



The Lyon Protocol

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Introduction

CONGRATULATIONS,

You have begun your journey to right your potential metabolic wrongs, correct your body composition, take care of your inflammation, and regain control of your blood sugar. The Lyon Protocol is a core nutrition reset and the principles will last you for life.

As you follow this guide, you'll learn how to:

1. Figure out and implement an appropriate macronutrient balance into your diet. "Macronutrients" is just a five-syllable way of saying "protein, carbohydrates, and fats" which make up the energy content of your food. You commonly call this energy "calories."
2. Determine high quality protein sources and how to include them in your diet.
3. Figure out your proper balance of food intake. You are not the same person you were a decade ago, and you are not the person you will be a decade from now – your nutrition should reflect your continuously changing metabolic needs.
4. Adapt my evidence-based guidelines to your personal needs and goals.

The ultimate goal is to get you feeling the best as you possibly can.



The Lyon's Main

1. **Protein** is essential for virtually every one of your cellular functions. Most people, when they think of protein, think of building muscles. I'll talk about that, but there's much more to protein than merely muscle. You need protein for the structure, metabolic function, and regulation of all tissues and organs, including muscle. Every cell in your body is full of enzymes, which are proteins that control your metabolism. Protein is also important for neurotransmitters which are responsible for mood and even your sleep. Your bones, your ligaments, your tendons, your liver, your brain, skin, and fingernails are all built from proteins.

To truly understand protein, we must first understand that proteins are built from amino acids and these amino acids are the foundation of how we will build your diet. By getting your protein intake correct, you will get your amino acid requirements correct. There are 20 of these amino acids and some sources of protein you eat have more of these amino acids with a better balance of the individual amino acids than others.



2. **Muscle** is the organ of longevity. It functions beyond locomotion. Muscle is the foundation of your metabolism, helping to regulate blood sugar and blood lipids. It's also an endocrine organ that secretes myokines, proteins that help regulate metabolism in all other tissues in the body. The stronger and healthier your muscles, the more carbohydrates and fat your body burns. It is your metabolic currency.
3. Learn to **design each meal around a targeted amount of high quality protein**. I recommend three meals each day for most adults with a minimum of 30 grams of high quality protein to optimize muscle protein synthesis. But this recommendation is also goal dependent. If you're trying to gain muscle, you can increase your intake to four, five, or even six times a day depending on total daily protein goal. It's more effective to increase your meal number than to eat more and more protein at a single meal. For example, if your protein target is 200 grams a day, and you already have three meals containing 40 grams of protein each, you should add an extra meal. There will be more on that later.



The Importance of Protein

Earlier, I spoke of macronutrients; that is, the protein, carbohydrates, and fats within foods that give us energy in the form of calories. I also mentioned that amino acids are the building blocks of protein.

There are two types of amino acids:

1. First, there are essential amino acids. These come directly from our diet and we need a daily supply; and for some amino acids, a supply at each meal.
2. Then, we have nonessential amino acids. Our body produces these all on its own.



Since every individual has a different overall diet, all the similarities notwithstanding, there are two possible occurrences. The first is you are not getting enough protein. The other is you have no idea how much protein you're actually getting in a day. For someone who isn't as conscious of their diet in the way an athlete is, I usually find most people are a combination of the two. They aren't getting enough, and they have no idea how much they aren't getting until they make an attempt to quantify it by tracking their intake.

On top of that, there are nebulous recommendations out there for protein intake. The current RDA (Recommended Dietary Allowance) for protein is set at 0.8 grams per kilogram of body mass (or about 0.36 grams per pound), which equates to only 72 grams of protein per day for a person weighing 200 lbs. (1)

YOUR WEIGHT (kg) × 0.8 = RDA (IN GRAMS) FOR PROTEIN

Depending on your background and experience, this might sound absurdly low, relatively high, or you might feel neutral about it one way or the other. Nevertheless, the RDA exists for a reason, and that reason is to keep you alive. The RDA is defined as the bare minimum to simply exist. That is, the RDA is designed to prevent deficiencies and provide for basic tissue repair and not much more. It doesn't take into account active lifestyles or people who want to protect muscle and longevity as we age. And I absolutely want you to optimize your current way of life, just as much as you do. In that regard, more protein will likely be more beneficial for you. It's time to find out why.



