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Foreword by
RICH FRONING,
four-time World's
Fittest Man



THE **RENAISSANCE DIET 2.0**

Your Scientific Guide to Fat Loss,
Muscle Gain, and Performance

MEYER & MEYER SPORT

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Foreword



My name is Rich Froning, and I would like to welcome you to the brand-new, revamped *Renaissance Diet 2.0*. I have been competing in fitness sport for nine years, and in those years

I have won four individual CrossFit Games Titles, three Affiliate Cup Titles, and a second place in each category as well. Nutrition for performance, recovery, and body composition change has been integral to my success. Whether you are trying to qualify for the CrossFit Games, just shed some body fat or gain some muscle to improve your appearance and health, or anything in between, you are going to want to be aware of the tools available for your fitness journey. As far as such tools go, proper manipulation of diet is one of the most powerful.

Over my many years in sport, I have encountered countless trends, fads, and misconceptions in nutrition. Some pop up for only a short time, others last decades, and some even come and go every few years. Unfortunately, most meant to notably and sustainably change your appearance and performance do not work in the long term. I have seen too many well-meaning, motivated people get ripped off and denied their best results because they invested in a fad diet approach.

The Renaissance Periodization way is different. First of all, as you will soon read, there really is no such thing as “the RP diet.” RP has just synthesized all available scientifically derived, research-backed principles of nutrition to create a detailed set of instructions that you can apply to your own diet or to the diets of clients.

This book is the most up-to-date, comprehensive resource on the science and practice of fat loss, muscle gain, and performance-improvement dieting currently available. For those who want the most detailed descriptions of how and why the dieting principles work, RP’s team of professors,

PhDs, coaches, medical doctors, athletes, and dietitians have provided just that, with a vast reference library for those that want to expand their understanding even more. Each chapter is summarized with the basics you need to know to understand the process, and several chapters are dedicated specifically to helping you design and execute your own diet based on your goals, step by step.

Happy reading,

Rich Froning

Four-Time World's Fittest Man

A Note From the Authors

When we wrote the original *Renaissance Diet*, it was the first comprehensive description of our diet approach based on the most up-to-date nutritional data available and on our experience with hundreds of clients. Our original book was one of the first to synthesize the current literature on nutrition for body composition and performance and to present it in an ordered, logical, and understandable manner. This early version of the *Renaissance Diet* was also the first to identify the most important factors for successful dieting and delineate their practical application.

It has been a few years since the original *Renaissance Diet* was published, and two major things have changed since then: First, the interim years of scientific research have increased and refined our knowledge of how to lose fat, gain muscle, and improve performance. Second, through a combination of one-on-one coaching and digital products, Renaissance Periodization has now helped several *hundred thousand* people with their diets. These people range from those just trying to get in shape for the first time to world champion athletes. This collective coaching experience has refined our strategies and tactics with respect to the application of all our scientific knowledge. The summation of

all this data and experience is now available to you, right here in this book.

This newest version of the *Renaissance Diet* is not only updated and refined, but also expanded. Special diet considerations and information on female-specific diet issues have been added along with information on gut health and an extensive section debunking some of the current and pervasive diet fads and fallacies. We put a great deal of effort into making this book bigger and better so that you can use it to become bigger, better, faster, stronger, leaner-whatever your goals call for.

We did this because we hate pseudoscience, scams, and quacks. We did it because we want to give you, our readers, our clients, and our friends in science, the best, most up-to-date information so that you can change your body, your performance, and your health for the better.

We sincerely hope you enjoy this book and will put the knowledge you gain from it to use in reaching your health and fitness goals.

Dr. Mike Israetel

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PART I

NUTRITION PRINCIPLES AND PRIORITIES





CHAPTER 1

The Diet Priorities

There are countless diet options available these days. If you would like some evidence to back this statement, try looking up “fat loss diet.” New diets that promise to help you lose fat, build muscle, and increase performance pop up online nearly every day. Some diets eliminate entire food groups while others focus on consuming solely those same food groups. In reality, the science of dieting has moved beyond the scope of just controlling food groups; you have likely heard of concepts such as macronutrients, total calorie intake, and meal timing. The scientific basis and reasoning behind the various available dietary regimens are not often made entirely clear. With so many opposing options, just deciding how to diet can be a frustrating and seemingly hopeless endeavor.

The good news is that there are five main principles, along with adherence to those principles, that contribute to any diet’s effectiveness. Differences in implementing these

principles account for all variations between diets and their outcomes. We can get lost in the superficial aspects of the many diet options available. One diet may require you to eliminate carbohydrates from your meals, whereas another calls for fasting. The intended outcome of each of these is generally weight loss. What might jump out at you is the lack of carbs or the fasting periods, but these are just superficial aspects—both these diet alterations are meant to achieve one goal: a calorie deficit. It is the calorie deficit that results in the weight loss, not the lack of carbs or meal timing.

