THE MUSCLE AND STRENGTH PYRAMID TRAINING

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PREFACE

While I was creating The Muscle and Strength Nutritional Pyramid a few years ago, I knew that I would eventually need to create a similar construct for training. The problematic issues that are prevalent in the fitness industry are not isolated to the topic of nutrition. Whether the topic is nutrition or training, we are bombarded by sound bites rather than content, generalizations rather than context, and an endless stream of information overload without any sense of priorities. To give some credit to the industry, resistance training is a broad topic in the sense that there are countless ways to provide a stimulus and achieve success, so the confusing landscape of information is understandable. The fact that this topic is so broad is why it took me two years after the completion of the Nutritional Pyramid to figure out an effective way to deliver the same framework for training.

For this reason it's no wonder that people, even highly intelligent people, are so often confused when it comes to the topic of setting up a sound training program. In most cases there is a deep rooted confusion that is apparent in the questions that are asked. Very commonly in the fitness field, you will be asked questions like "Is 531 better than Sheiko?" or "What's the best chest workout?" Well, that's kind of missing the whole point. What level of volume are you currently adapted to? How does your current training load compare to the approach you are planning on starting? Do you understand what stimulates muscle to grow? These queries sound perfectly reasonable, but in fact they imply a fundamental lack of awareness of what is important in the realm of resistance training.

As some of you may already know, I am one of the 5 coaches on a team called 3D Muscle Journey. We are a group of professional coaches who help people pursue their goals with drug-free bodybuilding, powerlifting, Olympic lifting, strongman, and anyone else who may be interested in strength or muscle mass gains. We do this in a couple of formats. We have our weekly coaching service which is primarily for people actually competing who need consistent ongoing guidance, and we also have our one-off consultations which can either be done as a standalone programming service or in sporadic sessions for off-season and general population coaching. Without fail, something that I have learned from consulting with people in these one-on-one discussions is that typically, the reason they aren't getting to where they want to be is because they don't have a system. They don't have an understanding of prioritization, and they can't differentiate between big rocks and pebbles.

I think that honestly, the fitness industry as a whole needs to take responsibility for this lack of awareness. I can't tell you how many articles I run into with titles like "The best leg routine for a massive squat!" or "10 exercises that every bodybuilder must do". These articles give the impression that programs are distinct "things" rather than just the manipulation of volume, intensity and frequency over time. Articles focus on the merits of certain rep ranges, exercises, and weekly routines in isolation. The problem is that we don't perform just one rep range, exercise, or training split; these concepts don't exist in a vacuum. These concepts exist as a part of your training as a whole. To continue to progress into the later stages of development and to reach your full

potential, you need a deeper understanding than these articles provide. You have to comprehend the fundamental reasons of why and how we get bigger and stronger, and then how to manipulate your training to stimulate progress before you start focusing on minutiae in isolation.

As you can see, we've got this fancy little cart here, it's got its lead, but it's hooked up to nothing and it's just hanging out here in front of the horse. Now the horse is sitting here going "Hey, I want to pull this cart, but I can't do it while I'm behind it." This expression of 'putting the cart before the horse' means that you are focusing on the details before you know the context of those details and the big picture.

For example, let's say you're an aspiring race car driver, and you've spent months researching race courses, strategies for competition, mechanical engineering as it relates to improving handling and top speed, and how to select a good pit crew. But you haven't yet learned to drive and don't have your driver's license. This may sound like a ridiculous error to make, but believe me, people do the equivalent of this every single day when it comes to training.

So, I decided to design what I call "The Muscle and Strength Training Pyramid". It is a six step pyramid with Level 1 as the foundation, the most important level. Then, as you move up into Levels 2 through 6 the level of importance gets progressively lower. I also acknowledge the overarching theme of periodization that is linked to all levels of the pyramid. While all elements of the pyramid are important, it's critical that we discuss the most important things before we discuss the least important things.

This is the whole reason I've made this pyramid. To help create some context and general guidelines for you to follow in an order that makes sense scientifically for reaching your goals.

Lastly, I also want to let you know what this guide is not. In this book I take the position of focusing on what to do, not what not to do. Frankly, I get extremely tired of the constant stream of myth busting that goes on in our industry. The reactionary approach of "evidence based" professionals is just as maddening to me as the gurus who promote nonsense. Waiting around for a moron to say something stupid just to point out why it's stupid is a waste of time in my mind, and I'd much rather spend time helping you learn what to do, why and how to do it. Got it? Good.

Let's dive in.

Level 5

REST PERIODS

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How long one rests between sets has been theorized to be an important variable for resistance training, specifically when the goal is hypertrophy. However, in recent years the mechanisms by which short rest intervals are thought to augment hypertrophy have been questioned and a solid body of research now challenges this convention. In this chapter we discuss the ins and outs of rest periods and give practical recommendations to help you avoid potentially degrading your training quality and also to potentially allow you to complete your training in a more time-efficient manner.

The Hormone Hypothesis

In Level 2 we stated that the traditionally recommended repetition range of 8-12 is not superior to other rep ranges for the purposes of inducing hypertrophy for any *mechanistic* reason. Rather, this repetition range is *practically* useful in that it allows you to accumulate volume in a time-efficient manner with a heavy enough load to produce hypertrophy. The distinction between this being the *practical* versus *mechanistic* rep range for hypertrophy stems from the history of the research in this area.

In the late 80s, 90s and through the early 2000's, a large body of evidence was accumulated that seemed to suggest that the hormonal "spikes" that occurred for short periods after resistance training were associated with hypertrophy. These associations were consistently found, and eventually it became nearly a forgone conclusion that if you wanted to optimize hypertrophy, you had to design your training in a way that created the largest hormone (typically growth hormone) spike possible post-training [1]. This body of evidence is what led to the hypertrophy-training recommendations of using compound movements, moderately high repetitions and short rest intervals, because all of these methods caused a large post-exercise hormone response.

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This viewpoint went largely unchallenged until the late 2000's when a number of research groups began testing and then subsequently questioning this conventional thinking [2-7]. As was previously discussed, it is now known that to a point there is a linear relationship with volume of resistance training, and hypertrophy. However, higher volumes of training also carry a greater metabolic demand as more fuel is needed to perform more work. Importantly, one of the many functions of growth hormone is to mobilize fuel. Thus, it has been speculated that at least in part, the hormone responses associated with hypertrophy were not necessarily causing the muscle growth, but were in fact caused by the training, which was causing the growth. Meaning, that rather than the hormone response being the *mechanism* causing hypertrophy, it was simply correlated with muscle growth because high-volume training produced a large growth hormone response [4].

This is not to say that hormones have no impact on muscle growth. Certainly we know that anabolic steroids (testosterone) taken exogenously as performance enhancing drugs in supra-physiological amounts can have large impacts on muscle growth and strength [8]. However, continuously injecting anabolic steroids in much larger amounts than are present naturally is completely different than temporary elevations that

occur post-exercise in the much smaller (natural) physiological range. Additionally, growth hormone which was primarily emphasized in the hormone hypothesis, unlike testosterone, doesn't appear to have a significant impact on hypertrophy even when taken at supra-physiological levels comparable to doping programs for a full month [9]. For these reasons, recommendations for hypertrophy training based around post-exercise hormone manipulation have been seriously questioned.

Understandably, this questioning also carried into the research on rest periods. In one study, a group of researchers found that the acute anabolic hormone response was higher in a group resting one minute between sets compared to a group resting two and a half minutes. However, interestingly enough muscle growth in the arm favored the longer rest period group [10]. Most likely, this was because the loads selected in this study were chosen so that the final sets on exercises were taken to failure. Thus, the longer rest period group most likely was able to use heavier loads in training. To conclude, at this stage we can confidently state that the hormonal response to exercise is not the cause of subsequent muscle growth, and therefore the recommendation to restrict rest intervals to enhance hormonal response is unfounded. But, are there other ways that restricted rest periods could aid hypertrophy?

