MAX-HYPE

MACROS AND NUTRITION GUIDEBOOK AND CALCULATOR

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DISCLAIMER

The contents of this e-book are not intended for the treatment or prevention of disease, nor as a substitute for medical treatment, nor as an alternative to medical advice. Utilizing the information within this e-book is at the sole choice and risk of the reader.

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INTRODUCTION

Welcome to the MaX-Hype Nutritional e-book! Your nutritional approach is going to significantly impact your results, or lack thereof, so our goal is to give you all the foundational tools to optimize your success! There is a lot of information on the web and social media platforms when it comes to nutrition. Some of it is good, some of it is horrible and deciphering between the two can be difficult. We're here to educate you, give you a foundation of knowledge, and a step by step process to help you reach your goals!

The truth of the matter is, I spent years spinning my wheels in the gym, not getting the results I was working for and it was *all* because of my nutrition. I was training hard, I was getting stronger

(progressively overloading my exercises), but I still wasn't building nearly as much muscle as I should, especially as a beginner when our ability to grow is greatest! Why? Because I simply wasn't eating *enough* food, I wasn't in a *calorie surplus*, a concept you're going to learn in this e-book. It was incredibly frustrating to work really hard, and not get the results I felt I deserved. This led me to pursuing an education in exercise and nutritional sciences. This is what I've dedicated my entire life to. I'm here to help *you* get the results you're capable of!

This e-book is going to start with some of the foundational concepts that affect your body weight and give you the tools to set up your nutritional approach based on your goals. Whether your primary goal is to build as much muscle as possible, lose a significant amount of body fat, or perhaps a combination of both, the tools in this nutrition e-book combined with our MaX-Hype Training Program is going to get you right on track! We look forward to hearing your feedback and seeing the amazing progress that you're about to make! Keep us in the loop and share your progress with us! It's time to #BeginTheHype!

*Share your progress with the #MaXHypeFam by using these hashtags and tagging @MaXHypeTraining #MaXHype101 #MaXHypeTraining #BeginTheHype #BelieveTheHype

LIFESTYLE & PREFERENCES

When it comes to nutrition, like training, the *best* approach may not be what is scientifically *optimal,* but what you can *adhere to* and *enjoy!* There are plenty of extremely strict diet plans that will get you temporary results. With that being said, the rigid structure isn't sustainable, so those results are short lived and you're quickly back at square one. Our goal is to provide you with a foundational understanding on how you can manipulate your nutrition for your goals in a way you can sustain. Knowledge is power and the more you know about nutrition, the more freedom you will attain with your dietary choices while still staying on top of your goals.

Some of you may want to eat a typical 3 square meals per day, others may want to eat 6 meals per day and some of you may be so busy, you'll rather fast for the majority of the day and just eat within a small feeding window. Your day to day responsibilities, overall lifestyle and preferences are going to heavily dictate how you're going to approach your nutrition through the guidelines we provide for you within this e-book.

Consistency is extremely important. You can't expect to be on track 5 days of the week and completely off the rails 2 days per week (i.e. weekends) and expect to make great progress. Making lifestyle changes is going to be key to your success. You will notice how much better you feel inside and out. Practicing discipline is extremely empowering and often times, improving your nutrition doesn't just improve your physical health, it trickles down into many aspects of your life including mental and emotional health.

The positive results from these lifestyle changes are going to add more fuel to the fire and keep you motivated. It's important to enjoy the process, embrace the journey and never forget where you started from. Take all of the information in the chapters below and be sure to apply it in a way that compliments your lifestyle and preferences!

THE PRIMARY VARIABLES TO TRACK: FOOD INTAKE & BODY WEIGHT

Before we get into how to set up your nutritional goals, you need to understand that your ability to accurately track on a consistent basis is going to be key to your success. You can learn how to optimize your macronutrient profile based upon your goal, but if you don't control, manipulate and track key variables (i.e. food intake), it's value will be lost. This e-book is designed to teach you all you need to know about how to track, but nothing teaches you better than real life practice.

When it comes to measuring your food sources, we highly recommend you use a food scale when you can, rather than volume tools such as a measuring cup. A food scale can cost anywhere from $10-30 dollars and is extremely valuable to ensure you're consuming the proper amount of each food source. Volume metrics can be very inconsistent and if you're over consuming calories unintentionally this can hinder your rate of progress. However, weighing your food gives you a very accurate snapshot of the macronutrient composition and calories you're consuming. Weighing your food *raw,* before you cook it is most accurate due to the effect cooking has on the amount of water each source contains.

Example: 1 *serving* of Oatmeal is typically listed as 45 grams or ½ a cup. If you were to use a measuring cup, you may end up with 60 grams of oats for ½ a cup. This unaccounted mistake will lead you to consuming an additional ~58 Calories (1g Fat, 9.9g Carbs and 2.5g Pro). If you were to make a relatively small mistake with a lot of your food sources, you can easily exceed your calorie goal.

Nutrition Facts

Serving Size 1/2 cup (45g)
Servings Per Container 15

Amount Per Serving	
Calories 170	Calories from Fat 25
	% **Daily Value***
Total Fat 3g	**4%**
Saturated Fat 0.5g	**3%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 0mg	**0%**
Total Carbohydrate 30g	**10%**
Dietary Fiber 5g	**18%**
Sugars 1g	
Protein 7g	

Vitamin A 0% • Vitamin C 0%
Calcium 6% • Iron 30%

* Percent Daily Values are based on a 2,000 calorie diet.

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

It is essential that you track your fats, carbohydrate and protein

intake from all foods consumed. For the food sources that have labels provided, they should always be a specified weight for each serving size. For foods that you're consuming that don't have a food label (i.e. fruits and vegetables), you can simply search for their nutritional information on various websites and applications (for example: http://nutritiondata.self.com/).

We recommend you track your food intake through mobile applications to make things as seamless and convenient as possible. Applications such as MyFitnessPal, My Macros+, FitGenie and Calorie King are upon the most popular and have a large database. These applications also have many corporate franchise restaurants in their database, so you can get a decent estimate on the calories/ macronutrient profiles of various dishes.

TRACKING BODY WEIGHT

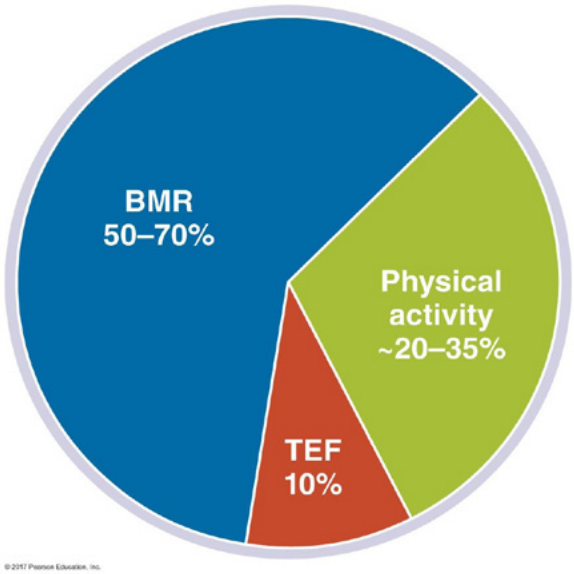
We recommend you track your body weight on a daily basis but pay most attention to your 7-day averages to get the best idea on how things are progressing from a week-to-week basis. Tracking your body weight first thing in the morning, after using the restroom, is going to be the most consistent time to weigh yourself. If you're weighing yourself on a daily basis but not keeping the time of day consistent, you're adding a lot more room for error to this already complex variable. Your body weight is going to fluctuate on daily due to water intake, sodium intake, carbohydrate intake/glycogen storage, food volume, bowel movements, etc. Do not stress about the day to day changes and focus on the bigger picture! We recommend a digital scale that is precise enough to measure in 0.2 lbs increments or better.

ENERGY BALANCE: CALORIC INTAKE VS CALORIC EXPENDITURE

This balance between how many calories you're burning and how many calories you're consuming on a daily basis is going to be the primary factor determining changes in body weight. If you're in a state of positive energy balance (calories surplus), that means you're consuming more calories than your expending, and this will lead to weight gain. If you're in a negative energy balance (calorie deficit), consuming less calories per day than your expending, this will lead to weight loss.[1] So in order to fully grasp this concept, we need to

understand what variables contribute to this equation of energy balance. Once we understand these variables, we can then make adjustments that best complement our goals.

Three Components to your Energy Needs: (Total Daily Energy Expenditure - TDEE)



1. Basal Metabolic Rate (BMR)
2. Physical Activity Level
3. Thermic Effect of Food (TEF)

Each of the three components has additional variables within them and that is also very important to understand, so I'm going to go into more detail.

Your Basal Metabolic Rate (BMR) essentially determines how many calories you burn at rest. How much energy (food) does your body need, just to sustain its normal metabolic functions and maintain its active tissue (i.e. skeletal muscle mass). In other words, this is the

minimum amount of energy your body requires to function at rest. This typically accounts for ~60% of your daily energy needs[2].

Variables that affect BMR:

- Gender
- Age
- Height
- Weight
- Lean Body Mass* - the more muscle mass you have, the more energy you will require at rest to maintain this metabolically active tissue. If you were to take two individuals that were the same gender, age, height and weight, but one subject were 25% body fat and the other were 12% body fat, the leaner individual would have a much greater BMR because they have more lean body mass (LBM)
- Genetics
- Dietary History

Our calculator utilizes the Mifflin St. Jeor formula to determine your BMR.

$P = \left(\frac{10.0m}{1\,\mathrm{kg}} + \frac{6.25h}{1\,\mathrm{cm}} - \frac{5.0a}{1\,\mathrm{year}} + s\right)\frac{\mathrm{kcal}}{\mathrm{day}}$, where *s* is +5 for males and –161 for females.

Fortunately for you, all you need to do is type in your stats into our nutrition spreadsheet and your BMR will be calculated for you. We then take into consideration your activity level and your current goal and provide you with a valid estimate on what your caloric intake should be.

Your physical activity level is the next component that significantly

impacts your energy needs. You can take two individuals with the same BMR but their energy needs can be drastically different due to differences in their physical activity level. Physical activity encompasses not just your exercise regimen, but what you actually do the majority of the day. This is commonly referred to as activities of daily living (ADLs). For example, there is a drastic difference between having a sedentary desk job compared to standing on your feet all day or doing intense manual labor. This component that ties into your physical activity level and your caloric expenditure is referred to as Non-Exercise Activity Thermogenesis (NEAT). This includes everything from walking to work, taking the stairs, typing on a keyboard, fidgeting and even chewing gum, etc. The interesting thing is, your body automatically reduces some of these NEAT processes when you've been in a calorie deficit for a long period of time as a means to decrease energy expenditure[3].

The more obvious component to physical activity levels and calorie expenditure will come from your training regimen. The type of exercise you're performing, the intensity at which you're training, and the duration of your exercise sessions will have the greatest effect on this. There is a big difference between how a powerlifter typically trains compared to a bodybuilder. The same way as there is a big training regimen difference between a cross-country athlete and track athlete. For those of you running MaX-Hype 101, you'll see a significant difference in regard to the metabolic demands between Week A and Week C. So not only will your calorie expenditure vary from day to day, it can also vary from week to week. This is one reason why there can be an additional benefit to altering your macronutrient targets and calorie target on your training days where you're more physically active, compared to an off day where you're

burning fewer calories, resting up. This is something we will get into a bit more in the next chapter.

Once you've determined your basal metabolic rate, you need to multiply it by the activity factor that is most appropriate to your lifestyle.

The definitions below are what is utilized for the MaX-Hype Nutrition Calculator.