Muscle: The Driver of Your Longevity

If your muscles are strong, you live better. Not only can you help friends move heavy things to their homes when they ask, but having increased muscle, compared to fat, has profound implications for your metabolic function. Muscle is the metabolic sink of the body. It determines almost everything about your body composition and overall health, how you regulate your blood sugar, your ability to manage fats, and your fuel during times of illness. Most health issues confronting adults are not a result of being “overfat” but being under muscled. It’s more than just looking good in a bathing suit. Obesity, diabetes, heart disease and many other chronic health problems begin with inactive muscles and poor metabolism. Muscles also serve as our amino acid reservoir. In times of stress your body can draw on muscles to protect other vital organs like the liver, kidney or brain. There are two ways to stimulate and protect muscle; one is through diet and the other through resistance training.



Protein builds muscle via protein synthesis and resistance exercise accelerates the process. Put simply, when you do resistance training, you stress your muscles, stimulating the processes of breaking down old and weak tissue and rebuilding new and stronger muscles. Resistance exercise plus protein yields repair, and you get stronger with more muscle definition. The more active your muscles, the more likely you’ll have lower blood pressure, better cholesterol, and better blood sugar. Not only that, if you make it a habit, you’ll improve your body composition with less body fat and be less likely to gain it back. Muscle can help you manage your body composition and your body weight over a lifetime. Fad dieting, crash dieting, and yo-yo dieting put people in a precarious situation where they may lose massive amounts of weight in a short amount of time. Yes, participants lose body fat, but guess what else they lose in the process? If you said “muscle tissue” you would be correct. It stands to reason that each time you repeat this cycle, more muscle is lost and it becomes harder and harder to earn back. The result is increasing metabolic dysregulation. I’m going to go out on a limb here and give you the benefit of the doubt. I’m going to assume you already exercise, or if you don’t, plan to start later on today.

“If you are strong, you live better.”



Now that you're committed to your resistance training, it's time to reevaluate the RDA standard for protein intake. The International Protein Board—the global authority on protein intake—recommends a minimum of 1.1 grams per kilogram of body mass for general health with an increase in protein need as you age plus additional protein if you exercise or play sports. (2) And since you either exercise currently, or plan to start later today, we recommend a minimum starting point of 1.4 grams per kilogram of body mass. For general exercise and fitness, healthy weight loss, and healthy aging, the range starts at 1.4 grams per kilogram and tops out at 2.5 grams per kilogram of body mass. To make all of our lives easier and ensure you're meeting your protein needs, let's get started with 1 gram per pound of body weight (that's equal to 2.2 g/kg).

So, if we refer back to our 200 lb individual, he would need approximately 200 grams of protein per day. Now, if you happen to be obese and you decide to set a goal of losing body fat, you would make some adjustments here. Let's say you're a 6'0 tall man and you weigh 300 lbs. Further, let's say you set a weight loss goal over the course of the next year or year and a half to lose 120 lbs. This puts your target weight at 180 lbs. The target weight will be your protein goal. In this case, our 6'0 tall man will aim for 180 g of protein per day. Next, you're going to learn about the three most important amino acids and how important protein quality is in helping you attain them.

Protein Quality & Amino Acids

You are now beginning to understand the vital role that protein plays and that it's function is not limited to building new muscle. For instance, antibodies, used in an immune response, are made of proteins. When a toxin or otherwise foreign substance, known as an antigen, enters your body, your antibodies protect you by fighting them off. In addition, many of your hormones, such as insulin, are made from proteins; and some like thyroid hormones, for example, are made from amino acids and transported by proteins. Thyroid hormones help to regulate your blood glucose and metabolic rate, and can impact growth hormone secretion and bone health. Although all proteins are made of amino acids, not all proteins contain the correct balance of amino acids your body needs. Amino acids are the key to understanding protein needs, and I want to highlight three of them.