Metabolic Fatigue

Sample

Besides progressive tension overload, which is the primary driver of natural skeletal muscle growth in adults [11], muscle damage and metabolic fatigue have also been proposed to play roles in resistance training induced hypertrophy [12]. As was discussed in Level 2, the result of effective hypertrophy training is the combination of increased strength and muscular work capacity. As the muscle cell increases in size and its fuel capacity increases concomitantly, the result is an optimized increase in muscle size. Both low and high load training can be used in hypertrophy training. Low-load high repetition training can produce appreciable muscle growth [13, 14] as it forces the muscle to adapt to a high work load and if taken to failure stresses the fiber's ability to keep contracting. For this reason, an argument can be made that by restricting rest periods, one could enhance metabolic fatigue to cause hypertrophy [15]. However, training that primarily emphasizes metabolic fatigue would prove suboptimal if it subverted the primary driver of hypertrophy, progressively increasing tension and volume over time [16].

For example, it is well established that using very short rest intervals can reduce the number of repetitions that can be performed on subsequent sets [17]. Thus, if you restrict rest periods for the purpose of increasing metabolic fatigue to the point where you perform less total repetitions, or have to use lighter loads on subsequent sets, you are essentially "throwing the baby out with the bathwater". Meaning, you have sacrificed total volume for metabolic fatigue.

In fact, the only study that has ever shown the superiority of shorter (1 min) compared to longer (4 min) rest intervals for hypertrophy, was designed so that the participants trained sub-maximally (not to failure) and therefore didn't risk "losing reps" [18]. While

this is a smart way to train in real life (see Level 2), as it allows you to perform more volume with subsequent sets and in subsequent days and weeks of training, for research intended to determine the mechanistic effect of rest intervals, this is a confounding variable. If both groups are not training to failure but using similar loads, this would mean that the group resting one minute would be less recovered between sets. Thus, due to cumulative fatigue, they would be providing more stress per set even if the sets and reps are the same. While you could argue that this is the appropriate way to train; restricting rest intervals but not restricting them so much as to detract from subsequent set performance, you also have to remember that in the real world we don't just manipulate rest periods, but also volume and load. Yes, a restricted rest period can be used to induce overload, but if you had the option of doing more repetitions with a heavier load or restricting rest intervals, the option of doing more volume with a heavier load would be the better choice.

Muscle Damage

But what about the role of decreased rest intervals and their effect on muscle damage? First of all, the muscle damage response to decreased rest intervals is inconsistent, and variable between individuals [19]. But even more importantly, we have to unpack the role of muscle damage in hypertrophy.

Sample

Like the growth hormone response to high volumes of moderate-load training, muscle damage has to occur to some degree when performing progressive resistance training. Muscle fibers are damaged and must regenerate during the process of completing muscular work. If you complete a large volume of work, there will logically be a larger amount of muscle damage. For this reason, it is difficult to discern whether muscle damage is causative, additive, or simply an unavoidable intrinsic process that occurs alongside resistance training induced hypertrophy.

While this is an evolving field, certainly it is known that in a practical sense, noticeable muscle damage is not required for muscle growth. Meaning, that you don't have to purposely design a training program to elicit damage and cause yourself soreness to ensure growth [20]. In fact, muscle damage can reduce force production capacity which can result in lowered volume and intensity in subsequent training bouts [21, 22]. Indeed, excessive muscle damage can actually interfere with hypertrophy [23]. This is not to say that damage should be avoided, rather that it simply does not need to be sought out. An appropriate amount of damage will occur naturally as you try to ensure progressive overload in your training by following the principles in Levels 2 and 3.

To conclude, if the rationale for reducing your rest periods is to augment hormonal response, metabolic fatigue, or exercise induced muscle damage, that rationale needs to be reconsidered. The potential detrimental effect of short rest periods on your ability to perform outweighs any potential benefit of short rest periods.

The Final Word On Short Rest Periods For Hypertrophy

If the above explanation of why the proposed arguments are flawed for using short rest periods to augment muscle growth didn't sway you, I have a feeling that the sheer weight of the evidence might:

- De Souza [24] found no significant difference in muscle cross sectional area when comparing rest intervals of 2 min to rest intervals as short as 30 secs.
- In a 6 month study by Ahtiainen [25] 2 minute rest periods were compared to 5 minute rest periods with matched volume programs of differing intensities, and no significant differences in muscle size were found.
- In Schoenfeld's 2014 study [26] using matched volumes in a powerlifting style split compared to a bodybuilding style split, muscle thickness changes were not significantly different in the powerlifting style group using 3 minute rest periods and the bodybuilding style group using 90 second rest periods.
- In our recent review on bodybuilding training, we stated: "no investigation to date has yet found variations in rest periods between 1 to 5 minutes to alter the hypertrophic response" [16].
- In a recent review in Sports Medicine by Henselmens and Schoenfeld on rest intervals for hypertrophy [19] the authors stated: "To date, no study has demonstrated greater muscle hypertrophy using shorter compared with longer rest intervals. Longitudinal studies that directly measured hypertrophy in groups with various rest intervals found either no differences between groups or, in the study by Buresh et al. [10], a higher increase in muscle girth in the group using 2.5-min rest intervals than in the group using 1-min rest intervals."
- In a paper recently accepted by the Journal of Strength and Conditioning Research, Schoenfeld and colleagues found that resistance trained males gained more muscle mass and strength after training using 3 minute rest periods compared to 1 minute (Schoenfeld et al., in review).

Sample

As we previously stated, only one study [18] has ever shown the superiority of shorter rest periods for hypertrophy, and this is more than likely due to what I would argue is a study design issue. While on the other hand, the majority of studies show either no difference [24, 25] or the superiority of longer rest periods [10] for muscle growth, which was recently confirmed in a study by Schoenfeld and colleagues (Schoenfeld et al., in review).

A Place For Reduced Rest Periods In Training

From what we've discussed so far in this section, it may sound like the only reasonable recommendation would be to rest as long as you want, auto-regulate your rest periods and then train when you are ready.

In fact, this is a logical conclusion to make. But is there a place for reduced rest periods in training? I would argue that there is, in a way, using a form of training called "antagonist paired sets".

Antagonist Paired Sets

Simply put, an antagonist paired set (APS), is performing one set on an exercise, and then instead of performing a second set on that exercise after resting, you perform a set on an exercise that is the "antagonist" of the muscle group trained on the first set. An example would be performing a set of leg extensions, and then performing a set of leg curls. The joint action of extending the knee, is "antagonistic" to the joint action of flexing the knee, hence the name.

Now honestly, this is something we in the bro community would just call "supersets"; where during the rest interval of one exercise, instead of just purely resting, another exercise is performed. But there is an important distinction. Supersets are often performed with an exercise that trains the same muscle group, while with APS the *opposite* muscle groups are used in the second exercise. For example, a set of shoulder presses immediately followed by a set of lat pulldowns, rather than a shoulder press followed by a front raise. Other examples are a leg extension paired with leg curls, bench press paired with rows, or bicep curls paired with tricep extensions.

Sample

Using supersets to train the same muscle group is essentially an approach that emphasizes metabolic fatigue. Often, these supersets are performed in such a way that can actually hamper total volume. For example, if you are supersetting shoulder press with front raises, and using minimal rest periods, not only will you run into the potential issue of "losing reps" like we discussed above, but also the fatigue generated from performing one shoulder exercise will decrease the load you will be able to lift on the other. While you might stimulate a lot of muscle fibers via fatigue and training the shoulders to failure, the total training volume and the mechanical tension will likely be substantially less than had you rested between sets.

Interestingly enough, APS, unlike supersets, can potentially allow you to *increase* performance.

Imagine that you do the bench press paired with a bench pull (commonly referred to as a "seal row" by the cool kids these days). When doing the bench press you're training your pushing musculature, then you go over and you do your seal row. While you're doing your seal row you're essentially resting all of the pushing musculature while you're training your pulling musculature. However, because the antagonists are being moved through an active range of motion but not actively contracting against load, it has been proposed that this might produce some sort of active recovery or potentiation effect that could actually improve performance when returning to the antagonist exercise. In fact, one study on APS for bench pulls and bench press found exactly that to occur; an increase in the volume load performed in the APS group compared to the traditional

group [27].

