroid route is a safer form of therapy.

The second set of side effects are the ones that healthy athletes encounter while using the drugs. Although they are at times uncomfortable, and/or socially unacceptable, these side effects usually reverse themselves upon cessation of steroid use. What I have just stated is not simply my singular, jaded view, but also is the conclusion of Dr. H. A. Haupt and G. D. Rovere in their article 'Anabolic Steroids: A review of the literature' published in The American Journal of Sports Medicine (Vol. 12, No. 6, 1984). At that time there was only one reported death of an athlete as a result of using anabolic steroids.

Misinformation arises from the media associating the healthy steroid athlete with the severe side effects found in hospitalized non-athletes. Sometimes this happens from simple ignorance; often it is conscious propaganda. It makes good copy and further adds momentum to the anti-steroid juggernaut. I do not dismiss steroid side effects in athletes as trivial. Although most are physically reversible when the athlete goes off the drugs, many of the physical changes instill psychological changes which do not necessarily ever go away. Also the scientific literature has never accumulated data on the effects of steroids on women. It's hard for the average person to know who or what to believe. Does one believe steroid horror stories found in the physical culture magazines? One of

the editors of FLEX magazine has privately confided 'The purpose of this magazine is to sell our products; informing and educating the readership is secondary in nature.'

Should you believe the cautious medical community which grudgingly admits that steroid side effects have not been documented to be serious in the healthy athlete? With only one documented steroid associated death of an athlete can we really take Dr. Bob Goldman's 'Death in the Locker Roorn' seriously? If you have had the patience to read his book, you'll find that much of it deals with drugs other than steroids.

What the medical community, the media, and Dr. Bob Goldman seem to ignore (Yes, I drag Dr. Bob into this a lot, but only because he allows himself to be quoted so much.), is the reality of the treatability of the side effects as they develop, or avoiding them entirely by tailoring the steroid therapy to the specific metabolism involved. It has taken independent research, creative thinking, sharing of results worldwide, and years of trial and error for a very few athletic coaches, most not schooled in any medical training, to aggressively pursue the eradication of steroid side effects. Whatever the popular opinion of these people is now (some are convicted felons), steroid use by athletes is a safer endeavor because of Jeff Feliciano, Steve Coons, Tony Fitton, and myself.

Yes, perhaps we all created or elevated what the government calls 'the steroid problem but I will say for myself that I always answered to a personal, ethical, and moral obligation to advance the art and science of steroid therapy. Just realize that advances such as estrogen antagonist therapy for gynecomastia, receptor mapping, toxic/non-toxic cycles, androgen staggering for reduced side effects in women, revised acne therapy for steroid users; all these did not come from doctors. And sadly, most steroid users still do not know about these advances.

In discussing steroid side effects, I'll list them alphabetically and mention the empirical and anecdotal evidence about the severity, possible avoidance, or treatment of the condition. I consider all side effects as being serious ones, and will identify those that cannot be treated or avoided.

ACNE - Acne can occur in both men and women on steroids. It is a very common side effect, although some steroid users are never bothered by it, no matter what kind of steroid is used. Steroids which are known riot to be androgenic, such as Anavar, Winstrol, and the Primobolans, usually won't generate acne. But take them in large enough dosages and they will. All other steroids can cause acne in women, and if taken in greater than moderate dosages will cause the problem in men. Acne is not to be taken lightly. It is not a problem, but a symptom of a bigger problem.

The skin is the largest organ of the body and does more than just hold your guts and musdes in. Androgens will bind at the receptors of the sebaceous glands, causing excess oil production. Coupled with bacteria in the oil, the result is not just oily skin, but clogged pores, whiteheads, blackheads, and even cystic acne. Athletes seem to get it mostly on the back, shoulders and chest. One can either avoid the androgenic steroids commonly known to cause acne (the testosterones, Finajet, Halotestin, Anadrol), or lower the dosage of the so called 'anabolics' (Dianabol, Deca) so that the acne is minimized. Light acne can be eliminated with nightly application of Retin-A cream, .1% for the body and .050% for the face.

Severe acne should be controlled with Accutane, either 10mg or 20mg once a day, depending on how bad the acne is. You may also need a mild antibiotic to kill off the bacteria that is feeding from the oil in the sebaceous glands and turning it into pus. Acne in the strength athlete usually brands him or her as a heavy steroid user, and that idea is socially repugnant. Not only is acne bad for your skin, and your whole recuperative process, it's bad for your mind also. Yes, you could just live with it; the acne goes away when you stop using steroids, but the pockmarks and scarring (both dermal and emotional) stay.

AGGRESSION - In women aggression can be a positive aspect and in these modern times is grudgingly accepted. The worst case of aggression I've encountered in women was not much more than simple obnoxiousness, no 'More unpleasant to bear than a Scientology accostall or an EST/Forum trade.

The obnoxiousness results from women straying into the realm of the minor or major androgenic steroids. Remember that just 2 Dianabol a day for a woman gives her the androgen equivalent of a normal male. If a woman insists on using androgens and her aggression negatively affects her job and relationships, well, she has wandered into the realm of irrationality and the options are to convince her to change her drugs, get counselling, slip her a Valium, or just ignore her.

Men, though, with increased aggressiveness can become outright frightening and dangerous, as well as being general dickheads. Try riding in a car with a 300 pound, acne ridden, hungry testosterone repository during rush hour traffic, Men have no excuse. Even the most bonehead of steroid users knows that all the really good, effective steroids: Testosterone, Anadrol, Dianabol, will make you more aggressive. Small or moderate amounts don't usually make men too objectionable, but if you insist on megadosing these drugs for whatever reason, and your family and friends are valuable to you, then learn to control the aggression. It is simply a form of mental discipline. Learn to control the drug; don't let the drug control you.

BALDNESS - Some steroids can make your hair fall out. It is rarely an anabolic steroid that does this, but rather the androgens, notably the testosterones. Anadrol, which is a borderline androgen, seem to cause hair loss as well as a more potent androgen can. Scientists think that the hair loss is related to a high conversion rate of the steroid to DHT (dihydrotestosterone). Although there is some regrowth of hair after taking the drugs, this side effect should be considered a permanent one. It you are a man and the men in your family have a history of male pattern baldness, the androgens will accelerate the process on you.

Men get hair loss at the widow's peak and the monk's cap area. Women who got hair loss from steroids (few do, as few use such androgenic drugs) get the hair loss on the sides of the head at the temples and above the ears. So far there is no way to treat this side effect, only to avoid it. I personally have seen one male get astounding hair regrowth using a Minoxidil and Retin-A liquid preparation, so perhaps this will become a viable therapy.

BIG NOSE - Steroids do allow cartilage growth and parts of the nose and ears are made of cartilage. You don't seem to notice the ears growing, nor do you notice the nose

growth on men very much. Women, however, seem to show marked nose growth from continual steroid use, when the use extends into years.

BLOOD CLOTTING/reduced ability - I first noticed that Deca Durabolin was doing something to my blood when all those little shaving nicks took a long time to clot up. Athletes complaining of nosebleeds usually get them as a result of too high blood pressure and a slower clotting time. It is standard practice to go off steroids before any surgery. So far, this side effect has been only a minor annoyance; I've never heard reports of a life-threatening situation developing.

BONE CLOSURE - Most steroids can prematurely close the ends of the long bones, resulting in a short stature. This theoretically would happen if steroids were used by children and teenagers. However, before the bone closure happens, most steroids will accelerate bone growth, resulting in an increase in height. So although most steroids will stunt growth, the majority of teenagers using steroids actually see a marked increase in height before they stop growing. Anavar does not cause bone closure and has been used by pediatricians to increase height in teenagers.

Most steroids shouldn't be used by children. They could stunt their growth even with the growth acceleration because children are not near their full adult height as teenagers are. These children could end up short; short people are unhappy people, and who needs a world with more unhappy people?

CANCER (liver, kidney, or prostate) - This side effect has only been documented in one athlete. He died of liver cancer and had been taking unspecified amounts of oral steroids continually for 4 years. We do know that his liver was healthy before steroid usage. We do not know of any other health problems he may have had, nor what other drugs he used along with the steroids.

CHILLS - This usually happens alternately with hot flashes to women who use Nolvadex. As Nolvadex is an estrogen antagonist, initial usage of the drug or a sudden increase in dosage could mimic menopause. This is an uncontrollable very temporary, and harmless side effect.

CHOLESTEROL INCREASE - Although there is argument about whether steroids truly lower HDL levels, the research showing that serum cholesterol can increase while using steroids cannot be dismissed. Steroid use doesn't always raise cholesterol in everyone. My cholesterol level stays under 200 whether I am on or off steroids. If you are going to stay on steroids for a long time, your cholesterol is naturally high and the steroids raise it higher, you are gambling with your health. It you only are using steroids for 2 or 3 months maximum out of the year, elevated cholesterol for this period of time is a more acceptable risk.

