The 4-Hour Body

AN UNCOMMON GUIDE TO RAPID FAT-LOSS, INCREDIBLE SEX, AND BECOMING SUPERHUMAN

Timothy Ferriss



CONTENTS

START HERE

Thinner, Bigger, Faster, Stronger? How to Use This Book 2

FUNDAMENTALS-FIRST AND FOREMOST

The Minimum Effective Dose: From Microwaves to Fat-Loss 17 Rules That Change the Rules: Everything Popular Is Wrong 21

GROUND ZERO-GETTING STARTED AND SWARAJ

The Harajuku Moment: The Decision to Become

a Complete Human 36

Elusive Bodyfat: Where Are You Really? 44

From Photos to Fear: Making Failure Impossible 58

SUBTRACTING FAT

BASICS

The Slow-Carb Diet I: How to Lose 20 Pounds in 30 Days
Without Exercise 70
The Slow-Carb Diet II: The Finer Points and Common Questions 79

Damage Control: Preventing Fat Gain When You Binge 100

The Four Horsemen of Fat-Loss: PAGG 114

ADVANCED

Ice Age: Mastering Temperature to Manipulate Weight 122

The Glucose Switch: Beautiful Number 100 133
The Last Mile: Losing the Final 5–10 Pounds 149

ADDING MUSCLE

Building the Perfect Posterior (or Losing 100+ Pounds) 158
Six-Minute Abs: Two Exercises That Actually Work 174
From Geek to Freak: How to Gain 34 Pounds in 28 Days 181
Occam's Protocol I: A Minimalist Approach to Mass 193
Occam's Protocol II: The Finer Points 214

IMPROVING SEX

The 15-Minute Female Orgasm—Part Un 226
The 15-Minute Female Orgasm—Part Deux 237
Sex Machine I: Adventures in Tripling Testosterone 253
Happy Endings and Doubling Sperm Count 264

PERFECTING SLEEP

Engineering the Perfect Night's Sleep 275
Becoming Uberman: Sleeping Less with Polyphasic Sleep 287

REVERSING INJURIES

Reversing "Permanent" Injuries 294 How to Pay for a Beach Vacation with One Hospital Visit 319 Pre-Hab: Injury-Proofing the Body 324

RUNNING FASTER AND FARTHER

Hacking the NFL Combine I: Preliminaries—Jumping Higher 347 Hacking the NFL Combine II: Running Faster 354 Ultraendurance I: Going from 5K to 50K in 12 Weeks—Phase I 367 Ultraendurance II: Going from 5K to 50K in 12 Weeks—Phase II 386

GETTING STRONGER

Effortless Superhuman: Breaking World Records with Barry Ross 406
Eating the Elephant: How to Add 100 Pounds to Your Bench Press 424

FROM SWIMMING TO SWINGING

How I Learned to Swim Effortlessly in 10 Days 434
The Architecture of Babe Ruth 444
How to Hold Your Breath Longer Than Houdini 453

ON LONGER AND BETTER LIFE

Living Forever: Vaccines, Bleeding, and Other Fun 460

CLOSING THOUGHTS

Closing Thoughts: The Trojan Horse 471

APPENDICES AND EXTRAS

Helpful Measurements and Conversions 476

Getting Tested—From Nutrients to Muscle Fibers 478

Muscles of the Body 483

The Value of Self-Experimentation 484

Spotting Bad Science 101: How Not to Trick Yourself 491

Spotting Bad Science 102: So You Have a Pill... 501

The Slow-Carb Diet—194 People 505

Sex Machine II: Details and Dangers 511

The Meatless Machine I: Reasons to Try a Plant-Based Diet for Two Weeks 520

The Meatless Machine II: A 28-Day Experiment 536

BONUS MATERIAL 550

Spot Reduction Revisited: Removing Stubborn Thigh Fat

Becoming Brad Pitt: Uses and Abuses of DNA The China Study: A Well-Intentioned Critique

Heavy Metal: Your Personal Toxin Map The Top 10 Reasons Why BMI Is Bogus

 $Hyperclocking\ and\ Related\ Mischief:\ How\ to\ Increase\ Strength$

10% in One Workout

Creativity on Demand: The Promises and Dangers of Smart Drugs An Alternative to Dieting: The Bodyfat Set Point and Tricking the Hypothalamus

ACKNOWLEDGMENTS 551
PHOTO AND ILLUSTRATION CREDITS 553
INDEX 555

TIM'S DISCLAIMER

Please don't be stupid and kill yourself. It would make us both quite unhappy.