LEUCINE

This is an essential amino acid found in high quality protein and is the key amino acid that drives muscle protein synthesis. It's also a modulator of insulin signaling, a fuel for skeletal muscle, and a primary nitrogen donor for production of alanine and glutamine in skeletal muscle. In addition to muscle protein synthesis, Leucine also increases your ability to burn fatty acids. (3) That all sounds well and good, but think about how you age. As we age, our muscles become less efficient at the critical processes of repair and replacement of existing proteins. This aging process is called anabolic resistance. We succumb to what's known as sarcopenia, the gradual loss of our muscle tissue. However, the good news, we can blunt or mitigate this aging process with the right choices of exercise and protein. This means Leucine is even more important as we get older, and it's also why our protein intake, both quantity and quality, should increase with age.



LYSINE

This one, in addition to starting with the letter “L” and having two syllables and sounding kind of similar to Leucine, is another essential amino acid, which means you can only get it via your diet. Lysine plays a large role in synthesizing proteins within your body. Not only that, Lysine is also responsible for the proteins specifically in your connective tissues, tendons, which connect a bone to a muscle, and ligaments, which connect bones to bones at a section called a joint. Your tendons and ligaments are composed of a structural protein called collagen, and Lysine is instrumental in collagen formation. Lysine also forms the backbone of the molecule called carnitine essential to help your muscles burn fats for fuel. Lysine is extremely low in grain products and virtually absent in wheat. Breads and cereals are very poor-quality proteins.

METHIONINE

Finally, we come to an amino acid that has more than two syllables and doesn’t start with the letter “L” but is just as important as its friends. Methionine is responsible for making creatine (that thing you might think is a steroid because weight lifters love it, but it really isn’t a steroid and is one of the most researched supplements around). Methionine is also important for the synthesis of carnitine, which is instrumental in fatty acid oxidation (4) and in the synthesis of another amino acid, cysteine, which leads to Glutathione, an antioxidant that helps with your immunity, and for production of DNA and taurine. Methionine also plays a role in detoxification of metals like lead and mercury as well as protecting the cell from pollutants due to its sulfur side groups. Finally, methionine is always the first amino acid transcribed from mRNA so without enough of it, protein synthesis doesn’t even start. Methionine is often in low amounts in plant proteins, especially in legumes, lentils, and nuts.