You can minimize cholesterol elevation while using steroids. Using steroids while on a calorie restricted diet will result in a lower serum cholesterol level than on a gain weight program. You can, of course, severely restrict dietary cholesterol and saturated fats and see if this lowers your cholesterol. Adding thyroid to speed up your metabolism seems to lower it, and for some unexplained reason, adding Nolvadex along with the steroid array lowers it also. If you intend to be using steroids for most of the year (as I and many others do) then you ideally want your cholesterol level to be under 200 all the time. It it is

over, even after all efforts I just outlined to try to lower it, then just realize that you may be seriously compromising your health. Curiously, many, many steroid users have had elevated cholesterol levels for decades and show no signs of heart disease. So although I have cautioned you to play it safe, most have not and they are still healthy, alive, and vigorous as they advance into old age. Whether they die of heart disease in their 70's or 80's, well, only time will tell. Let us hope that if such an occurrence happens, that the steroid use enriched their vigorous life so much as to be justifiable compensation for a shortened one.

CLITORAL ENLARGEMENT - Women get quite confused about this occurrence. Before it happens they dread that it will. Once it happens (androgenic steroids are the cause) they realize that they have an easier time achieving an orgasm, and also find that multiple orgasms happen frequently. A little bit of clitoral enlargement seems to be acceptable among women, but gross clitoral enlargement, when the clitoris takes on the physical aspects of a small penis, usually causes severe psychological distress.

Although in a physiological sense, a large clitoris is not harmful, many men and women feel it to be sexually repugnant. Clitoral size will reduce only slightly upon cessation of steroid use, but will never return to normal, pre-drug use size. Even low androgen steroids such as the nandrolones will, it used over a long period of time (months), or in a high enough dosage, enlarge the clitoris. Steroids generally known not to cause any clitoral enlargement are Anavar, Winstrol in moderate dosages, and the Primobolans.

DEATH - As mentioned earlier, death from anabolic steroid use by healthy athletes appears rare, as we only have one documented case.

DEEPENING OF THE VOICE - This happens to most women using steroids to some degree. How severe the drop is depends on the androgenicity of the steroid, duration of its use, and the metabolism of the woman. I've encountered women whose voices deepened while taking minimal amounts of Anavar; so you can't predict the individual's response. The deep voice brands the woman as a steroid user. The voice doesn't go back to normal after the drug use. This side effect is physically harmless, but again may inflict permanent psychological damage, as many people, even other steroid using athletes, find a female with a deep voice socially and sexually undesirable.

DEPRESSION - This happens in the extreme to women, as they experience an estrogen rebound when terminating steroid and/or Nolvadex usage. The depression is a given: it cannot be avoided, but can be treated with anti-depressant drugs. Women coming off steroids are going from an enhanced metabolic state to one that is SUB-normal because of the rapid estrogen rise. Eventually they will return to a normal female metabolic state, but in the interim they will feel weak, depressed, lethargic, and apathetic. Women must understand that it is simply a hormonal imbalance controlling their emotions, and that they are not 'going crazy'.

Steroids do cause a feeling of euphoria in both men and women. When men go off steroids, if they have not worked to keep their testosterone levels elevated to compensate for the steroid withdrawal, then they will feel depressed too. And of course, both men and women will be disheartened to see their strength, energy, size, and leanness ebb away. Don't despair: it doesn't all go away, and it will probably come back to a greater degree it steroid therapy is used again. **DISCHARGE** - Women using steroids that are moderately or highly androgenic usually have what's known as 'the drip'. The discharge is not a result of any infection, and is usually odorless. It is a physically harmless side effect, but bothersome to deal with. Steroids such as Anavar, Winstrol, and the Primobolans don't appear to cause it. Dianabol does.

DISCOMFORT - Some steroids such as Anadrol and Halotestin will make you feel strong, but at the same time you just don't seem to feel healthy and vibrant. You will be perplexed at how strong you are in the gym and how terrible you feel the rest of the day. Though there's no research to prove that this side effect is dangerous, I would assume it is. Face it: if you don't feel healthy, then you probably are not healthy; so stay away from those steroids which cause this effect. Not many do, so your choices are not that limited.

EDEMA - (see WATER RETENTION)

ERECTIONS/decreased frequency - I consider this a very serious side effect. Because most steroids cause the body to shut down testicular function, testosterone, sperm count, and libido all go down. Though these side effects are temporary, reversible, and avoidable, many men do not bother to deal with the problem and just accept their temporary impotency as a given when taking steroids. I have seen many, many marriages and relationships end because of sexual disinterest and inattention to one's sexual partner.

By simply taking HCG and maintaining a sexual schedule, decreased erections should not be a problem. Consider this a serious side effect because it psychologically and emotionally hurts other people, people very close, which ultimately will affect the emotional well being of the athlete. This is a steroid specific side effect. Testosterone users complain (?) about frequent erections. Frankly, no one has charted any of the individual steroids on the 'peter meter'. Volunteers, anyone?

ERECTIONS/increased frequency - This side effect is so rare, its actually thought of as a gift from God, and not a hindrance. In small amounts, steroids can cause this effect to a beginning user, but usually, just the opposite happens. Sustanon 250 in moderate amounts (250mg/wk) has the reputation of being the best steroid to generate this particular effect.

FEVER - This is a temporary side effect mostly experienced by women using Nolvadex for the first time, and either men or women using Equipoise. Some very androgenic steroids will cause women to have a fever that will not go away. Finajet does this to some women (but, they shouldn't be using Finajet anyway).

FETAL DAMAGE - Although women do produce a form of nandrolone during pregnancy, pregnant women who still have steroids in their bloodstream will cause masculinization of the female fetus, and precocious puberty in the male. I think that this side effect is so self evident that most female athletes would never consider bearing a child until they are tested clean. An odd repeated occurrence I have observed worldwide is that when men are on steroids and impregnate their wives/girlfriends, mostly female babies are born. I couldn't begin to tell you why, but I get phone calls piling up the statistics all the time.
GYNECOMASTIA - This is enlargement of the male breast, and usually a tumor growth (non-cancerous) accompanies it. Many steroids aromatize to estrogen, and this excess estrogen in the male will cause the breast tissue to grow. Its most apparent because the tumor is usually located just under the nipple and in a lean condition can be discerned with even casual observation. Gynecomastia can be almost entirely avoided by not using steroids known to aromatize to a marked degree (the testosterones and Anadrol do), keeping the dosages of mildly aromatic steroids low to moderate, adding 20mg of Nolvadex per day to your steroid array, or just using the very few steroids that don't aromatize.

If the tumor is small, it may appear to go away after steroid use, but will probably flare up if you use steroids again. If the gynecomasta cannot be controlled with Nolvadex, and stays after the drug use, then the only way to get rid of it is surgery. This is a minor operation involving cutting at the edge of the nipple, removing some breast tissue, the tumor, and chasing down any offshoots the tumor may have sprouted and removing them. Even after the operation you may have a slight swelling of the breast tissue while on aromatizing steroids, you just won't have the sore lumps under the nipples. This is because some breast tissue must be left to keep the nipple erect; total removal of all the breast tissue would result in a flaccid, soft looking nipple. The average cost of a well done gynecomastia operation is \$2000. Health insurance companies usually will pay for it. If during puberty you experiencienced transient gynecomatia, then it is likely that offending steroids will cause it in adulthood.

HEADACHES - Headaches usually are caused by highly androgenic steroids, such as Halotestin (the #1 steroid to cause headaches), Finajet, or Parabolan, or can be the result of high blood pressure caused by a particular steroid. Headaches are more serious than you think; they are not a problem but are a symptom of a (greater) problem. Avoid steroids that cause headaches; don't just take aspirin.

HEART DISEASE - This side effect has yet to show up in a statistical sense in healthy athletes using steroids. By all medical logic if an athlete on steroids has high blood pressure, high serum cholesterol, high serum triglycerides, and low HDL levels, he is a high probable for heart disease. The real world facts do not follow through on this one.

Although the media would like you to think differently, heart disease has yet to be a significant problem in the healthy steroid taking athlete. That's not to say that it is definitely nothing to worry about; I assume that it could be, so I do everything I can (thyroid, Nolvadex, keeping blood pressure, cholesterol, and saturated fat intake low) to avoid a future complication and I recommend any steroid-taking athlete to do so especially if he has a family history of heart disease.

HYPERTENSION - High blood pressure is very common in men using steroids. Realistically, a male strength athlete can hope to attain a 120/90 reading as normal. I've seen lower readings, mostly with women, but men don't often get below this figure while weight lifting unless they are on a strict diet. My blood pressure suddenly went to 160/120 recently and stayed there. It was not steroid related, and stopping the use of steroids did not significantly lower it. I felt terrible. I had shortness of breath, labored breathing, and fluid in the lungs. I could never get a good night's sleep, got headaches; I just felt quite ill. I now use an anti-hypertension medicine daily (Diazide) and my blood

pressure is now 112/80, even while on steroids. Always monitor and control your blood pressure: you'll not only live longer, you'll just feel healthier.

HIRSUTISM - This is the medical term for hairriness in women and though treatable, is irreversible. Most of the very muscular women in bodybuilding and powerlifting have to shave every day. Not just the legs, but the arms, the chest (including around the nipples), the face, and the buttocks, especially the lower inner glutes around the rectum. Although such hairriness is physically harmless, it is considered socially and sexually repugnant and does cause severe emotional trauma for women. Hairriness can happen even on low androgen steroids such as the Decas. It usually does not happen with Anavar, the Prirnobolans, and moderate dosages of Winstrol. A woman using 50mg of injectable Winstrol every 2nd or 3rd day can get hair growth, but a daily dosage of 10-15mg would probably not cause the problem. Most of the hair can be shaved, waxed, or removed by electrolysis, but even with electrolysis women will experience hair regrowth, especially when using steroids again.