Calorie balance is the first and most important of the diet principles, and any diet that works well will manipulate calories directly or indirectly. The other four diet principles can also alter superficial aspects of a diet. Once you have learned to see past these superficial aspects and identify each of the five underlying diet principles, you will be able to assess their roles and predict that diet's effectiveness.

Diets vary quantitatively across one or more of the following five principles:

1. **Calorie Balance:** How many calories you eat per day relative to how many you burn.
2. **Macronutrient Amounts:** How many grams of protein, carbohydrate, and fat you eat per day.
3. **Nutrient Timing:** When and how you spread your total food intake across daily meals.
4. **Food Composition:** The sources of macronutrients you consume.
5. **Supplement Use and Hydration:** How much and what type (if any) dietary supplements you consume

and your level of hydration.

All these factors contribute to rates of weight loss or weight gain as well as differences in athletic performance. As we will learn, some of these principles are more powerful than others in determining outcome.

Although adherence is not a programmed aspect of a diet, it is critical. If the diet were a race car, adherence would be the driver; without a driver, the car does not race. A good driver can get the best possible performance with any given machine, but a bad driver can crash even the best car. Simply put, you cannot succeed on a diet you do not follow, regardless of how good the diet is.

When we wrote the first edition of this book some years ago, we took an extensive look at the research on dieting for fitness. We assessed effect sizes, which are measurements of how much change in outcome is observed when a specific variable differs between groups. Studies that varied calorie balance alone showed the most significant effects; studies that manipulated macronutrient intake (without altering calories) showed smaller but still significant differences in body composition changes. Altering nutrient timing (without changes to calories or macronutrients) resulted in very small differences in outcome. The effect of changes in food composition or supplement use on fitness outcomes was undetectable in most cases. As a testament to the fact that adherence to any diet is a prerequisite for its success, metabolic ward studies, in which subjects do not leave the research facility and can only eat the food administered by researchers, are the gold standard in nutrition research

because of the near perfect adherence that results from these conditions.

We qualitatively consolidated data from these investigations and came up with estimated relative effect sizes for the five principles of dieting:

Calorie Balance: approximately 50%

Macronutrient Amounts: approximately 30%

Nutrient Timing: approximately 10%

Food Composition: approximately 5%

Supplements and Hydration: approximately 5%

Again, these percentages only apply to the extent that an individual adheres to a given diet. A perfectly planned calorie balance, for example, will not have the desired effect if the dieter is not eating those planned calories.

