

Keto Myths and the Normalization of Obesity

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COMMENTARY

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Alex Leaf, MS, CISSN discusses prebiotic fiber, plant-based diets and carnivore/keto diets, dispels common Keto Diet myths, and the trend of “normalizing” the obesity epidemic.

The growing health burden of obesity is one of the most well-recognized in the world. With a prevalence of just 10% at a global level, the Global Burden of Disease collaborators estimate that 5% of all deaths are attributable to obesity. Yet, in affluent countries like the United States, obesity affects more than 40% of the population and only continues to grow. An equivalent number of adults are overweight, meaning that being at a healthy body weight is now a minority characteristic.

We recently sat down to talk with Alex Leaf, MS, CISSN about the issue of nutrition and obesity. Alex received his master's degree in nutrition from Bastyr University and currently helps teach in the Human Nutrition and Functional Medicine master's program at the University of Western States. He is the former senior researcher at Examine.com and now works as a content creator and research writer at The Energy Blueprint.

Alex has written extensively about all topics related to health throughout his professional career, including those dealing with diet, supplements, and lifestyle. "This lack of focus has been consistent for me throughout my decade-long career in the field. I work to write blogs, books, online programs, continuing education material, textbook chapters, and peer-reviewed literature that address a wide

variety of topics, all of which synthesize the available research on the topic into understandable and action-oriented information for the reader," he says.



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THE FOUR PILLARS OF FALSEHOODS WITHIN THE KETOGENIC AND LOW CARBOHYDRATE COMMUNITIES

Every diet or nutritional plan should support continued scientific research into the health benefits and drawbacks of the specific dietary advice and guidelines upon which the diet rests. Due to the widespread and "viral" nature of specific dietary programs, however, the scientific foundations for the diet are often lost amongst the abundance of self-prescribed nutrition gurus peddling their dietary advice online. Given the current popularity of the Keto diet and other low carb diets worldwide, many beliefs related to low carb diets do not rest on solid scientific research. This lack of rigorous scientific exploration might lead to several myths that could potentially pose a problem to the health of people who follow these types of diets.

"I definitely think that there are myths within the ketogenic and general low-carbohydrate communities that either stall progress or perpetuate potentially harmful practices," Alex says. "In my experience, I think there are four pillars of mythology that tower above all others." Below, we outline the four pillars of mythology in Alex's own words.

PILLAR #1: LACK OF FIBER IS GOOD FOR HEALTH

"First, there's an ever-growing belief that fiber is not necessary for optimal health and can actually be harmful. This is probably the worst of the beliefs and one that is perpetuated mostly by individuals trying to rationalize their choice of eating a carnivore diet. I understand how it came to be since no one likes hearing that their way of eating is harming them, but it's such an easily solved problem through dietary fiber supplements that one could still eat a carnivorous diet and avoid the problems it causes.

In a nutshell, we have a tremendous body of literature showing that:

- Having a diverse microbiome is important for every facet of our health.
- Diversity requires prebiotic fibers.
- A lack of prebiotic fibers causes dysbiosis and extinction of beneficial taxa over time.
- Prolonged dysbiosis damages the intestinal barrier and is causal for colorectal cancer while also negatively impacting metabolic health.

All these people who claim to be healthy (and who are) eating no fiber are analogous to people who smoke that claim to be healthy because they don't have lung cancer.

I think that the primary risk is a lack of fiber that is likely to contribute to poor intestinal health and, as a result, poor overall health. What sucks is that not eating fiber is a great way to manage intestinal symptoms like bloating and gas but serves to exacerbate the underlying issues of visceral hypersensitivity and dysbiosis. Ideally, one would work to use targeted prebiotic fiber supplements to address these issues alongside general fiber restriction to manage symptoms.

The analogy here would be using a low-carbohydrate diet to manage the symptom of type 2 diabetes (elevated blood sugar and insulin) while simultaneously losing fat mass to address the cause (ectopic fat accumulation primarily in the liver and pancreas).

I think any food can be keto if you take a small enough bite. Food group elimination isn't inherently problematic, in my opinion, as there isn't a single food group out there that is irreplaceable in terms of what it brings to the table, mostly thanks to having supplements readily available.

Depending on the extent of ketosis one wishes to achieve, there may not be room to incorporate legumes or grains into the diet without causing suffering in some other way via having to restrict other foods that contribute carbohydrates (even fibrous vegetables)...I do think that blood lipids and lack of fiber are concerning, but I also think they are easily managed with supplemental prebiotic fibers like partially hydrolyzed guar gum and soluble corn fiber."