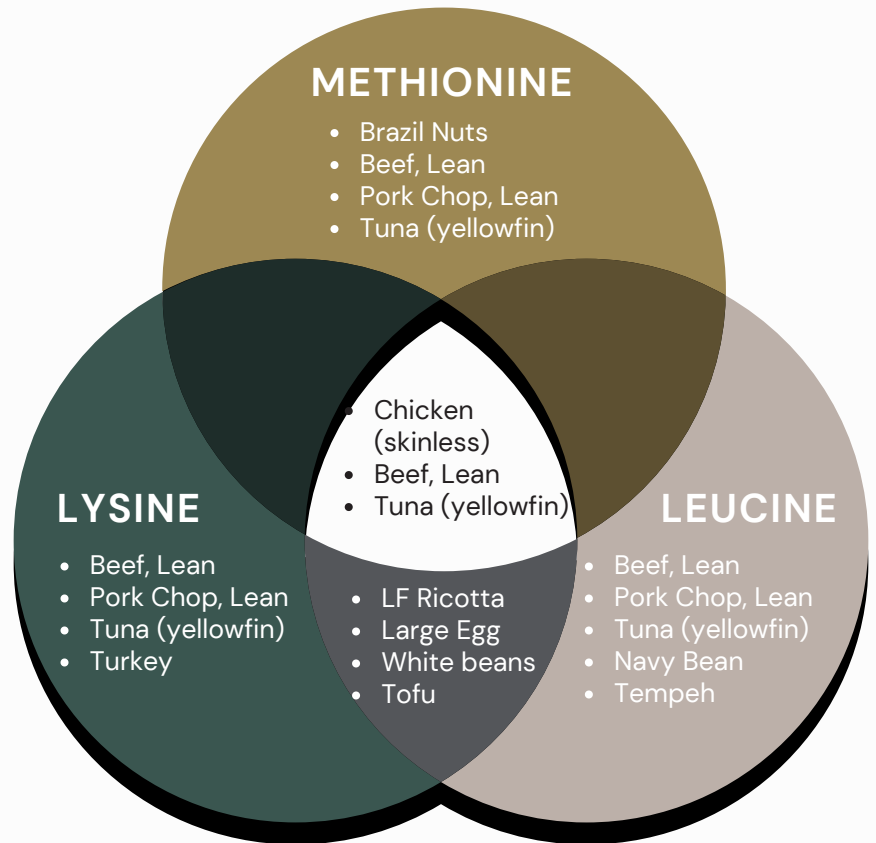
Applying It To Your Life

SO YOU HAVE ALL THIS COOL INFORMATION. NOW WHAT?

First, it helps to know where you can get these essential amino acids, so I'll give you a list of foods that contain them.

There are a couple of things I want you to notice. First, there's a lot of overlap among the foods listed. Because of that, I have a nifty three-way Venn diagram and right in the middle are all the foods that are rich in all three of these amino acids. Second, you'll notice the list has a few plant-based options, but the bulk of the foods listed are from animals, in some form or another. This is because animal sources are the highest in these particular amino acids. Now, it's not impossible to get them on a vegetarian diet, especially if you are a lacto-ovo vegetarian. If you're a lacto-ovo vegetarian, you still have the option to take in some high-quality animal protein sources from animals in the form of dairy and eggs. It's not impossible to get these essential amino acids in a vegan diet, though your options will be limited, and you will need to eat more total protein and more total calories to reach your goals. You may want to consider supplementing your diet to prevent a deficiency.

Foods per 1 oz	Methionine	Leucine	Lysine
Turkey	140	385	455
Beef, lean	260	793	843
Chicken Breast (skinless)	179	485	549
Tuna (yellowfin)	194	532	601
Pork Chop, Lean	189	584	635
Extra Firm Tofu	35	210	182
LF Ricotta	80	346	379
Brazil Nuts	282	323	138
White beans (large)	98	522	449
Navy Bean	27	179	148
Large egg	106	305	256
Tempeh	49	400	254



For more foods please see, <https://www.nal.usda.gov/sites/www.nal.usda.gov/files/leucine.pdf>



Balance

First, before diving into the nuances of a balanced diet, you need to figure out how much you need to eat in a given day. It will be different for each of you, and there are a lot of equations out there on the internet to choose from. You are more than free to try those out, if you want. However, for the sake of ease, there's a simple set of math equations everyone can follow to figure out their caloric and macronutrient needs.

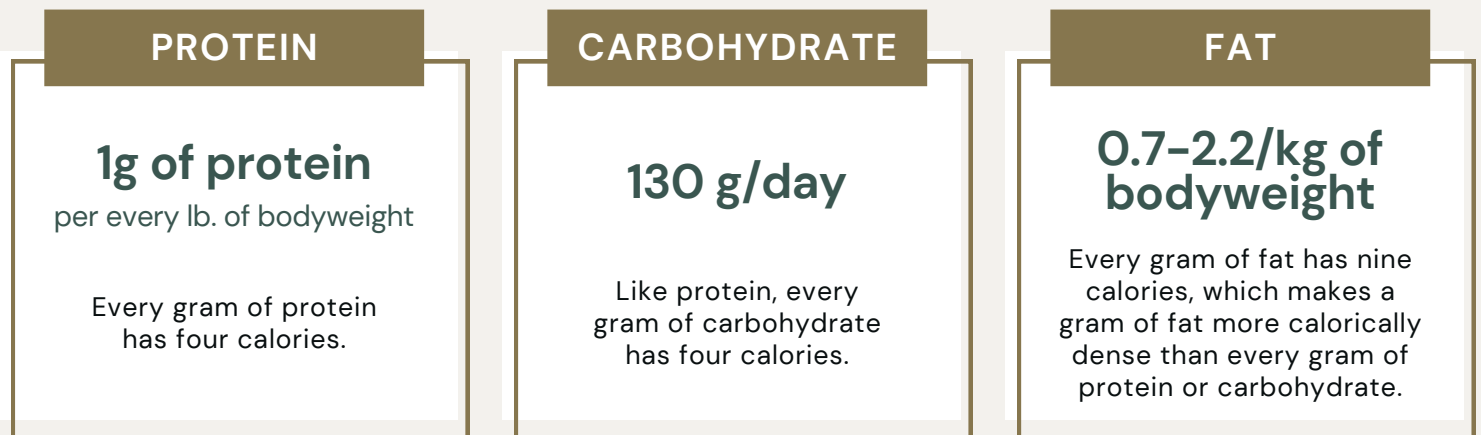
Let's refer back to our fictitious 200 lb man again. For him, we will use his body weight as our number in which we figure out his caloric intake. Before we do that, there are a few points of note about the calories within the food we eat. Specifically, every macronutrient has a calorie count per gram.