Sedentary. Little to no exercise	Daily calories needed = BMR x 1.2
Mild activity level: Intensive exercise for at least 20 minutes 1 to 3 times per week. This may include such things as bicycling, jogging, basketball, swimming, skating, etc. If you do not exercise regularly, but you maintain a busy life style that requires you to walk frequently for long periods, you meet the requirements of this level.	Daily calories needed = BMR x 1.3 - 1.375
Moderate activity level: Intensive exercise for at least 30 to 60 minutes 3 to 4 times per week. Any of the activities listed above will qualify.	Daily calories needed = BMR x 1.5 - 1.55
Heavy or (Labor-intensive) activity level: Intensive exercise for 60 minutes or greater 5 to 7 days per week (see sample activities above). Labor-intensive occupations also qualify for this level. Labor-intensive occupations include construction work (brick laying, carpentry, general labor, etc.). Also farming, landscape worker or similar occupations.	Daily calories needed = BMR x 1.7
Extremely Active level: Exceedingly active and/or very demanding activities: Examples include: athlete with an almost unstoppable training schedule with multiple training sessions throughout the day or a very demanding job, such as shoveling coal or working long hours on an assembly line. Generally, this level of activity is very difficult to achieve.	Daily calories needed = BMR x 1.9

The final component to energy expenditure comes from the thermic effect of food (TEF). Although we consume food for energy, the digestive process actually requires energy and is a component to our daily energy expenditure. The food we eat needs to get broken down into a usable form of energy and this process of digesting, absorbing, and utilizing the nutrients requires a multitude of metabolic processes.

To keep things extremely simple, an example would be the complex carbohydrates we eat are primarily polysaccharides that need to get digested and broken down into smaller molecules, such as disaccharides or monosaccharides so it can be utilized for energy. The same way a polypeptide from the protein we consume needs to get broken down into smaller molecules and eventually individual amino acids. The food we eat supplies us with energy, but the process to acquire that energy is an important component to our TDEE.

Interestingly, there is a difference in TEF between different macronutrients (fats, carbohydrates and protein). Protein is the most thermic macronutrient meaning it requires the most amount of energy to break down. This is one of the reasons why *high protein diets*, have resulted in better body composition results in research studies where total calories were matched but macronutrient intakes were different. These studies would result in the high protein group losing more fat and preserving more muscle compared to the group consuming a smaller portion of their total calories from protein.

Also, foods high in fiber are going to have a greater thermic effect than foods low in fiber. For example, you can take 2 different food sources that provide you with 30g of total carbohydrates. If one of those sources provides you with 2g of fiber and the other source provides you with 15g of fiber there will be a difference in thermic effect. The food with a greater percentage of carbs coming from fiber will require more calories to be burned during the digestive process.

THERMIC EFFECT OF MACROS: PROTEIN > CARBS > FATS

This is a perfect segue to our next chapter, Macronutrients!

SETTING UP YOUR MACRONUTRIENT GOALS

Our macronutrients are our energy yielding components from our food, meaning they provide us with calories. Fats, Carbohydrates and Protein are our primary macronutrients with alcohol being an additional macronutrient we consume on occasion, but ideally not in excess on a regular basis.

The way we manipulate our macronutrients can significantly impact body composition. For those of us seeking to maximize fat loss and/or muscle gain, your macronutrient intakes are going to be key variables to control in order to get the best results.

Research has proven that manipulating macronutrient intakes significantly impacts body composition effects even when total calories are matched. So although counting calories and ensuring you're in a calorie deficit can be an effective way to lose *weight,* you can further enhance your progress and ensure you're maximizing true *fat loss*, with evidence-based macronutrient manipulation. If you've heard of "Weight Watchers", this is a simple calorie tracking system that basically *allows* you to eat whatever you want as long as you don't exceed your total caloric goal (points in their system) for the day. Flexible dieting or this "If It Fits Your Macros" approach takes this one step further and gives you the freedom to select whichever food sources you'd like, as long as you don't exceed your Fats, Carbohydrate and Protein goals for the day. By paying attention to specific macronutrient targets and not just total calories, you can optimize your results in and out of the gym!

It's important to understand the difference between each macronutrient as well as the ratio and quantity of macronutrients per serving of different food sources. We're going to give you guidelines on how you can set up your macronutrient goals to get the best results possible. If you don't have experience tracking your food intake and macronutrients, just like anything in life, practice makes perfect. Over time, you will develop this skill that truly will help you for the rest of your life with your dietary approach and understanding. It becomes second nature.

ENERGY YIELDING EFFECT OF EACH MACRONUTRIENT

NUTRIENT	CALORIES
FAT	~9 KCAL/GRAM
CARBOHYDRATE	~4 KCAL/GRAM
PROTEIN	~4 KCAL/GRAM
ALCOHOL	~7 KCAL/GRAM

*Note: There are slight differences within each macronutrient but this is the generalized values used. For example - Medium Chain Triglycerides (MCT's - Fat source abundant in coconut oil) yield 8.3 kcal/gram where as Long Chain Triglycerides provide 9 kcal/gram.

Let's get started! Along with the general guidelines outlined below, we're going to provide you with different examples so you can follow along, step by step and set up your macronutrient goals!

First things first - we are going to have to determine your calorie goal based upon your individual stats (gender, age, height, weight), activity level, and your body weight goal! Using the Nutrition Calculator, enter your stats!

*Note: You CAN simply use the recommended macronutrient target our calculator provides for you, however, if you want to optimize your results, the guidelines below will improve your individual targets. For the purposes of the e-book and this step-by-step snapshot, the two mock individuals we're going to use, will be the following:

Subject A) 200lbs Male, 5 foot 9 inches, 23 years old, mildly active, approx. 20% body fat, seeking to lose 1 pound per week, while doing 3, 400 Calorie cardio sessions per week.

John Smith	
Age	23
Gender	Male
Height(inches)	69
Preferred Unit	Lbs
Initial Weight	200
Start Date	1/1/2018

Current Weight	200 Lbs
Goal Rate	
Lose	1 Lbs/week
Caloric Expenditure via Cardio	1200 KCal/Week
Caloric Target	**2,274 Kcal/day**

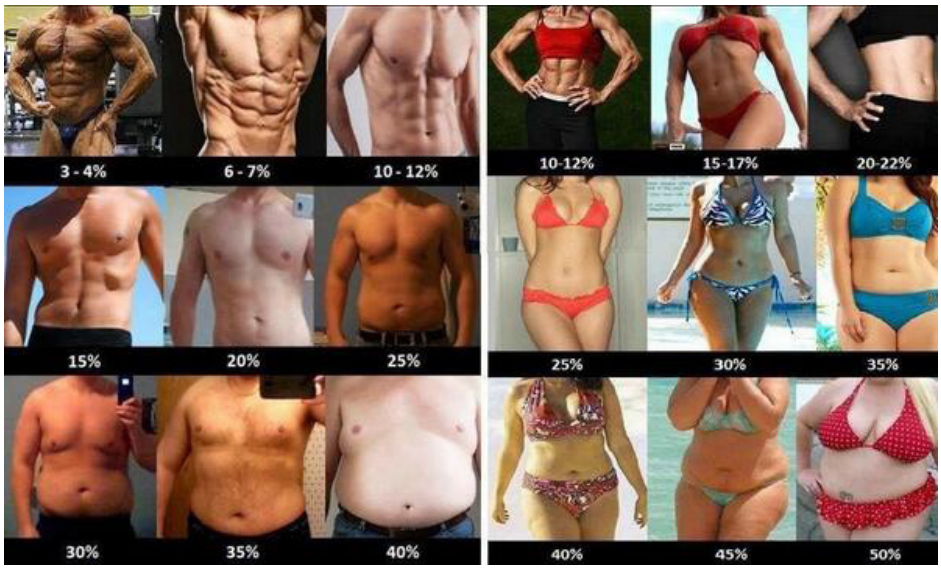
CALORIE CALCULATOR	
Weight	200
Activity Level *(refer to ebook)*	Mildly Active
Resting Metabolic Rate	1893 Kcal
Maintenance Calories	2603 Kcal

MACRO SUGGESTION CALCULATOR	
Body Fat Level	Above Average (>18%)
Fats	96 g
Carbs	193 g
Protein	160 g

The first thing we need to pay attention to is the Calorie recommendation. This individual is recommended to consume 2,274 Kcals per day in order to lose ~1 pound per week. So the first macronutrient we recommend you predetermine is **protein**.

The scientific literature suggest that protein intake should be set at 1.045-1.4 grams per pound of *lean body mass (LBM).*[4,5] This converts to 2.3-3.1g/kg of LBM. So rather than just using your body weight to determine your protein goal, you can improve your dietary intake by using your lean body mass. You will need to have a decent idea of what your body fat% is to determine how much of your weight is composed of lean body mass.

Body fat percentage can be guesstimated through many different methods. You can use skinfold thickness calculators, bioelectrical impedance analysis (BIA), hydrostatic weighing, dual-energy x-ray absorptiometry (DEXA), etc. None of these tools are *perfect,* but they allow you to track changes over a period of time. If you don't have access to any of the tools above, see the photo below to estimate your body fat percentage to the best of your ability.



For this individual, his body fat was approximately 20%. So with simple math, we can determine how much lean body mass (X) he has.

X(Lean Body Mass)/Total Body Weight = Body Fat %/100 (Total Body Mass)

X(LBM)/200LBS = 20% Body Fat/ 100% Total Body Mass

X = 160LBS of LBM

So for this individual the absolute minimum amount of protein he should consume would be 160 grams per day, which the MaX-Hype

Calculator set him up at. However, he'd like to potentially maximize his muscle mass building and/or retention capabilities, he could increase his protein intake within the recommended range.

Lean Body Mass X (Range: 1.045 - 1.4) = Protein Goal

160 X 1.2 = 192g Protein Per Day

	NORMAL DAYS
FAT (g)	
CARBS (g)	
PROTEIN (g)	192
CALORIES	768

Once you determine your protein goal, the next step is to set up your fat intake. We recommend your fat intake compose anywhere between 20-35% of your total calorie intake.[6] If you go below 20% of your total calories coming from fat, you increase your chances of becoming deficient in fat soluble vitamins (A, D, E & K). A lot of factors come into play when it comes to setting up your dietary fat goal. Your personal preference is very important to increase the likelihood of adherence. Which foods do you enjoy? What you can regularly access and cook are also things to consider.

In regards to optimizing your health, performance and physique the following variables may alter how you should set up your fat intake.

- The amount of body fat you have can affect how efficiently you utilize carbohydrates. The greater your body fat levels are, the less sensitive you are to the hormone insulin. Insulin is an anabolic hormone that plays a vital role in nutrient delivery, especially glucose (carbohydrates).[7] Therefore, those with higher

levels of body fat whom tend to be less insulin sensitive, do not utilize carbohydrates as efficiently.[8] On the opposite side of the spectrum, the leaner you are, the greater your insulin sensitivity would be, thus enabling you to tolerate carbohydrates well. Therefore, heavier set individuals may want to increase their fat intake to the higher end of the spectrum of the 20-35% of total calories coming from fat. This will thereby force carbohydrate intake to be lower.

The opposite would hold true for leaner individuals. They may benefit from having their fat intake on the lower end of the spectrum, allowing themselves to consume a greater amount of carbohydrates.[7,8]

- Physical activity level is a crucial component to consider when setting up your dietary fat and carbohydrates goals. The more sedentary you are the less reliant you are on glucose (carbohydrates) as an energy source. The opposite holds true as well. Those that are more physically active will require more glucose and utilize carbohydrates for energy.

So for this mock example, John Smith, we are going to set his fat intake to account for 28% of his diet.

Total Calorie Goal X Percent Goal for Fat Intake = Kcals From Fat

Kcals From Fat / 9 kcals/gram = Goal Fat Total (grams)

2274 Kcal X (0.28) = 636.72

636.72 / 9 = 70.74

We're going to round up and set John's Daily Fat Goal at 71 grams.

	NORMAL DAYS
FAT (g)	71
CARBS (g)	
PROTEIN (g)	192
CALORIES	1407

We now have John's Fat and Protein goal determine and we just need to figure out how many carbohydrates he should aim for on a daily basis in order to reach his calorie goal!

Total Calorie Goal - Calorie Total from ONLY Fat & Protein Target Intakes = Calories Remaining

Calories Remaining / 4 kcals/gram = Goal Carbohydrate Total (grams)

2274 - 1407 = 867

867 / 4 = 216.75

We're going to round up and set John's Daily Carbohydrate Goal at 217 grams.