IMPOTENCE - As discussed before, many (too many) male athletes get reduced libido as a result of the whole male reproductive system shutting down in response to steroids in the body. The impotence is temporary, can be avoided with the use of HCG, and can be brought back once off the drugs. In the curious case of female impotence from steroid use, I truly am at a loss for a solution because the effects vary so widely from individual to individual.

Some women get extremely aroused while using steroids; others using exactly the same steroid and dosage have no sex drive whatsoever. The impotence problem is compounded in both sexes while on a calorie restricted diet. Not only are both men and women usually impotent then; they're usually defensive and mean-spirited about it.

INSOMNIA - Steroids do have mood elevating properties, and they can act like a mild central nervous system stimulant. This effect is most apparent if you take the steroids at night before you (try to) go to sleep. To avoid the steroid insomnia problem, steroids, both oral and injectable, should be taken just after awakening.

JAUNDICE - This is a very serious side effect, but is rarely encountered in healthy athletes. Jaundice indicates that you have some serious liver problems, possibly hepatitis. Before your skin turns yellow, the corners of the whites of the eye will, so you do have a preindication that something very bad is about to happen. This side effect warrants a quick cessation of steroid use and a visit to a doctor for some blood tests. A healthy athlete would have to be using a very large amount of oral steroids to reach this state.

LARYNX/Adam's apple growth - This is a very rare side effect that happens to women who use steroids which are moderate to highly androgenic and use them over a long period of time (years). First the voice gets low, then the cartilage on the outer larynx thickens and begins to take on the characteristics of the male's Adam's apple. Again, this is a side effect that is physically harmless, but socially repugnant.

LIVER DISEASE - Most reported cases of liver disease have developed in hospitalized non-athletes. Documentation of liver disease in healthy athletes is, as discussed before, so rare as to be statistically insignificant. This does not mean that the steroid taking

athlete is home free. With the lowered quality of steroids on the black market, along with the increasing appearance of bizarre designer steroids, it is now irresponsible not to monitor organ functions while taking steroids.

MENSTRUATION IRREGULARITIES - Many women using steroids stop getting their periods, especially if they have a low bodyfat percentage. But then women athletes who don't take steroids can have the same irregularities if they become lean enough. Most women I've polled don't mind not getting their period. All that I have interviewed also got their periods back once they went off the drugs and allowed their bodyweight to rise.

NAUSEA -A very few steroids, only Anadrol and Halotestin that I know of, may cause nausea. Anavar can give the impression of stomach fullness, but has never been associated with a queasy feeling. This effect of nausea seems to mainly happen to older (middle-aged) men.

NOSEBLEEDS - Powerlifters get nosebleeds more than other strength athletes. It seems to result from a combination of high blood pressure caused by the steroids, sudden elevation of blood pressure from the explosive nature of the lifts, along with the steroid's other side effect of reduced clotting ability. Although the nosebleed Itself is not a serious problem, it may, as I keep saying, be a symptom of a more serious problem: high blood pressure. Remember, hypertension not only leads to heart problems, it also can damage the kidneys.

OILY SKIN - Oily skin occur in both men and women even on low androgen steroids such as the nandralones. It the oily skin does not develop into acne, then it can be controlled by simply bathing more frequently throughout the day. If the oiliness really becomes bothersome, then 10 mg of Accutane every second or third day will control it, although I think that this would be a frivolous use of a powerful medication.

PROSTATE ENLARGEMENT - Of course, this problem does not apply to women. Usually prostate enlargement happens when men use very androgenic steroids, and not necessarily high dosages of such steroids. The trenbolones can enlarge the prostate, and some of the old, no longer available DDR compounds (I believe the Nor-Diethylin 1 was extremely androgenic) caused a noticeable enlargement. Usually, a man can tell if his prostate is enlarged simply by tensing his sphincter muscle while in a sitting position. If the prostate is enlarged, then he should 'feel' that something is there. This is no guaranteed way of testing your prostate size, but it works for many men. Your doctor can, of course, tell you during a physical exam. Men should not put up with an enlarged prostate; they should back off the offending steroid(s), as an enlarged prostate can lead to a host of other health problems, mostly urinary, bladder, and kidney problems.

PSYCHOSIS 'Steroid psychosis' or 'roid rage - Has gained a lot of attention in the media lately; mostly, I believe, because of a novel line of defense in a minor criminal case. Also, since the media and the medical community have not been able to establish a pattern of concrete, serious health problems occurring in athletes taking steroids, then the other recourse in order to keep fueling the fire is to explore the psychological damage that steroids could cause.

We do have research documenting that cortical steroids have been known to make people psychotic permanently. But steroid psychosis is not permanent, not common, and

its relationship between cause and effect has not been explored in enough detail. Most steroids won't make you psychotic. Androgens taken in high enough dosages will induce aberrant behavior. If you wish to call this behavior induced by psychosis, well, I'm not a psychiatrist, so I will not argue the point. I think that I elaborated enough on this topic when discussing Testosterone Cypionate. Steroids do induce psychological changes and in women the changes linger long after steroid use.

SKIN TEXTURE CHANGES - Women have nice, soft, beautiful skin because skin has estrogen receptor sites to make it that way. Female athletes using steroids and/or Nolvadex for a long duration (months, years) can develop non-feminine looking skin, especially if steroids are used in conjunction with a lot of UV exposure (the sun, tanning beds; they both will do damage). Some women on heavy steroid arrays never lose their beautiful skin texture; most do. After stopping the drugs, the skin will reacquire its feminine properties, but may take a year to do so. There is no remedy (other than, perhaps, Retin-A) for UV damage.

STOMACH FULLNESS - This side effect seems unique to the use of Anavar, both with the oral and also with the new injectable form. Perhaps this is one reason why so many athletes use Anavar while dieting. This side effect is so apparent that I, along with many of the other 'lab rats' have been able to tell if a counterfeit Anavar really has oxandrolone in it, just from the stomach fullness side effect it generates.

STUNTED GROWTH - Most steroids will cause premature bone closure in children and teenagers, limiting their stature. Anavar does not. Jeff Feliciano once stated that Halotestin does not, but as androgens stop bone growth faster than anabolics, I would not gamble with my child's height on this speculation.

TENDON/LIGAMENT INFLAMMATION - Most strength athletes don't encounter this, but other athletes, primarily runners, who use steroids do. This effect mostly has to do with which steroid the athlete is using. For example, Anavar, Winstrol (if it is indeed effective), and Primobolan Acetate will impart strength to the muscles, but not load any significant extra fluid into either the muscle or connective tissue.

Since the non-strength athletes mosty limit their use to these three steroids, tendon/ligament inflammation seems to happen because the muscle has become stronger, puts more stress on connective tissue which did not become spongier and more elastic, as the strength athletes' connective tissues do because of their use of steroids that will act to increase fluid retention in the tendons and ligaments.

TESTICULAR ATROPHY - Anavar won't cause this problem, nor will Teslosterone Undecanoate. Most other steroids will (well, unless you're a girl). You can avoid this shrinkage by using HCG along with steroids, or you can get them to grow back by using HCG after going off steroids. For what it's worth, they never seem to get back to their full, original, pre-steroid size. But this may be because many men go back on steroids sooner, perhaps, than the fully required 'gonad grow back time'. I have no idea how long it takes.

URINATION PROBLEMS - This side effect concerns men, and is really an offshoot of an enlarged prostate. Usually the problem is a minor nuisance, in the guise of a post urination dribble after everything has been put away and zipped up, resulting in the

'Look, he pissed himself!' wet spot in the crotch of the pants. However, if you have a hard time to urinate, painful urination, or blood in the urine, these do not fall under the heading of 'minor nuisances'; see a doctor. Note though that men and women who have extremely low bodyfat levels may have blood in the urine temporarily, usually after a bicycle ride over very rough road, or if the athlete has a heel pounding running style. Fat coats the organs (here we're concerned with the kidneys) and acts as a cushion. It does happen that extremely rough jouncing of the pelvic area while low in bodyfat will result in a few pink urinations.

WATER RETENTION - You also can call this side effect 'edema', as most doctors would. In its mildest form, water retention is considered socially unacceptable, resulting in the moon-faced, overfed look. Women find it more uncomfortable than men. But water retention is usually a good indication that something else is amiss, usually blood pressure, which can be controlled, or kidney damage, which is not easy to rectify. Many effective steroids increase fluid retention in all the tissues: muscle, tendon, ligament, skin, and blood. Muscle and connective tissue water retention is athletically beneficial. Puffy skin and high blood pressure are liabilities, not assets.

CHAPTER TEN

NEEDLE ARCANA

The American public has a deep rooted phobia about hypodermic needles. The media has conditioned us to believe that the worst kind of drug addiction involves sticking needles in your veins. Many photographs accompanying anti-steroid articles include a dripping hypodermic syringe. These images do a very good job of pushing some kind of panic button in most people, and, of course, instantly bias them against any kind of drug use that requires a needle to deliver it. Even your friendly dentist becomes suspect when he holds that novacaine hypo.

Ironically, the injected anabolic steroid, delivered through a throw away instrument costing less than a quarter, is considered a much safer drug than its oral derivatives. Injectable steroids are usually less liver toxic than the orals. Many injectable steroids are extremely effective and relatively inexpensive; consequently, despite needle phobia, athletes will use injectable steroids and usually have to self-administer the injections. But unlike the typical profile of the needle-using drug addict, athletes, especially American athletes, are extremely hygienic, selective, actually idiosyncratic about their selection and use of hypodermic needles.