Let's start with **protein**. Protein is critical for your muscle health, so always begin your diet planning with decisions about protein. Our goal is 1 gram of protein per pound of body weight and every gram of protein produces 4 calories. So, for our 200 lb guy, we have 200 g of protein and that produces 800 calories. Easy enough so far, right?

Next, let's determine your **carbohydrates**. Given all the strong opinions and crazy fad diets governing carbs, many people find them the most confusing macro. You've likely encountered dietary guidelines that recommend carbohydrate intakes of 45 to 65 percent of your daily calories. This might be appropriate if you're an elite athlete or a highly active construction worker, but for most adults, consuming this many carbohydrates will provide far too many calories. So let's take an approach more suited to modern American lifestyles. To minimize the insulin response, keep your carb grams to within 30 to 40 grams max per meal. If your training program includes extended bouts of exercise (where your heart rate reaches above at least 120 beats per minute), you can incorporate additional carbohydrates—perhaps an additional 60 grams per hour of moderate- to intense exercise. If you are less active, you should stick within the 90 to 130 grams range. For anyone overweight or who has abnormal blood markers showing carb intolerance, I recommend limiting starches and grains to no more than 30 grams per day to start. (Those who are carb tolerant can up their starches and grains to 50 grams.) Then use the rest of your carb budget for leafy greens, red and orange vegetables, or high-fiber fruits like berries. A muscle-centric approach to health and longevity requires a protein-centered diet and careful calculation of your meal tolerance for carbohydrates. Recognizing your relationship with these foods will help you to understand your personal flexibility. By now, I also hope you understand that you need to choose your carbs based on both quality and quantity and can see why you must earn through exercise any extra carbs in your carbohydrate budget.



Finally, let's define our goal for **fat**. Fat makes up every cell membrane, including the unique protective layer around nerve structures in our brains. It also provides important fuel for muscle. Practically speaking, when it comes to apportioning macros, fats and carbohydrates are interchangeable. Start with identifying your protein goal, see how many calories that equates to, and then move on to set your carbohydrate total based on your activity level. Whatever remaining calories you have left can be dedicated toward healthy fats. Too much fat can wind up driving up calories (and possibly LDL cholesterol) and/or displacing protein in your diet. Keep fat calories within your overall calorie budget. As a guideline, the remaining daily fat allowance typically falls between 0.7 and 2.2 grams per kilogram of bodyweight. Depending on your carbohydrate intake, your total fat consumption should range between 0.7 and 2.2 grams/kilogram. Note that fat contains 9 calories per gram and can be interchangeable with carbohydrates based on your personal preferences and caloric intake. Making healthy food choices should keep you on track with your fat intake.



Note: Every macronutrient has a calorie count per gram.

SO FAR, OUR DAILY MACRONUTRIENT TARGETS FOR OUR EXAMPLE GUY COME OUT AS SUCH:



His daily macronutrient and calorie targets are:

$$\begin{aligned}
 200 \text{ g} \times 4 \text{ calories/g} &= \mathbf{800 \text{ calories from protein}} \\
 80 \text{ g} \times 9 \text{ calories/g} &= \mathbf{720 \text{ calories from fat}} \\
 130 \text{ g} \times 4 \text{ calories/g} &= \mathbf{520 \text{ calories from carbs}} \\
 800 + 720 + 520 &= \mathbf{2040 \text{ calories/day}}
 \end{aligned}$$