	NORMAL DAYS
FAT (g)	71
CARBS (g)	217
PROTEIN (g)	192
CALORIES	2275

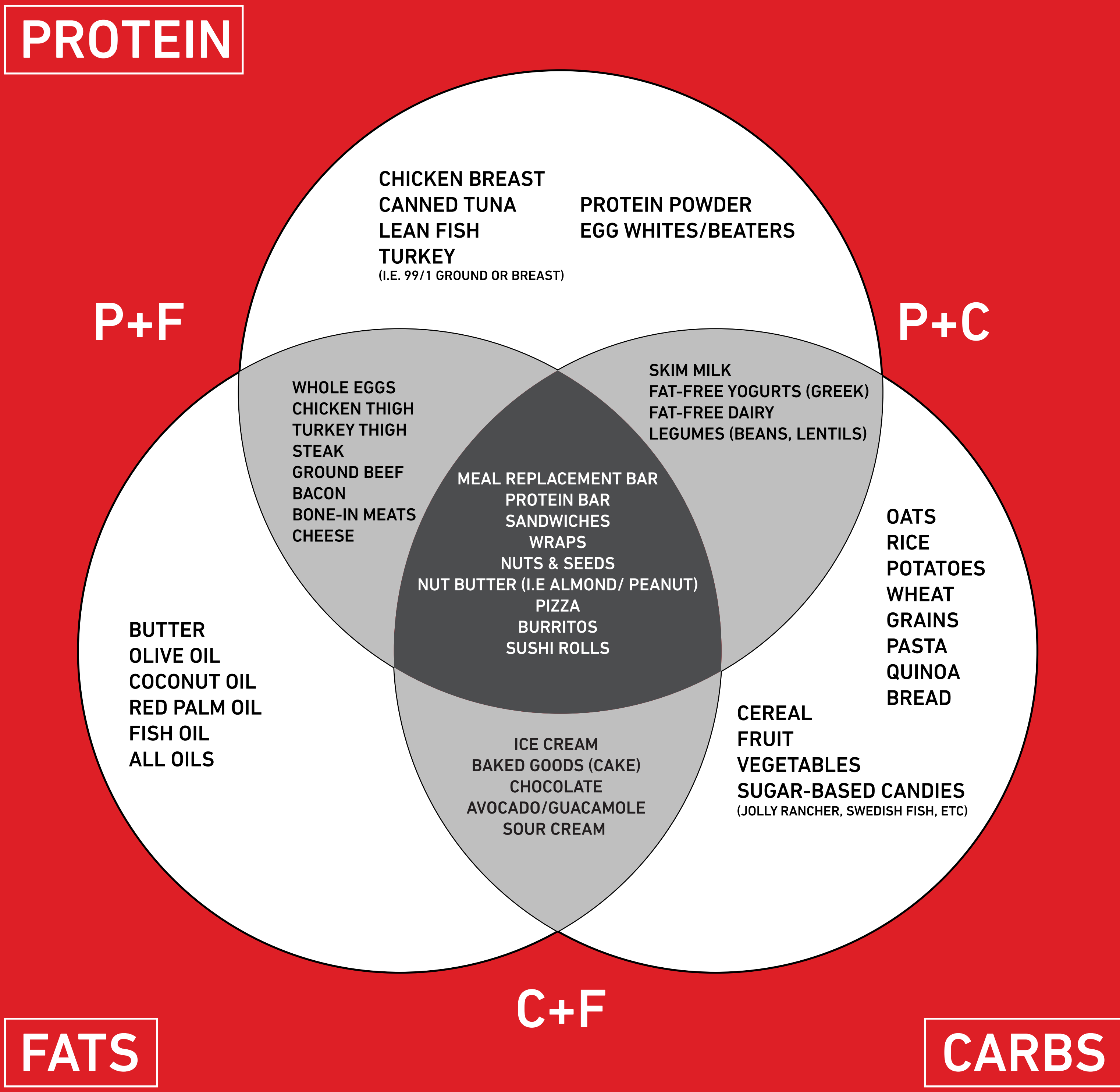
Perfect!!!

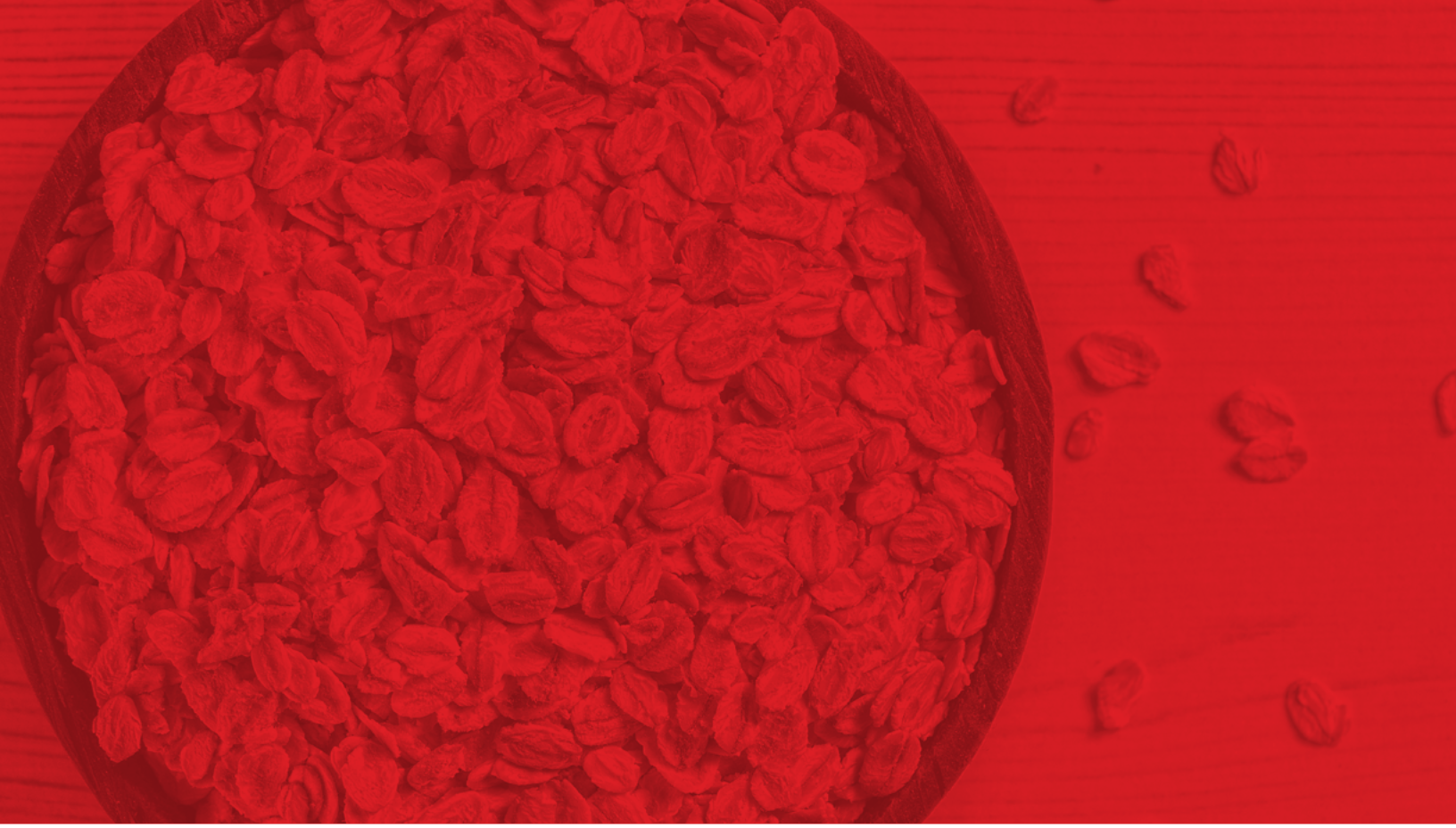
Note the difference in John's macronutrient target when following these guideline compared to just using the macronutrient goals the nutrition calculator predetermined.

MACRO SUGGESTION CALCULATOR	
Body Fat Level	Above Average (>18%)
Fats	96 g
Carbs	193 g
Protein	160 g

	NORMAL DAYS
FAT (g)	71
CARBS (g)	217
PROTEIN (g)	192
CALORIES	2275

Note: The calories in both scenarios are exactly the same so John would progress either way. However, by further optimizing his macronutrient targets, his gym performance, energy, recovery and many other variables may improve!





CARB CYCLING : A LOGICAL APPROACH

If you're seeking to take your nutritional approach one step further to really optimize your results, you may consider having different macronutrient targets based upon how your activity levels and performance needs may vary from a day to day basis. A concept of "carbohydrate-cycling" has gained a lot of popularity but is often overhyped. However, there can be benefits to carbohydrate cycling when it is implemented in a logical manner.

On days you are more physically active and have an intense training session planned, your energy and performance may be enhanced with greater carbohydrate intake. On the contrary, on day's you're

not training or perhaps less physically active, you will not require those carbohydrates for performance reasons, and decreasing your carbohydrate intake can potentially increase your fat oxidation. There are many ways you can approach this, but it is something you may enjoy and benefit from.

High Carbohydrate ("Refeed") days can also be implemented as a tool to help restore depleted glycogen stores. Glycogen is a starchy carbohydrate we store in our skeletal muscle and liver. As we are in a calorie deficit and have less energy coming in through our food intake, these stores are utilized for energy. However, these energy reserves are limited and when they are depleted, our performance can suffer. Therefore, significantly increasing carbohydrates intake can be a great tool to keep overall energy and performance high.

Refeed days can be programmed in many different ways. Some people take one refeed day per week, others may take multiple refeed days back to back. Others may take smaller refeeds multiple times per week. There are countless ways this can be utilized and it is definitely a tool to experiment with. This also is a great day to potentially be more flexible with your diet as your overall calorie goal is higher. This will give you the freedom to "fit in" more foods and makes eating in social situations much less restrictive.

General Guideline to Experiment with:

- Non-Training/ Rest Days/ Low Activity Days - Decrease carbohydrate intake by 20% and fill in the calorie difference with Fats. (you can also be more aggressive with your deficit and leave fat intake the same – consuming fewer total calories for

this day)

- Refeed/ High Carb Day: Increase Calories to at least "maintenance" if you're in a calorie deficit, OR increase carbs by 20%.

Below is an example of how you may carbohydrate cycle:

	NORMAL DAYS	REST DAYS	REFEED DAY
FAT (g)	71	90	71
CARBS (g)	217	174	300
PROTEIN (g)	192	192	192
CALORIES	2275	2274	2607

Note: Carbs were reduced by 20% on Rest Days and Fats were increased to keep Calorie goal the same. Carbs were increased on refeed days to bring his total calories right at his estimated maintenance determined by our calculator.

WEIGHT GAIN GOALS (CALORIE SURPLUS)

How might your macronutrient target change if you plan on *Lean Bulking?* (Being in a calorie surplus with the goal of *maximizing* muscle mass accretion and *minimizing* fat gain)

Before you begin a *bulking phase,* there are a few variables you must take into consideration. First, are you currently in a good position to gain weight? Perhaps you just finished a fat loss phase, are very happy with the progress you've made to your physique and are now shifting your goals to building as much muscle as possible. By shifting into a calorie surplus, it is likely that you will see performance improvements with the additional fuel sources available

to you through the increase in calories.

You will have to ask yourself, how much weight are you aiming to gain as a whole and at what *rate* of gain would be most appropriate. The less training experience you have, the more *aggressive* you can typically be with your bulk. This is because you can make the greatest amount of progress to building muscle when this training stimulus is novel to you. The more training experience you have and the closer you are to your *genetic limit,* the slower your rate of gain should be to minimize excess fat gain.

Some things you also need to take into consideration when transitioning from a calorie deficit to a calorie surplus is that you may gain a few pounds almost instantly due to refilling your glycogen stores and the increase in food volume. Don't panic and make sure you're also using visual feedback as a tool to assess your progress and not just the number on the scale when you weigh-in.