Consult a doctor before doing anything in this book.

PUBLISHER'S DISCLAIMER

The material in this book is for informational purposes only. As each individual situation is unique, you should use proper discretion, in consultation with a health care practitioner, before undertaking the diet, exercises, and techniques described in this book. The author and publisher expressly disclaim responsibility for any adverse effects that may result from the use or application of the information contained in this book.

SIDE EFFECTS: THE DOSE MAKES THE POISON

Here is a small sample of well-documented side effects, provided by the National Institutes of Health:

- Swelling of the eyes, face, lips, tongue, or throat
- Wheezing or difficulty breathing
- Fast heartbeat
- Fast breathing
- Cold, clammy skin
- Ringing in the ears
- Loss of hearing
- Bloody vomit
- Bright red blood in stools

This list should scare you.

It should scare you because these aren't side effects of anabolic steroids. These are common side effects of aspirin.

First rule of drug use: there is no safe drug.

Some are safer than others, but almost anything will kill you at a high enough dose. It's the dose that makes the poison.

Never forget this, and don't confuse the effects of moderate use with those of outright abuse.

It's the difference between a single 8–12-week cycle of low-dose injectable testosterone for surgery, on the one hand, and uncycled megadose oral testosterone for elite bodybuilding, on the other. It's the difference between a baby aspirin (75–85 milligrams) and half a bottle of aspirin. It's the difference between having a glass of wine before bed and drinking bottles until you wake up in the intensive care unit.

Notice whether "use" or "abuse" is used in studies regarding AAS. Politics show up more than good science, and the two are not the same.

The Real Risks of Anabolic Steroids

Legal Side Effects

First of all, there are serious criminal penalties for using AAS in the United States without a prescription.

They are Class III controlled substances, and you can receive up to three years' imprisonment for possession and up to 10 years' imprisonment if convicted of trafficking or intent to traffic. If you have anything to lose, this alone rules out nonprescription use.

Did AAS get designated as controlled substances because they fit the bill? Not quite.

During deliberations, the American Medical Association (AMA), Drug Enforcement Administration (DEA), Food and Drug Administration (FDA) as well as the National Institute on Drug Abuse (NIDA) all opposed listing anabolic steroids as controlled substances, citing the fact that use of these hormones does not lead to the physical or psychological dependence required for such scheduling under the Controlled Substance Act. Nevertheless, anabolic steroids were added to Schedule III of the Controlled Substances Act in the Anabolic Steroid Control Act of 1990.

This places steroids in the same legal class as some forms of opium and morphine. The cause? Public uproar over Ben Johnson's gold medal at the Seoul Olympics, which was later revoked. The scandal offered the perfect media platform for politicians who prefer reelection to listening to scientists.

The moral of the story: physical side effects aside, using AAS without a legitimate prescription can ruin your life. Is that worth an additional 20 pounds of muscle or 50 pounds on your bench press?

Counterfeits

The black market is rife with counterfeit anabolic steroids. Counterfeit manufacturers are often well funded and produce incredible duplicates, up to and including packaging holograms in some cases.

One acquaintance injected a counterfeit Deca-Durabolin® vial bought in Tijuana, Mexico, only to wake up in the middle of the night with a gigantic, pus-filled abscess on his leg and severe swelling (edema). He had retained nearly all the liquids he'd consumed since the injection and had to be rushed to the ER for treatment.

Pills can kill you just as dead as injections.

In all cases: avoid the black market.

