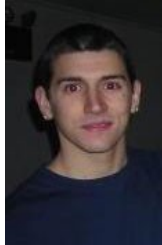


# Achieving Optimal Health On The Paleo Diet With Greg Battaglia

*Nikki Young Interviews Greg Battaglia*



*Greg Battaglia is a Certified Level I Crossfit trainer and a Dietetics student at Immaculata University who is passionate about constantly exploring ways to improve human health and performance and helping others to achieve their health and fitness goals.*

**Greg, you are probably one of the most knowledgeable people i know when it comes to nutrition and the paleo diet. I guess my first question would have to be what has been your personal experience with the paleo diet?**

I first began a paleo diet at the end of my senior year in high school, which was about 4 years ago now. Before then I followed the basic high carbohydrate, low-fat diet recommended by the USDA. Most paleo people talk about how atrocious the USDA food pyramid is when it comes to getting lean and being healthy, but to be honest with you I actually felt pretty good on this diet and performed pretty well. I was doing a lot of bodyweight calisthenics and interval training (not too different from Crossfit) while on a higher carb intake and managed to stay pretty lean.

I really didn't feel that I needed to change my diet at the time unless it would have an impact on my health and performance that was worthwhile. Then I discovered Crossfit and gave it a shot and realized that most of the people in the community were crushing my WOD times. I heard that converting to paleo would improve my performance so I gave it a shot. I went 100% paleo and saw my performance improve immediately and started getting good times.

In addition, I lost some body fat and definitely gained some muscle mass, while drastically reducing my appetite. It was weird, I was able to eat much less but maintained a higher bodyweight and felt much stronger, quite a paradox.

Other benefits were reduced joint pain, better sleep, better sex drive, more sustained energy levels, and the ability to concentrate much better.

I guess I felt that my higher carb diet was keeping me healthy before switching to paleo because I hadn't ever experienced the health benefits of paleo. I had no basis for comparison, and once I went paleo there was no going back.

**I believe nutrition plays a major part in achieving and maintaining a healthy body, do you agree, and what are your thoughts and beliefs when it comes to medication to treat illnesses over a healthy diet and lifestyle?**

I absolutely agree. Nutrition is so important, yet so many people neglect it, even elite level athletes. When it comes to getting lean the number one most important factor is your diet. That's not to say that exercise is not important for maintaining a healthy weight or just good health in general, you still need exercise to be healthy and vital. However, when it comes to getting/staying lean it's mostly your diet. I recently suffered a shoulder injury that put me out for quite a while and I wasn't able to be nearly as active as I should have been, but I still managed to stay lean and maintain a muscular body simply by eating a lower carbohydrate paleo diet.

Using pharmaceuticals to treat lifestyle diseases has been largely ineffective and provides no solution or long-term option for improving one's health or reducing disease risk. Most drugs that are used to treat lifestyle diseases like heart disease, diabetes, acne, etc only act as a

band aid to eliminate symptoms, not to eliminate the root of the problem.

Additionally, most of these drugs have undesirable side effects that essentially thwart the original purpose of the drugs, which is to improve quality of life. What good is taking a statin drug to reduce your risk of heart disease if your going to be walking around like a zombie all day with achy joints, memory loss, and muscle weakness? And that's assuming that the drugs actually reduce your risk for getting heart disease in the first place (research suggests that they don't). I do want to point out that I don't think that all pharmaceutical drugs are evil and should avoided at all costs. For instance, bacterial infections that would have killed people years ago before we had modern medicine can now be treating quickly with the use of antibiotics.

Also, some of those "lifestyle" drugs like insulin for instance can used effectively in the short term or in low doses as a compliment to a healthy lifestyle when necessary. A good example of this is insulin use in diabetics. Diabetes can usually be essentially cured with a low-carbohydrate diet, but some people have done so much damage over the years and trashed their insulin sensitivity that small doses of insulin along with a paleo lifestyle may be optimal in controlling their diabetes.

The point I'm trying to make is that drugs should only be used as a last resort and in the proper context, not just given out like candy, as doctors currently tend to do.

In reality, the only way to become truly healthy is to eat right, exercise, get good sleep, and handle stress properly. There are no short cuts, no magic pills, and no quick fixes. It takes effort, hard work, and a proactive mindset to be healthy in our world.

I don't mean to bother you with my own idealism, but it seems that we have lost sight of the fact that the only way to achieve anything worthwhile in life is to work hard, there's just no getting around it.

The key is to make it fun. Just because getting healthy and fit is hard work doesn't mean it has to be drudgery or misery. After all, the idea is to get fit to improve your life and happiness, not to hinder it.