GENERAL RATE OF GAIN

	BEGINNER	INTERMEDIATE	ADVANCED
RATE OF GAIN	2-4LBS PER MONTH .5-1.0LBS PER WEEK	1.5 - 3LBS PER MONTH .375 - .75LBS PER WEEK	~1-2LBS PER MONTH .25 - .5LBS PER WEEK

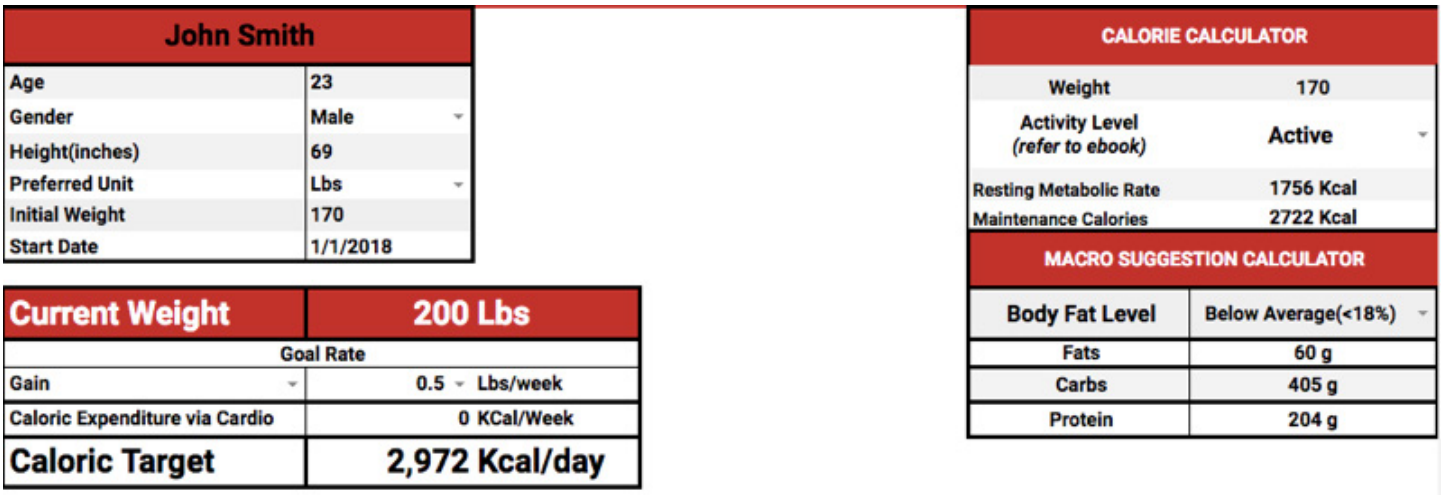
*Note: Each individual is going to progress at different rates. Make sure you use your body weight as one source of feedback data but also pay attention to how your physique is looking and how you're feeling. If you're a beginner and are making excellent progress at a faster rate than 4lbs per month, do *not* slow down your rate of loss just because of a general guideline. On the other hand, if you're gaining weight but don't see improvements in muscle size and

performance but are gaining excess fat, reduce your calories and rate of gain.

Weight is *relative* to each individual. There is a drastic difference between a 120lbs female gaining 4lbs in a month compared to a 180lbs male gaining 4lbs per month.

For the purpose of this E-book, we are going to give you an example of how your calorie and macronutrient goals may change when you're in a gaining phase rather than a fat loss phase.
We're going to use the same subject, John Smith, but we're going to assume that John did a stellar job during his deficit and lost 30lbs by following the nutritional guidelines he set forth for himself utilizing this information and MaXHype 101 Training Program!

Subject B) 170lbs Male, 5 foot 9 inches, 23 years old, mildly active, approx. 8% body fat, seeking to gain .5 pound per week.



John Smith	
Age	23
Gender	Male
Height(inches)	69
Preferred Unit	Lbs
Initial Weight	170
Start Date	1/1/2018

Current Weight	200 Lbs
Goal Rate	
Gain	0.5 Lbs/week
Caloric Expenditure via Cardio	0 KCal/Week
Caloric Target	**2,972 Kcal/day**

CALORIE CALCULATOR	
Weight	170
Activity Level *(refer to ebook)*	Active
Resting Metabolic Rate	1756 Kcal
Maintenance Calories	2722 Kcal

MACRO SUGGESTION CALCULATOR	
Body Fat Level	Below Average(<18%)
Fats	60 g
Carbs	405 g
Protein	204 g

As previously mentioned, it is best to set your protein goal first. We can utilize the same 1.045-1.4 grams per pound of *lean body mass (LBM)* recommendation from before or go as high as 1.5 grams per

pound of total body weight when *bulking.* There are multiple reasons why you may want to set your total protein goal higher when bulking rather than cutting.

First, as your calories increase and you're adding in a lot of carbohydrate and fat sources into your diet, you're getting a lot of *trace* proteins from these foods. These trace proteins are generally much lower in the key amino acids needed to optimize muscle protein synthesis. So although your total daily intake may seem high, you're consuming less protein of high biological value.

Secondly, protein is by far the hardest macronutrient to store as fat. Protein is rarely utilized as an energy source and it primarily utilized to repair/grow tissue. Moreover, because of it having the greatest thermic effect coupled with its other characteristics, this is going to minimize any excess fat gain when in a calorie surplus.

So for this individual, the absolute minimum we're going to set his protein at the higher end of the spectrum for the appropriate range. If John is 170lbs at 8% body fat that means he has 13.6lbs of fat mass and 156.4lbs of lean body mass.

Lean Body Mass X Protein Range (1.045 - 1.4 gram/ lb of LBM)

156.4 X 1.4 = 218.96

We will round up and set John's macronutrients at 219 grams per day.

	NORMAL DAYS
FAT (g)	
CARBS (g)	
PROTEIN (g)	219
CALORIES	876

Protein would be appropriate to be at a minimum of 163 grams and a maximum of 255 grams.

Next, we would have to set up John's fat intake. Please refer back to all the variables you should take into considerations when setting up your fat intake earlier in this e-book. The lowest our fat intake should be is 20% of our total diet, and no higher than 35%. Because John is extremely lean at ~8% body fat, it's very likely that he is sensitive to insulin and will be able to tolerate carbohydrates very well. This will enable us to have a greater percentage of his total macronutrients come from carbohydrates and less from fat.

For the purpose of this example, we're going to set John's fat intake to compose 22% of his total calories.

Total Calorie Goal X Percent Goal for Fat Intake = Kcals From Fat

Kcals From Fat / 9 kcals/gram = Goal Fat Total (grams)

2972 Kcal X (0.22) = 653.84

653.84 / 9 = 72.65

We're going to round up and set John's Daily Fat Goal at 73 grams.

	NORMAL DAYS
FAT (g)	73
CARBS (g)	
PROTEIN (g)	219
CALORIES	1533

We now have John's Fat and Protein goal determine and we just need to figure out how many carbohydrates he should aim for on a daily basis in order to reach his calorie goal!

Total Calorie Goal - Calorie Total from ONLY Fat & Protein Target Intakes = Calories Remaining

Calories Remaining / 4 kcals/gram = Goal Carbohydrate Total (grams)

2972 - 1533 = 1439

1439 / 4 = 359.75

We're going to round up and set John's Daily Carbohydrate Goal at 360 grams.

	NORMAL DAYS
FAT (g)	73
CARBS (g)	360
PROTEIN (g)	219
CALORIES	2973

Perfect!
Now John is ready to get his lean bulk underway and start building some quality muscle tissue!

MACRO SUGGESTION CALCULATOR	
Body Fat Level	Below Average(<18%)
Fats	60 g
Carbs	405 g
Protein	204 g

	NORMAL DAYS
FAT (g)	73
CARBS (g)	360
PROTEIN (g)	219
CALORIES	2973

Note: As you can see, the automated nutrition calculator had John's Fat and protein intake lower and his carbohydrate intake higher. John would get great results in either scenario, but by optimizing his macronutrients based on the information provided above John may improve his overall health, hormonal function, and minimize fat gain during this calorie surplus of his!

What if your goal is to maintain your body weight?

In this scenario, simply enter your stats into the MaX-Hype Nutrition Calculator and see what calorie goal recommends for you in order to maintain your weight. You can then use the exact same step-by-step principles above to further optimize your macronutrient goals.

CALORIE CALCULATOR	
Weight	170
Activity Level *(refer to ebook)*	Active
Resting Metabolic R	1756 Kcal
Maintenance Calorie	2722 Kcal

John Smith	
Age	23
Gender	Male
Height(inches)	69
Preferred Unit	Lbs
Initial Weight	170

WHEN & HOW TO MAKE ADJUSTMENTS?

Once you've determined your calorie and macronutrient targets it's time to implement and adhere to these guidelines to the best of your ability. If you're completely new to tracking your nutrition, it's going to take some time to get adjusted, but over time it will become second nature. Do your best to adhere to your goals so you can get the results you're seeking and make appropriate adjustments as needed.

There are many tools that we can use to assess our progress that measure different variables over time. The most obvious one people pay a lot of attention to is their body weight. However, this doesn't always depict accurate feedback to what is happening in regards to

body composition. Many variables can affect your weight, such as, water intake, food volume, sodium intake, bowel movements, and most importantly body composition changes over time (fat loss vs muscle gain). Because tracking *body weight* alone has its flaws, it's important to pay attention to how you're looking and feeling. If you can visually see progress in the mirror and you notice things like your clothes start fitting you differently that is extremely valuable to note. Other tools you can use to track progress over time would be circumference measurements (the most common is waist), skin-fold measurements with a caliper and potentially an easy to use body fat assessment tool (i.e. BIA – body impedance analyzer).

If your goal is to lose body fat and you set yourself in a calorie deficit, you should see both visual progress in the mirror and positive feedback on the scale (weight loss). If this is the case, do not make adjustments unless progress stalls for 2 consecutive weeks.

You may experience a time period where your weekly averages in regards to weigh-ins aren't changing much at all, but you're seeing a lot of visual progress. If that is the case, understand that the positive visual changes you're noticing are much more important than the number on the scale. Remain patient and continue to adhere to the plan.

Perhaps you're in a situation where you're adhering to your dietary goals however, you're not getting any positive results. Your body weight isn't decreasing and you aren't seeing any visual progress. In this scenario, it's likely that your guesstimated calorie intake is much closer to what you need to maintain your weight and isn't a true calorie deficit. In this scenario you're going to have to create a calorie

deficit through either calorie restriction, increased physical activity, or a combination of both.

As mentioned earlier in the e-book, calorie deficits are created when you're consuming less energy on a daily basis than you are burning. Whether we utilize calorie restriction, increased physical activity or a combination doesn't make much of a difference so be sure to create this deficit in such a manner that fits your lifestyle best and in a way you'll be able to adhere to the plan.

Whichever approach you're taking, make sure you don't do anything too drastic overnight. You wouldn't want to reduce your calorie intake by 1000 calories overnight or add in excessive cardio on a daily basis if you weren't doing any cardio at all previously. Make small adjustments to your diet and/or cardio regimen. Practicing patience is a crucial component to reaching your goals.

	NOT LOSING WEIGHT	NOT GAINING WEIGHT
WHAT YOU CAN DO?	DECREASE CALORIE INTAKE (TYPICALLY BY REDUCING FATS/CARBS) AND/OR INCREASE PHYSICAL ACTIVITY (I.E. ADD CARDIO)	INCREASE CALORIE INTAKE (TYPICALLY FROM FATS/CARBS BUT ALSO A VERY SAFE TIME TO FURTHER INCREASE PRO) AND/OR DECREASE PHYSICAL ACTIVITY LEVELS OUTSIDE OF RESISTANCE TRAINING (I.E. NEAT, CARDIO, RECREATIONAL SPORT)

Below are various examples of how you can track your progress using the MaX-Hype Tracking Spreadsheet and what adjustments you can make based on how your body is responding.

Example A) John Smith seeking to lose 1 pound per week. His macronutrient goals were previously set (as shown earlier in the ebook) and John did an excellent job of adhering.