To their credit the incidence of 'bad' shots or infections is extraordinarily low for this group. Of course, there's the nut case who nonchalantly jams a needle into his backside right through his dirty gym sweats, but then the follow up infection was the least of his problems. His biggest problem was that he was flat out crazy.

Before I continue, lets briefly go over a phenomenon associated with injections of any sort: anaphylactic shock, also known as septic shock. Septic shock happens when an individual has a severe allergic reaction to some compound introduced into the body. All

the blood vessels dilate, resulting in a rapid drop in blood pressure. Mild reactions are nausea, sweating and dizziness.

Severe reactions could be unconsciousness, coma, even death. I have only heard of one case of septic shock happening to an athlete while self-injecting a steroid, and the incident happened over 15 years ago. Although septic shock has not been a problem with steroid taking athletes up to now, I mention it because counterfeit steroids of questionable cleanliness are becoming available on the steroid black market. Only one counterfeiter assembles steroid products in laboratory conditions as outlined by the FDA, but the average black market buyer usually has no idea where his steroids came from.

All injectable anabolic steroids are in the class of intramuscular injections. No anabolic steroids are injected into a vein. The preferred injection site is in the backside, the gluteus muscles, preferably high, nearer the hip than the thigh, and toward the outside. There are many reasons for this placement. The glutes are fairly insensitive to pain because of a lack of nerves in the area. There are also no major veins or arteries you could puncture. The one major nerve vertically bisecting the left glute is called the sciatic and the 'to the side' advice assures that you won't inadvertently nail it and find yourself embedded into the root of your bathroom.

The thumb and forefinger should stretch a few inches of skin tightly so that the needle doesn't 'trampoline' the skin, but pierces it cleanly and painlessly. Most athletes start out with a friend, girlfriend or wife giving the injection, but usually move on to doing it themselves after they realize that the injection really doesn't (usually) hurt. It may take a few times of the needle bouncing off the skin because it wasn't pushed hard enough, and once in awhile people miss and stick the needle in the thumb or forefinger and that, by the way, does hurt a bit. Powerlifters and bodybuilders are rather blase about self injections. Track athletes get real nervous over even a sub-q B_{12} shot delivered with an insulin needle.

The needle-syringe combination should be held as 6 it were a dart and the method of piercing the skin is almost a flick of the wrist throwing motion, but unlike a dart, you shouldn't let go of the thing. Some people practice on the skin of an orange to get the correct technique and force. I mentioned not pushing the needle in hard enough, but the other common mistake is to really zing the thing as 0 you were going for a dartboard halfway across the room. Although the glutes are the preferred area for steroid injections, some athletes are rather inflexible and uncoordinated and simply can't turn to the side enough to reach either glute.

So, they'll go for the thigh. The thigh is meaty enough for an intramuscular injection, but it does have more nerves and veins, so its not uncommon to hit a small nerve and have your leg jump-twitch in response. When that happens, you'll know enough to pull the needle out (pronto) and move it over a few inches.

It's also common to pierce through a small vein, so that when you pull the needle out, the injection site will bleed a bit. Sometimes the blood really spurts frighteningly far just once, immediately when the needle is removed, then settles down to the typical slow dribble. This effect isn't serious unless you have a heart condition. In either the buttocks or thighs, if the injection is large, over 3ccs, or not deep enough, you may notice your oil

based steroid dripping down your leg out of the needle hole you just made. Band-aid time.

Although a doctor will swab the area with alcohol before injecting it, this is an act of habit and decorum, more than one of hygiene. The alcohol really hasn't enough time to disinfect the area it's used on. After you have gotten used to injections, you'll also realize that fanatically getting every trapped air bubble out of the syringe (it's called 'aspirating') isn't necessary. Oil based steroids tend to troth as you draw them into the syringe. Too many murder mysteries use the old 'air bubble in the vein' trick to do someone in, but in reality, you need a lot of air, about 10 ccs in a vein or artery to off someone. A bit of air intramuscular does no damage.

Steroids are designed to be injected into the muscle so that the drug will dissipate from the injection site at a timed, determined rate. If you inject an oil based steroid into a slab of fat, it will take longer (sometimes months) to dissipate from the injection site. Also some steroids, notably Testosterone Proplonate, and also the new injectable Oxandrolone and injectable Oxymetholone are painful shots, not initially, but onsetting a few minutes after the injection, the pain lasting for a day or two. The swelling associated with these injections is lymph accumulating in the area. These painful injections, along with repeated injections into the same area with big needles will allow intramuscular scar tissue to develop. You usually can feel the scar tissue areas as hard little lumps under the skin. You should avoid injecting into scar tissue. The scar tissue is tougher and denser than regular muscle and it is extremely hard to push a needle into it; in fact you can at times actually hear the needle audibly squeak as it goes through, and thars a sound that kind of makes you nauseous when you first hear it. Also, scar tissue takes a long time to dissipate from the injection site.

Frequency of injections and amounts used per injection varies from country to country. European athletes think nothing of filling a 10cc syringe and injecting one whopping dose of various steroids per week. American athletes shudder at this notion. In fact, American athletes have gotten used to small, daily injections. This frequency originated when the DDR designer steroid people advocated a 1cc daily injection of their Bolasterone, and advanced the notion that daily injections of short acting steroids were more desirable than a weekly or biweekly schedule. Oil based steroids and the size of needles associated with their use were not intended to be injected so often. But daily injections are still the trend, especially for precontest bodybuilders, and the result is that some athletes have so much scar tissue throughout the glutes, that they have to inject into the thighs.

Needle size (diameter) is designated by a number, for humans somewhere between 18 and 28, and the larger the number, the smaller the needle, Traditionally, doctors will use a 21 or 22 gauge needle, $1 \frac{1}{2}$ " long for steroid shots. But these doctors are used to injecting once a week, or once every two weeks. Trust me, a 21 or 22 gauge needle is BIG. When you first see, for example, a preloaded Suslanon 250 syringe from Mexico, it looks as if the only way you'll get it through the skin is if you line it up and give it a good whack with a hammer.

The doctor uses the larger gauges mostly because he can quickly draw the oil out of the multi-use vial and into the syringe. The smaller needles take longer for the oil to draw

into the syringe. Oh yes, the bigger the needle, the more it hurts going in; you should know that. With smaller gauge needles, not only is the pain factor reduced, but so is the incidence of scar tissue. Oil based steroids can be injected through almost any gauge needle, even itsy-bitsy 28 gauge insulin needles.

The two problems with using the smaller gauges are getting the oil into the syringe and finding a smaller gauge needle that is long enough to reach into the muscle, and not the subcutaneous fat. In America, the ideal all around needle size for minimal hassle, pain, and scar tissue is a 23 gauge,1" long (okay, $1\frac{1}{2}$ " for fat butts). You can draw oils, albeit slowly with this gauge, which a doctor wouldn't have patience to do, but to you, what's an extra 30 seconds?

The real trick setup for daily injections is a bit different than what I just described. Since most needles screw onto the syringe, it's pretty easy to draw the oil with something in the vicinity of an 18 or 20 gauge 'pipe', unscrew it, and screw on a 25 gauge 1". Now, the 25 gauge needle is generally considered a vitamin needle, and the standard size is 5/8", usually a bit too short, but 25 gauge 1" and even 1 1/2 " are available. These longer 25 gauge sizes do tend to bend easily. I mentioned that you can push an oil based steroid through any gauge, but with the smaller gauges you need more finger strength. The two major brands of needles sold in America are Monoject, which come in individual plastic containers, and BD, which are wrapped in paper. Monoject seems to have the sharper needles, but in pushing the oil through a 23 or 25 gauge Monoject, you'll quickly find that the syringe is designed poorly and is difficult to hold onto while pushing hard at the same time. The BD syringe has little 'wings' at the plunger end of the syringe which allow you to hold on securely without tear of the thing slipping out of your hand and ending up God knows where. Real picky, picky athletes will actually use a 25 gauge, 1" Monoject needle attached onto a 3cc BD syringe. Syringe sizes are usually 3cc, 5cc, and 10cc, even up to (gulp) 60cc.

The smaller the syringe size, the easier it is to push the oil through, as the pounds per square inch force is multiplied with the smaller syringe bore diameters. As needles can be bought independently from syringes, this mix and match philosophy is not so wasteful as you might think. Running very hot tap water over a filled syringe for at least a minute will make the oil easier to pass through the smaller gauges. So will zapping a filled syringe without the needle attached for 30 seconds in a microwave oven set on the defrost cycle.

Needles shouldn't hurt (much) as they go through the skin, and they shouldn't bruise, unless they are dull. Pushing a needle through the rubber stopper of a multi-use vial dulls it tremendously, Knowledgeable athletes who inject frequently have learned never to use the same needle on their skin that went through the rubber. Of Monoject and BD, anecdotal opinion is that the Monoject is the sharper, and less painful of the two. The sharpest needles available in America are the Japanese 'Terurno' brand. Their problem, though, is that the needle is sealed onto the 2 $\frac{1}{2}$ cc syringe, usually mandating a pass through the rubber stopper and then through the skin. And although the Terumos are outstandingly sharp, the metal used for the needle is softer than the BD or Monoject brands, so a pass through rubber dulls it to an unusual degree. Of course, with the European steroids packaged in individual ampules, the Terumos are ideal. Terumos also cost considerably less than either BD or Monoject. Monoject and BD needle-syringes wholesale to a pharmacy for between \$16-\$18 per box of 100. Terumos are usually

priced \$5 less per hundred. There is a way of loading a Terurno, from a multi-use vial without dulling it, which I'll get into a bit later.

