

### 5 REASONS

WHY YOU AREN'T BUILDING MUSCLE ON A KETOGENIC DIET

### INTRODUCTION

It seems that nearly everyone is curious about the benefits of the ketogenic diet; Yet, few people really know how to do it well.

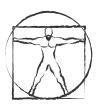
Many people often fail to see the true benefit because they never really nail down all the necessary components.

It can be confusing if you don't have an understanding of a few basic points.

We decided it would be useful to begin by answering some of the most important questions about the ketogenic diet, how it impacts the body and mind, and determine whether this is the best diet for you and your goals.







### **KETO 101**

### A KETOGENIC DIET IS NOT:

- // A free ride to eat anything you want, as long as it is carb free.
- // A miraculous fat loss diet that doesn't require exercise or adherence to calorie restriction.
- // A diet where you can eat ANY type of fat you like and still lose body fat.

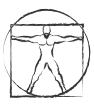
### A KETOGENIC DIET IS:

- // An amazing solution for people who want to simplify their diet and lifestyle.
- // A great diet to help your body become metabolically flexible and use fat for fuel.
- // A brilliant option for improving brain power and decreasing brain fog.
- // A diet that requires fewer feedings and allows you to feel great even when not eating often.
- // A diet that supports consistent energy levels and fewer crashes.
- // A high fat, moderate protein, low to very-low carbohydrate diet.

### **BENEFITS OF KETO:**

- // Improved cognitive function and decreased brain fog.
- // More consistent energy less ups and downs through the day.
- // Decreased inflammation.
- // Decreased hunger and cravings.
- // Improved insulin sensitivity.





### IS KETO UNHEALTHY?

### DON'T I NEED MORE VEGETABLES AND FRUITS?

Being in ketosis is a completely safe and natural state. In fact, when we are born, we move in and out of ketosis. This has not only been studied extensively, but it seems that neonates who are breastfed are more likely to be in ketosis, indicating that when nourished with biologically appropriate food (i.e. breastmilk vs. formula) we begin to produce ketones, even in the presence of sugar in the breast milk!

On the subject of fruits and vegetables, we have been told for eons that they are key to a healthy lifestyle. However, what we can observe using anthropological data, as well as studying the effects that many plants can have on our bodies, is that a majority of plants on this earth are dangerous to consume because of their various phytochemicals and inherent defence mechanisms. Plants can inhibit the absorption of various vitamins & minerals, and even attack our immune systems and lead to further complications down the road, for instance, autoimmune issues.

It turns out that historically, human eating habits have been mostly focused on hunting. We followed the buffalo and other large game. We focused on the largest animals, followed by prime aged animals after the eventual dying off of megafauna. Man has a unique advantage over most herbivores. Instead of needing to be equipped with digestive systems similar to ruminant animals, where we need to depend on the fermentation of various plants into usable fats, we are able to consume the actual fat of an animal. These animals have already taken all

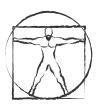
of the nutrients from the sun to the plants they consumed, and turned low quality food into high quality, nutrient dense food.

You may think to yourself, "This may be true, but what about all of the important vitamins and minerals that I need to consume to thrive?" It turns out that not only do animal sourced foods have everything we need, but they are also in a form that is much more bioavailable. Animal sourced foods contain vitamins and minerals in their most useable forms, and they are accompanied by the fat needed to absorb them (in the case of fat soluble vitamins). Examples of this would be heme iron, vitamin A, and DHA. All three of these can be found in plant foods, but they are in forms that do not translate well into our human operating systems. In addition, many of us have genetic mutations that compromise our ability to convert these vitamins and minerals into their most usable forms (this even happens in individuals without these mutations, but is much worse in those who have them).

For more information on why plants may not be as healthy as we think, we recommend this great article by Dr. Georgia Ede:

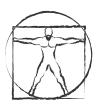
https://www.diagnosisdiet.com/food/vegetables/





## TOP FIVE REASONS YOU'RE NOT BUILDING MUSCLE ON KETO





### TOP FIVE REASONS YOU'RE NOT BUILDING MUSCLE ON KETO

The following five reasons, listed in order of likelihood, can easily hinder your muscle-building potential while on keto.

### 1. PROTEIN & ENERGY INTAKE

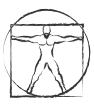
Dietary protein intake is still one of the most important elements in preserving and building muscle, especially when first transitioning to a ketogenic diet. We suggest that you increase protein intake as part of the first 3 week "fat adaptation" period, before we lower it again to help speed up the adaptation process after the initial 3-4 weeks.

It has been repeated at nauseam that eating too much protein may trigger gluconeogenesis, or negatively impact ketone production and fat adaptation. While this is true, it is highly unlikely unless you are consuming extremely high quantities of protein, or have underlying metabolic issues (which may actually be a concern for some high stress people).