A review on APS in 2010 concluded that overall this improved performance effect is not always necessarily shown in research, but at the very least structuring training in this manner could be a time efficient way to train that would not harm performance [28]. However, since the publication of that review, more studies have been conducted which found a performance enhancing effect [29] and others have clarified when it might be a bad idea to implement this strategy [30].

So How Does One Implement APS In An Effective Manner?

Well, first you have to remember that despite the practical similarity, the underlying philosophy of APS is fundamentally different from supersets. Instead of ramping up fatigue, you are trying to improve muscular performance to enhance volume. So, when performing APS with compound upper body push and pull movements, you want to ensure the cumulative fatigue doesn't detract from performance, so resting between sets is still important. Basically, you would pair a push and a pull, and complete a set of each in roughly a 3-4 minute period. This allows the completion of one set on the pushing exercise, a rest period of two minutes or so, and then the completion of one set on the pulling exercise [27]. Because these are compound exercises that can produce significant total body fatigue, I would advise auto-regulating your rest periods and simply performing the next set on the antagonist exercise when you feel ready if you don't quite feel ready after a two minute rest period.

Sample

When you are performing isolation exercises with APS, such as tricep extensions and bicep curls, or leg curls with leg extensions, there is less total body fatigue to worry about. In the research examining APS for isolation exercises, more repetitions are performed when the rest period is approximately one minute between sets on opposing muscle groups [29]. Thus, you might perform a set of leg extensions, rest one minute or so, then perform a set of leg curls, as an example.

Finally, we do need to talk about when this strategy can go wrong. One study found that performing squats with a 3 minute rest interval, but doing a set of bench press and seal rows during this rest interval, reduced total repetitions performed on squats [30]. Truly, a squat is a full body movement. Even though the legs are the primary movers, the load is supported on the back. Thus, all of the muscles that support the spine and posture have to be aggressively activated in order to perform each rep. Meaning, squats and other movements that require full body effort generate local fatigue in many muscle groups at once, and also generate a lot of cardiovascular stress that can leave you winded. Therefore, for "full body exercises" such as the deadlift, deadlift variants, back squats, squat variants, and lunges it's a good idea to simply rest between sets without doing anything else. I would even argue that powerlifters should be cautious when considering using APS with bench press. Many consider a properly performed powerlifting bench press as a full body movement due to the intended "leg drive" that is used.

Example Programming With APS

Imagine you have an upper body day pairing a horizontal push with a horizontal pull, a vertical push with a vertical pull, and a tricep exercise with a bicep exercise.

Programming this day with APS might look like the following:

Incline Bench	Overhead Press	Tricep Press-downs
~2 minutes rest	~2 minutes rest	~1 minute rest
Seal Row	Chins	Bicep Curls
~2 minutes rest	~ 2 minutes rest	~1 minute rest
Incline Bench	Overhead Press	Tricep Press-downs
~2 minutes rest	~2 minutes rest	~1 minute rest
Seal Row	Chins	Bicep Curls
~ 2 minutes rest	~2 minutes rest	~1 minute rest
Incline Bench	Overhead Press	Tricep Press-downs
~2 minutes rest	~2 minutes rest	~1 minute rest
Seal Row	Chins	Bicep Curls
~2 minutes rest	~2 minutes rest	

Sample

Not only will this not negatively affect your performance, it may positively affect your performance. Plus, much of the time you would usually spend sitting on your butt listening to music or getting distracted by Facebook posts will be spent training. You can finish your workout earlier, and accomplish the same amount of (if not more) total volume, while maintaining your loads.

However, make sure you remember when you would probably not want to do this. If you are a bodybuilder and you have a leg day that includes the squat, or a back day that includes the deadlift or if you're doing a deadlift variant, a squat variant, a lunge, or some other movement that requires a lot of full body effort and stabilization, APS would not be advised as it could potentially harm the performance of the main movement.
- Rest as much as you need so you can give it all you've got.

Rest Period Recommendations

After all of that information and all of the theory we discussed, in the end, the recommendations are quite simple. Rest until you feel ready to perform at your best on the next set [19]. However, if you happen to be hyperactive when training, or have a history of feeling like you need to sweat, or that you habitually under-rest, it would be a good idea to actually clock your rest periods to ensure you rest at least 1.5 minutes

between smaller muscle groups and at least 2.5 minutes between compound lifts when training in a straight-set fashion. If you are performing APS for upper body push and pull exercises, rest for roughly 2 minutes between sets on exercises, and if you are performing APS for isolation exercises rest for roughly 1 minute.

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PREFACE

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A few years ago I saw a need for a system that comprehensively covered the big picture of nutritional strategies, approaches, and theories for people interested in muscle and strength development. This decision was spurred by my years of experience working with individuals who wanted to improve their physiques through the manipulation of weight training and nutrition, but who all seemed to be lacking the same understanding of context and who were all plagued by black and white thinking.

I typically can tell if someone has some deep rooted misconceptions about nutrition based on the questions they ask me. Very commonly in the fitness field, you will be asked questions like "should I take the yolks out when I eat eggs?" or "Is bread bad?" Well, that's kind of missing the whole point. Does it fit with your energy balance? Does it fit in with the fat or carbohydrate intakes that you have available for the day? These queries sound perfectly reasonable, but in fact they imply a fundamental lack of awareness of what is important in the realm of nutrition.

As some of you may already know, I am one of the 5 coaches on a team called 3D Muscle Journey. We are a group of professional coaches who help people pursue their goals with drug-free bodybuilding, powerlifting, Olympic lifting, strongman, and anyone else who may be interested in strength or muscle mass gains. We do this in a couple of formats. We have our weekly coaching service which is primarily for people actually competing who need consistent ongoing guidance, and we also have our one-off consultations which can either be done as a standalone programming service or in sporadic sessions for off-season and general population coaching.

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Without fail, something that I have learned from consulting with people in these one-on-one discussions is that typically, the reason they aren't getting to where they want to be is because they don't have a system. They don't have an understanding of prioritization, and they can't differentiate between big rocks and pebbles. I think that honestly, the fitness industry as a whole needs to take responsibility for this lack of awareness.

I can't tell you how many articles I run into with titles like "10 Good Foods that will get you ripped!" or "10 Bad Foods that bodybuilders should always avoid". These articles jump right into food choices without any mention of what your calorie intake should be, what your macronutrient composition should be, and pretty much just focus on the quality of foods when you look at them in isolation. The problem is that we don't eat food in isolation. We have diets. So as I like to say to my clients and to anyone who will listen, there's no such thing as a good or bad food, but there is such a thing as a good or bad diet.

It is because we in the industry present ideas and thoughts that are easy to turn into small sound bites that are "packagable" and sellable, but don't have any context, that people run into trouble. More often than not, the smart, well-intentioned, motivated people that I talk to have a lot of potential for success, however, they end up not making any progress because they have the proverbial cart before the horse.

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As you can see, we've got this fancy little cart here, it's got its lead, but it's hooked up to nothing and it's just hanging out here in front of the horse. Now the horse is sitting here going "Hey, I want to pull this cart, but I can't do it while I'm behind it." This expression of 'putting the cart before the horse' means that you are focusing on the details before you know the context of those details and the big picture.

For example, let's say you're an aspiring race car driver, and you've spent months researching race courses, strategies for competition, mechanical engineering as it relates to improving handling and top speed, and how to select a good pit crew. But you haven't yet learned to drive and don't have your driver's license. This may sound like a ridiculous error to make, but believe me, people do the equivalent of this every single day when it comes to nutrition.

So, I decided to design what I call "The Muscle and Strength Nutritional Pyramid". It is a five step pyramid with Level 1 as the foundation, the most important level. Then, as you move up into Levels 2 through 5 the level of importance get progressively lower. I also acknowledge the overarching themes of mentality, adherence, lifestyle, and behavior that are linked to all levels of the pyramid. These concepts will be discussed in this text before, after, and throughout the explanation of the pyramid itself. While all elements of the pyramid are important, it's critical that we discuss the most important things before we discuss the *least* important things.