PILLAR #2: THE ISSUE OF INSULIN

Second, a lot of people still erroneously believe that insulin drives long-term changes in body fat mass, as opposed to it being driving by energy balance. To be fair, I think that this myth perpetuates mostly because folks simply don't understand what energy balance entails and conflate it with the calories in, calories out diet (CICO)."

PILLAR #3: DANGEROUSLY HIGH LEVELS OF SATURATED FAT

"Third, some individuals refuse to give up their saturated fat when it is negatively impacting their blood lipids. They believe saturated fat isn't harmful or that LDL doesn't play a role in heart disease. I don't think saturated fat needs to be limited unless it is driving your LDL upwards, as the convergence of evidence looking at genetics, interventions, and observational data indicate its role in heart disease (not to mention the established biological mechanisms). But really, how hard is it to eat leaner cuts of meat and obtain more of your fat from nuts, seeds, and fatty fruits like avocados?"

PILLAR #4: LIMITING PROTEIN INTAKE

"Fourth, and this is far less prevalent than the other three, some in the ketogenic diet camp believe that protein causes fat gain and should be minimized. Individual requirements vary, but there are few circumstances under which one should consume less than 1.2 grams of protein per kilogram of body weight."

PLANT-BASED DIETS VERSUS A CARNIVORE KETO DIET

The debate between plant-based diets and the high meat consumption of low-carb diets like Keto has never been more intense.

[In one of Alex's recent articles](#) comparing plant-based diets to Keto, he says: "In the short-term, a low-fat vegan diet results in lower calorie intake despite greater food intake and similar appetite ratings as a low-carb keto diet. Metabolically, it also leads to marginally higher average blood glucose levels throughout the day, improves blood lipids other than triglycerides, and reduces inflammation compared to a ketogenic diet."

However, Alex believes that the differences in health benefits or drawbacks between whole food, plant-based diets, and the high-meat consumption of Keto and other low-carb diets are largely based on bio-individuality.

"Fundamentally, the difference between these two diets is a reliance on either animal or plant foods for nutrition. I think both can be viable for achieving health depending on the person and their individual needs and preferences," he says. "For example, some people may do better on one diet than the other for long-term fat loss. I think that helping someone with obesity achieve a normal body weight takes precedence over the type of diet they eat to accomplish that goal."

However, both of these diets ideally require people to carefully consider what nutritional elements might be missing from their daily diet. Alex recommends that people who choose to follow a primarily plant-based diet should pay more attention to their protein intake. He recommends the use of protein powders. Also, certain nutrients like B12, iron, DHA, zinc, and calcium may be lacking in some strictly plant-based diets, though finding supplements is easy and convenient. For people who choose to eat an animal-based diet, Alex recommends

that people pay more attention to how they cook their meats (gentle methods over harsh methods), their fiber intake (he recommends looking into prebiotic supplements), and certain nutrients like magnesium, folate, vitamin C, and vitamin K (with supplements again being recommended).

WEIGHT LOSS AND OBESITY ISSUES

Rapid weight loss achievement is one of the main attractions of the Keto diet. However, some medical professionals debate whether this weight loss is sustainable over the long run. Others question whether it might compromise better metabolic health. According to Alex, "rapid weight loss actually leads to greater weight loss over the long-term compared to slower weight loss even if they regain is also quicker (because the extra weight loss was still greater than any regain)," he says. "I think that so long as a person respects energy balance and knows that the drop in the first week or two is just water weight from depleting glycogen stores, then it's a sustainable way to obtain a healthy body composition."

With obesity affecting well over 40 percent of the adult population in the United States, losing weight is understandably one of the primary health goals. "Regardless of how fat loss is achieved, it should improve metabolic health if one is carrying an excess of fat mass," Alex says.

In another of his recent articles, Alex says: "The health detriments of being too fat are well established, and that needs to be made clear. People are far more likely to pursue lifestyle changes to lose weight when they perceive themselves or receive a doctor diagnosis as overweight or obese. So, let's get self-perceptions back on track."

This societal "normalization" of obesity is just one of the cultural issues that obstruct the pathway towards healthier diets and lifestyles.

Alex believes that the [visual normalization theory](#) proposed by Eric Robinson at the University of Liverpool, United Kingdom, is one reason why obesity and excess weight are gradually becoming accepted as the norm in certain areas around the world.