The first step to making this happen is to find some community support. If we put ourselves around others who want to improve themselves it makes it a lot easier for us to stick to lifestyle changes. If you're trying to stay paleo, or workout everyday and everyone around you is eating cookies, getting hammered, and sitting on the couch watching TV it will be much harder to make the necessary changes. That's why I'm such an ardent advocate of Crossfit; it provides this community atmosphere and camaraderie.

This kind of goes back to the whole paleo concept in the first place. Our hunter-gatherer ancestors were closely connected with one another. They hunted together, ate together, slept together....they did everything together. Humans tend to do what others around them are doing. It's a part of our tribal ancestry to feel wanted; it's a survival mechanism. So the take-home message is that we need to surround ourselves with others who have the same goals to improve our chances of success.

### **What are some of the most common illnesses/diseases that you have come past or experienced that have been easily treated through the consumption of paleo foods?**

The most striking one was my girlfriend's acne. She suffered with acne for years and it had a considerable impact on her level of self-confidence and overall happiness. When we first started dating I encouraged her to give paleo eating a shot, since I knew that inflammation and insulin resistance were the root causes of acne. She agreed and went on a flexible paleo diet for a few months and saw modest improvements in her skin.

Eventually she decided that she wasn't going to settle for modest improvements and went 100% strict low-carb paleo and her skin literally cleared up completely within weeks. Whenever she falls off the boat and cheats her skin breaks out again, it's like clock-work. If she eats something bad I can guarantee that she will have a breakout the next day.

This is a strong testimony to the potential for paleo to treat certain conditions. The interesting thing is that she has discovered that even some paleo foods cause her to breakout. For

instance, whenever she eats apples her skin breaks out, even though apples are completely allowed on the paleo diet. On the other hand she can eat raisins, which are a high GI fruit, but have no problems at all. I guess this just goes to show that although some basic guidelines are very helpful, everyone needs to experiment to find what works for them.

I would say that most people should use a strict paleo diet as a starting point and then alter certain components as necessary to get really dialed in to what foods work for their own body.

I can also personally attest to the power of paleo to reduce/eliminate joint pain, regardless of the original cause. I've been diagnosed with mild osteoarthritis in both shoulder joints and eating paleo can mean the difference between being cramped up all day and having to skip a workout and feeling completely pain-free. If I cheat and eat anything sugary my joints are really tender and achy the next day. When I'm paleo I generally have very little if any pain at all as long as I stay active. Grains can give me a mild reaction, but I've found that dairy products are by far the worst. If I eat some cheese, or especially milk, my joints will literally be inflamed for days.

Digestive conditions are very responsive to paleo eating as well, and this makes sense since digestion is simply the process of breaking down and assimilating whatever you put in your mouth. Put in junk, and problems are going to occur. Put in good stuff and things are likely to be just fine. I really think that more people in our society are gluten intolerant than we tend to believe. Just from my own experience and the experience of some of my friends and family members who've made changes to their eating, I've found that gluten is a major issue.

My mom for instance, has told me that every time she eats anything with whole wheat she gets serious digestive disturbances. It got to the point where she started taking nexium (despite my recommendation to eliminate grains from her diet first!) and her symptoms cleared up for a while but ended up coming back even worse. She switched to a diet much lower in gluten (although she hasn't completely cut it out) and noticed immediate improvements in her digestion. She used to get awful stomach pains after a breakfast of whole-wheat pancakes, which have subsided since switching to a gluten-free pancake mix made with tapioca. Still not paleo, but definitely an improvement.

Also, a bodybuilder friend of mine has had colitis all of his life. When he found out about paleo and made the switch he was able to drastically reduce his dose of medication to control this condition. He still has problems sometimes, but overall his condition has improved greatly with nothing more than a simple change to paleo eating.

**Three of the major food sources that aren't part of the paleo diet include grains, dairy and processed sugar. Apart from the fairly well known diseases associated with these foods, such as coeliac disease and diabetes, what other diseases can be brought on by consuming a large quantity of these foods that people may not be as aware of, and would you say these diseases could be treated through a change in diet which consisted of paleo foods?**

I think the most intriguing area of research surrounding the elimination of grains, beans, and dairy products is multiple sclerosis (MS) prevention and treatment. As you may know, MS is a debilitating autoimmune disease that results in the destruction of parts of the myelin sheath that relays chemical messages in nerve cells. Loren Cordain, the author of The Paleo Diet, has been doing some interesting research in this area and found some intriguing connections between food components found in grains, beans, and dairy products that may be implicated in the development and progression of MS.

There's not enough time to get into all the biochemical details of how these foods may cause MS, but we basically know that proteins known as lectins found in grain and legumes may be implicated in MS.