All of these injection tips come in handy only if you have easy access to hypodermic syringes, which was the case when there were a lot of steroid dealers in business. That has changed. In some parts of the country, especially in states where you cannot buy needles at a pharmacy without a prescription, needles have become scarce, so scarce that the 22 gauge needle you used to use once is sometimes used over and over. Lately veterinary vaccination needles have become common on the steroid black market. Vet-vax needles are usually factory 'seconds' from Monoject, 22 gauge, press on, not screw on, 5/8" long. These needles are sanitary, but they are on the dull side. The press on nature of the needle to the syringe dictates that you push the plunger gently and inject slowly. A quick, forceful push will result in you blowing the needle off the syringe, spritzing your bathroom with oil. Actually, you are blowing the syringe off it needle, as the needle is still there, sticking out of the side of your butt.

The absolute newest fad in injecting steroids is locally injecting the steroid into individual muscle groups with insulin needles. Insulin needles are usually 1cc, 28 gauge, $\frac{1}{2}$ " long. Someone finally figured out that it injectable Oxandrolone and Oxymetholone swelled up the injection area, well, you might as well swell up something showy, like your calves, or arms, or shoulders, and not your backside. Usually the skin is thin enough to get the $\frac{1}{2}$ " needle into the muscle, and as each injection site usually only gets $\frac{1}{2}$ cc, it's okay that you aren't going terribly deep. Because the bore diameter of an insulin syringe is quite small, the pounds per square inch force that your fingers push is so multiplied as compared to a 3cc syringe that the oil will zip right through the small (28) gauge.

Now, as to loading the oil into the insulin syringe (and the following goes for the Terumos, too): You'll need a regular 'big' needle-syringe, 18-23 gauge. With the big combo loaded with the oil based steroid, you take the plunger completely out of the insulin syringe. Hold it between your teeth so you won't forget where it is or, worse, get it dirty. Stick your 18-23 gauge needle into the open ended insulin syringe and start to fill it. If you trap air in the insulin syringe, giving it a few shakes downward will remove the air pockets. Once you have filled the insulin syringe with the oil based steroid, gently put just the rubber tipped section of the plunger back into the insulin syringe. Notice that there is an air pocket between the plunger tip and the liquid.

Upend the syringe, the needle end is vertically up, and give it a few shakes downward. Keep a hold on the plunger with a couple of fingers while you do this or it will fall out, and you will have just doused your foot with a cc of steroid. Voila! The air pocket should now be at the other end of the syringe, near the needle. Aspirate, and you are ready to inject your oil based steroid with an insulin needle. Needless to say, you can only inject Icc at a time this way, so you may have to do a few refills. This whole procedure works for the Terumo, needles, too.

I do go into the insulin needle method of injection in such detail because in most states you don't need a prescription to buy a box of insulin needles, although you could need one for the larger gauges, I would rather see someone go through this bothersome procedure as opposed to using one of the bigger gauges over and over. If you find that you have to reuse needles, sanitary practice is to draw and expunge either bleach or isopropyl alcohol three times after each use of the needle. And I think you know enough never to share your needles with anyone. The most sanitary place to keep used needles (assuming you have to reuse them) in the average household is in the freezer.

Note: water based injectables, especially Winstrol V have crystal sizes that usually jam in anything smaller than a 23 gauge. And although oil and water don't mix, it's perfectly acceptable to mix oil based and water based steroids in the same syringe The water based steroids will look like round globules floating in the oil, just don't mistake them for giant air bubbles (HCG is a clear water based liquid, so it will look like an air bubble that refuses to float to the top).

As far as personal preferences, I am not an advocate of daily injections, especially as my favorite injectables have an activity of three days. This would mean a twice weekly injection schedule. I will admit that the injectable Oxandrolone and Oxymetholone work best when injected daily, done locally with insulin needles. These two drugs cause too much nerve damage and muscle tissue scarring to be used on a long term basis.

Perhaps many readers may feel that I've dwelt on the subject of injections too long and went into too much detail. I'll just say that since the original USH came out 8 years ago, which also included a chapter on self-injection, I've gotten many letters from people terrified about giving themselves their first shot. Some have actually opened the European ampules and drunk the contents, rather than inject it. And in reply to Pete from St. Louis who sent me letters almost monthly, do you now finally believe that steroids are NOT injected into the ankle?

CHAPTER ELEVEN

HUMAN GROWTH HORMONE

Probably the biggest blooper I made in the original Underground Steroid Handbook was proclaiming how wonderfully and effectively Human Growth Hormone (HGH) worked at promoting rapid gains in size and strength. It was the only drug I had not personally used before writing the original USH, and I simply believed all the rumors and anecdotes flying about. I can't honesty tell you if my rave review had anything to do with increasing the drug's popularity, but today, eight years later, Human Growth Hormone is the most sought after drug in athletes. Though banned, there is no test for it at athlete events.

The use of HGH by athletes has increased and it now has the reputation of being the ultimate anabolic drug an athlete can use. It also is the most expensive. Many of the top strength athletes use HGH and the cost of its use has run as high as \$30,000 over the course of a year for one particular pro bodybuilder. Short term users (8 week duration) will spend up to \$150 per daily dosage, And because the top athletes are rumored to use 4, HGH lust in the lower ranks has become more rampant. The most curious aspect of the whole situation is that I've never encountered any athlete using HGH to benefit from it, and all the athletes who admit to having used it will usually agree: it didn't/doesn't work for them. But, in the wacked-out world of competitive athletes, those same athletes also admit that they will continue to use it in the future as long as their competition does.

The whole Growth Hormone story-controversy is so bizarre, you should know a little of its history. Most of the Growth Hormone in America was given to children with growth disorders from the mid 1950s up until late spring of 1985. 'Given' in this case is the correct word. About 3500 children in the US have growth disorders that could be treatable with HGH. Originally HGH was extracted from the pituitaries of cadavers. Through the National Hormone and Pituitary Program, based in Bethesda Maryland, the United States Government funded the drug therapy for about 2300 children. It only cost the government \$500 per child per year to do this, and additional children would have been given tree treatment if more pituitaries had been available (the Program, at its end, had access to 50,000 pituitaries a year). The rest of the children needing HGH bought it from two private companies, Serono (Asellacrin, 10 IUs per vial) and KabiVitrum (Crescormon, 4 IUs per vial), and the cost for the HGH from either company averaged \$5000-\$10,000 per patient, per year.

When it became common knowledge (from what I reported in the original USH) that adult athletes were using HGH to try to enhance their performance, there was an initial outcry that the children would not have enough of this scarce drug. The reality of the situation was that plentiful supplies of the original HGH were never a problem, as athletes bought the Serono or KabiVitrum product, sometimes from a doctor or pharmacist, but mostly from black market sources (without the pharmaceutical companies' knowledge, wink, wink). So the athletes never dipped into the free pool.

In March of 1985 the National Institute of Health was hit with some chilling news. A Stanford University doctor, through autopsy determination, discovered a death caused by the rare Creutzfeldt-Jakob disease, a progressive brain disorder with an unusually long incubation period (decades) causing dementia and eventually death within a year. Creutzieldt-Jakob disease usually occurs randomly; the odds are one in a million of contracting it. This particular victim contracted the virus-like carrier, a prion (proteinaceous infectious particle), from Human Growth Hormone the victim had used between 1966 and 1976. Within a matter of months, two more similar deaths, both involving prior HGH use, were reported. Unfortunately, before 1977, the extracted HGH was only between 25-500% pure, with the remainder being unknown proteins, including, a few infectious prions.

From 1977 on to the end of the government program in 1985, Dr. Albert Parlow of Harbor UCLA Medical Center extracted and processed all the NHPP's HGH. His final product had a purity of 95%, and has never tested positive for prions. However, over the protest~ of Parlow, and of course, Serono and KabiVitrum, the FDA stopped the commercial sale of naturally derived HGH and suspended the activities of the National Hormone and Pituitary Program.

While this controversy over naturally derived HGH raged on, a California company, Genentech, was finishing up its research and petitioning the FDA for approval of commercial production of synthetic Human Growth Hormone, using a process involving genetically altered Escherichia Coli (aka E Coli) Bacteria to 'grow' the hormone, which is a complex peptide chain of 191 amino acids. Genentech has one problem with their hormone: the synthetic peptide actually has 192, not 191 aminino acids, and this one extra, obscure amino, methionyl, generates an antibody response, which inactivates the hormone in the body, in over 30% of the test subjects.

Under ordinary circumstances, Genentech probably would not have gotten the FDA approval for Protropin that it did in October of 1985. But Congress, in 1983, passed the Orphan Drug Act, which encourages the private sector to produce drugs for rare diseases when companies usually would not because of no patent protection or high production costs. So, when the FDA approved Protropin in 1985, Genentech looked forward to a monopoly of the American Human Growth Hormone market for a guaranteed (by the Orphan Drug Act) seven years.