Drug Interactions: Antidepressants and Anti-Anxiety Drugs

First, the basics, remembering the importance of distinguishing *use* from *abuse*: There is no evidence that steroid dependence develops from *therapeutic* use of anabolic steroids to treat medical disorders, but instances of AAS dependence have been reported among weight lifters and bodybuilders who chronically administered

supraphysiologic doses.

The problem really gets volatile and complicated when we start to add other drugs to the mix. Though controversial, there is evidence that testosterone may have an effect on dopamine receptors and can also alter the biochemical response to SSRIs like Prozac®.

Most suicides or crimes associated with the use of AAS also involve either antidepressant or anti-anxiety (anxiolytic) drugs.

Just say no to mixing drugs, especially AAS and the aforementioned psychotropics. It's a potentially fatal idea.

Dosage Drift and Ancillary Drug Drift

If you choose to use AAS, you will quickly realize two things.

First, using high dosages of these drugs will not make you remotely resemble Barry Bonds or Mr. Olympia.

Thought you might get away with mediocre training, diet, or genetics? Not a chance. In fact, moderate doses of AAS might not produce huge jumps in performance or size. This realization causes people to experiment with much higher supraphysiological doses, and the side effects jump accordingly.

This is "dosage drift."

Second, there are very common side effects with even moderate use of most AAS, and these effects can lead to a drug domino effect. Here are some of the side effects you might expect:

- Short-Term Use (one to two 8–12-week cycles per year)
- Increased oil production
- Acceleration of male-pattern baldness
- Increased aggression
- Decreases in HDL cholesterol and increases in LDL cholesterol
- Long-Term Use (longer cycles or lack of cycling altogether)
- Increased size (hypertrophy) of the left ventricle of the heart
- Prostate enlargement

Let's look at one example of how the drug domino effect can be triggered.

Don't like the water retention or nipple sensitivity? Then you end up taking an anti-estrogen or anti-aromatase. Uh-oh. That causes your "good" HDL cholesterol to plummet. Now you need more drugs or supplements to increase your HDL back to baseline.

Don't like losing your hair? Who does? So you start taking Propecia® (finasteride), which can negatively affect your sexual performance, which leads you to begin Viagra®. Alas, your blood tests then show an adverse change in your liver enzyme levels, so you add Liv-52® to the mix.

In each case, one side effect has led to two to four ancillary drugs, each one used to counter the side effects of the previous one. It's a vicious cycle.

Multiply the domino effect for each common side effect—increased sebaceous oil secretion, hair loss, etc.—and you quickly end up with a laundry list of drugs, not to mention the drugs like hCG and Clomid® that you're likely to use to get off of your cycle.

This is what I refer to as "ancillary drug drift."

Know what you're signing up for. If you think it's just one drug at a moderate dose, you're probably wrong.

Whether it's to overcome disappointment (created by unrealistic expectations) or to mask side effects, drift in both dosages and types of drugs is the rule rather than the exception.

To get an idea of just how far this can be taken, here is an alleged 10-week precompetition drug schedule used by professional bodybuilder Andreas Munzer:

Weeks 10 to 1: Daily Throughout

Ephedrine

Clenbuterol

IGF-1

Erythropoietin (EPO)

Captagon (an amphetamine alternative popular in Arab countries)

Thyroid hormone

Aspirin

_

¹ A portion of all testosterone naturally produced is converted to estrogen; more testosterone therefore equals more estrogen.