Essentially, the way lectins cause problems is they interact with antibodies created by the body in response to infection. Many common pathogens (that people are regularly exposed to) contain proteins also found in the myelin sheath of nerve cells. When we consume grains and legumes, the lectins contained in them bind with pathogens in the gut, creating a protein matrix that can cross the gut lining and enter the blood stream (which wouldn't be possible without this binding). Once in the blood stream the immune system mounts an attack on the protein matrix, since the body has already developed antibodies to the pathogen after initial

exposure with the pathogen in the past. As a result the body labels the proteins found in the matrix as being foreign and attacks the proteins.

Unfortunately, some of the same proteins found in the pathogen are also found in the myelin sheath of the nerve cells. The result is that the immune system attacks not only the pathogen/lectin complex, but also attacks and destroys the proteins found in the myelin sheath. This process is known as molecular mimicry. This leads to the break down of the myelin sheath, and causes the symptoms of MS. Interestingly, butyrophilin, a protein component of casein in dairy products has been found to bind with wheat germ agglutinin, a lectin in wheat products, and may afflict the same damage.

Another unexpected player is tomato lectin, found in tomatoes, that also may be implicated in molecular mimicry. Loren Cordain has conducted some case studies on a few people implementing a grain, legume, and dairy-free diet to treat MS. Interestingly, he has found so far that all people that switched to the paleo diet either stopped the progression or even improved their MS symptoms and regained some physical function.

Unfortunately, it appears that the paleo diet does a better job of stopping the progression of MS than improving the condition, so it is important to catch the disease early and make the switch early on to minimize CNS damage. However, it is important to note that lectins likely aren't the only factor at play in MS, as some epidemiological research has also linked MS to low vitamin D status, not to even mention the genetic factor at play.

In theory, this same process is behind most diet-related autoimmune diseases, like rheumatoid arthritis, graves disease, scleroderma, psoriasis, etc. Although most accounts of improvement of auto-immune disease with a paleo diet are anecdotal, research is underway and thus far it appears that lectins do indeed play a significant role in auto-immune disease. Keep your eyes open for studies in the near future, because I think that this is an area of research that is going to explode once Cordain publishes his findings.

### **Grass fed meats Vs Grain fed meats; how would you differentiate the two in regards to health benefits and nutritional value.**

When it comes to grass-fed meats they are higher in omega-3 fatty acids, higher in conjugated linoleic acid (CLA), and have been shown to have higher density of vitamin E. Grass-fed meats have a healthier ratio of omega-3 fats than do grain-fed meats which means that eating grass-fed meats contributes to achieving a proper ratio (4:1 – 1:1) of omega-6 to omega-3 fats and lessen systemic inflammation. Conjugated linoleic acid is also about 5 times higher in grass-fed meat than in grain-fed meat and has been shown in animal trials to reduce tumor growth and in human epidemiological studies to be correlated with lower rates of breast cancer. Grass-fed meat is also about 4 times higher in vitamin E when compared to grain-fed.

From my own experience I can say that the number one best “supplement” that I ever added to my diet is grass-fed meat. I can see immediate changes in my overall health and performance when I switch to eating all grass-fed meats.

### **The paleo diet has been shown to consist of foods which promote good health, while eliminating foods which do the opposite. However, is there a way someone could go 'wrong' when following the paleo diet to an extent that it would play negative effects on their health?**

Yes, and I'm glad you brought this up because I think it is an important issue to touch on. One of the things that I commonly see with people who think they're eating paleo is that they tend to assume that just because a food could have been attained in nature that it can and should be consumed in unlimited amounts. For example, when I first started eating paleo I ate nuts as my staple source of calories. I loved the taste of them and they filled me up quickly.

At first I felt great, probably because I eliminated all bad foods from my diet, but eventually I started getting some serious digestive disturbances. I eventually started to feel sick and lethargic after eating nuts. The reality is that it is hard to obtain large amounts of nuts in nature because it is very labor intensive and the nut intake of our paleo ancestors was probably not very high because of this. Nuts also contain protease inhibitors, which can interfere with digestion. A good way to reduce this effect is to soak the nuts in water over

night and then dehydrate them (if they stay wet they'll grow mold). You could also run into problems with a very high fruit intake. I have nothing against fruit and I eat quite a bit of it myself, especially during the summer months. However, modern varieties of fruit have been selectively bred over the years to contain much more sugar than wild varieties, and can cause some problems with insulin resistance when consumed in large amounts.

I would also advise people to keep their consumption of paleo deserts to a minimum. Some assume that just because a food has more natural ingredients that they can consume it in unlimited amounts with no consequences just because it's "paleo".