Before making Protropin, Genentech had produced Humalin, an excellent synthetic human insulin, which they marketed through the Eli Lilly company, and Humalin is still sold by Lilly today. But Lilly got wind of the notion that this time around Genentech was going to market Protropin directly, so Lilly, in retaliation, developed their own synthetic Human Growth Hormone, using the same E Coli Bacteria fermentation process, but refining it so that the peptide had the correct 191 sequence of aminos, with no extra methionyl at the end. The incidence of antibody reactions in test subjects was shown to be a reduced 2% as compared to Protropin.

This product, commercially known as Humatrope, was considered different enough from Protropin that the FDA approved its use and sale on March 8,1986, and Humatrope also is sheltered by the Orphan Drug Act, which technically protects it from any other synthetic competitors with the correct 191 amino count for seven years. Ironically, even when Genentech tweaked its original synthetic and bumped the methionyl amino from the peptide, the improved version could not be sold. And Serono, which just developed an elegant synthetic HGH (trade name: Saizen) using recombinant mammalian cell techniques resulting in the superior 191 count peptide cannot market their product in the US.

I guess you can imagine that between Genentech, the FDA, Lilly, and Serono, everyone's lawyers are in high gear. By the way, the Orphan Drug Act is up for reacessment by Congress sometime in 1989. So where is the athlete in all this mess?

Not very far ahead, really. Of course, Lilly's Humatrope is now the HGH of choice for athletes. Many of the top pros and amateurs use HGH regularly simply because, whether it works or not, they know that the competition is using it, so they all want the same advantage. It's obvious that HGH works on stunted growth children. Salvatore Raiti, the former director of the National Hormone and Pituitary Program has said, 'Yes, we know it works [on children] but we don't know the optimal dosage.' Assuming that HGH did work on adult athletes, could anyone determine the optimal dosage for enhanced athletic performance?

What about the horror stories: the bone distortions, organ problems, and premature deaths that CBS's 60 Minutes would like to attribute to Growth Hormone use? That has happened only to people having pituitary disorders; I've never even heard rumors of any bad side effects on athletes using HGH. But then, I've never seen any effects, period. No athletes got bigger, or stronger, or leaner while using just HGH. They just got poorer. Of course, many athletes have used HGH in conjunction with anabolic steroids, and did get some results, but from the steroid use, not the HGH use,

I know, I will not be able to convince some of you that using HGH is a worthless endeavor. Someone will always rationalize: I'll use more; I'll use Humatrope; I'll take little

amounts every two hours, like it's really naturally secreted, etc., etc. Let me sober you with this. I've seen some beautifully done counterfeit labels of Lilly's Humatrope. They were going onto rebottled Human Chorionic Gonadotrophin, as this white, unreconstituted powder looks identical to synthetic Human Growth Hormone. And the sick probability is that the athlete who buys this take may indeed make more strength gains using HCG, which will increase his own Testosterone production, than it he used the real synthetic Growth Hormone. Just think about this: \$400+ is a lot to pay for a \$10 bottle of HCG. Remember, the less effective the drug is, the easier it will be to counterfeit with a different substance. The only other thing I have to say about the whole Human Growth Hormone issue is this: With all the drug testing going on at athletic events, the term 'going for broke' has never been taken so literally.

But, since drug testing is on the increase, and many athletes will be using GH no matter what view I take of it, I will hypothethize on the ideal way to use GH. My first thought on adults using GH is that probably they're not using enough. Looking in the PDR, Genentech recommends .2iu per kilo of bodyweight for children, three times a week. This would lead me to think that 2iu per 20 pounds of bodyweight would be the correct minimum dosage for adults. So, an average 200 pound male athlete would need 20iu, three times a week. Protopin is packaged in 10iu bottles, so the amount needed would be 6 bottles per week.

If someone could afford this much GH, the next question arises: How do you make the entire 20iu dosage actively available? GH works in conjuction with Somatomedin C, which is spontaneously produced when GH is in the bloodstream. We don't know if the body could generate enough Somatomedin C if a full daily dosage of GH were injected all at once, but I would guess not. Perhaps we will see improved response to GH 6 the dosage is divided into 6 or 8 smaller dosages, given every two hours throughout the day, In continuing the example, the 200 pound male athlete would be injecting 3iu every two hours over a twelve hour period (six injections, 18iu), with a final 2iu injection before bed.

So, until I've done more research on GH therapy, my three hints at improving its usefulness are:

1) Use the Lilly Humatrope or Serono Saizen only. Never settle for the Genentech product.

- 2) Use a correct dosage, about 2iu per 20 pounds of bodyweight three times a week.
- 3) Divide the daily dosage into 6 or a smaller doages spaced two hours apart.

CHAPTER TWELVE

GETTING OFF STEROIDS

Even though it's possible to use anabolic steroids all year long and still maintain one's health, there are a number of reasons why an athlete should stop using steroids for a while. In fact, most athletes using steroids do go off them and in doing so encounter the classic symptoms of steroid withdrawal: weakness, lethargy, depression, injuries, muscle

size shrinkage, and fat accumulation. This happens to both men and women, but, as I mentioned before, women seem to get magnified versions of these symptoms.

Why do athletes go off steroids? Many fear that the drugs are damaging their health, so the steroid use is limited to perhaps eight to twelve weeks out of an entire year. In some instances this is rational thinking, as the more potent steroid cycles/arrays do contain (relatively) toxic drugs such as Anadrol, Halotestin, and Parabolan/Finajet which could cause health problems it used over longer periods of time. Many other arrays are so benign that stopping them after a two or three month duration of therapy may actually be counterproductive, as the individual may not have reaped the anabolic benefits of the less potent arrays which do work best over many months time. The possibility is that the athlete may still be perfectly healthy, but stop the anabolic therapy based on an unjustified fear that he is not. But, since I believe that the basic reason for using steroids is to make the athlete happier than he was while training naturally, it he has a fear for his health, no matter how irrational it is, then he most certainly is not happy.

Many athletes stop the drugs because of a moral sense. Even though the general population views drug use in competitive athletics as immoral, many athletes hold just the opposite view: using steroids when not training for a competition is 'not right'. Steroids are serious medications and should not be indiscriminately used while playing around off season. I should interject that many athletic events which steroids are associated with are now drug tested, and off season drug use has actually increased because of this. Also, ironically, because the injectable steroids are thought to be so troublesome to clear from the body, these athletes will use oral steroids exclusively, which for the most part, are more damaging to the liver and kidneys than injectables are. Drug testing has changed steroid use: it is now more prevalent in the off season and the drugs used are potentially more harmful to the athlete's health.

Many times the decision to go off the drugs is simply a financial one: the athlete cannot afford to use the drugs year 'round. I have not mentioned prices much throughout this text, but a simple Deca/Dianabol stack of moderate dosage (200mg Deca per week, 20mg Dianabol per day) can be fairly inexpensive, about \$75 per month, sometimes less. For all that these medications do in a positive sense, some steroids are real bargains. All too often athletes use steroids which are not cost effective. Although I mentioned that an Anavar/Testosterone Undecanoate stack was a favorite of mine, it would cost at least \$300 per month on the black market. I think that for most steroid users, this is an overpriced stack.

A very good reason to go off steroids is to adjust the metabolism back to a normal, unenhanced state so that the baseline blood tests can be done. And an even better reason would be because the athlete really does have a health problem that could be remedied by stopping all steroid medications. And of course, if the athletic event is drug tested, then the athlete must, de facto, get off all offending medications.

What I've just described are a few of the reasons an athlete would consciously cease steroid therapy. There is the other side of the coin, though, the athlete who won't get off steroids. And this is probably the type of person who needs to get off the drugs more than the other types discussed. This leads into why I periodically stop steroid use: as an exercise in psychological self-discipline. I stop using steroids to periodically prove that it is myself who is controlling the drugs, and not vice-versa. I'm afraid some athletes do

have a psychological dependence or addiction to steroids and perhaps this type of person should not be using these drugs even if they pose no serious physical health risks, though I believe that addictive personalities will latch on to some kind of personal narcotic and it might be that steroids could be the most benign of their choices.

So, there should be an ideal way to end steroid use that doesn't leave the athlete a physical and mental wreck. Steroid opponents would have you believe that once you get off the drugs, all the gains generated will go away. In a worst case scenario this could happen. Unfortunately, many athletes do come close to a worst case scenario even though a proper 'detox' is not that complicated or hard to follow. Stopping steroid usage and maintaining most of the gains they brought about simply takes a little planning, especially in knowing when to stop the drugs. More often than not, most athletes plan to go off the drugs immediately after some major athletic event, a bodybuilding or powerlifting contest, a track meet, whatever. This usually ends up being the worst time to stop steroids because athletes usually slack off with their eating and training at the same time. Suddenly ceasing all steroid use while at the same time going on an eating binge and taking a few weeks off from training is definitely a 'worst case scenario'. Unfortunately, there is no one ideal way to stop steroid use.

For example, advising a male athlete on how to taper off 50mg of methandrostenolone per day would not help a woman using 5mg of oxandrolone. Dosages and specific drugs vary so much that a successful steroid withdrawal has to be specifically tailored to the individual. Let's discuss some common sense rules that have held true for most athletes in the past.