DATE	WEIGHT	PROTEIN(g)	CARBS(g)	FAT(g)	CALORIES(Kcal)	Rate of Change(Lbs)
Mon, Jan 1, 2018	200.0	192	217	71	2275 Kcal	
Tue, Jan 2, 2018	200.0	192	217	71	2275 Kcal	
Wed, Jan 3, 2018	199.5	192	174	90	2274 Kcal	
Thu, Jan 4, 2018	199.0	192	300	71	2607 Kcal	
Fri, Jan 5, 2018	199.8	192	217	71	2275 Kcal	N/A
Sat, Jan 6, 2018	199.0	192	217	71	2275 Kcal	
Sun, Jan 7, 2018	198.5	192	174	90	2274 Kcal	
Weekly Average	199.4	192	216.5714286	76.42857143	2322 Kcal	
Mon, Jan 8, 2018	198.6	192	217	71	2275 Kcal	
Tue, Jan 9, 2018	199.0	192	217	71	2275 Kcal	
Wed, Jan 10, 2018	199.2	192	174	90	2274 Kcal	
Thu, Jan 11, 2018	198.2	192	300	71	2607 Kcal	
Fri, Jan 12, 2018	198.6	192	217	71	2275 Kcal	-1.0
Sat, Jan 13, 2018	198.0	192	217	71	2275 Kcal	
Sun, Jan 14, 2018	197.4	192	174	90	2274 Kcal	
Weekly Average	198.4	192	216.5714286	76.42857143	2322 Kcal	

As you can see, after two weeks of adhering to the protocol, John lost exactly 1 pound when comparing his weekly averages and went from 200lbs to 197.4lbs. In this scenario, there would be no reason at all to make any changes. John could continue to adhere to this dietary intake and continue with his training regimen.

Example B) John Smith was seeking to continue losing 1 pound per week but after 8 weeks of dieting his progress has stalled. He's made great progress since the beginning of his journey but it seems like his current calorie intake is causing him to maintain his body weight.

DATE	WEIGHT	PROTEIN(g)	CARBS(g)	FAT(g)	CALORIES(Kcal)	Rate of Change(Lbs)
Weekly Average	192.0	192	217	71	2275 Kcal	
Mon, Mar 5, 2018	192.4	192	217	71	2275 Kcal	
Tue, Mar 6, 2018	192.0	192	217	71	2275 Kcal	
Wed, Mar 7, 2018	191.8	192	174	90	2274 Kcal	
Thu, Mar 8, 2018	191.6	192	300	71	2607 Kcal	
Fri, Mar 9, 2018	192.4	192	217	71	2275 Kcal	0.0
Sat, Mar 10, 2018	192.0	192	217	71	2275 Kcal	
Sun, Mar 11, 2018	192.0	192	174	90	2274 Kcal	
Weekly Average	192.0	192	216.5714286	76.42857143	2322 Kcal	
Mon, Mar 12, 2018	191.6	192	217	71	2275 Kcal	
Tue, Mar 13, 2018	191.8	192	217	71	2275 Kcal	
Wed, Mar 14, 2018	191.8	192	174	90	2274 Kcal	
Thu, Mar 15, 2018	191.8	192	300	71	2607 Kcal	
Fri, Mar 16, 2018	192.8	192	217	71	2275 Kcal	0.0
Sat, Mar 17, 2018	192.4	192	217	71	2275 Kcal	
Sun, Mar 18, 2018	192.0	192	174	90	2274 Kcal	
Weekly Average	192.0	192	216.5714286	76.42857143	2322 Kcal	

As you can see, John's weekly average isn't changing and his weight loss has stalled. In this scenario, John would have to either decrease his calorie intake, increase his cardio, or do a combination of both. As

previously stated, it's best to make smaller adjustments rather than something drastic. John can decrease his calorie intake by 100-200 through carbs and/or fat and increase his weekly cardio sessions. Many people may think you'd have to decrease calories by 500 per day in order to continue losing 1 pound per week. Although there are 3500 calories in a pound, our bodies are very complex machines and these perfect math equations don't always play out in real life. A *small adjustment* can have a *big impact*.

An appropriate adjustment to his macronutrients would look something like the following.

	NORMAL DAYS	REST DAYS	REFEED DAY
FAT (g)	65	85	65
CARBS (g)	200	150	300
PROTEIN (g)	190	190	190
CALORIES	2145	2125	2545

Changes made: Decreased fats by 6 grams, carbs by 17 grams and protein by 2 grams on *normal days.* Decreased fats by 5 grams, carbs by 24 grams and protein by 2 grams on *rest days.* Lastly, high carb days were only decreased by 5 grams of fat and 2 grams of protein.

There are many options available to make your adjustments. As previously mentioned it will have to be either through dietary decreases or physical increases. Make the change(s), adhere to the new plan and practice patience so you can reassess.

MICRONUTRIENTS: HOW TO ENSURE YOU'RE GETTING ENOUGH!

Our micronutrients are our vitamins and minerals. Although they do not provide us with a direct source of energy in the form of calories, they are *essential* for cellular metabolism! Just as their name suggest, we require less of our micronutrients compared to our macronutrients. When talking about our macronutrients, we utilize *grams* as our unit as measure, whereas with micronutrients, we utilize *milligrams* and smaller sub measurements.

Although we don't need to consume copious amounts of these

smaller nutrients, they can still pack a big punch and positively impact our health and metabolism. Consuming adequate amounts of our micronutrients can improve our energy levels, hormonal profile, mood, cognition, gym performance, recovery and much more.

VITAMINS:

Vitamins are essential, organic compounds utilized on the cellular level for various metabolic processes. There are two categories of vitamins, fat-soluble and water-soluble. Vitamins A, D, E & K are your fat soluble vitamins. Vitamin C and the eight B Vitamins are your water-soluble vitamins. Their specific roles as well as how they are absorbed and utilized vary.

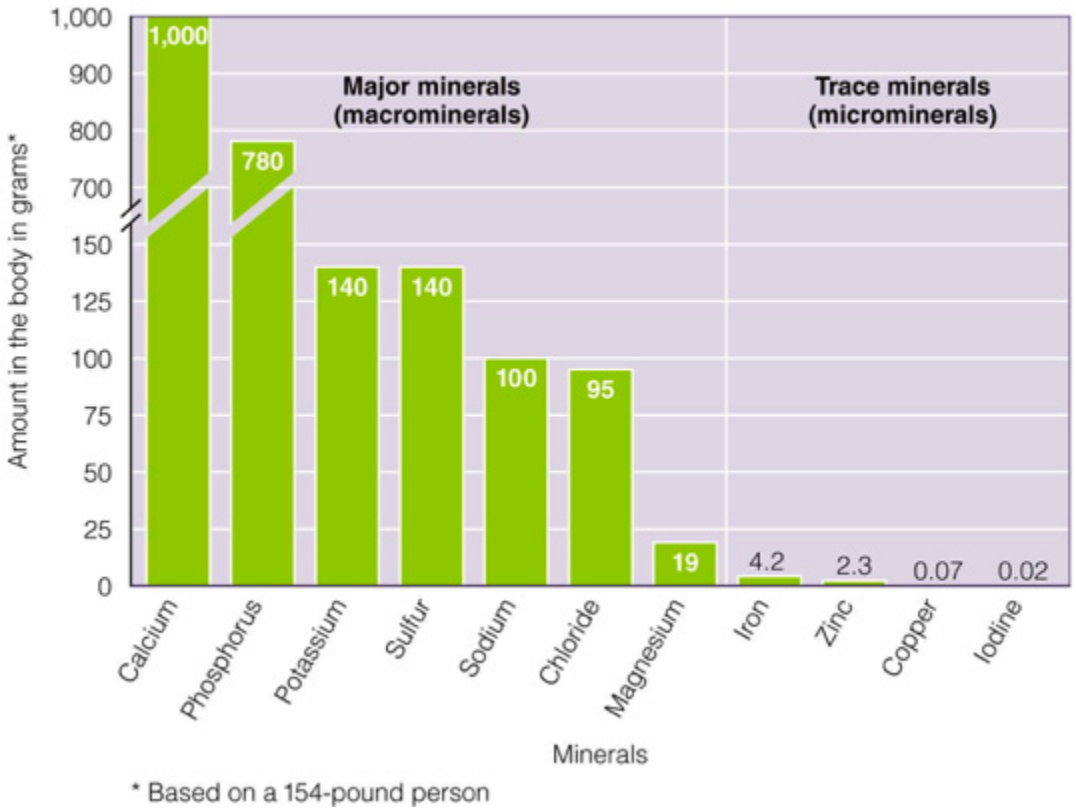
The fat-soluble vitamins are absorbed through the small intestine and as the name suggest, they *require* fat to be utilized. They are transported in the lymph through micelles and chylomicrons. They are also stored in our body fat, liver and even muscle tissue. In very high amounts, these vitamins can be toxic and have adverse effects but this is extremely uncommon to occur just through whole food.

On the other end of the spectrum, your water-soluble vitamins can be utilized a bit more efficiently as they do not depend on fat or another macronutrient. They are also absorbed through the small intestine but they enter the bloodstream directly. Water-soluble vitamins are not stored in the body and are excreted through our urine. This makes it extremely difficult to consume toxic amounts of water-soluble vitamins and a big reason you may see energy drinks include very large doses of b-vitamins (i.e. 5000% daily value). Any excess is easily excreted through the urine, but our rapid turnover of water-soluble vitamins and inability to store them means we need to

consume them on a regular basis.

MINERALS:

Unlike Vitamins, Minerals are inorganic compounds that compose ~5% of our bodies. We have macrominerals and microminerals. Macrominerals make up a larger component of our body and we require them on a larger scale compared to microminerals.



Minerals play a large role in overall fluid balance, intracellular vs extracellular water, and a variety of physiological processes. Minerals like calcium and magnesium are also crucial for muscular contractions. Some minerals also compete with one another for absorption. For example, excessive zinc can reduce copper consumption. Having an appropriate balance is important to optimize overall health.

To ensure you're getting an adequate amount and a wide spectrum of micronutrients in your diet, it is paramount that you consume a variety of fruits and vegetables in your diet. Although some meal plans may be viewed as being *healthy* consuming the same food every day is also an easy way to skimp out on some key nutrients. Studies have shown that bodybuilders dieting on what is considered *clean* or *healthy* food still reported multiple nutrient deficiencies. To prevent this, make sure you're either rotating your fruit and vegetable sources or regularly consuming a large variety of different fruits and vegetables.

Food Sources Typically Abundant in the Following Minerals:

Vegetables	Fruits	Grains	Protein	Dairy
Potassium	Potassium	Sodium	Sodium	Potassium
Calcium	Calcium (fortified juice)	Phosphorus	Phosphorus	Calcium
Magnesium	Manganese	Magnesium	Magnesium	Phosphorus
Chromium	Boron	Iron	Iron	
Manganese		Zinc	Copper	
		Selenium	Zinc	
		Chromium	Selenium	
		Manganese		

Food Sources Typically Abundant in the Following Vitamins:

Vegetables	Fruit	Grains	Protein	Dairy
Folate	Folate	Folic acid	Niacin	Riboflavin
Vitamin A	Vitamin C	Niacin	Thiamin	Vitamin A
Vitamin C	Vitamin A	Vitamin B_6	Vitamin B_6	Vitamin B_{12}
Vitamin E		Vitamin B_{12} (if fortified)	Vitamin B_{12}	Vitamin D
Vitamin K		Riboflavin		
		Thiamin		

Food Sources Typically Abundant in the Following Phytonutrients:

The Phytochemical Color Guide

The National Cancer Institute recommends eating a variety of colorful fruits and vegetables daily to provide your body with valuable vitamins, minerals, fiber, and disease-fighting phytochemicals. Whole grains also have phytochemicals and have been added to this list.