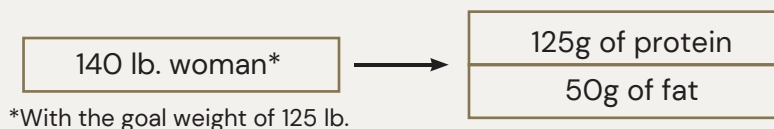


DAILY CALORIE BALANCE AND WEIGHT MANAGEMENT

Our daily calorie target of 2040 calories may be a little low for our 200 lb guy. It all depends on his daily physical activity, age and body composition. An active, young guy may lose weight with this calorie amount. Any guy with an hour or more of daily intense exercise may need 200 to 500 more calories each day. It all depends on the amount and intensity of his daily exercise. We call these extra calories discretionary calories. They are discretionary because you can choose which category of macronutrients you want to add for the extra calories. If you're a body builder, you may want to add more protein. If you participate in high intensity, interval training (HIIT) or intense tennis singles, you may want to add more carbohydrates. The final decision is your choice and should be based on how you feel and your goals. Ultimately, the decision requires a little trial-and-error to find out what works best for you and achieves the stable body weight that you want.

NOW, WHAT ABOUT A 140-POUND WOMAN WHO WANTS TO LOSE 15 POUNDS?

As always, we begin planning with protein. In this case, we base everything on her goal weight of 125 pounds. So, her protein target of 1 g per pound is 125 grams. For fat, we multiply her target body weight by 0.4 to determine her daily fat intake, so, 125 lbs x 0.4 = 50 g of fat and 450 calories. Then, we add in the carbohydrates at 130 g.



Her daily macronutrient and calorie targets are:

125 g x 4 calories/g = **500 calories from protein**

50 g x 9 calories/g = **450 calories from fat**

130 g x 4 calories/g = **520 calories from carbs**

500 + 450 + 520 = **1470 calories/day**



Her calorie target of 1470 calories/day should achieve her weight loss goal, but once again everyone is a little different because of age, body composition and physical activity. If she is young, with healthy muscles and goes hard in her daily exercise, she may be able to achieve her weight loss goal even eating 200 to 300 more calories each day. Again, these extra calories would be discretionary calories that could come for protein, carbohydrates or fats. However, if she is not achieving the desired weight loss, it means that her daily calories are too high or her daily exercise is too low, and probably both are true. In this case, she will want to reduce her carbohydrates. The protein and fat goals should remain the same, but she will want to reduce her carbohydrates, especially ones coming from starch and sugar like breads, cereals, pasta, rice and bananas. Her carbohydrate tolerance for achieving her goal weight may be only 50 to 70 g per day. Weight management always requires some trial-and-error to see what is right for you, but the basic principles of balancing macronutrients and getting your protein right are always the foundation for success.

Simple enough, right? I know it's a bit of math, but I encourage you to take your time with that section so you are clear on your macronutrient and caloric goals.

LEUCINE

Now that you have your caloric equations, there are few more pillars to put into place, and around those pillars you can construct the rest of your diet and lifestyle. This takes us back to Leucine. Don't worry, I'm not going to go crazy on Leucine anymore, but there are two things to keep in mind:

1. The minimum RDA for Leucine is only 2-3 g per day, but remember the RDA is designed simply to prevent deficiencies. You will want to shoot for at least 8 to 9 g per day for optimum muscle health with at least 2.5 g to 3.0 g at each meal. The good news is once you start eating high quality protein and hitting your protein target every day, this will be easy to accomplish.
2. To achieve your protein needs and optimize muscle protein synthesis, you need to eat a minimum of 30 grams of protein at each of your three meals per day. The origins of this 30 g number is not magic and it's not related to the myth that your body can only use 30 g of protein in a meal. The 30 g is simply the amount of protein in an average meal that is required to get the minimum of 2.5g of Leucine. The actual amount of Leucine differs in individual proteins. Whey protein is a rich source of Leucine which is why it is a favorite of most body builders. Whey has about 11% Leucine, while meats have about 8.8%, soy about 7.8%, wheat 6.8% and quinoa 6.0%. So, you can get 3.0 g of Leucine with 27 g of whey protein or 34 g of beef protein, but it requires 38 g of soy, 44 g of wheat or 50 g of quinoa. For most meals, you'll want your protein amount between 30-50 g, which is the sweet spot for muscle protein synthesis. Research is now showing that it is especially important to make sure you hit the 30g protein threshold at your first and last meals of the day.