FIND AN IDEAL TIME TO STOP THE DRUGS An ideal time is when you are training regularly, have a tight control of your eating, and seem reasonably happy. This 'when' is the most important rule here. The times in your life when you have the highest degree of discipline and optimism are ideal times to stop steroid therapy.

ALWAYS TAPER THE DOSAGES. TRY NEVER TO 'COLD TURKEY' THE STEROIDS. Remember that most steroids have shut down the body's own testosterone production. Stopping steroids suddenly and completely will bring on depression (from low androgens), accelerate fat and water retention in both men and women (more severe from an estrogen rebound in women), and unmask any connective tissue aches and pains as these tissues shed excess water and become less elastic.

UNLESS YOU ARE STOPPING STEROIDS BECAUSE OF A HEALTH PROBLEM, TAPER THE INJECTABLES FIRST. The amount of taper will be dependent on the type of injectable and frequency of injections, but a taper from full dosage to no dosage over a four week span seems reasonable.

TAPER YOUR TABLET DOSAGE DOWN EVERY 3 DAYS. You may taper your oral dosages during the third week that the injectables are tapered. When you are down to one tablet daily and there are more weeks left, try an every other day, or every third day taper. NOTE: Large dosage tablets such as Anadrol, Prirnobolan, or Proviron can be cut in halves or quarters.

TAPER THE TOXIC ORALS OUT FIRST; IF USING ANAVAR, TAPER IT Last. Anavar does not shut down your own testosterone production, Orals with the most side effects should be eliminated first, the milder ones last.

CONTINUE OR ADD NOLVADEX FOR 3-4 WEEKS AFTER THE STEROID CESSATION, THEN TAPER THE NOLVADEX OVER A TWO WEEK PERIOD. This rule is especially helpful for women, as they experience an estrogen rebound when stopping steroid use. Men also benefit from Nolvadex because if they use HCG to elevate their natural testosterone production, estrogen is also elevated.

MEN: BEGIN HCG THERAPY AT END OF THE THIRD WEEK OF THE TAPER. Usual dosage has been 1000iu every third day for about a month. However, small dosages of 25 to 50iu every two hours, every day, injected subcutaneously with an insulin needle is tremendously more effective at stimulating testosterone production.

WOMEN: WHEN FINISHED WITH STEROIDS, ADD 50MG ALDACTONE PER DAY FOR 10 DAYS, THEN TAPER THE ALDACTONE. Along with the estrogen rise when ceasing steroid use, aldosterone levels also elevate. Aldactone (generics available) is an aldosterone antagonist. Aldactone should be added at the end of the fourth week of the steroid taper.

USE EFFECTIVE NON-STEROIDAL ANABOLICS IMMEDIATELY AFTER STOPPING THE STEROIDS, AFTER THE FOURTH WEEK. Synthroid, synthetic T₄, acts as an anabolic, and will work extremely well with the asthma medication clenbuterol (100-200mcg T₄ with 10mg clenbuterol, daily). Co-enzyme B12 (dibencozide) is legally available in America, and will be effective in two 5mg oral doses daily. Highest quality oral dibencozide available is the DICOBALENE-V brand by Jenapharm USA. You may want to try L-Dopa, 1gram before bed, or CATAPRES, .3mg, also before bed to elevate GH output (athletes with low blood pressure should avoid Catapres). Arginine and Ornithine taken orally are not effective at elevating GH.

ELIMINATE MOST JOINT STRESSING COMPOUND MOVEMENTS FROM WEIGHT TRAINING FOR FOUR TO SIX WEEKS AFTER STOPPING STEROIDS. Connective tissue is injury prone after stopping steroids. Cheat curls, wide grip benches, behind-the-neck shoulder presses, weighted chins, and weighted dips should be stopped for a while, and then gradually added back to the workouts. Getting an injury right after going off steroids will seriously hamper your ability to keep muscle gains.

MODIFY YOUR TRAINING TO STIMULATE NATURAL TESTOSTERONE PRODUCTION. Research has shown that exercises of five repetitions, with a three minute rest between sets results in the body secreting the most amount of testosterone. Workout sessions should not be more than an hour at a time. It is possible to have more than one workout session per day with this method.

By building these rules into an individualized program, an athlete can keep much of the size and strength that steroids impart. Just remember that the steroids known to cause water retention (Anadrol, the Testosterones, and to a lesser degree, Dianabol) are the ones athletes will feel a loss of most when they are off them. Anavar, Winstrol, Primobolan, and Maxibolin are subtle steroids which will not affect size or mood as dramatically. Women are markedly affected when ceasing even mild steroid use. In

going off steroids, women actually descend to a sub-normal metabolic state until the estrogen-androgen ratio rebalances itself to a normal, pre-steroid condition.

I want to stress how important it is to realize that post-steroid depression in both men and women is the result of an imbalanced subnormal metabolism; a normal metabolism is not the depressing experience that the seasoned steroid user laments it to be.

CHAPTER THIRTEEN

THE DRUG TEST

Although most of this book has been about using steroids, and most steroid users never compete as athletes, drug testing at athletic events is becoming increasingly common and should be discussed briefly for the benefit of the steroid using competitor who must pass a urine test. I have assisted a few athletes in achieving a negative on the urine test and none I have advised has ever tested positive. I don't think that I have a lot of secrets, I just play the 'beat the drug test game' very conservatively.

But there are a few tricks, and whether you ever have or want to use them or not, I think you should at least know about them, so if one day you are beaten at a drug tested event and think that someone cheated to beat you, at least you won't be ignorant of the methods used. So how does one go about beating a drug test?

Lets understand which test the athlete is trying to pass. The easiest test to pass is the one required right at the competition. The harder one is the random, off season testing that the female pro bodybuilders have to put up with. Since there are only about 20 women concerned with the new random testing, let's concentrate on the event test. I tend to slant the information towards women because it is mostly the women's bodybuilding contests which are tested, so I have more experience with women passing a test than with men.

The most conservative course of action (and my success rate is mainly because I am conservative) is to simply use only oral steroids during off season training. I just haven't had time to research steroid metabolite clearance times to comfortably work with injectables off season. In real world time, I've seen a competitor clear nandrolone out of her system in seven months, but have never heard of anyone even trying to use nandrolone type drugs for contest preparation. Statistically, the majority of bodybuilders have tested clean when they stopped their oral steroid use 21 days before the test.

The most effective orals that women can safely take are methandrostenolone (aka Dianabol), between 2-4 tablets a day, along with Anavar, usually between 6-10 tablets a day. All the remaining oral steroids, other than perhaps Anadrol 50 (though most women are scared to use this steroid), are not potent enough to allow a 21 day abstinence before a drug tested event. Simply put, the potent steroids allow an athlete to took and perform better after being off them for three weeks as compared to using 'light steroids' and stopping their use for the same amount of time.

As far as how close you can take steroids to the test date, I know of one competitor who tested clean by stopping 11 days before the event. She determined this cutoff point by testing herself in the off season using a private lab. Once you are off steroids, there are still lots of anabolic drugs you can take that are not tested for, at least not yet.

Synthroid (Flint), a synthetic T_4 thyroid acts as an anabolic in its unconverted state (T_4 mostly converts to the more active T_3). A powerful anabolic recently studied is the beta andrenergic agonist CLIENBUTEROL, an asthma medication, one not on the IOC banned substances list, available as SPIROPENT by Thomae in West Germany and Monores or Clenasma in Italy. Clenbuterol increases the T_4 receptor sites in the muscle cell. Animal studies have shown a 400% increase over a 12 week period of the cross section of Type II (fast twitch) muscle cells. Protein content of the muscle was up 13%, and the overall fat content of the body decreased 20% because of increased brown fat thermogenesis.

The estrogenic anabolic Zeranol, an isolate of resorcinol lactone has replaced many steroids in feed animals because it is considered a very safe anabolic. It is available commercially in Anwta as Ralgro cattle implant pellets and can be used by humans by grinding up the pellets and mixing the powder with injectable oil based vitamins. Dosage has been 3 (ground up) pellets per week. Zeranol is not on the IOC banned list.

Athletes might want to try taking 1 gram of L-Dopa before bed to elevate GH output. Also, the high blood pressure medicine Catapres in a .3mg amount (orange tabs) taken before bed can elevate GH output. Catapres should not be taken by athletes with low blood pressure. Catapres works better than L-Dopa, which seems not to work at all for most athletes. It is not a banned substance.

The new-to-America Co-enzyme B_{12} (aka Dibencozide) is used throughout the world as a non-steroidal anabolic. It definitely gives a mood elevation to most people who use it, so may be very valuable to use while dieting and before a workout.

As far as steroids that can be taken right up to a few days before contest time, there are definitely two which can be used, as these were the predominate ones used by the track athletes that DIDN'T get tested positive at the Olympics. They are both synthetic Dihydrotestosterones (DHT). DHT derivatives are attractive for a number of reasons.

DHT converts to regular testosterone metabolites, which are not tested. It clears out of the body quite rapidly. It does not upset the testosterone/epiandosterone ratio which cannot max over 6 to 1. Regular short acting testosterones upset this balance. The two popular DHT derivatives used at the Seoul games were PESOMAX by Boniscontro (Spain), which is a fast acting steroid in the Androstanolone family (as are all DHT derivatives), and the more esoteric Furazabol marketed as MIOTOLON by Daiichi Labs in Tokyo, Japan. These compounds can be used up to 3 days before the event.