This is the whole reason I've made this pyramid. To help create some context and general guidelines for you to follow in an order that makes sense scientifically for reaching your goals.

Lastly, I also want to let you know what this guide is not. In this book I take the position of focusing on what to do, not what not to do. Frankly, I get extremely tired of the constant stream of myth busting that goes on in our industry. The reactionary approach of "evidence based" professionals is just as maddening to me as the gurus who promote nonsense. Waiting around for a moron to say something stupid just to point out why it's stupid is a waste of time in my mind, and I'd much rather spend time helping you learn what to do, why and how to do it. Got it? Good.

Let's dive in.

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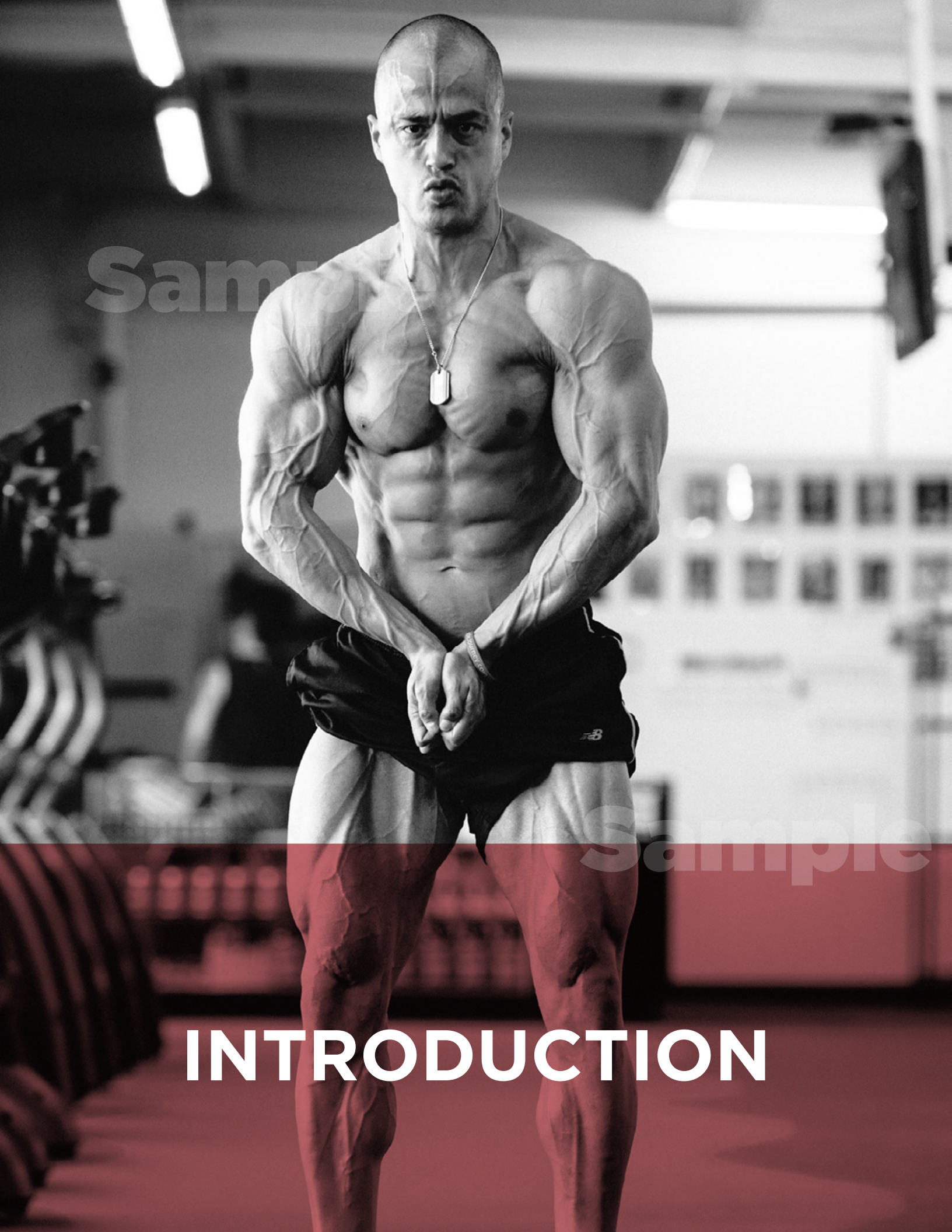

INTRODUCTION

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Let's start with a brief overview of what is included in the chapters of this guide.

Mindset & Materials

The beginning section will cover everything that is necessary to own and understand before implementing The Pyramid and its levels. There must be a balance between accuracy, flexibility, and consistency as we embark on our nutritional endeavors, otherwise adherence becomes a serious issue over time. We will discuss the psychological outlook required to keep yourself sane and satiated, and the physical tools needed to track your progress.

The Levels of the Pyramid

Once we have some basic understanding of what we will need upfront, we will then get into the meat of the matter. All levels of The Muscle and Strength Nutrition Pyramid will be very intricately described with many recommendations, values, and equations for setting up a sound nutrition plan as it pertains to your particular goals.

Now as a brief introduction to The Pyramid, here are the levels in order of decreasing priority.

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Level 1: Energy Balance, Calorie Intake, & Rate of Bodyweight Change

In this first and most important level of The Pyramid, we will go over how to determine your caloric needs, specifically as they relate to recommended rates of bodyweight change for muscle gain and fat loss.

Level 2 – Macronutrient Composition of the Diet

Here we will go over the function of the macronutrients and then establish macronutrient intakes that are appropriate for most athletes in various conditions. I'll also introduce some alternative guidelines for those who may fall outside of the norm, and then discuss how to identify where you fall within the spectrum of all of these values. To close it out, we will go over fiber intake recommendations for health and nutrient absorption.

Level 3 – Micronutrients & Water Intake

This section will go over the types of micronutrients and how to use your food choices to fulfill their daily requirements. We will then finish Level 3 with fluid intake recommendations and how to tell if you are consuming enough to keep yourself hydrated and functioning properly.