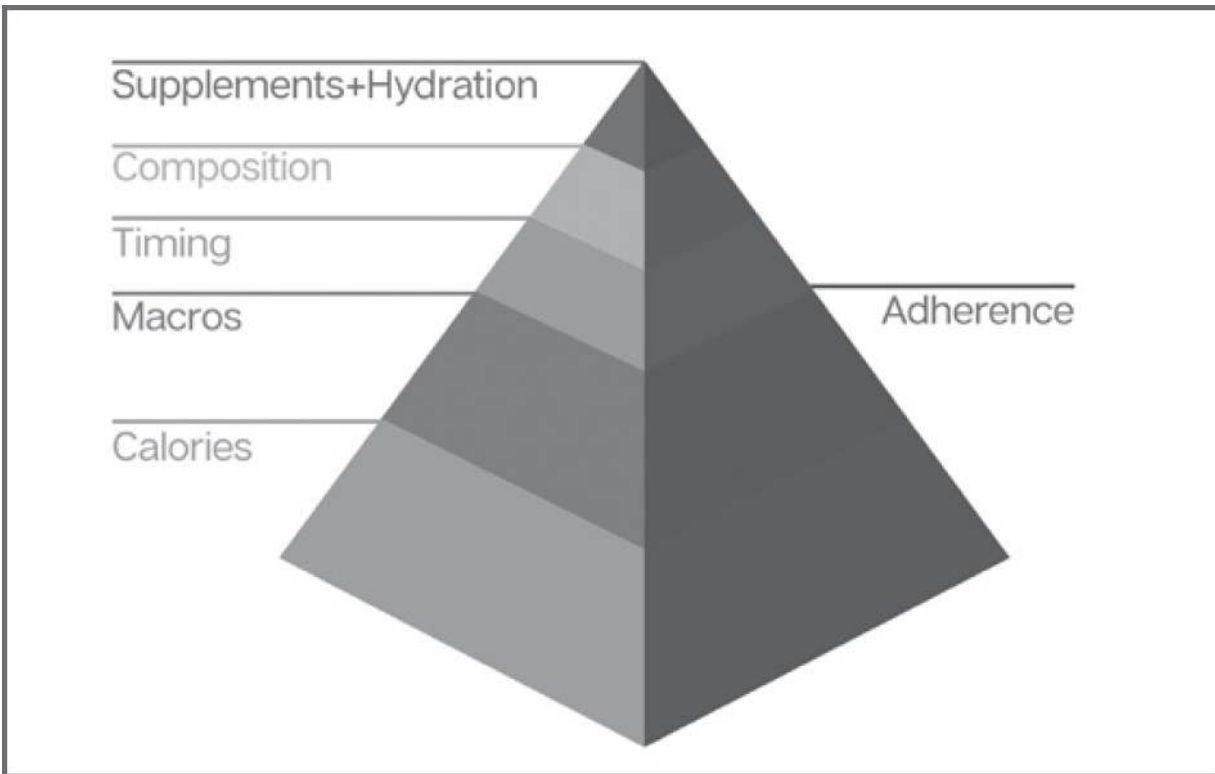


Figure 1.1 *The Diet Priority Pyramid depicts the relative importance of the diet priorities for body composition and performance outcomes.*

If you run a diet based only on calorie balance, you might expect to get about 50% of the potential effect of the diet on body composition and performance. On the other hand, if you based your diet on both calorie balance and proper macronutrient intake, you could get about 80% of the diet's potential results. If you took all the right supplements and ate only healthy food options, but did not worry about macronutrients, timing, or calories, you could not expect more than about 10% of the potential positive outcomes from the diet. We want to make it clear that this analysis is for body composition change and performance outcomes, *not health*. While paying attention to food composition (eating healthy foods most of the time) does not have a huge effect on appearance or performance, it does have a

significant effect on health, as detailed in our book *Understanding Healthy Eating*.

AVOIDING PITFALLS AND USING THE DIET PRINCIPLES TO YOUR ADVANTAGE

The differential effects of diet principles provide useful guidelines for programming diets with specific outcomes in mind. Prioritizing the less powerful aspects (such as meal timing and supplements) and taking the powerful principles (such as calorie balance and macronutrient intake) for granted are common mistakes. Someone might eat with exact meal timing and take creatine and whey protein supplements, but if calories and macronutrients vary too much day to day, there simply will not be substantial results. Thousands of people start new fat loss or muscle gain diets every week, and many of them choose diets that are not based on the higher priority diet principles and thus experience minimal results.

Perhaps the most commonly neglected dieting principle is calorie balance. Thousands of people restrict various food types to consume only specific foods-unknowingly prioritizing one of the less important diet principles, food composition. Supplements are the most overemphasized principle. People buy countless bottles of pills and powders and take them religiously, expecting big results. While investing so much time and energy into the minor priorities, many of these well-intentioned dieters do not have the willpower leftover to invest in the big priorities that really

matter. In a fat loss phase this can mean eating too much (very healthy) food to create a calorie deficit. In a muscle gain phase this can mean eating exclusively healthy food that is high in fiber and not as appetizing, resulting in a failure to create a calorie surplus for weight gain. Both these failures often occur despite a diet with appropriate food composition, well-planned meal timing, and supplements.

Unfortunately, these mistakes often involve every bit as much effort as a successful diet. Every year, people find their dieting efforts largely wasted on unimpressive results, leading many to assume they are “hard losers,” “hard gainers,” or otherwise personally flawed. The true underlying problem is simply a mismanagement of dieting principles.

By getting to know the diet principle hierarchy, we can ensure that our hard efforts are being spent where they are most effective. As you read about each of the individual diet principles, please keep their hierarchical organization in mind so that when it comes time to program your diet, you can effectively manage the distribution of these factors to meet your goals.

KEY DEFINITIONS AND CONCEPTS

Some key concepts and definitions that will come up throughout the book are listed below. We will revisit many of these multiple times throughout the coming chapters, so be prepared to return for a refresher as needed throughout your reading:

Set Points

An adult's set point is the bodyweight that they are naturally inclined to maintain. Some people have a high set point and would become obese if they just ate and exercised as they pleased. Others have trouble maintaining sufficient bodyweight for best health when left to their own devices. Set points are genetic predispositions, but your body's preferred weight can be changed.

Settling Points

A settling point is the weight your body is inclined to maintain, taking into account your current *and historical* dietary and activity practices. Your settling point can be very different from your genetic set point. Enough added fat or added muscle maintained for periods of months to years can permanently push your settling point above your genetic set point. In contrast, there is no convincing evidence as of this book that settling points fall permanently below genetic set points when weight is lost. The good news is that it is often the case that more overweight people have actually pushed their settling point far above their genetic set point as opposed to their having a very high genetic set point.

Muscle mass has its own independent set and settling points—some people are naturally more or less muscular regardless of diet and training, though these points are not affected as easily as those for general bodyweight. Once more muscle has been gained and maintained for a year or longer, only a fraction of the original effort is needed to rebuild it if it is lost. Also, muscle takes much less effort to

maintain than to build, a fact we can exploit in the construction of nutritional periodization.