"Basically, people perceive weights based on exposure and subconsciously associate the most prevalent weights with normality. As an example of this, in the US, both men and women don't consider "obesity" to begin until around a BMI of 37 (it starts at 30), which is almost morbid obesity (BMI of 40). That's simply because most people in America are overweight or obese," he says.

At the same time, Alex believes that people suffering from obesity consider being overweight to be their "normal weight," thus skewing the entire scale upward due to this normalization of abnormal body weights. "The media plays an incredibly pervasive role in this issue, given that they are a main exposure source for most people," he continues. "It is one reason that I believe the current trend of having more models be overweight or obese is problematic. It just exacerbates the weight issues of our nation by implying that being overweight or obese is normal, healthy, and sexy, rather than painting it as the massive public health emergency that it is."

Criticism within the fashion industry has often been focused on the use of ultra-skinny models and the body-shaming that has led to issues of insecurity, eating disorders, and body dysmorphia. A [2016 study in the International Journal of Fashion Design, Technology and Education](#) found that the average American woman wears somewhere between sizes 16 and 18. The plus-size

female apparel market, US size 14 and up, drove 21.4 billion dollars worth of business in 2016, with plus-size teens accounting for 34 percent of the market in 2015.

In the eyes of many apparel companies and others in the fashion industry, the use of "plus-sized models" is thus a strategy to reach a vast (and growing) segment of consumers. This strategy has mostly been met with approval and deemed a sign of greater inclusion and acceptance. However, Alex brings up the critical issue of whether or not we should be commending obesity, which is an epidemic in the United States and many other areas worldwide.

"None of this is said with disdain, disgust, or dislike," he clarifies. "I want to emphasize that there isn't anything wrong with being overweight or obese, just that there is something unhealthy about it. I have long stated that the current "Health at Every Size" movement should rebrand as "Happiness At Every Size", since people should be happy no matter their body composition, and this avoids the blatant myth that one can be healthy even when obese."

Despite the normalization of obesity that Alex mentions above, recent polls have found that [over half of Americans](#) want to try and lose weight. Given that people want to lose weight, we asked Alex for his recommendations for a scientifically-based and supported fat loss program:

"Find a way of eating that you both enjoy and can sustain over the long run. No diet will work for everyone all of the time, but any diet will work for someone some of the time. Yes, we are all humans and share the same basic

physiology and biochemistry, but we also have our own unique preferences. And that's important because it doesn't matter how good a diet is in theory if you can't actually stick to it.

There's little doubt that certain dietary characteristics cause more fat loss, more muscle growth, and less hunger, but you need to figure out how to work these characteristics into a dietary pattern that you enjoy and can adhere to over the long term. When the goal is fat loss, everyone has their own jive for what will work best. Don't underestimate the importance of being true to yourself and your preferences.

“In this day and age of Google searches and unlimited access to information, almost everyone feels that they can become experts on anything. In terms of diet and nutrition, there is, unfortunately, no lack of "diet gurus" who peddle nutritional programs based on scant

Also, don't be afraid to try new things. If something stops working for you, then consider abandoning it and finding a new path forward. I see this most often with the low-carbohydrate crowd. Someone loses a hundred pounds and then stalls out or even starts regaining some weight, but instead of reconsidering their dietary methods, they just dig their heels in and end up spinning their wheels."

Lastly, in this day and age of Google searches and unlimited access to information, almost everyone feels that they can become experts on anything. In terms of diet and nutrition, there is, unfortunately, no lack of "diet gurus" who peddle nutritional programs based on scant scientific evidence. As a nutrition scholar, Alex ends our interview by reminding people of the importance of listening to contrary opinions to construct a dietary and nutritional lifestyle that works.

"Be open-minded and evaluate arguments rather than people. I probably said at least one thing that you don't agree with. Don't discard it out of hand unless you have a well-formulated argument for why I'm wrong," he says.

"If you don't have a well-formulated argument, then consider putting one together. The simple process of trying to craft a steelman of your own or another's argument can go a long way to clear up uncertainty. As for evaluating arguments rather than people, don't disregard everything I said simply because you didn't like one piece of it. People can be both right and wrong when you break apart everything into their individual positions, so focus on the substance of what people say rather than the people themselves." ■

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If you are interested in learning more about Alex's work, check out his ["Fat Loss Blueprint Program."](#) This 18-lesson program spends only two lessons talking about diet and exercise, while the other 16 lessons are devoted to addressing the things that no one else considers, the things that could be silently sabotaging your dieting efforts and causing that insidious tightening of the belt.