Color	Phytochemical	Found In
Red	Anthocyanins	Apples, beets, cabbage, cherries, cranberries, red cabbage, red onion, red beans, peppers
	Lycopene	Tomatoes, watermelon, pink grapefruit
Yellow/Orange	Beta-carotene	Apricots, butternut squash, cantaloupe, carrots, mangoes, peaches, pumpkin, sweet potatoes
	Flavonoids	Apricots, clementines, grapefruits, lemons, papaya, pears, pineapple, yellow raisins
White	Alliums/allicin	Chives, garlic, leeks, onions, scallions
Green	Lutein, zeaxanthin	Broccoli, collard greens, honeydew melon, kale, kiwi, lettuce, mustard greens, peas, spinach
	Indoles	Arugula, broccoli, bok choy, brussels sprouts, cabbage, cauliflower, kale, Swiss chard, turnips
Blue/Purple	Anthocyanins	Blackberries, black currants, elderberries, purple grapes
	Phenolics	Eggplant, plums, prunes, raisins
Brown	Beta-glucan, lignans, phenols, plant sterols, phytoestrogens, saponins, tocotrienols	Barley, brown rice, oats, oatmeal, whole grains, whole-grain cereals

It's important to realize that your current goal and calorie intake directly impacts your ability to consume an adequate amount of micronutrients. While in a calorie deficit, consuming less food on a daily basis and having a smaller carbohydrate allowance, it's very important to ensure you're prioritizing your micronutrients. Consuming an adequate amount of fruits and vegetables will reduce the risk of you becoming deficient in a particular micronutrient. This will also likely improve satiety and reduce hunger as fruits and vegetables are typically good sources of fiber.

We recommend you aim for at least 2 servings of fruit per day and 2-3 servings of vegetables on a daily basis. This can significantly vary based on your calorie and carbohydrate allowance. If you don't typically enjoy eating vegetables, experiment with different sources, different ways to cook the veggies and don't hesitate to add some spice. Fruit, on the other hand is essentially *nature's candy* and typically enjoyed. Allowing flexibility in your diet is key to adherence and long term success, but it's equally as important to prioritize

nutrient dense foods to optimize your overall health.

Lastly, besides doing your best through dietary means to consume an adequate amount of micronutrients, supplementation can be very beneficial. Supplementing with a high-quality multivitamin/mineral can be a great way to fill in some of the gaps of your diet. For those of you that may restrict a certain food group for personal/ethical reasons (i.e. vegans) this becomes even more important as your risk for various nutrient deficiencies increase. You can supplement with specific vitamins and minerals you are aware that you're lacking in your diet, or utilize a multivitamin.

MEAL FREQUENCY: HOW MANY TIMES PER DAY SHOULD YOU EAT?

The topic of meal frequency has been very controversial over the last decade. However, when you look at the scientific literature, we can answer some of the most common questions and make some recommendations based on your goal. The number of meals you eat per day is much less important to your success compared to the foundational components we discussed earlier in this book; energy balance (caloric surplus vs caloric deficit), and macronutrient composition[4,9]. However many meals you consume per day that

enables you to reach your calorie and macronutrient goals in the most sustainable fashion will be best for your long-term success.

Does eating more meals per day speed up your metabolism?
The scientific data clearly demonstrates that the number of meals you eat per day does not significantly impact your metabolism.[10] Multiple studies have been performed comparing meal frequency, and time and again it was shown that the subjects resting metabolic rates were not significantly impacted by manipulating this variable.[10]

Is it better to eat 6 *small* meals per day instead of 3? (more frequent small meals vs less frequent, large meals)
First things first, it's important to note that terms such as *small* and *large* are relative. For example, you may have somebody in a calorie surplus, aiming to consume 3000 or more calories per day, compared to somebody in a calorie deficit consuming 1800 calories per day.

In the scientific literature, there is some contradicting evidence in this area. Some studies have shown no difference in body composition when comparing meal frequency and others have demonstrated potential benefits of consuming more meals per day. One study in particular, saw more lean body mass gains and greater fat loss in a group consuming 6 meals per day compared to the group consuming 3 meals per day and macronutrient ratios were equated between the groups.[11]

So let's cut to the chase... what do we recommend?

In regards to meal frequency, we recommend you consume anywhere between 3-6 meals per day if your goal is to optimize your

body composition. You can still make great progress consuming fewer than 3 meals or greater than 6 meals, if that is something you can adhere to and prefer, but there can be some negatives with that as well.

If you want to structure your diet based on what is *optimal,* I would suggest you consider evenly distributing your protein intake with the intent to maximize your protein synthetic response (anabolic, muscle building) with each meal. This tends to be even more important for females and those with a *lower* daily protein goal. If you consume too many, *small* meals, you may not be maximizing the anabolic potential of each meal.

Here are mock examples in which this commonly occurs and how you can improve meal frequency.

Subject A) Mary Jane, 140lbs female aiming for 120g protein daily. She is evenly distributing protein across 6 meals. Therefore, she is consuming 20 grams of protein per meal.

In this scenario, Mary is likely *not* maximizing the anabolic, muscle protein synthetic response of each meal and may be better off consuming 4 meals per day at 30 grams of protein per meal.

Subject B) John Smith, 160lbs male consuming 210 grams of protein daily. He is evenly distributing is protein across 3 meals per day. Therefore, he is consuming 70 grams of protein per meal.

In this scenario, John would likely be better off consuming more meals per day, and stimulating an anabolic, protein synthetic

response more frequently throughout the day. For example, rather than consuming 3 meals at 70 grams of protein per meal, he'd be better off consuming 5 meals per day at 42 grams per meal.

There is evidence in the scientific literature that demonstrates a maximum threshold for the protein synthetic response per meal. It is understood that leucine is the key amino acid for stimulating muscle protein synthesis (MPS), and all the other essential amino acids are key to keep MPS elevated. It has been shown that ~0.045g/kg of leucine maximizes the protein synthetic response of a meal.[12] So for example, Mary Jane, our 140lbs female, would maximize MPS with 2.86 grams of leucine in a meal. Therefore, whether Mary consumes 30g of protein in one meal or 50g of protein in one meal, the anabolic response of the meal would essentially be the same assuming she reached that maximum leucine threshold. However, if Mary consumed smaller meals, more frequently with less protein (i.e. 20g protein per meal) she would likely be falling short of maximizing the anabolic potential of each meal.

Many people struggle to understand what muscle protein synthesis is and why it's important. A good way to think of muscle protein synthesis, the anabolic response to each meal, is through this analogy comparing it to a light switch with a dimmer. When you don't have any amino acids in your blood stream (i.e. have been fasting, and haven't consumed a meal), muscle protein synthesis is turned *off*, so picture the lights being *off* in a room. Now, picture each meal having the potential to *turn on the lights* depending on the composition of the nutrients within the meal.

Let's say you consume a meal or a small snack with 12g of protein

(i.e. Greek yogurt on the go), this meal would stimulate MPS, and turn on the lights, but to a very small degree. So the lights are turned on, but it's still not a well-lit room. This is due to multiple factors. First, the total amount of protein is inadequate, Greek yogurt is primarily casein protein and doesn't have a ton of leucine.

Now let's picture you consume a meal with 22g of protein (i.e. 1 scoop of protein), this is going to turn on the lights to a much greater extent and the room is going to be brighter. For some individuals (smaller individuals with less body mass), this one scoop alone may turn the lights on as bright as possible, fully maximizing the anabolic potential/MPS response. This is because this is a larger amount of total protein, and whey protein is very high in leucine.

Lastly, let's picture you consume 45g of whey protein or 100g of whey protein in one sitting. Both meals are going to turn on the lights as bright as possible. The 100g meal isn't going to make the lights any brighter. It's physically impossible as there as a maximum limit as to how bright the lights can be turned on. Muscle protein synthesis works in a similar fashion. There is a limit to how anabolic one meal can possibly be.

For those reasons, it is likely *optimal* that you consume as many meals per day that optimizes MPS per meal when considering your total body mass and daily protein goal.

There are some negatives with consuming too many or too few meals. If you consume too many meals (more than 6), you're likely going to never be satiated and despite eating so frequently, you'll constantly feel hungry. Also, from a psychological standpoint, if you

eat so many times per day, you're going to be very food focused, thinking about when your next meal is and this can negatively impact productivity. On the opposite end of the spectrum, if you're eating 1-2 meals per day, you're consuming a lot of food in one sitting, putting a lot of stress on your digestive system at once. Besides some of the obvious negatives that come with eating very large meals (i.e. stomach discomfort, bloating, crash of energy) you may also inhibit your body's ability to effectively digest and absorb the nutrients from your food.

For most of us, 3-6 meals per day is going to be our sweet spot.

TIPS TO STAY SATIATED:

Staying satiated and suppressing your appetite can be a very important variable to whether or not you're successful when in a calorie deficit. If you can optimize your energy levels and minimize your hunger, you're putting yourself in a great position to reach your goals and not overeat. There are many variables at play when it comes to staying satiated so I'm going to provide you with many tips to help you succeed.

One of the most significant variables in regards to hunger goes back to our macronutrient composition of our diet. Protein is the most satiating macronutrient, followed by fats and then carbs. As previously mentioned, protein is also the most thermogenic macronutrient and another reason why high protein diets are very effective.

Although carbohydrates are the least satiating macronutrient, there are more pieces to the puzzle that effect hunger when it comes to

carbohydrates. Something that isn't often mentioned is the glycemic index of the carbohydrates you're consuming. The glycemic index refers to how a food source effects your blood sugar levels. Foods that are *low* on the glycemic index, do not significantly impact blood sugar levels/insulin, and foods that are *high* on the glycemic index do spike your blood sugar levels/insulin. This causes a hormonal cascade and can greatly impact hunger levels. Low glycemic carbohydrates are much more satiating, whereas high glycemic carbohydrates typically cause greater sensations of hunger after the meal.

Consuming an adequate amount of fiber is going to be another crucial component to making sure you stay satiated. Fiber slows down the digestive process, lowers the glycemic response of a meal and does a great job of keeping you full. If you're not consuming adequate fiber on a daily basis, increase your veggies and/or fruit intake and experiment with adding in legumes into your diet. Legumes are a very effective way to increase your fiber intake while also providing an adequate amount of protein.

Eating foods that are very high in volume (often containing a lot of water/fiber) is a great way to keep you full. For example, you could compare 40 grams of bread to 250 grams of broccoli. Both will provide you with ~20 grams of carbohydrate, but you're getting more than 6x the volume with the broccoli. As your total calorie goal gets lower and lower over time, smart food choices like this will greatly impact your satiety.

Staying satiated isn't just about not feeling hungry. It greatly impacts our mood, our energy levels and our ability to adhere to

our nutritional plan. As we've noted multiple times throughout this e-book, consistency over a long period of time is what's going to enable you to reach your goals.

Lastly, consuming enough water on a daily basis can greatly impact our satiety. Often times, people mistake their biofeedback signals and the most common one being thirst. If you aren't adequately hydrated, not only may you experience thirst, you will also feel more hunger. Staying adequately hydrated is going to be different for each individual based on many factors, such as their body weight and their activity level. The best way to ensure you're adequately hydrated is that your monitoring your urine output. The two main variables to pay attention to is frequency, and color. You want to make sure you're using the restroom multiple times per day, especially before and after exercise, and that your urine is clear and not yellow or dark yellow.

TIPS TO REACH CALORIC BULKING GOAL:

Believe it or not, there are individuals on the other side of the spectrum who seem to lose weight with ease and have a very hard time gaining weight. These people are often labeled as "hard gainers" and believe it or not, I once identified myself as a hard gainer. The truth of the matter is *weight gain* is fairly simple, just consume more calories on a daily basis than we burn. Although I may not have the greatest genetics for building muscle, my lack of weight gain earlier on in my lifting career was due to an inadequate amount of calories.

Some of us don't have that much of an appetite and aren't naturally food focused by any means. However, these natural tendencies may be inhibiting us from reaching our goals. It is very important for us

to find ways to increase our calorie intake without getting resistance and negative biofeedback. Some of these tips are going to the opposite of what was suggested above for ways to stay satiated.

If your goal is weight gain and you're having a hard time doing so, you may want to slightly reduce your fat intake and increase your carbohydrates as they are the least satiating macronutrient. Moreover, you should aim to consume foods lower in fiber that are much more calorie dense.

Also, if you consume foods higher on the glycemic index scale, this is going to lead to a hormonal cascade that will increase your hunger and increase your chances of eating more food. Eating foods that you can digest very well in large quantities and that don't cause any stomach distress is very beneficial. I personally recommend a lot of white rice and rice derivatives (i.e. crisp rice cereal, cream of rice). I can typically consume hundreds of grams of carbohydrates from this source without any negative feedback.