An easy way to determine a starting point for protein would be to calculate your lean body mass in pounds by having your body fat percentage checked (or best estimate), and setting your protein intake in grams equal to your lean body mass in pounds. For example, if you are a 200 pound male with 15% body fat, that would mean that your lean mass is about 170 pounds, and you can set your protein to 170 grams a day to be consumed in 3-4 equal servings over the day.

Protein is only one part of the equation. Adequate total energy intake is still extremely important to overall health, but even more so if you are trying to add muscle. Inadequate energy intake will definitely slow down your gains. Keep in mind that protein is rarely used as energy because it is saved by the body for emergency situations.





Depending on what diet you follow, the bulk of your energy will either come in the form of carbohydrates or fat. Following a ketogenic diet can be advantageous because of the energy density of fat (one gram of fat is equal to 9 calories of energy, while one gram of carbohydrate is equal to 4 calories of energy). Setting your fat equal to your protein would be a bare minimum for maintaining a healthy body weight and preserving muscle, but to optimize your total energy intake for building muscle, you may need to go as much as 1.25-1.5 times your protein in fat grams. In our example this would mean 215-255 grams of fat.

If you are not eating adequate protein, or you are not in a sufficient caloric surplus, you will have a very hard time building muscle while following a ketogenic diet.

Without carbs, people often complain about a lack of energy, lack of pumps, or poor recovery. Rather than writing it off as difficult or "impossible," try to focus on the immediate solutions to these circumstances.

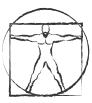
More than likely, you're not taking in enough sodium, water, and other key nutrients to support your body's performance. For a boost in energy, try adding 300-600mg of alpha GPC and 10g of MCT oil or powder in your pre-workout drink. When it comes to getting a pump, sodium and water are the driving factor. You can also add 5g of creatine and some methylated B vitamins to increase your pump in the gym. Finally, to aid recovery, creatine, glutamine, glycine/collagen, magnesium, zinc, and methylated B vitamins should be part of your regime.

### 2. YOU'RE JUST NOT GETTING IT DONE IN THE GYM.

There is a BIG chance you're just not executing your workouts optimally. Most people simply aren't. This has much less to do with how hard you work, and much more to do with how focused you are and how smart you work.

One of the most overlooked considerations when building muscle on a ketogenic diet is choosing how to adjust training to maximize results with these new special considerations (as in, not having carbohydrates as fuel).





Planning for the right training volume with adequate rest periods is vital to ensure that you're not burning through muscle, overstressing the liver, and are allowing enough time for physical recovery. While you may have been able to follow a higher volume training split with shorter rest periods on a higher carb diet, this is not optimal while on a ketogenic diet. At times, we incorporate higher volume periods with shorter rest times, but more often than not, we are training in the 5-8 rep range and taking longer rest periods of 3+ minutes.

We have found that we can limit volume and lengthen rest periods and still see great results if we are executing these movements with perfect form and focus. In fact, even someone on a higher carb diet can see great results from this approach. Derek Lunsford, a professional bodybuilder, trained very similarly to us with some added volume, drop sets, and shorter rest periods, and he placed second in the 212 pound weight class on the biggest bodybuilding stage in the world.

Maximizing your training on while on keto must address exercise selection, training volume and frequency, as well as intensity.

### **Exercise Selection**

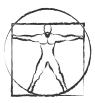
Focus on choosing the movements that are best suited to your anatomy, and then focus on building your skills in these movements to a point where every single rep looks exactly the same.

Remember, the goal is not to just "lift weights," the goal is to maximally challenge a muscle.

If you are focused on getting the best muscular contraction at every length of the contraction, you will see great results. It may not look as hardcore as doing a 10x10 German volume training program, but when done correctly, is often even more challenging and even more effective-especially for people that may not build muscle easily.

The terms "compound movements" and "mass builders" get thrown around often, but are complete nonsense for people looking to build muscle.





Remember, your goal is to challenge your muscles. Not to simply lift weights, and certainly not to do exercises because your favorite YouTube celebrity is doing them.

When done correctly, you can make just about any movement difficult enough to elicit a response that would lead to muscle growth—especially if you are focused on the contraction at every length of the movement.

If you are curious as to whether or not you are currently doing this, pick any of your favorite exercises and see if your muscle is contracted while in the lengthened position. It is natural to contract your muscle while it is in the shortened position (think of a flexed bicep), but if you are not initiating the movement properly from the start of the movement, and not constantly mindful of what your body does through the whole range of movement, you may be missing out on at least half of that repetition.