Valium

Weeks 10 to 6: Daily Intake

Testoviron (methyltestosterone)—2 injections (500 mg)
Parabolan—1 injection (100 mg)
Halotestin (Fluxymesterone)—30 tablets (150 mg)
Dianabol—30 tablets (150 mg)
Human growth hormone—20 IU
Insulin—20 IU

Weeks 5 to 3: Daily Intake

Masteron (Methyltestosterone)—3 injections (750 mg)
Parabolan—2 injections (200 mg)
Halotestin (Fluxymesterone)—30 tablets (150 mg)
Stromba (stanozolol)—50 tablets (250 mg)
Stromba (stanozolol)—2 injections (200 mg)
Insulin—24 IU
Human growth hormone—24 IU

Weeks 2 and 1: Daily

Masteron (Methyltestosterone)—2 injections (500 mg) Stromba (stanozolol)—2 injections (200 mg) Halotestin (Fluxymesterone)—40 tablets (200 mg) Stromba (stanozolol)—80 tablets (400 mg) Human growth hormone—24 IU Insulin—24 IU

This list doesn't include the drugs Munzer took to mitigate side effects, nor does it include two of the more dangerous drugs he was known to use just prior to competition: the diuretics Lasix® (very popular with racehorses) and Aldactone®.

Andreas Munzer died of "complete organ failure" at age 31.

Was it the combination of diuretics and EPO, the blood thickener so popular with Tour de France cyclists? Or was it the Captagon plus something not on this list?

It's impossible to know.

Here's what's undeniable and incontrovertible: drugs should be treated with respect. In the right dose at the right time, there is a place for AAS in therapeutic settings, as there are for hundreds of drugs.

Those same drugs, aspirin and AAS included, can have horrific side effects (ladies, anyone want an enlarged clitoris the size of a thumb?) when abused.

Be smart and have professional supervision and you will have little to worry about. Be cavalier and you have everything to worry about.

What Can Self-Experimenters Learn from a Proper AAS Cycle?

Millions of American males get their introduction to self-experimentation through AAS. Can other self-experimenters learn anything from their experiences? I think so.

Below is an excerpt from an interview between Gary Wolf, contributing editor at *Wired* magazine, and an anonymous self-tracker using the pseudonym "Phineus." It originally appeared on the "Quantified Self" blog, where Phineus promises to reveal his true identity in the near future.

That near future is now: I am Phineus.

I've also taken the liberty, as Phineus, to clean up some answers for space and clarity.

GW: You don't take all the drugs all at the same time?

Phineus: The more astute self-experimentalists stagger dosing. From the standpoint of detectable blood levels, you might well be "on" all of the drugs at the same time, but you introduce and remove them one at a time. This is very important if you want to correctly correlate the positive effects and side effects to specific drugs that you're using for the first time, or in combination for the first time.

Understanding the varied pharmacokinetics and having a written schedule is critical. Suppose you are taking a testosterone suspension daily that reaches peak concentration in 4 hours, an oil-based testosterone blend like Sustanon 250 that might produce a cumulative peak at approximately day 25, and Deca-Durabolin, which is injected weekly and achieves maximal blood-nandrolone levels 48 hours after each injection. It is prudent and beneficial to know when those peaks will overlap, both for scheduling training and avoiding other situations (negotiating a business deal with the testosterone level of a bull shark is not recommended).

GW: What can people doing other kinds of self-monitoring learn from these athletes?

Phineus: The biggest mistake people make in self-monitoring is that they don't get an accurate baseline beforehand.

This is a subtle point, because once is not enough. In other words, I am not interested in a single snapshot, but in the trend. Let's say you think you are getting a baseline, and you do a complete metabolic panel and lipid profile. You have an HDL of 60, you take the anabolic steroids, and four weeks later it is 50. You seemingly have evidence that the steroids caused your decrease in HDL. But if you had done a lipid profile four weeks prior to your cycle, and then immediately prior, you might have seen 65 for the first test, then 60 on the second, showing that there was already a downward trend. That would have helped you avoid misattributing the total decrease to the effect of the drugs.

GW: What have you learned from your experiences working with doctors? **Phineus:** Even if you find a doctor who will supervise your use of the drugs—and it is very difficult to find somebody who is both qualified and willing—a proper pre-use baseline is almost never established. They seldom look for trending in estradiol, for instance, and often neglect to look at pre-AAS levels of luteinizing hormone (LH) or follicle-stimulating hormone (FSH), which are influenced by a feedback loop.