A good example is almond cookies. They contain butter, almond meal, and honey all in one snack. Sure, they lack the anti-nutrients found in regular cookies and have a greater nutrient density, but when you combine large amounts of fat (from butter and almonds) with sugar (from honey) you're setting yourself up for fat gain. Not to mention that paleo deserts tend to also be quite high in calories. That said, I would save paleo treats for special occasions, which is completely acceptable and is obviously better than snacking on regular sugar/trans fat laden cookies.

**Probably another important aspect of following the paleo diet would be the addition of exercise. Is there a particular way of training which you feel strengthens the health benefits associated with paleo foods more than others**

Constantly varied, functional movements, performed at a high intensity. That's what Crossfit recommends and I know it may seem biased or even trendy to make such a recommendation since Crossfit is becoming so popular, but I can honestly say that in my experience no other way of training has compared to Crossfit when it comes to improved health and performance. The only thing I would add is that scaling is incredibly important when beginning Crossfit and frequency of workouts may need to be adjusted for some people.

Some people go to the Crossfit site and start right off the bat with the workout of the day as posted, with no scaling whatsoever. This is irresponsible and dangerous. The key is to get over your ego, start slowly and build up your work capacity gradually. I would also say that in my experience the frequency of the Crossfit WOD can lead to overtraining very quickly if you're not careful. I've found that an every other day approach works best for me. The 3 on/1 off Crossfit schedule is too much, for me at least.

I would also say that it's really important to incorporate some good uncompetitive, unstructured, play into your program. In our society adults have really lost the ability to play. We become too sophisticated and "mature" for our own good. Just get outdoors and have some fun. It doesn't matter how, just get moving and do something that's fun, preferably with other people.



**Lastly, what has some of the paleo diet and other dietary/nutritional changes that you have played around with and what experiences and results have you felt with your health?**

I was messing around with intermittent fasting (IF) for quite some time and got a lot of other peoples experiences before coming to what I think are some pretty solid conclusions on IF. IF can be a great tool for improving health and performance, losing body fat, and making life a

lot more convenient. However, there are some important things that anyone should know before giving it a go.

Unfortunately, in our society many people are chronically stressed. There's work, school, kids, traffic, bills, etc. that all contribute to psychological stress. IF also happens to be a stress, in fact, this is how it is believed to produce health benefits. IF places a mild stress on the body's cells which then adapt to that stress and become stronger and healthier. However, if you have a chronic stress on the body it cannot adapt effectively and actually begins to degrade rather than strengthen. This is where IF can be a problem.

If you already have a lot of stress from daily industrial living and toss IF on top of that you're only going to make matters worse and create a downward spiral into adrenal fatigue and possibly some serious health problems related to stress. So when it comes to IF if you already have a lot of stress then you're better off either avoiding IF altogether or getting rid of the cause of your other life stresses. If you don't have much stress then IF can be a great option after you get a healthy paleo diet dialed in.

That brings me to my next point, that IF should not be done on junk foods. Some people call this IFOC, which stands for Intermittent Fasting On Crap. The key is to get a good paleo diet dialed in first and then possibly tinker around with some IF. Even then some may find that IF simply doesn't work for them, in which case they should listen to their body and give it up.

Another tool that I've experimented with is post-workout carb feedings. Essentially, what you do is eat low-carb paleo all day and then eat a meal containing protein, small amount of fat, and a good dose of starchy carbohydrates usually from sweet potatoes or some other tuber (no grains, we want to stay paleo) following a glycogen depleting workout. The idea is to refill the body's glycogen stores within the muscles to enhance recovery and ensure adequate glycogen for the next workout.

Typically when high GI starchy carbs are consumed they elicit an insulin response that leads to fat storage, since the muscle cells are already saturated with glycogen (a storage form of glucose in muscles). After a workout, however, the muscles become much more insulin sensitive, meaning that they respond very well to insulin secretion and will suck up glucose molecules to be stored in the muscle as glycogen, rather than fat.

Basically my experience with this has been that if you're already in good shape and at a healthy body fat percentage this is a great way to enhance your performance. If you're someone who is overweight it's better to skip the starchy carbs post-workout and stick with a low GI paleo meal. This allows the body to more readily draw from its fat stores and help to improve body composition.

Nikki's [Paleo Cookbooks](#) are amazing! They include everything from light summer salads to hearty winter soups, all without using any of the unhealthy ingredients that typically accompany our favorite dishes. The Paleo Cookbooks clearly show that eating healthy does not in any way have to be boring or tasteless. If you want flavor and healthy all in one shot The Paleo Cookbooks are the way to go.

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