### **Volume and Frequency**

Because the overall training volume per day should be a little lower, it would make sense to train muscles more frequently while following a ketogenic diet.

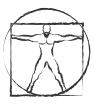
Remember, the primary goal with this type of training is not to do more. The goal is to do it better. More is not better, better is better.

Training muscle groups two and sometimes three times a week is very beneficial in providing a sufficient stimulus for muscle growth. Taking a lower volume and higher frequency approach works very well with ketosis.

Body parts that you connect well with - your "strong body parts" - can be done less often because you're inherently able to work the muscle better, and create more damage, with less overall work.

On the other hand, body parts that you don't connect well with will benefit from a slightly higher frequency due to less challenge per repetition. Even if your mental exertion may feel equal or higher, the work done by the muscle is less.





### **Intensity**

Your first objective should be to improve the efficiency of the nervous systems ability to contract a single muscle, and get better at generating intense contractions. This is not measured by perceived exertion, it is measured by intensity of contraction. For example, taking contractions from 20% of muscle fiber per contraction to 25%, then 30%, and eventually 50-60% of all the fibers contracting with each rep. How hard does the muscle feel to be contracting during each rep? Rock hard intense contractions almost to the point of cramping, or weak fluttering contractions?

### 3. YOU'RE DOING TOO MUCH WORK AND NOT ENOUGH "GOOD WORK".

If you're training smart, you're going to be very fatigued, very quickly. The idea of doing more work will be near impossible for most people when you're doing things right. Workouts are more challenging to the muscles when you learn how to train with intelligence.

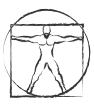
Certain types of training will lead to using more fat for fuel while other types of training will require more carbohydrates for fuel. If you're not consuming carbohydrates but you're training in a way that tends to burn through them, you will burn muscle.

### THIS IS A BIG MISTAKE.

It is vital that you adjust the "density" of your training and allow for longer rest periods as well as shorter working sets. Total work is also a big consideration because no matter how careful you are to avoid long burning sets, you will be burning through stored glycogen in your liver and muscles.

Keep the contractions hard, and the total volume low to make the most of your muscle building potential on a ketogenic diet.





### 4. YOU'RE NOT EATING ENOUGH.

Total calories and the right calories matter when it comes to building a great physique. Certain amino acids, micronutrients, vitamins and minerals will determine whether you're able to grow. Make sure you're doing all the right things to build a great physique.

### 5. YOUR STRESS IS KILLING YOUR PROGRESS.

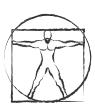
Stress will kill progress. High sympathetic stress and chronically elevated cortisol levels are the enemy of building muscle. Getting your stress under control is imperative and non-negotiable. Remember, stress is not a result of the event itself, but from your interpretation of it.

If you're highly stressed or not sleeping adequately, I would not recommend starting a ketogenic diet. Even though keto could work to help, chances are that your body is reliant on carbohydrates for managing stress and modulating cortisol and serotonin. Taking carbohydrates away to start a ketogenic diet, could make these problems worse in the long run.

Begin implementing more parasympathetic activities into your life and let the balance of parasympathetic activities outweigh the number of sympathetic ones.

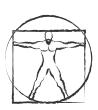
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# KETO EXPERIMENT RESULTS





### MY KETO EXPERIMENT RESULTS (COACH BEN)



I've been using a ketogenic diet for the most part since retiring from professional bodybuilding. I don't often come out and share that, because people feel the need to comment when you eat a blueberry.

I like to point out that I don't do a ketogenic diet to be able to tell people that I'm "in ketosis." I do it for the health and cognitive benefits. So, if I decide that eating sweet potatoes or berries is a good idea, I do so. I'm not attached to the name of the diet I follow, I'm attached to the results I achieve and the way I feel.

I decided to give keto a try during an intense training phase. It's important to point out that my ability to produce effort and intensity during a training session will far outweigh that of most people, so by deductive reasoning, I have an increased need for all nutrients.

During this training phase, I really focused on decreasing the total amount of work, and ramping up my intensity of contraction with each rep, to do everything better!

I started off strict keto for the first 3 weeks with increased protein (260 grams of protein and about 260 grams of fat). After 3 weeks, my ketones were consistently around 0.5 to 0.6 mmol/L every morning.

I then slightly shifted my protein down to 200 grams and kept fat at 260 grams. My primary sources of fat were fatty meats, olive oil, avocado, coconut oil, bacon, and macadamia nuts.

My biggest challenge came when I had a hard time getting enough fat and started seeking other sources of fat that I could eat to meet my fat requirements. I often ended up "chasing" fat intake, even when I wasn't hungry. This lead to overeating fats that weren't ideal, like nuts and nut butters. If I consumed too much fat from these sources, I didn't feel my best, and it was kicking me out of ketosis.