Most competitors know that the blocking agent PROBENECID has been banned by the IFBB and NPC. However, the language of the IOC banned substances list reads 'PROBENECID and related compounds'. If the phrase 'related compounds' is not written into the rules of the testing procedure for your sports organization, here are some related compounds which block steroids from being excreted in the urine: the generic Benzbromarone, trade named AZUBROMARON by Azupharma in West Germany and

also available throughout Europe under the names of DESURIC, MINURIC, URICOVAC, and URINORM, Dosage is 80-160mg. In America, Ciba's ANTURANE brand of suffiripyrazone also has the same actions as PROBENECID. As far as unrelated blocking agents, the clandestinely produced CARINAMIDE is the agent routinely used to block the urinary excretion of steroids.

If we are just concerned with drug testing only the women, well, they potentially have the advantage of using any drug they want. Some women competitors in the Olympics, mostly those from the Eastern bloc countries passed the urine test this way: They use a specially made squeeze bulb/catheter device that is inserted into the vagina before testing. The rubber bulb contains clean, drug free urine. The catheter tube is short enough to be hidden from prying eyes (as yet, there are no prying fingers in the testing rooms). These women have practiced relaxing and flexing their vaginal muscles beforehand so that when called upon to urinate, a squeeze of the hidden bulb results in a clean urine sample.

So, as you may begin to realize, the drug tests, even at the IOC level, could be viewed as designed for ignorant, unsupervised athletes to fail them. Most of the top Olympic athletes had access to at least half the tricks I just outlined. Since most of the competitors at the now drug tested bodybuilding contests will cheat in some way, I thought everyone should be privvy to the list of the popular tricks.

CHAPTER FOURTEEN

YOU, STEROIDS, AND THE LAW

In April of 1988, I had a long conversation with the head of the Federal Steroid Task Force. It was actually a debate concerning the 'dangers' of steroids, one that, at least on a logical and factual basis, I was winning. Dennis stopped in the middle of the verbal parrying, exasperated, and simply asked, "What would you do about the steroid problem?" It was immediately obvious for me to respond: "First we have to agree on what exactly the problem is."

My view is that the real problem, the host problem that spawned all the subsequent 'steroid problems' was and still is this: athletes can no longer find doctors who will prescribe anabolic steroids. Now, I didn't even qualify the doctors as 'competent'. It is just about impossible anywhere in America to find an MD or Osteopath, young, old, good, bad, or even greedy to write prescriptions for steroids. It was a major problem six years ago when the first USH came out, and now it's become more complicated. In Florida and Colorado it is illegal for a doctor to prescribe steroids to an athlete for performance enhancement purposes. The anti-steroid propaganda has even quelled the AMA from mounting lawsuits, or lobbying against this type of legislation which seems, even to the average person, to be unconstitutional.

It gets worse. Many states, California included, make it a criminal misdemeanor to simply posses anabolic steroids without a prescription. In other states, it can be a felony. And think about this: the Steroid Task Force is planning to prosecute the retail buyer of steroids, the end user. Some of the black market steroids are made in Mexico and

smuggled in, so an end user could be liable for felony counts such as conspiracy and smuggling. I would estimate that 90+% of all steroid users in America are buying them without a prescription, are buying counterfeit product, and are unknowingly, just by possessing them, breaking various local, state, and federal laws! So the next time you admire a great bodybuilder's physique, or an outstanding powerlifter's total, *realize that the athlete probably had to break a number of laws to achieve that excellence*.

Are there any ways to protect yourself from arrest and prosecution, assuming that you are illegally possessing and using steroids? Yes, but they are sneaky and unethical. Never, never admit to using steroids. Ever. Lie if you have to. Never carry steroids around with you in the car, to the gym, nowhere. Keep them home in the medicine cabinet or locked up. With all tablets, transfer the contents of the bottles to plain non-descript, unlabeled bottles. With injectables, take a sturdy single-edged razor blade and scrape the paper labels off all the bottles.

If you have European injectables, throw the boxes away and take an emery board and sand off the silkscreened letters on the ampules. Burn all paper boxes and product inserts. Make everything so nondescript that even you could forget what's what. Keep used needles, vials, and ampules as separate trash and throw them away in a place that is far from your residence. Make sure that kids can't pick through the trash. Buy a box of insulin needles (usually you'll need no prescription) and fill out the Diabetic ID request card that is usually in the box and mail it to the company, which will then mail you an ID that identifies you as a diabetic. When you get the ID card, fill it out and carry it with you all the time. It can get you out of sticky situations, like explaining those syringes in your carry-on to airport security.

Even with all this, you are still criminal in your unprescribed possession of anabolic steroids, but you have made it very hard for any of the authorities to prosecute you, because now they would have to prove with laboratory analysis that what you have in those unmarked bottles are actually steroids. When US Customs searched my residence two years ago they took all my personal-use steroids, but left any medication that was unlabeled. Why? Liability. That unlabeled bottle could be an essential medication for my health. It could be, for example, insulin. Most Customs people don't know what injectable insulin looks like. Insulin does look a lot like Winstrol V injection or Testosterone Aqueous Suspension. It they confiscated in error an essential medication from me because they assumed it was a steroid and then, say, I die from the lack of it, well then the Feds are in deep shit. Don't feel too guilty about playing dirty by doing these tricks. Most of you reading this book have never been arrested on felony charges, so you have no idea of just how routinely dirty the government plays. So now you understand why I cannot outright advocate you to try using anabolic steroids. Besides the fact that such advice could compromise your health, I would actually be telling you to break the law, and of course I would never do that.

Also I want to vehemently warn you about going to Mexico, buying steroids there and trying to smuggle them across the border, especially into the San Diego area. The Southern District of California is a nasty place to be arrested. New policy is to immediately arrest people smuggling steroids in, even in small personal-use amounts. There is no more simple confiscation of product, a stern lecture, a small fine, then you go home. You could be incarcerated in the Metropolitan Correctional Center to await bail which could be unusually high. You will probably be prosecuted by Philip Halpern who

not only is excellent at getting steroid convictions, but enjoys the challenge. Halpern is an outstanding trial attorney and no lawyer working for steroid-related defendants I've seen has matched his vigor and canniness. Halpern has made my life miserable for two years (so far), but I have a somewhat grudging admiration for the man; he's a fighter and a good one. Don't fuck with him.

If a doctor wishes, he can prescribe anabolic steroids to athletes for performance enhancement no matter what the state law reads. All he has to do is order up a blood test, interpret the red blood cell count on the CBC part of the test as low, and legally prescribe the few available anabolic steroids still for sale in the US as therapy for pernicious anemia, which is an FDA approved use for anabolic steroids. In most states your medical records, including the blood test results, are private and cannot be subpoenaed by any prosecutor, so it would be practically impossible to contest the doctor's diagnosis of anemia. Although this legal loophole is available, don't expect most, if any, doctors to do this for you, not even sports medicine doctors.

Even though most doctors will not prescribe anabolics to you, and you decide that you are going to use them anyway, it still makes good sense to find a good doctor and use his services regularly. Prices for an initial office visit including a general physical can cost you about \$160 (here in California, anyway), with the blood tests adding another \$120. Believe me, this is money well spent. Blood tests showing cholesterol, triglycerides, liver and kidney functions can indicate if you could be more sensitive to steroid side effects, and will guide you to individual steroids more suited to any deficiencies you might have. And of course always watch your blood pressure. Many steroids can raise it. The majority of doctors who see hypertension, high triglycerides, high anything will usually go into their 'Those steroids are going to kill you' song and dance. The truth is that usually you can adjust the dosage, your diet, change the steroid, add high blood pressure medicine, etc. to keep yourself healthy.

The trouble is that the doctor is usually not creative in his therapy, but to follow the spirit of his Hippocratic oath will say, 'Get off those things!' Then he goes home, has a few drinks, takes a Valium and goes to bed. The point is you are paying the doctor; use him; make him work hard for you. He's not going to 'turn you in' because you're a steroid user. In talking with hundreds of athletes about their relationships with their doctors (if they indeed use one) I hear over and over that when the doctors got negative about steroid use, the athletes kept using steroids, they just didn't see their doctors anymore. This is not dealing with a problem, it's ignoring it. Take it as a given that most doctors will not prescribe steroids to you, but they do have a responsibility of keeping you healthy. Remember: a doctor is not going to snitch a steroid user to any of the authorities.

I have a feeling that most of you who bought and read this book had already made the choice to use anabolic steroids. Well, welcome to the new subculture: the Anabolic Outlaws, the Dianabol Desperados. Before you do anything, think through the information I've presented. Read some chapters again. Not only could it save you a lot of money, but it should prevent you from making irrational decisions like the ones I made when I was younger and more impressionable.

<u>Take advantage of me; learn from my mistakes</u>. Steroids were not created by magic, and magic things do not happen when you take these drugs! if you do things in what I consider a correct manner, you should improve your performance, your appearance,

AND your health. Now that you've come to the end of this book, you know that the rabbit was always in the hat, the card up the sleeve, the doves in the cape. All the magic, sad to say, has ... vanished!

A note about the original pak book: Th entire book was written and set up for printing on a Toshiba T-1000 laptop computer using Symantees O&A Write word processing program exclusively. Rough dafts were printed on a portable Kodak Diconix inkjet printer. Final camera ready copy was printed with an HP Laserjet 11.