Carbs & Fats

I have spoken quite a lot about protein so far, in case you haven't noticed, and that's where your thinking should begin at every eating occasion. Protein is critical, but there are other macronutrients, carbohydrates and fats, and we need to get them balanced correctly. These two macronutrient groups get an awful lot of attention in the news, on the internet, and in documentary films. Rightly so, too, since dietary manipulation of them is hardly new. If you feel like going back to the 19th century, google the name "William Banting" for early examples of low carb dieting. For low fat dieting and pro vegetarian propaganda, google "the Kellogg brothers." Yes, that's the same Kellogg you're thinking of.



A good reference point of fiber intake is about 14g for every 1000 calories you eat.



CARBOHYDRATES

I want you to focus on two types of carbohydrates in your diet. First, and most important, are the **fibrous carbohydrates**. The second, and more prevalent but less important, are **starchy and sugary carbohydrates**. Both starch and fiber are made of long chains of glucose molecules while sugar is a small molecule. All, three forms offer you energy. Most Americans get over 50% of their daily calories from carbohydrates, and as we know, nearly 75% of Americans are over-weight. Too many starchy and sugary carbs are a problem for most adults. But for your overall health, you need a solid amount of fiber. Why is fiber important? I'm glad you asked. For one thing, it helps you have healthy bowel movements, all without the stress and literal strain. This is a good thing; nobody likes to be constipated. Not only that, **soluble fiber** – the fiber type found in citrus fruits, apples, and oatmeal – can potentially decrease your total serum cholesterol when you get your blood work done. A good reference point on fiber intake is about 14g for every 1000 calories you eat. (6, 7, 8) Rounding up a bit to make the math a little easier, a 200-pound man should aim for 30 grams of fiber daily, while a 140-pound woman should shoot for 25 grams. Now, how do you choose those grams wisely? Let's talk through the key ratios for determining the carb content of your diet.



To meet your goals without overconsuming calories, I recommend higher-fiber foods such as vegetables, berries, beans, and lentils. One advantage is that fiber slows digestion, keeping you full longer. In addition, high-fiber foods tend to also be whole foods found in nature, which are always my favorites.

With my plan, two practical relationships drive dietary decision-making:

1. the ratio of carbs to protein and
2. the ratio of carbs to fiber.

Here are some examples of high-fiber carbs that I recommend based on these ratios:

1 cup of broccoli contains about 7.8 grams of carbs and 4.6 grams of fiber. Doing the math ($7.8/4.6 = 1.7$) shows a carb-to-fiber ratio for broccoli of 1.7.

→ For green beans, the ratio is 2.5.

→ Raspberries, 1.7.

→ Strawberries, 3.1.

→ Blueberries, 5.1.

→ Most beans, 3.0.



FATS

Dietary fats come in three types:

1.

Monounsaturated Fats (MUFA)

These have one double bond in the acid chain, in addition to single bonded carbon atoms. The most common MUFA is oleic acid found in olive oil and is heart healthy. Surprisingly to most people, the most prevalent fatty acid in beef fat (51%) is also oleic acid.

2.

Polyunsaturated Fats (PUFA)

Instead of the single bonded carbon items, like in their monounsaturated counterparts, polyunsaturated fats have at least two double carbon bonds. PUFA's are produced by plants and are prevalent in processed foods as corn oil and soybean oil. PUFA's are easy to oxidize, so plant oils can become rancid if you store them too long.

3.

Saturated Fats (SFA)

These are made up of single and carbon atoms. They are, literally, saturated with hydrogen. Not only that, saturated fat, unlike the unsaturated fats, are solid at room temperature.

Many dietary recommendations and popular diets often recommend restricting dietary fat and avoiding saturated fats mostly because fats have a higher calorie content (9 calories per gram), but fats also have a higher satiety value meaning they tend to reduce your appetite and make you full compared with carbohydrates that tend to make you hungry. There is always room for dessert even when you're full. Remember weight management and body fat are determined by the number of calories you eat, and Americans get over 50% of their calories from carbohydrates and about 35% from fats.



