PALEO DIET

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Introduction/Background of Fad Diet

The Paleolithic diet is actually called the Paleo diet most often. This diet is also frequently called the hunter-gather diet, the Stone Age diet, and the caveman diet. These surnames are due to the nutritional content of the régime. The Paleo diet was created in the 1970s by Walter Voegtlin, who was a gastroenterologist (*Paleo-Type Diet*). The diet had existed before then by our ancestors, but he came up with the concept of returning to eat the foods that they did. He believed that adapting to our past diet would make us healthier by reducing obesity, diabetes, and Crohn's disease over time (Butler, 2014). There is no concrete evidence to prove when this diet initially became popular. However, it is likely that the paleo diet is popular now because there is a growing interest with eating healthier, wholesome, and unprocessed foods (*Paleo Diet: What is it and why is it so popular?*).

Promised Outcomes

There is little long-term research on the paleo diet; however, there have been several clinical trials conducted for 12 weeks by participants in small groups (*Paleo Diet: What is it and why is it so popular?*). The trials suggested that the paleo diet could improve weight loss, glucose tolerance, and appetite management, as well as help to regulate blood pressure (*Paleo Diet: What is it and why is it so popular?*). More trials with larger groups and a longer duration time would be helpful to know the exact health benefits for the general population and potential risks associated with this food plan.

Nutritional Breakdown

The hunter-gather diet is probably the most accurate nickname for the paleo diet, as it includes exclusively foods that are found around the world and processing them as little as possible. Ideally, the diet would change depending on where someone lives because the food would vary as to what is available to be grown and what animals inhabit that climate.

The vitamin and mineral content within the diet is much higher compared to the average American (*Paleo-Type Diet*). This is because the amount of plant-based foods is much higher. Also, the diet would naturally consist of very low or no salt, and also saturated fat and cholesterol would be much lower (*Paleo-Type Diet*). Protein is likely higher for people eating within the paleo guidelines than for average Americans (*Paleo-Type Diet*). However, the majority of a person's protein, who is following the diet, would be from plants. These plant sources have unessential amino acids within them, so their bodies are unable to make a complete protein. Fiber is also very high as compared to what is recommended today, and this is due to the high amount of vegetables that would be consumed (*Paleo-Type Diet*).

Omega-3s and omega-6s are also very high within the paleo diet as there is a great emphasis on fish and other small aquatic animals (*Paleo-Type Diet*). Because of this emphasis and the prominence of vegetables, fruits, and lean, grass-fed meats in the diet, there is not as much dietary fat within the foods found in the diet (*Paleo-Type Diet*). So, dietary fat would in turn be lower than the average American as this diet does not allow for high calorie byproducts of butter or the fats found in processed foods that paleo-followers cannot eat.

"Good" and "Bad" Foods:

The Paleo Diet explains a list of foods to eat and what not to eat, such as good and bad foods. The good foods include grass-fed meats, fish/seafood, fresh fruits, fresh vegetables, eggs, nuts, seeds, and healthy oils (olive, walnut, flaxseed, macadamia, avocado, and coconut). The bad foods include cereal grains, legumes, dairy, refined sugar, potatoes, processed foods, overly salty foods, refined vegetable oils and candy/empty calories.

Supplements

This diet does not require those that follow it to take supplements, although it may be recommended to take a multivitamin as many people who follow this diet are lacking in essential nutrients. There are also supplements labeled "paleo diet;" however, the initial principles of the Paleo diet do not involve taking these.

Cost of the Paleo Diet

The Paleo Diet reflects conflicting reviews based on the expenses. Commonly, the Paleo Diet is assumed to be expensive considering that the diet requires an abundance of fresh fruits and vegetables, as well as nuts, but especially the meat is most expensive which is a large part of the diet. However, there have been a number of reviews refuting the common belief that it is more expensive than eating regularly.

Throughout several reviews of the Paleo Diet based on finance, people spend approximately \$150 per week on groceries for two people. The first week of the Paleo Diet tends to be more expensive because most of the staples are not readily found in people's cupboards, such as coconut flour or almond butter, etc. However, once the staples are purchased, they are able to last for a good amount of time. Most people believe that the Paleo Diet is expensive considering the fact that meat is a major part of the diet, but there are a number of people who refute this belief. A calculated monthly cost of another two people following the paleo diet amounted to \$1,184.72 per month but a number of factors could make someone's diet more expensive. These factors include whether they are purchasing from organic suppliers, whether they are specifically purchasing grass-fed meats, farm fresh eggs, wild caught fish, and etc. Those that eliminated these factors could end up spending approximately \$10 per day, but the diet does not recommend this. Therefore, it all depends on the quality of food that a person buys; the paleo diet could get expensive because of this.