The lesson I learned was that you will not be as hungry on a ketogenic diet once your body actually starts using ketones for fuel. That being said, be patient and don't chase the fat intake with sources that aren't ideal.

### THE MOST JACKED KETO COACH IN THE WORLD (COACH DANNY)



Your coach, Danny Vega, is by far the most jacked and ripped keto coach in the world. He is able to build muscle, stay under 8% body fat year around, run a business, and maintain a happy and fulfilling family life with a wife and two amazing children.

### DANNY IS NOT "GENETICALLY BLESSED" OR SUPERHUMAN, ALTHOUGH SOME DAYS WE WONDER.

What Danny does better than anyone else I know, is follow through. He's consistent, committed, and disciplined with everything he does. A phrase that comes to mind is "the way you do anything, is the way you do everything."

### Danny gets this through a number of key attributes that everyone can learn from him:

- 1. Set a goal. Even short term goals, and always follow through. You can always change direction when it's done.
- 2. Know your values. For example, family, fitness, and finances.
- 3. Be disciplined and build your belief in yourself.
- 4. Never choose short-term gratification over long-term results.
- 5. Create an attitude of gratitude toward every aspect of life.

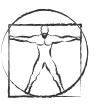
Coach Danny has followed a Ketogenic and/or Paleo diet for 10 years. He knows the immense benefits of using a ketogenic diet as a tool, but is not attached to the process if it isn't most effectively serving his goal. He is willing to use carbohydrates as necessary to suit his goals (as he discusses in the Ketogenic Muscle Building Program).

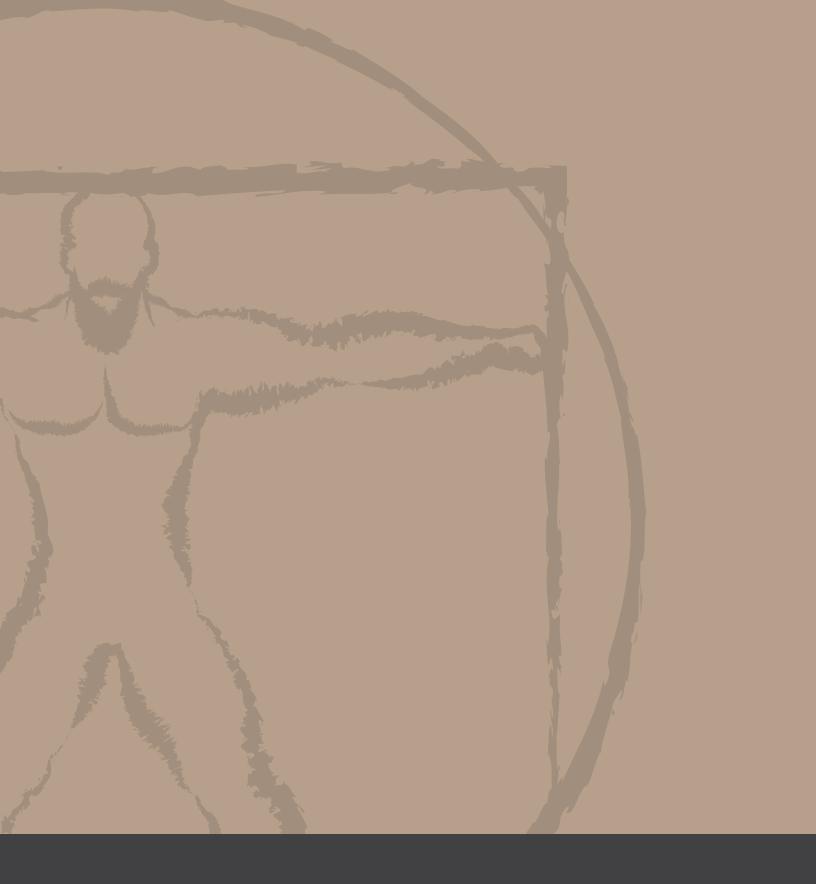
If he is training really hard and notices that he is feeling depleted, a general sense of malaise, isn't recovering properly, or notices a drop in his HRV, he consumes small amounts of carbs to help offset this.

## THERE IS A PHRASE THAT OUR FRIEND ALI MILLER, RD USES OFTEN, "DOCTRINE CREATES DISCONNECT."

What this means is that many of us become myopic and closed minded when trying a new dietary or training approach, and this can shortchange our results. The ability to know your body and make adjustments based on how you feel and perform is key--especially when following a particular approach blindly which can be extremely limiting under certain circumstances. We are always learning and applying new ideas to see how they can enhance what we are doing and address issues with our current approach, and no approach is without its drawbacks.







INTELLIGENCE"