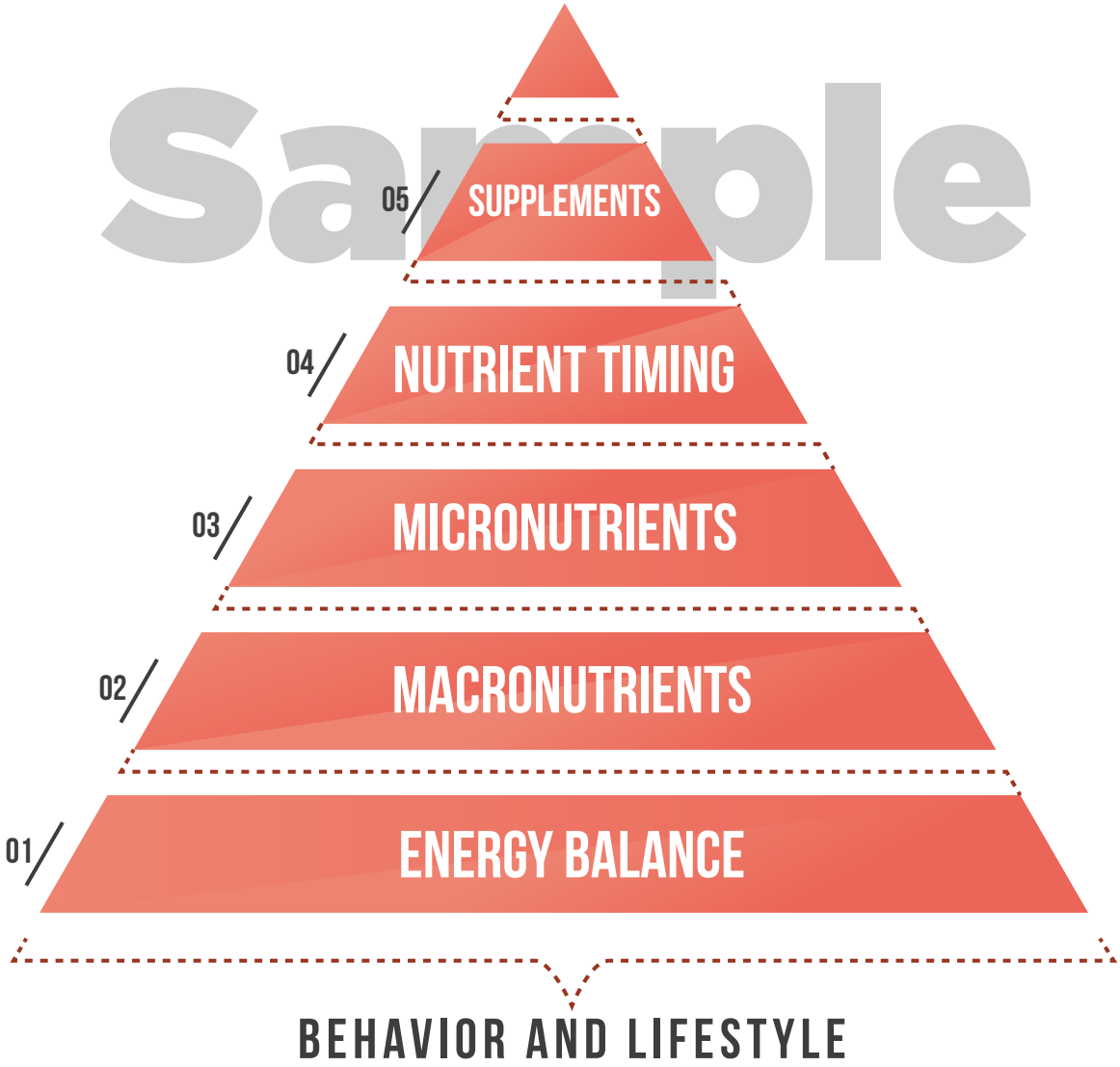
Level 4 – Nutrient Timing & Frequency

This level discusses how to distribute calories over different periods of time. We will do this on both a broad and acute scale, diving into the timeline of the whole diet, over the course of a week, over the course of the day, and in relation to training.

Level 5 – Supplements

Supplements are the least important part of The Pyramid and are not necessary for success, barring that you do not have some type of nutritional deficiency or condition that requires them. In fact, in the grand scheme of things, the vast majority of supplements on the market don't do anything except burn a hole in your wallet. That said, some are based on sound science and are therefore worth discussing as they can provide a small benefit. And because there are so many ineffective or unnecessary supplements on the market, we also need to discuss how to differentiate between the useful ones and the not so useful ones. Once we've learned how to evaluate them, I will present a list of recommendations and doses for you to consider.

MUSCLE & STRENGTH NUTRITION PYRAMID



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Behavior & Lifestyle

And lastly, in the final portion of this text we'll discuss how to implement these numbers and values into your current way of life. This can involve everything from tracking alcohol consumption, how to tackle eating out, and how to track in a less-strict manner as you become a more advanced dieter.

I will then close this guide with some of my ideas on how to better relate to other people in your life while you progress towards your goals. We will discuss the support of family and friends, and what to do when people ask you for advice.

As you can hopefully tell, The Muscle and Strength Nutrition Pyramid is not a rigid program to be followed in an extreme manner. I believe it is very valuable to create discussions around the implementation of your diet within your lifestyle throughout the process of changing your behaviors, so that is what you can expect throughout the remainder of this text.

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BEHAVIOR & LIFESTYLE

Now that we are aware of all Pyramid Levels, their order of importance, and how to give ourselves guidelines in alignment with them, how do we put all of that into practice? Although this can be a loaded question, it is definitely the most important one of this entire guide.

Because what good is a nutrition plan if you cannot follow it? And unless you're in a contest prep fat-loss phase, what good is a nutrition plan if it is not maintainable in the long run? These are some of the queries and topics that I will address here in this final portion of our guide.

The bulk of this section will go over a tier-based system of nutritional tracking methods that you can use based on how strict you need to be depending on your situation. I'll also give some general guidelines on how to eat out with loved ones, and even consume some alcohol in moderation if you so choose.

Tracking Your Numbers With The 3-Tiered System

Throughout this text thus far I've made it a point to always acknowledge that contest prep is different than a fat loss phase, which is different than maintenance, which is different than off-season gaining. This very broad spectrum of goals and seasons throughout the life of an athlete is not often addressed in nutritional programming, which is why many individuals get stuck in social isolation and can easily adopt those dreaded "all or nothing" ways of thinking.

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Without context, everything appears to be of equal importance at all times and a great deal of effort can be spent micromanaging a laundry list of dietary details. So the question becomes, which of the details needs to be managed and when? While The Nutrition Pyramid in and of itself can help you navigate this question, it is also true that some elements of The Pyramid can become nearly irrelevant in certain circumstances.

An analogy I often use to describe the different nutritional needs of an offseason bodybuilder or powerlifter compared to a bodybuilder during contest prep or a powerlifter dieting to a lighter weight class is that the former is walking a wide path while the latter is walking an ever narrowing path slowly becoming a tight rope.

What I mean by this is that when one is lean and calorically restricted, they have less leeway in their nutrition before it has the potential to negatively impact them. A greater amount of energy is created by metabolizing body protein in lean individuals compared to those overweight [1], and when lean individuals are calorie restricted they experience a reduction in testosterone [2] while those who are overweight likely will not [3]. For these and other reasons, the leaner you are the more likely you are to lose lean body mass during weight loss [4].

Additionally, resistance training depletes glycogen to a degree [5] and when glycogen depleted (which is more likely to occur while dieting), muscular performance can degrade [6]. Resistance training is also partially fueled by intra-muscular triglyceride

which is depleted to a degree alongside glycogen during resistance training [7] and a diet low in fat may not completely replenish intra-muscular triglyceride levels [8]. Since both carbohydrate and fat will likely be restricted while dieting to reach the requisite caloric deficit, performance is more likely to be negatively affected while dieting. Logically, the magnitude of the caloric deficit has a direct impact on how much dietary fat and carbohydrate is consumed and thus it is no wonder that faster rates of weight loss (achieved through larger caloric deficits) can result in poorer strength performance [9] and muscle maintenance compared to slower rates [10].

In addition to these physiological impacts, the psychological stress associated with intensive weight loss can be much higher than the stress experienced during a non-energy restricted period [11, 12].

Matching Precision To Needs

Due to all of the above, there are disparate needs based on nutritional status. I hope I have conveyed thoroughly that contest-prep dieters require high levels of consistency and accuracy, which usually comes with far less flexibility. However, when one isn't dieting and is in the "off-season" or simply doesn't need to diet (such as in the case of a powerlifter staying in the same weight class), what needs should be focused on and what degree of precision and accuracy are required on a day to day basis? Well, this comes down to interpreting concepts and theories to create a framework for practical application.

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Nutritional science and exercise science rarely tell us explicitly what to do. Rather, they help us determine what should be measured and managed. We then have to translate that knowledge into something actionable for us as athletes.

An example of this would be managing macronutrient ranges and the size of a caloric deficit. When coaching my contest-prep athletes, I typically give them a daily target for the three macronutrients and decrease or increase them based on the rate of weight loss that occurs on a week to week basis (while also looking at body comp change via pictures and weight room performance). During weight loss, the specific balance of macronutrients becomes more important because there is an imposed maximum energy intake and an increase or decrease in any macronutrient necessitates the subsequent increase or decrease in another to maintain the caloric deficit.

For this reason, I use a relatively tight range for the macronutrients, often + or - 5 to 10 g while dieting. This degree of accuracy helps the dieting athlete walk the "tight rope" as described in my analogy above. However, it also requires attention to detail, the use of tracking software or applications, a digital food scale, abstaining from eating out the majority of the time, and planning some meals or even entire days in advance when traveling. This degree of attention to detail is certainly sustainable for finite time periods and is the cornerstone of success for all of my clients with shorter-term goals requiring calorie restriction.