Fat-Loss Phase

A period of dieting for the purpose of losing fat. A common secondary goal on such a phase is to minimize muscle loss to the greatest extent possible.

Muscle-Gain Phase

A period of dieting for the purpose of gaining muscle. A common secondary goal on such a phase is to minimize fat gain to the greatest extent possible.

Post-Diet Maintenance Phase

Also known as a “diet recovery phase,” this phase occurs after a fat loss or a muscle gain phase, and its purpose is to maintain the changes made to body composition during the preceding diet. This period involves easing back into normal eating, slowly moving out of the deficit or surplus created by the previous phase. The purpose of this phase is also to reset metabolic and psychological homeostasis at a new bodyweight and establish new settling points. Post-diet maintenance begins at the end of a fat loss or muscle gain diet, and its duration will depend on the degree to which bodyweight and metabolism were changed by the previous phase. At the conclusion of post-diet maintenance, you can begin another weight-changing phase or move into long-term maintenance of the current weight.

Long-Term Maintenance/Balance Phase

In this phase of dieting, the individual's physiology and psychology have adapted to the current state of the body. This phase typically starts after the post-diet maintenance phase and can last as long as the individual would like to maintain their results and live a healthy, active, and balanced life.

High-Volume Hypertrophy Training

High-volume hypertrophy training is needed to maintain muscle mass on a fat-loss diet or increase muscle mass on a muscle-gain diet. It consists of resistance training composed of multiple sets of exercises (8-20+ sets per body part per week), mainly in the 6- to 30-repetition range. This resistance training is ideally mainly composed of compound basics like squats, bench presses, rows, and so on—lifts that engage multiple joints and whole muscle groups. For more information, visit renaissanceperiodization.com and check out the eBook, *Scientific Principles of Strength Training*.

Low-Volume Strength Training

Low-volume strength training increases strength and power without changing muscle size. It is composed of fewer sets (5-15 per body part per week), usually in the 1- to 8-repetition range. This type of training is conducive to maintaining muscle during isocaloric periods (post-diet or long-term maintenance phases). It also has the added benefit of making the muscles more sensitive to the muscle growth effects of high-volume hypertrophy training for another fat-loss or muscle-gain diet.

Mesocycle

Mesocycle is a term used to describe training on a month-to-month basis—periods of dedicated training usually lasting between four to eight weeks. The mesocycle is comprised of a series of microcycles, or week-to-week training phases. Mesocycles are strung together to form training macrocycles, which are long-term periods dedicated to progressing toward a particular goal. Mesocycles (or several mesocycles with the same goal sequenced together) are also colloquially known as “blocks” or “phases” of training.

Fractional Synthetic Rate of Muscle Growth (FSR)

FSR generally refers to the rate at which a certain amount of amino acids from dietary protein are incorporated into skeletal muscle. In other words, this describes how much of the protein you eat is used to grow muscle and how fast.

Fractional Breakdown Rate of Muscle Growth (FBR)

FBR generally refers to the rate at which a certain amount of skeletal muscle protein is broken down for use in the body. In other words, this describes how much muscle tissue is lost during periods of insufficient training, insufficient energy availability, or insufficient circulating amino acids and how fast.

Partitioning Ratio

The P-Ratio describes the ratio of fat to muscle gained or lost on a diet. A favorable P-Ratio on a muscle gain phase would mean gaining larger amounts of muscle and very little fat. One of the reasons to periodize diet phases for muscle gain is to maximize the P-Ratio of each gaining phase so that more muscle than fat is gained over the long term.

Beginner, Intermediate, and Advanced Lifters

In this book we will define beginners as having around 0 to 3 years of structured lifting experience, intermediates as having roughly 3 to 6 years of experience, and advanced lifters as having 6+ years of experience. These are not precise timelines, but rather serve as a rough guide to classify lifting experience. In general, beginners gain muscle and lose fat more readily than intermediate and advanced lifters. Advanced lifters need more voluminous training to gain even a small amount of muscle compared to less experienced counterparts. While genetics and other factors play a large role in muscle growth responses, the relative differences between levels of experience are consistent. In other words, there may be outlier individuals who gain more muscle as advanced lifters than less genetically inclined beginners, but on average those early in their lifting career will have better responses to training than their more experienced counterparts.

CHAPTER SUMMARY

- Diets to improve performance and body composition can be evaluated based on how they address the diet principles of calorie balance, macronutrient amounts, nutrient timing, food composition, and supplement use and hydration.
- Individual diet principles do not contribute to success equally, and diets that prioritize the less powerful factors are either less effective or doomed to failure.
- Better adherence increases any diet's effectiveness. Adherence is imperative for success.