Action Plan

The first thing I want you to do, as you do your shopping, is to get a food scale. As you embark on cooking your food, I want you to weigh it, as well. The nutrition label on the back has everything you need to get started.

You want to look at three things:

1

The serving size, in grams, ounces, or milliliters, if it's a liquid.

2

The fat, carbs, and protein in each serving.

3

The amount of fiber in each serving.

Next, get a calorie counting app. My Fitness Pal, Cronometer, and My Macros Plus are three popular ones that will serve your purpose, but note that the latter has a one-time fee of \$2.99 to download it. Whatever you choose, it's worth it. And when you are starting to weigh out your food portions, enter them into your app yourself. Under no circumstances should you trust anything in their database. If you have a food that has no label, like a banana or an apple, you can look up the information in a search engine or you can get the information directly from the USDA website. The purpose of this is two-fold: there's so many entries for a given food on either app, and it's simply better to do it yourself, and if you make a mistake, it's your fault, and you can easily fix it. If it goes in your mouth, weigh it, and track it.

As an example, let's look at boneless, skinless chicken breasts. An organic chicken breast from the local supermarket comes out to 24 g of protein, 0 g carbs, and 1 g of fat for every 4 ounces. Enter it into your app, don't worry about the total calories, most apps will do the math automatically for you. Because of labeling laws which allow rounding up or down, this is a more precise option. Remember, protein has 4 calories per gram and fat has 9 calories per gram. Based on that, the chicken breast comes out to 105 total calories in a four-ounce serving.

Third, I want you to base your entire day around three meals, with 30-50g of protein in each meal. Remember all that stuff about muscle protein synthesis and optimal tissue repair I went over earlier? Building your meals around protein is instrumental to your success.



Building a Daily Routine

Busy in the morning? Mix some 2% milk with a scoop of whey protein powder to start your day. Do you have more time in the morning? Make an egg white omelet with 200g of liquid egg whites, a whole egg, and a serving of lower fat cheese. Both of those options will give you your required 30g minimum of protein. Use your app to figure out the exact numbers and calories. Repeat this at lunch. Maybe for lunch you can take a precooked 4-6 oz portion of boneless, skinless chicken breasts and some vegetables. Do the same thing after work, before your dinner. Do you work late? Take two chicken breasts with you. Or a 4-6 oz portion of chicken with vegetables, and a 4-6 oz portion of red meat and vegetables. If you make it a priority, you will make it happen. Do you have kids? Don't nibble in the kitchen while you prepare their meals or snacks. They may need the calories but you don't.



Finally, when you lock down your anchor meals, fill in the rest with your appropriate nutrient targets. You can supplement that with your discretionary calories but always emphasize protein sources such as whey protein shakes, or vegetables. The main thing is to choose good foods from our list and to hit your macronutrient targets. You will have to adjust, remember a little trial-and-error. It will take time to get it right, especially if you live in a household with many people. You will not get it 100% correct the first time you try this. That's ok. Nobody ever starts anything with complete perfection. But you will get better, and that's what we want.





The Lyon's Main

You now have your building blocks. We know this works, so put it into action.

Remember the following, if nothing else:

1. 30-40g minimum of protein per meal.
2. Always select high quality food sources. Buy fresh vegetables, fruits, meats, dairy and eggs. Avoid ultra-processed foods in bags or boxes.
3. Vegetable based carb sources are a priority, with some starches thrown in occasionally, around workouts, especially if you high intensity exercise.
4. Weigh your food. Do you have to do this forever? No, but you are training yourself to figure out exactly what you're eating. Learn what portion size is appropriate for you. The more you visualize your eating, the better you'll achieve your goal, and the quicker you can ditch the scale, so long as you remember what your plates typically look like.

Above all else, never forget these important steps. Sure, you'll deviate for a holiday or birthday, but that does not have to derail your overall consistency. Let this guide serve as a template for life.

Prioritize your health. Doctor's orders.



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