On the other hand, when we're talking long-term success and sustainability as an athlete, adherence is the most important variable. And in my experience as an athlete and coach, the harder it is to stick to a plan, the less likely it is that you are going to achieve your goals using it.

So in a culture where "if it fits your macros" or "follow a meal plan and eat clean all the time" are often presented as the only two ways of doing things, it seems like you're stuck with two rigid options. Option one means hitting your macros every day for the rest of your life, and option two means eating that chicken breast and broccoli at exactly 3 pm for the rest of your life. For most people, neither is sustainable long term and both share the weakness of promoting a black and white mindset; you're either on your meal plan or *off* it, or you either hit your macros or you didn't (see "Magic Macros" in the Mindset and Materials section). Fortunately, this doesn't have to be the case.

The solution for those who aren't dieting or for non-competitors looking for long-term plans is to seek non-binary approaches. Meaning, it's not either a zero or a one, black or white, or on or off. Rather, you have a continuum which you can follow and options to use based on the demands of the given situation. Early on in this book I explained the importance of developing this mindset, now I am going to give you a system to apply it.

Defining the Tiers

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So even though we might aim to be as precise as possible, life happens and it's usually not practical to be exact all the time. With a binary approach, a slight deviation results in "falling off the diet", but a flexible approach allows for other outcomes. For example, when a target is not perfectly hit, this simply means that you broaden the target by dropping to another level on the precision scale and carry on.

To build upon this notion, here are the basics of our 3 nutritional tracking tiers:

- Good: You hit your target calorie goal within a certain + or - range. Typically I recommend using + or -100 kcals for your calorie goal.
- Better: You hit your protein within a certain + or - range and also hit a target calorie goal within a certain + or - range. Use the same ranges for protein above, and use + or -100 kcals for your calorie goal.
- Best: You hit your macros within a certain + or - range. For contest prep I would recommend + or -5 g, for other types of cuts I would recommend + or -10 g, and for the offseason I'd recommend + or -20 g on carbs and protein and + or -10 g on fat.

This approach is best used when tracking macros is not a major stress for you. Most of the time, you try to do "Best", but remind yourself that both "Better" and "Good" are totally acceptable options that can occur on a regular basis. This approach allows for social events, going out to eat, holidays, and drinking alcoholic beverages. It's also handy for times when you accidentally went over on one macronutrient target, or when hitting your protein target would put you over your calorie goals for the day.

Borrowing

Normally we are accustomed to sticking to our targets in a 24-hour period. This might be appropriate during contest preparation where most days are low in calories and at a certain point you are walking the "tight rope". However, for casual diets or the offseason, when you have ample glycogen and body fat stores and plenty of calories to play with, you can be more flexible. Take the 24-hour period off the pedestal and all of a sudden you have more options.

With the borrowing approach, you can take up to 20% of the macros/calories on any one day, and give it to another day. That way, if a planned event is coming up or if you simply are very hungry on one day or not hungry at all on another day, you can shift your calories around. A 20% reduction on any isolated day in a non-dieted and depleted body is going to have very little impact on anything of import, and it allows one to mix and match to account of the occurrences of real life.

Another way to institute borrowing is to set up an excel sheet that calculates a 7-day average of your calories for the week. You can simply have the goal of hitting the target calories on average by the end of the week. When doing so, by the end of the 7-day period, if your daily goal was 2500 kcals for example, so long as you averaged that over the 7-day period, you've met your goal for the week. This way, you can have a day at 3000 calories, a day at 2000 calories, a day at 2700, a day at 2300 and then the remaining three days at 2500 calories and that's absolutely fine, rather than having to rigidly consume 2500 calories every day.

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Relearning How To Listen To Your Body

If you are a competitive bodybuilder, there is a certain point during contest prep where you have to stop listening to your body. Your hunger signals become constant, and your satiety signals disappear. In these cases, your plan is the only tool you have to ensure you don't overeat.

However, when you are not in a contest prep phase, there should come a time to let go a bit. If you spent months weighing and tracking your food and bodyweight, looking at nutritional labels, learning where calories come from, and changing your eating habits to reach nutritional targets, you are better equipped than you once were. But, at the same time you've gotten so used to following a relatively rigid plan that doing so can become second nature and can even replace what normal humans use to regulate their energy intake: hunger and satiety.

Ironically, after you spend years "going by the numbers" and modifying your body composition using the quantitative approaches outlined in this guide, I believe it is actually very important to then learn how to once again listen to your body. The goal of integrating the awareness of your hunger and satiety levels with your newfound nutritional knowledge and experience is to eventually develop an approach that requires minimal day to day effort. The first step in checking if you are ready for this would

be to stop following your nutritional plan for a day. Don't try to hit your targets, just simply eat, but write down the foods you consume and rough portion sizes (but not the macros or calories).

At the end of the day, without looking at what you wrote down, estimate in your mind your macros and calories for the day. Then use the notes you took on what you actually ate to determine your true intake and compare the two. If you were pretty close in your remembering and estimation to what you actually consumed, and you didn't go hog wild and over eat, or drastically under eat, you are most-likely ready for this approach of listening to your hunger signals a bit more.

Tracking Your Diet With Just Habits And Bodyweight

First of all, let me make it clear that the following strategy is probably most appropriate in the offseason when hunger and satiety signals are operating. That being said, once you've established that you can accurately gauge your calorie and macronutrient intakes, then you need to see how close you were to where you want your numbers to be. If you are accurate with tracking macros and calories but your protein is habitually low, or if you are accurate but you aren't eating enough calories, or if you are accurate but you never eat fruits and vegetables, you have just identified the things you need to mindfully change in order to reach your goals with this approach.

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This identification system, along with bodyweight monitoring, can help you adhere to a plan that is far less constricting than what most people would consider a typical muscle and strength type of diet. If you'd like to maintain a consistent trajectory towards your long-term success without the pressures of tracking all of your dietary numbers, I suggest a simpler approach as detailed below.

The following bullet points below offer some guidance on how to monitor habits and bodyweight for nutritional success. Once again, this approach should only be taken after you have a lot of experience with tracking, measuring, weighing and manipulating your body composition. If you have this experience and have established that you can be accurate on "auto pilot", then you can use this approach and the following advice:

- If your goal is to slowly gain weight and you slowly lose or maintain weight when following your habitual eating patterns, strive to be a little full at most meals or during most days of the week. Check your weigh-ins to make sure you are successful in achieving slow weight gain and also not overdoing it and gaining weight too quickly. This approach is not appropriate for extended cuts to get very lean as you will very quickly not be able to trust your hunger and satiety signals.
- Likewise, if your goal is to slowly gain weight or maintain weight and you gain weight too quickly, try to consciously decrease portion sizes and stop just when satisfied at meals. Also try eating slower to allow time for your satiety to catch up. Once again, double check this strategy with your scale.

- Don't stress your carbohydrate and fat intake. Unless you are really low on one or the other (which typically takes conscious avoidance and effort), just eat. If you consumed 20% of your calories from fat on one day and 40% on another day, it likely doesn't matter one bit in the grand scheme of things when you aren't dieting. So, just focus on calories and protein.
- If you are an offseason strength athlete, you want to make sure you aren't too low in protein. While there is good reason to eat high protein diets while dieting [13], you are just fine in the range of 0.8-1.0 g/lb when you aren't lean and calorically restricted [14]. If you find you habitually undershoot your protein, try adding a protein shake or two per day to get up to this range. If you are over this protein range, that's fine there's no harm in it so long as you aren't eating a very low fat or very low carbohydrate intake because of it.
- Remember the micronutrient level and the recommendation to try to consume at least one serving of fruits and vegetables for every 1000 kcals you eat. If you find you don't do this habitually, buy fruit and leave it easily accessible and make a point to pack a couple pieces of fruit to take to work or school. For vegetables, try to have a salad each day and that will most likely cover your servings of vegetables. If you can hit these targets, you're most certainly going to be consuming enough fiber as well.