Other ways to increase your calories is by consuming intraworkout carbohydrates. If you were previously just staying hydrated and consuming water when you exercised, consider adding in some liquid carbohydrates, such as dextrose (Gatorade) when training. You can easily consume 20-40g carbs intraworkout which will quickly add 80-160kcals to your diet respectively.

Also, you can add fats to many of your meals by simply adding oils (i.e. olive oil, coconut oil, red palm oil, etc), butter (preferably grass-fed – i.e. Kerrygold), and/or nuts. These pure fat sources are extremely calorie dense and will help ensure you're in a calorie

surplus.

Last, but not least, feel free to eat more *dirty* foods. Whether it is processed snacks, ice cream, burgers and fries, etc, hitting your calorie goal and eating in a surplus is the only way you're going to pack on the weight! Eat up!

NUTRIENT TIMING: PERIWORKOUT - PRE, INTRA, POST

At this stage of the e-book, you have a good understanding of how your macronutrient composition of your diet can affect your body composition and understand how you can manipulate your diet based on your goals. To take things to the next level, not only may you want to consume the right amount of each nutrient, you may want to properly time those nutrients around your workouts in order to enhance your performance and maximize your recovery! The foods we consume before, during and after exercise can play a role in how

we perform and how we recover. If we can optimize these variables, we will ultimately be one step closer to reaching our potential and leaving no stone unturned.

Your periworkout nutrition is going to be dependent on multiple factors. The type of exercise you're performing, the duration of your exercise, your experience level and your goals can impact how you approach your periworkout nutrition.

To keep things simple, I'm going to list the major goals of each section, and then explain how you can actually manipulate your diet to address these goals.

PREWORKOUT GOALS:

- Provide energy substrate to fuel the workout
- Sustained energy throughout the whole duration of the workout
- Stimulate MPS and minimize muscle protein breakdown(MPB) during the session (positive nitrogen balance)
- Effective digestion and nutrient absorption (minimize GI distress)
- Adequate hydration + electrolyte consumption

INTRAWORKOUT GOALS:

- Sustain energy throughout training
- Spare glycogen to prolong fatigue
- Minimize Negative Nitrogen Balance (Muscle Protein Breakdown vs Muscle Protein Synthesis)
- Enhance overall training performance
- Remain well hydrated + electrolyte replenishment

POSTWORKOUT GOALS:

- Maximize MPS
- Replenish Glycogen Stores
- Rehydrate + electrolyte replenishment

PRE-WORKOUT:

Your preworkout nutrition can absolutely vary depending on what type of training you are doing. If you're weight training and performing high-intensity, low repetition (5 or less reps) strength work, your preworkout nutrition is going to be less dependent on carbohydrate consumption.
This is because high-intensity, short duration exercise is going to heavily rely on the Phosphocreatine energy system and not too much on glucose. However, if you're performing higher repetition work, you're going to start relying more so on glucose and tapping into your glycogen stores if you're not well fueled before your session.

For your preworkout meal, I recommend you aim to consume low glycemic carbohydrates and a combination of food sources that will provide you with both glucose and fructose as they are digested.[13,14] The low glycemic carbs are going to keep blood sugar levels much more stable throughout your training session and prevent you from going "hypoglycemic" which would cause you to crash while training.[15]

Moreover, consuming a combination of food sources that provide you with both glucose and fructose make the digestive process much more efficient. This is because glucose and fructose have different transporters allowing you to consume a greater amount of total carbohydrate while still effectively transporting them into your target

cells (i.e. muscle). Starchy carbohydrates are going to primarily break down into glucose, and fruit sources are going to contain a significant amount of fructose. For example, SGTL1 (sodium-glucose transporter 1) is a transport protein that carries glucose into a cell, and GLUT5 is a transport protein that only transport fructose to cells.[13,14] By consuming multiple carb sources in one meal, you essentially *open up* more *doors* to transport your carbohydrates.

An analogy I use to describe this mechanism is the following. Imagine you have 70 students in one classroom trying to exit the room at once all through one doorway. Those 70 students are representative of 70 grams of carbs. Now imagine you have the same 70 students, and exactly 35 of them are males and 35 are females, and a second doorway appears that only females can exit from. You now have 35 males exiting through doorway 1, and 35 females exiting through doorway 2. This is going to make the process of leaving the classroom much more efficient. The same concept applies with multiple transportable carbohydrates. Picture 35 grams worth of those carbs are going to break down into glucose and 35 grams get broken down into fructose. By having different transport mechanisms, gastric clearance is enhanced and we can efficiently and effectively deal with this bolus of food.

It is also important to consume a significant amount of protein in your preworkout meal to maximize MPS. When you're exercising, specifically resistance training, you are breaking down muscle proteins so consuming an adequate amount of protein in your preworkout meal is going to ensure you still have amino acids in your bloodstream while your exercise to reduce the likelihood of a negative nitrogen balance due to the training. Resistance training

in itself is actually a *catabolic* process that stimulates an *anabolic* response. As previously mentioned, consuming ~0.045g/kg leucine will maximize the MPS response of a meal.

Although carbs and protein are typically the focal point of preworkout nutrition, fat can also play a role. Depending on how long before your exercise session you're eating, you may want to alter your fat intake. The further away your training session is from your meal, the more fat you can consume because this will slow down the digestive process therefore causing glucose and amino acids to slowly enter the bloodstream. If you're consuming your meal relatively close to your workout, you're going to want to reduce your fat intake. One fat source that can be utilized immediately for energy and enters the bloodstream and bypasses digestion is Medium Chain Triglycerides. So adding in some coconut oil, or MCT oil to your preworkout meal can be beneficial.

In general, you're going to want your high(er) carbohydrate meals to be low(er) in fat, and your high(er) fat meals to be low(er) in carbohydrates. Make sure you select food sources that you digest very well and don't cause any stomach discomfort. If you have any food allergies or sensitivities, you should be more cognitive of avoiding them for your prewokrout meal.

For resistance training workouts, consuming ~1g carbs/kg of body weight is a good amount to experiment with. Your macronutrient goals for the day are going to heavily dictate how many carbs you will be able to *fit* into your preworkout meal. Experiment with different amounts, different carb sources and different timing to see what you feel best with.

Some of my favorite preworkout meal examples are as follows:

- Old Fashion Oats, Mixed Fruit, Whey Protein, Cinnamon, Himalayan Pink Salt or Sea Salt,
- Brown Rice & Lentils, Fibrous Veggies, Protein Source (i.e. salmon, chicken), guacamole, & a fruit. Himalayan Pink Salt or Sea Salt,
- Sweet Potato, Butter, Fibrous Veggies, Protein Source, & a fruit, Cinnamon, Himalayan Pink Salt or Sea Salt,
- Cream of Rice, Almond Butter, Mixed Fruit, Whey Protein, Cinnamon, Himalayan Pink Salt or Sea Salt,

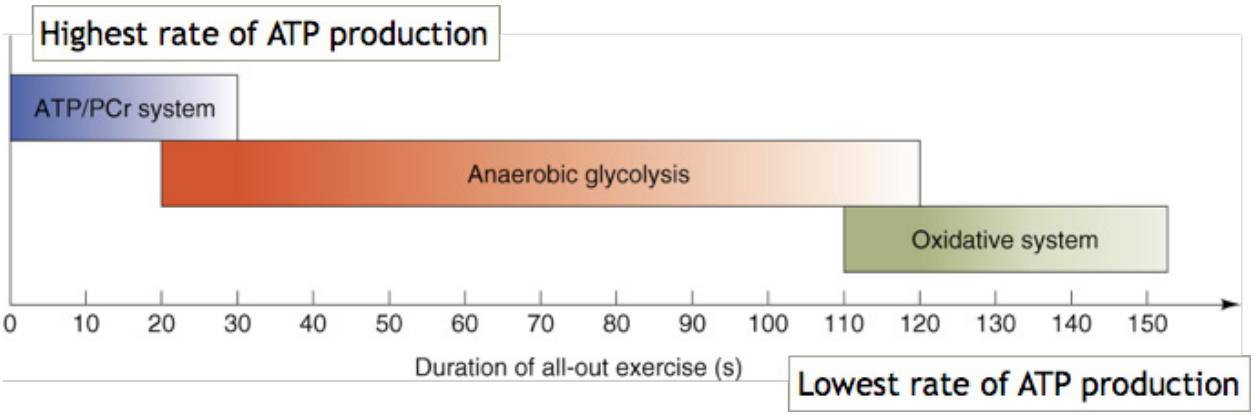
Note: There are endless variations of foods that you can combined for your prewokrout meal. Experiment with different food sources and pay attention to how you feel and how you perform in the gym.

INTRAWORKOUT:

The type of exercise you're performing, as well as the duration of your training session will impact how you can optimize your intraworkout nutrition. Other factors that can impact the importance of your intraworkout nutrition are how long prior to exercise did you eat and what your preworkout meal consisted of. Figuring out what is going to work best in regards to your intraworkout nutrition is going to be highly individual and require some experimenting.

Intraworkout nutrition can improve your performance and reduce your fatigue.[16] The longer and more intense your training sessions are, the more you can benefit from intraworkout nutrition. If your training sessions are 45 minutes or less and you're performing lower repetition work, you're not going to require nor benefit from intraworkout nutrition. It's important to understand what energy

systems your exercise session is going to tap into and to what extent.



As we mentioned earlier, the Phosphagen system is going to be the primary energy system used during heavy, high-intensity lifting you perform in a low repetition range (i.e. 1-5 repetitions). For example, a power-lifter training in the low repetition ranges isn't going to benefit much from consuming carbohydrates while training. However, if you're performing moderate to higher repetitions and the duration of each set is longer, you begin utilizing more of the glycolytic system. In this case, you can benefit from consuming carbohydrates during your training session.

When utilizing intraworkout carbohydrates, you want to make sure it's not going to cause any gastrointestinal comfort. Utilizing a liquid carbohydrate source is typically a better option compared to whole foods as the gastric clearance rates will be better. Different carbohydrates oxidize at different rates (another component to why multiple transportable carbs are beneficial for our preworkout meal)
Oxidation rates:
Glucose, sucrose, maltose, maltodextrin ~1g/min
Galactose and fructose ~0.5g/min

A very cost effective carbohydrate is dextrose. This is the main ingredient in Gatorade and Powerade and can be very beneficial

during exercise. These products also include electrolytes which minimize the risk of dehydration and are crucial for performance.

Utilizing anywhere from 10-40g of intraworkout carbohydrates while resistance training can improve your performance and reduce fatigue throughout the training session. The amount of carbohydrate you should consume will also vary based on the muscle(s) you're training that day. If you're doing smaller muscles like shoulder & arms, you won't need as much fuel coming in compared to doing a large muscle group like legs, or a full upper body session. So depending on your total carbohydrate intake for the day, and what you're training, the amount of carbs you may need will vary.

Another carbohydrate source that is a great option during your training is highly branched cyclic dextrin (HBCD). This carbohydrate source has a greater molecular weight compared to dextrose. This means that each molecule is essentially *heavier,* and this improves the gastric clearance rate. Rather than floating around in your gut, it basically *sinks,* to the bottom and enters the bloodstream at a faster rate. This is a much more expensive carbohydrate, but a good option for those with sensitive stomachs.

Lastly, supplementing with branch chain amino acids (BCAA) and/or essential amino acids (EAA) can be a useful tool to ensure you're staying in a positive nitrogen balance. Because resistance training is *catabolic* in nature and you're actually breaking down muscle proteins (amino acids), having a source of amino acids coming in while training is a good way to *minimize* the catabolic processes. Consuming anywhere from 3-6g of BCAA and/or 5-15g of EAA would be appropriate during your session. This is going to depend on when

your previous meal was (how long before the training session) and what you consumed. For example, if you consumed a slow digesting protein (i.e. casein) you will have amino acids in your blood stream for a longer period of time so you may not need as much amino acids intra workout. However, if you consumed a faster digesting protein (i.e. whey), you may benefit from having amino acids delivered while you're training.

Experiment with different amounts of carbs and potentially even amino acids and see what works best for you. Most importantly, make sure you stay hydrated throughout your training session as this is crucial to maximize your performance.