Not looking at trends is the biggest medical error by far. There is a good chance your system is somewhat off-kilter before the self-experimentation, so gather more control data earlier, on at least two occasions.

GW: How did you learn this?

Phineus: I've been self-tracking through blood tests for at least six years. Before I used AAS, I had blood tests drawn every two months or so to measure eosinophil levels, among dozens of other variables, and my levels did not fall outside normal range until the third or fourth tests. But the doctors never looked at more than one test, they never analyzed them in succession. They said, normal, normal, normal—oh, now you have a problem! It could have been addressed months earlier, but they waited until the value was out-of-range.

You will also find baseline problems in the case of mood tracking. People using anabolic steroids don't track mood much because there is no real performance benefit to doing so. But if you do, you develop a hyperawareness of emotional states that you did not have before the cycle, and you interpret mood swings as new that you quite probably had before. What you lacked before was the awareness. For that reason, you have to track variables before you begin, before you introduce the new variables. You should begin self monitoring at least four weeks in advance.

GW: How common is this sort of self-experimentation among athletes? **Phineus:** Among athletes that perform in any strength-, speed-, or endurance-dependent sport at the highest levels, I believe at least 80% use "drugs" of some type. I use the term "drug" very broadly. From a training perspective, a drug is a drug. The usual distinction between a nutritional supplement and a drug is not a biological distinction, but a legal distinction.

GW: The ones who get caught using banned drugs always say, "I didn't know what I was taking!"

Phineus: Pro athletes who claim ignorance are using the only defense they can. "I thought I was injecting flaxseed oil to get bigger." Right. That would be like a NASCAR driver claiming he knows nothing about fuel or tires. His job requires he know the vehicle, and being a top professional athlete requires understanding exactly what you put in your body to get performance out of your organic machine. It could make the difference between a seven-figure or eight-figure income. Athletes know exactly what's banned. The lists are beaten over their heads ad nauseam because sports franchises and amateur federations dislike the labor costs, PR headache, and revenue loss that scandals can produce.

GW: Any last advice you might want to deliver to the broader world of self-trackers and self-experimenters?

Phineus: Yes, you need to develop an ability to interpret data for yourself. I have seen legitimate medical doctors in life extension facilities gloss over serious side effects of the substances they recommend. Remember that private clinics are in business, and—in this case—drugs are a profit center. Don't expect unbiased feedback. For example, aromatase inhibitors such as Arimidex (anastrozole), often used to minimize the estrogenic side effects of AAS, can cause near instantaneous problems with your lipid profile, particularly related to decreased HDL "good cholesterol." To track this, you should have your blood tests drawn every two weeks. Certain adverse side effects are reversible following short-term use of AAS. Testicular atrophy and HTPA disruption are two typical examples, though the return of normal function to the latter is

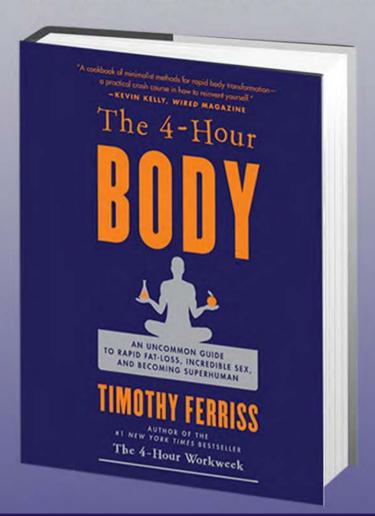
by no means guaranteed, especially if you don't use post-cycle therapy drugs to restart endogenous production.

On the other hand, certain side effects are irreversible, and you are the one who has to determine what risk/benefit ratio is acceptable.

There is a reason you see certain athletes with bigger heads and bigger hands than they had five years ago, as well as bodybuilders with distended abdomens due to enlarged visceral organs. In fact, there are at least two reasons: HGH and, less common for recreational users, IGF-1. Guess what: when these athletes stop using these drugs, their heads are not going to shrink. Do your homework, as you will have to live with the results

Caveat emptor.

Tim Ferriss' New Book



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