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These systems above can be used in isolation, or in conjunction. For example, you can have a day where you are eating targets just based on calories and protein (the "Better" option from the three tiers), and also borrow 20% of your calories from that day to give to another day of the week. Likewise, you can follow the habit development game plan, and then intermittently go back to tracking using the 3 tiered system and borrowing to ensure you were being accurate and staying on track.

None of these systems are mutually exclusive, and when used together they provide you more options. If you can learn these principles and slowly implement them into your lifestyle, you will most likely have a much easier time with your athletic endeavors in the long run and will be able to live a much more normal existence than if you perfectly hit targets every single day.

NUTRITIONAL TRACKING TIERS *In descending order based on precision*	
BEST	**Hit your macros within a certain + or - range.** Contest Prep: + or - 5 g of each macronutrient Fat Loss Phase: + or - 10 g of each macronutrient Off-Season: + or - 10 g for fat and + or - 20 g for protein/carbohydrate
BETTER	**Hit your protein AND calories within a certain + or - range.** Protein: Same as "BEST" tier Calories: + or - 100 kcal
GOOD	**Hit your target calorie goal within a certain +or- range.** Primarily used in off-season: + or - 100 kcal
Habit-Based Tracking	**Aim for consistent implementation of habits after establishing accuracy.** If you constantly undershoot protein, over-eat dietary fat, miss out on fruits and veggies, or fail to execute any other beneficial behavior, make it a point to monitor yourself around that one thing until you can achieve it consistently. Once mastered, find another behavior to alter in your favor if necessary. Continue until healthy, helpful habits are established in agreement with your goals. Best combined with tracking bodyweight (using 7-day averages).

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Eating Out

So now that you've got all the different forms of tracking under your belt, it's important that you are able to implement them outside of your own kitchen when out with friends and family. But before we dive into food choice strategies, let's address all of you in-season competitive bodybuilders.

Simply put, during contest prep, eating out is something you want to avoid. The times I suggest that you do eat a meal out during a competition diet is when you have something that is very important in your life.

For example, in 2011 I dieted from January to August, and I ate out 3 times: for my anniversary with my wife, for Mother's Day, and for my mother's birthday. Each time I went out, I got a very simple meal. I had double steamed broccoli and a lean sirloin steak with no butter. I didn't weigh the food, I just estimated the calories and macros. But, I knew that even if the cooks didn't ensure that I got exactly a 7oz sirloin steak and exactly 2 cups of broccoli, that at most my estimations would be off by maybe a couple grams of carbohydrate and maybe 6 or 7 grams of protein and fat each. So the consequences from estimating that meal's macros incorrectly, if any at all, were very low.

However, if I had ordered pasta, that could have been off by massive amounts. It's so easy for a chef to put an extra 2 tablespoons of oil above and beyond what the nutrition information for the restaurant lists. Adding that oil alone means you could have an extra 250 calories that you didn't plan for and most likely wouldn't even notice simply by taste. Even if I could have fit the macros of the pasta dish into my diet for that day, I would have been making a big gamble assuming that the macros I estimated or that were listed on the restaurant's menu were accurate.

So just remember that chefs and cooks are not going to weigh your food out for you. They don't care about your macros, they care only about giving you a tasty meal. So when you eat out, be aware that the nutrition information won't be accurate, and your best guesses can be way off if you order foods that are likely to have a large margin of error (due to being energy dense). However, there are ways you can mitigate the risk by making smart choices. On the whole, if you are a competitive physique athlete, I would limit eating out to once per month at most.

Now remember, I am talking about the specific case of contest preparation for a competitive bodybuilder. I am not saying that those of you who are dieting for non-competitive purposes should strive for this level of control. In fact I don't think you should, it would likely hamper adherence. But in the end, competitive bodybuilding is an extreme sport, and thus even when approached in a flexible manner, it takes a relatively extreme level of commitment to achieve success on stage.

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If you're not in contest prep, if you're just doing a cut, eating out 1 to 2 times per week is fine, so long as you make conservative estimations of the caloric and macronutrient contents of your food and choose low-calorie options (like the steak and broccoli versus the pasta). Doing so will ensure that you are accurate while still participating in important social aspects of your life.

If you're in the off-season, eating out 1 to 2 times a week is also fine (or even more often). Track the meal with your best estimations, but don't worry too much about the macronutrient breakdown. You have a larger calorie buffer, so you may be able to work it into your target macros (if you have them when not dieting) by the end of the day. And even if you're not able to hit your macros, just fall back to "Better" or "Good". Likewise, if you accidentally go over your calorie range and can't fall back to the "Good" tier, use the 20% borrowing rule and pull from the next day's calories (up to 20%).

Remember that if you're eating 3 to 5 meals a day you're going to have an average of 28 meals per week. If 1 to 2 of them is only 50 to 75% accurate, it's not going to be a big deal in the grand scheme of things in the offseason. So long as you are getting in enough protein, and gaining weight at an appropriate rate, you have covered the most important offseason nutrition variables.

Alcohol

Simply put, the key with alcohol is moderation. No matter how popular it is in college

or how common it may be in certain cultures, binge drinking until you are completely wasted or throwing up is not a healthy habit. It's also not normal or conducive to an active healthy lifestyle.

That said, what does moderation mean? Well in my opinion, it means drinking to the point where you don't feel it the next day. Or if you did feel it slightly in the morning, it certainly wouldn't hamper your performance. In addition to that guideline, I'd also say that it would need to fit within your dietary goals as well.

Although we did not mention alcohol in our macronutrient section in Level 2, it definitely has calories. To be precise, it actually contains 7 calories per gram, and most of the time it's combined with carbohydrates. Wine is made from fruit and beer has hops, wheat and barley. All of which are carbohydrates, which also have calories.

Now that said, we don't have a fourth macro that we follow. So when you decide to drink you have automatically fallen to the "Better" or "Good" tier. Since you don't have an alcohol target, consuming alcohol means you automatically revert to calories and protein, or just calories.

So let's say you had a couple of beers which ends up being 400 calories total. Your macros are normally 200 protein, 300 carbs, and 70 grams of fat. In terms of calories, this amounts to 2630. By consuming alcohol, you now are simply focused on either hitting calories and protein (tier 2 "Better") or just calories (tier 3 "Good"). After the alcohol consumption, you would have 2230 remaining to spread between protein, carbs, and fat for the day (finishing by hitting your protein target and calories within a + or - 100 kcal range). This way you've still met your number one goal of energy balance and you've ensured adequate protein. This is also a moderate amount that wouldn't affect your training the next day, so you're all good.

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Just like eating out, I would recommend drinking only once or twice a week, in moderation. But what does "in moderation" mean? Well I recommend consuming no more than 15% of your total daily allotted calories from alcohol. For most people that amount is one, two, or maybe three drinks if you're a big guy in the offseason with a lot of calories to play with.

So as you can see, this alcohol recommendation, along with the entirety of this section was very broad and theory-based as opposed to the hard-set prescriptions from the actual Pyramid Levels. Although there is not an absolute right or wrong here, some general advice would be to err on the side of being overly precise as opposed to being overly flexible at the start of your journey when you are less accurate at tracking.

Then, over time as you get more aware of the calorie and macronutrient contents of foods you will be able to be more flexible while still having appropriate accuracy. Eventually, you will find your sweet spot that works best for you at different stages dependent on your immediate and long-terms goals as an athlete. Just always remember that precision and tracking will need to follow a wider road at times as opposed to a tight rope in order to maintain a sustainable lifestyle.

Social Environment

The entire purpose of this text was to give an evidence-based approach to some often-debated topics related to some not-so-common ways of living. Because you have chosen to embark on a different path than a lot of the rest of the world, it is quite possible that you will receive some resistance from various people in your life when they witness or are affected by your personal choices and habits.

Given that, I think it's important for me to leave some of my anecdotal recommendations for physique and strength athletes to better exist in society. I'm not simply talking about how you can make it through your day, because if you were able to purchase this guide you are probably doing alright in terms of basic survival. Rather, what I want to cover is how you can progress towards your athletic goals while maintaining an emotionally stable existence, and stay happy without alienating people in your life who deserve the best parts of you.