POST-WORKOUT:

Starting your recovery process and creating an anabolic environment through your nutritional approach can be very beneficial over the long haul. Essentially, you can shift the internal environment after exercise from catabolic to anabolic with your nutrition. The main goals after training should be to maximize muscle protein synthesis, replenish glycogen stores, rehydrate/replenish electrolytes and minimize fat storage. This is going to require you to consume particular amounts of certain macronutrients, potentially utilize specific food sources, and time your nutrition in a specific way.

Let's start off with the most important aspect to post-workout nutrition, maximizing muscle protein synthesis.

In order to maximize MPS, you're going to have to consume an adequate amount of protein, that is abundant in the amino acid leucine. Leucine is the key amino acid in stimulating MPS and it has

been shown that consuming ~0.045g/kg of leucine will maximize this anabolic process. For most people 2.5-3.5g of leucine is going to be a great amount to consume post exercise. It's important to understand that how much protein *you* need is going to vary based upon the amount of muscle mass you have. There is a significant difference between how much protein a 120lbs female will need compared to a 180lbs male.

How much of each food would you need to consume in order to obtain 2.5g LEU?

How much total protein should you consume? Is more protein better?

There are a lot of misconceptions when it comes to protein intake. A common myth that has been out for decades now is that your body can only *absorb* 30 grams of protein in one sitting. This is completely

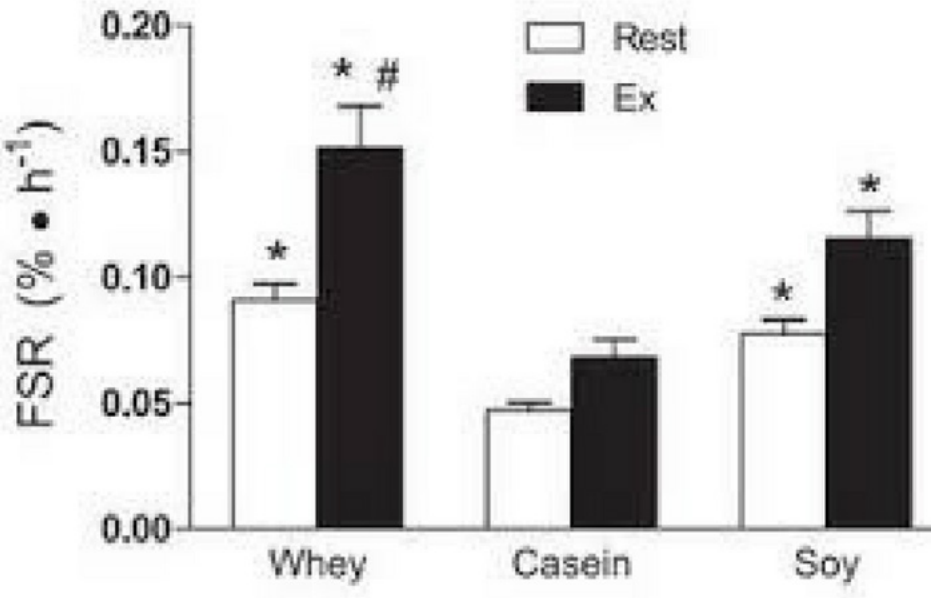
false and your body will digest and absorb large quantities of protein at once. However, there is a threshold in which *more* is no longer *better.*

For many years, evidence-based trainees and coaches believed that 25g of whey protein would maximize the protein synthetic response post-workout. This was because that's what the data at the time was reporting. However, those initial studies had some flaws within their design, by only training one muscle group or even one limb at a time. There wasn't much ecological validity with those initial studies.

Recently, data has suggested that 40g of protein is superior to 20g of protein post workout.[17] This study utilized a full body training regimen and suggest that more protein can be beneficial when training larger or multiple muscle groups in one training session. Although whey protein isn't necessary, it does have an incredible amino acid profile, bioavailability and digestion rate. These reasons are why whey protein has become extremely popular for post exercise.

Multiple studies have demonstrated that whey is superior to other protein sources. Generally speaking, ingesting 25-40g of whey protein (depending on your lean body mass) is going to be an effective way to maximize MPS. This will effectively initiate the recovery process.

DIFFERENCES IN MUSCLE PROTEIN SYNTHESIS AT REST & POST EXERCISE



Replenishing muscle glycogen is another common goal for post-workout nutrition. This component becomes more important the sooner your next training session will be. If your next training session is 24-hours later or more, this component is no longer as important, as long as you consume enough carbohydrate before your next training session.[19-21] However, your ability to replenish glycogen is enhanced post exercise. This is due to increased activity of glycogen synthase and heightened insulin sensitivity via GLUT-4 translocation.[22]

Utilizing high glycemic carbohydrates are a great way to maximize glycogen resynthesis post exercise.[23] You can also utilize multiple transportable carbs in this scenario to improve the replenishment efficiency and total amount of carbohydrates you can consume at once.[24] Data suggest ~1.5g carbohydrate/kg of body weight

will maximize the resynthesis rate.[25] Moreover, consuming 0.5g protein/kg of body weight has been shown to enhance glycogen replenishment.[25]

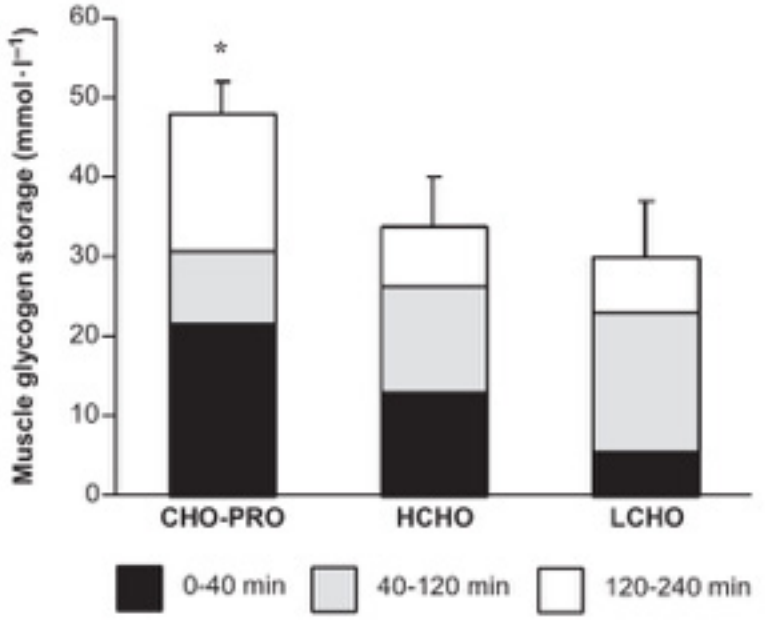


Fig. 3. Muscle glycogen storage following co-ingestion of carbohydrate and protein. Muscle glycogen storage at 0–40, 40–120 and 120–240 min of recovery from an exhaustive cycling exercise. Treatments were carbohydrate–protein (CHO-PRO), isocaloric carbohydrate (HCHO) and isocarbohydrate (LCHO) supplements provided immediately after exercise and after 2 h of exercise. *Significantly different than HCHO and LCHO (Ivy *et al.*, 2002).

So to provide you with a practical example supported by the scientific literature below is an example of an optimal post-workout meal.

A) John Smith, 160lbs male

160lbs/2.2 = 72.72kg
Carb Goal = 73 x 1.5 = 109 grams
Protein Goal = 73 x 0.5 = 36.5 grams

Note: John's carbohydrate intake in his postworkout meal does not have to be this high, especially if his total carbohydrate goal for the

day isn't too high. However, if John's goal was to maximize glycogen resythensis, this would be *optimal*.

MEAL EXAMPLE:

- 100g Cream of Rice (High GI Starchy Carb Source)
- 100g Banana (glucose/fructose – multiple transportable carbohydrates)
- 40g Whey Protein (High Biological Value – High Leucine Content)
- Himalayan Pink Salt (Electrolyte Replenishment)
- Adequate Water (Rehydrate and effectively transport Carbs and Protein)

Note: There are endless variations of meals that can effectively fulfill all of your post-workout nutrition goals.

As you can see from the meal above, there is no fat source added to this meal and it is very low in fat. This is intentional as consuming fat would slow down the digestion and absorption of the carbohydrates and protein in this meal. Moreover, utilizing high GI food sources is going to significantly spike insulin levels. Insulin is a crucial hormone that helps deliver nutrients (i.e. glucose and amino acids) to your muscle cell but it also is responsible for storing fat through a process called lipogenesis. By keeping fats low in your post-workout meal, you will limit the amount of fatty acids in the blood stream and reduce the likelihood of lipogenesis occurring.

Wrapping it up:
We've covered multiple topics thus far in the e-book, starting with our broad, foundational concepts and have funneled into more details along the way. Often times, people stress the smaller variables

but they don't even have the basics down. You must build a strong foundation first; understand, implement, and adhere to your plan to the best of your ability. Your consistency is going be most important.

ALCOHOL: HOW TO ACCOUNT FOR THE 4TH MACRONUTRIENT

While alcohol consumption isn't necessary nor is it optimal to include in your diet, it is a part of life for many people, especially during celebrations and social gatherings. You do not have to completely abstain from alcohol consumption in moderation to achieve your fitness goals. As a competitive natural bodybuilder, I choose not to consume alcohol during contest preps, however, in the offseason and even during a mini cut, I have found a balance to consume moderate amounts of alcohol without significantly impacting my performance

in the gym and my body composition.

Alcohol has 7.2 calories per gram which makes it the 2nd most calorie dense nutrient. It also has one of the greatest thermic effects at 20% which makes its effective caloric value 5.7 calories per gram. Unfortunately, alcoholic beverages don't include the number of grams of alcohol on the label, if there even is a label. For example, if you look at a label of Michelob Ultra, it's only 2.6 grams of carbs per bottle with zero fat and zero protein, yet it's 95 calories. The remaining ~70 calories are from alcohol.

Michelob Ultra Light Beer

Nutrition Facts

Serving Size: **(1 Bottle Serving)**
Servings Per Container: **N/A**

Amount Per Serving		
Calories 95	Calories from Fat **0g**	
		% Daily Value*
Total Fat	**0g**	**0%**
Saturated Fat	**0g**	**0%**
Trans Fat	**0g**	
Cholesterol	**0mg**	**0%**
Sodium	**0mg**	**0%**
Total Carbohydrate	**2.6g**	**1%**
Dietary Fiber	**0g**	**0%**
Sugars	**0g**	
Protein	**0.6g**	

If you're going out for a night or even staying in but plan to indulge in a few alcoholic beverages there are a few ways to account for this and make them fit into your calorie goal for the day. The most

accurate way and best approach if you're cutting (aside from just abstaining) is to save a number of carbs and/or fat equal to the total number of calories you'll be consuming in alcohol. Plan ahead and be disciplined. Make sure to hit your total protein intake for the day. Again, we're not tracking alcohol per grams so you'll take the total number of calories and divide by 4 or 9 and subtract it from your remaining carb or fat intake respectively.

Two Michelob Ultra Lights are approximately a total of 200 calories so I would track them as 50 grams of carbs or 22 grams of fat. The other option would be to split them up as 25 grams of carbs and 11 grams of fat.

Another method to handle alcohol consumption is to hit your protein goal, save a few hundred calories by eating light during the day and not even worry about tracking the drinks if this is going to be a one time event and not a weekly night out.

Drinks and cocktails that are less detrimental to your calorie goals: Choosing beverages that are lower in calories will make it much easier to stay within your calorie/macro goal for the day, especially on a cut.

I recommend choosing light beers like the Michelob Ultra Light mentioned above. Any cocktails made with sugar free mixers like soda water, water, ice, diet coke, diet sprite, etc will save you hundreds of calories. My go to drink is club soda and vodka with a lime or just a splash of pineapple juice. Two of these are just ~150 calories and since it's generally a night out, I'm usually burning

significantly more calories than sitting at home and watching Netflix, it will have a minimal effect on body composition. I make sure to rehydrate properly as alcohol, specifically liquor, will dehydrate you. If you drink in moderation and don't consume more than you can handle then you should be able to train the following day with no ill effects.

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MAX-HYPE

MACROS AND NUTRITION GUIDEBOOK AND CALCULATOR

CHRISTOPHER BARAKAT / CHRIS ELKINS