Support

From birth, we are obviously unable to do things on our own. Throughout the first few years of our lives, this continues on for survival. But beyond that, no matter how much people want to *think* they can do everything on their own, it is simply not the case. Humans have evolved to be social creatures, and it is imperative that we maintain relationships with other individuals in order to lead fulfilled lives.

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This is not just about personal happiness, but also about your success as an athlete. Yes, I will argue that having a stable and supportive social environment aids your ability to increase your muscle and strength to some degree. The optimal amount of social engagement might be more or less for you depending on how introverted or extroverted you are, but human connection and support is necessary to some extent for all of us and it is imperative that we strive to balance this aspect of our lives and integrate it with our goals. Scientifically, there is a great deal of research that shows the beneficial effects of a positive support network on behavior change for nutrition and exercise [15-19]. It is this reason that we emphasize *Team* 3DMJ, not just 3DMJ in our coaching model.

Framily

This word, "framily", is a catch-all phrase for your friends and family; your wife, your dad, your best friend, your coach, your colleagues, all the people who make up those you care about and whom care about you and your life.

They can only support you if they understand what you're doing, what you're going through, how you experience it, and what it means to you. I've run into a lot of people who start weighing their foods, start losing weight, and possibly even start dieting to get extremely lean for a competition without having some basic initial dialogue with their framily unit. Neglecting to do so can generally cause athletes to lose the support of their loved ones just a few shorts weeks into the dieting phase.

And this is not because their framily doesn't care about them, it's because their framily doesn't understand. So, I would really suggest that you enlist the aid of the people you care about and who care about you. Obtain a support network if you don't already have one and give them the communication they deserve, so they know what journey you are embarking on.

A support network can be online, at a local fitness club, at Weight Watchers, or anywhere really; there's a lot of ways to do this. But get your support, find your framily, and explain to them what you're doing in a calm, collected, informative manner right from the beginning of your journey.

Communication

Once you've decided to have this conversation, you want to include not only what you are doing, but why you are doing it and why it is important to you. Your framily doesn't have to be a fan of bodybuilding or to "get" what you are doing necessarily. However, they do need to understand how you feel about it, why and how important it is to you. I have a lot of framily members who flat out don't like bodybuilding. That's okay! What is important is that they love and respect me, and they show me support, even if they don't necessarily "get" the sport I compete in. Also, be explicit with your desires. For example, if you want the support of your loved ones you could say "I would really appreciate your support in this. It's going to be difficult for these reasons, at these times, and it would mean a lot to me just knowing that you have my back."

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Don't make assumptions about what they do or don't know about what you're doing or why you're doing it, and likewise don't make assumptions about why they're acting the way they're acting. Take responsibility for your choices and have dialogues with your framily on occasion throughout the process. Adult communication means stating what you need, informing the people you care about as to why it matters to you, and then asking for feedback on how you are holding up your end of the relationship as well.

It is extremely important to understand that asking for help is not weak. Anyone who is smart and who is honest with themselves shouldn't be afraid of looking weak. Showing your vulnerabilities takes true courage and puts you ahead of most people who don't show or admit to any vulnerability, and therefore can't meaningfully connect with others. So, do yourself a favor as an athlete and communicate effectively, get the support you need, and interact with your loved ones responsibly in an emotionally mature way.

Also, remember that you are choosing to do this. If you are dieting, or competing, that is your choice, and it is not reasonable to expect the world to change for you. Being emotionally healthy and being clear with your needs and expectations is not the same as acting as though you are entitled to different treatment because you voluntarily chose to get on a bodybuilding stage.

One of the goals I try to encourage my athletes to pursue, is to try to leave as small of a social impact on those around them due to the process of dieting. Meaning, they

try to live their lives during prep in a way that minimally affects their loved ones. This might mean still going out with the boys or girls on a weekend, but instead of drinking, offering to be the DD and ordering diet soda but still laughing it up and connecting with your friends. Or, instead of just eating your own pre-prepared meal at home and never taking your significant other out to eat, maybe you instead cook a meal and have a date night in and watch a movie.

Perhaps, even though you don't go out on dinner dates as much, you might go on movie dates. Or maybe, you do occasionally go on dinner dates during your diet, but you make the right choices so it doesn't get in the way of your nutritional targets. Proverbially (but probably not literally unfortunately), the goal is to have your cake and eat it too.

Helping Others

Although your framily might not always know that it is helpful to ask questions and have regular dialogue with you about your health and fitness goals (until you train them to, of course), there will also be a select group of people on the flip side who cannot help but ask for advice and input from you. These individuals can typically be found at the gym where you train or amongst coworkers. I'm talking about the people in your daily life who notice your progress and want similar results for themselves.

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Some people do a great job interacting with these people in an empathetic, intelligent, and open-minded way. Others, not so much, and often alienate, shame, judge or even give out inappropriate advice to those they interact with. If you are someone who wants to be a leader in the fitness field, it is imperative that you understand that what you say can carry a lot weight in the eyes of those who are seeking answers.

Here are some thoughts and strategies to help you carry on your training, your reputation, and your integrity without alienating or upsetting those around you.

Challenging Convention

Some of the things I've said in this book challenge the conventional wisdom of the old school. So, when people ask you for help, don't be surprised when sometimes they express shock that you aren't doing things that they think are required for success (such as banning certain foods or food groups, having rigid meal timing or frequency, etc). So, when you respond to questions do it in a way that you are not intentionally bashing tradition just for the sake of feeling smart or clever.

An example of handling this situation poorly are the common interactions you see when the topic of "if it fits your macros" vs. "clean and dirty" dietary approaches come up. These conversations often lead to shame and bashing rather than education, which simply creates more deeply entrenched divisions. Both groups are trying to get healthy and be in better shape, but by developing two hard lined camps that throw stones at each other, neither learns anything from the other. What many of them don't know (or choose not to acknowledge) is that there are flawed philosophies on both sides.

You don't have to tell someone else they're stupid to answer a question. You don't need to "myth bust" and attack someone's idols to get across new concepts, you can just simply tell them what to do and the logical reason why to do it. Don't approach conversations with a condescending mindset or tone of voice. When people ask you what you're doing or say, "Hey I thought (insert inaccurate claim here)", approach them without a shaming or condescending demeanor. If you do bash what they were doing in your explanation, you are more likely to put them on the defensive, embarrass them and you are more likely to entrench them against the message you want them to learn.

Just try to explain to them what you're doing and why. And if they want more help, direct them to some of the resources that you learned from, and/or share more of what you do at your leisure. What you don't want to do is give out unsolicited advice or bash the opinions of anyone else who tells them different information than you do.

Unsolicited Advice

Let people come to you rather than approach them unsolicited, because that indicates they are ready to learn and try something different than what they've been doing. If you're sitting on the bench press waiting between sets, odds are if you even eavesdrop just a little, you're going to hear things that will make you want to face palm. Fight the urge of interrupting someone else that is either giving advice or sharing what they are doing by giving unsolicited advice.

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Understand that the person you hear saying these not-so-accurate, but very common philosophies, is not intentionally doing anything bad; he or she is just trying to help somebody reach the same goals we all want to reach. It's also worth pointing out that what the person receiving the "bad advice" was doing before (which may even be nothing) is possibly worse than even the incorrect or unnecessary advice they are receiving. So the simple fact that they're getting involved, asking questions and taking a step forward is a good thing.

Please remember that the "evidence based" fitness professionals and the so called "bros" are on the same team. It's just different mindsets and different approaches. If you don't corner yourself and put a label on what you're doing and what they are doing, you can actually learn from one another and the fitness community would actually see progress in more areas.

In short, be open-minded, compassionate and don't give unsolicited advice. Also, you don't need to make someone else feel stupid or wrong to give them advice when it is solicited. Just share your knowledge in a non-emotional, non-attacking, non-confrontational way when asked for it and you're more likely to actually effect positive changes in that person's mindset.

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