Time Commitment

The level of effort required for the paleo diet is moderate. There is no calorie counting, and the fiber-rich fruits and vegetables will fill you up, as will the lean meat.

For limitations the Paleo Diet allows for some cheating, especially at first. When you're just starting, you can eat what you want for 3 meals a week. Cordain

calls those "open meals." Or you can challenge yourself to just one "open meal" per week.

As far as shopping and cooking you'll need to stock up on the allowed foods and cook from scratch, so plan for kitchen time. You are also not allowed to buy packaged foods or meals, so processed foods are not an option. There are no inperson meetings you have to remain committed to. You can do this diet on your own, but if you want to connect to your fellow Paleos, there are Paleo Diet forums online.

The diet allows for some restrictions, such as low salt in your diet, but is not recommended for vegetarians or vegans. The reason it would be impossible for vegetarians or vegans is because the diet emphasizes meat and fish, and Cordain says it's impossible to follow a Paleo Diet without eating meat, seafood, or eggs. Excellent vegetarian sources of protein, such as beans and other legumes, are not allowed. It is easy for low-salt diets because it doesn't allow salt, so it may help you cut down on sodium.

Overall, the reviews all have very different opinions about if the diet is time consuming or not. Many reviews claim that it is very time consuming because they may spend a whole Sunday preparing their meals for the rest of the week. Others say that it is not time consuming because they have created a system that makes it easy to prepare meals for the diet. There are also many recipes online that claim they are fast and easy paleo meals. So if a person was interested in this diet but had limited amounts of time, they could always use the fast and easy meal guides.

"Special" Foods/Items

In order to complete this diet there is no special foods or items that an individual must purchase in order to complete the diet. If they wanted more information and not just websites there are books about the diet that the person may buy and use. There are many books, such as How to Eat Paleo on a Budget, The Ultimate Guide, and several others.

Exercise Component

There is no official Paleo fitness program. In general, the Paleo lifestyle emphasizes natural movement over machine-based exercises and brief but intense strength training workouts over extended sessions of steady-state cardio. It is preferred that you work out outside rather than inside. The program stresses the importance of rest and recovery time because they believe your workout should leave you feeling strong and energized, not constantly sore and exhausted. They don't want exercise to feel like a cruel form of torture you have to force yourself through. It is important but it shouldn't dominate your life in this workout. Paleo fitness is infinitely flexible and adaptable to individual needs. The most important aspect of any exercise program is how well it works for you. They suggest you try different types of exercise programs such as natural movement, overall strength and conditioning, and powerlifting.

There were no elliptical trainers in the Paleolithic Era. While exercise machines fit conveniently into time-crunched modern schedules, they only work a narrow range of muscles and rarely mimic any movement you might need to do

outside a gym. When you spend 30 minutes moving in a regimented, mechanical way and then sit for the next eight hours, you're fundamentally disconnected from your body's natural activity patterns. A person's basic skills can be divided into three categories: manipulative (moving objects around), combative (self-defense), and locomotive (moving yourself from place to place). Challenge yourself to a long hike, spend some quality time climbing around in a tree, or take a swing on the monkey bars at a local playground.

There are a few different types of strength and conditioning workouts that Paleo is likely to recommend. One of them is CrossFit, the most popular overall fitness program in Paleo circles. Famously unspecialized, CrossFit builds overall fitness through workouts that incorporate bodyweight exercises and Olympic lifting into a program you can scale to meet your own fitness level. Another is Primal Blueprint Fitness, which are slow movement, compound lifting exercises and bodyweight training to build strength, and occasional sprinting and high intensity training. The program focuses on functional strength, discouraging "chronic cardio" and isolation exercises. Another workout program grounded in the Paleo diet is EPLifeFit, which stands for Everyday Paleo Life and Fitness. They post daily workouts with instructions, and the forums let you connect with a community, ask questions, and even upload videos for Sarah and Jason to check your form. These programs all have three basic common features: they encourage compound lifts over isolation exercises, free weights over machines, and lifting heavier weights at fewer reps. All these exercise programs have one thing in common: they emphasize rest and recovery.

Paleo exercise has the same basic goal, which is to improve your health by working with your body, not against it. They want you to focus on natural movement and consistent physical activity. Paleo fitness means whatever way of moving your body works best for you. The programs above are a great start by experimenting with them, keep track of your results, and find a way of moving that fits into your life.

Creator

The Paleo Diet, also referred to as the Caveman Diet, was first thought of by Joseph Walter Voegtlin in the 1970s (Butler, 2014). Joseph Walter Voegtlin, a gastroenterologist, was the first person to consider that eating like our human Paleolithic ancestors could be healthier than how we eat today (Butler, 2014). He published a book titled *The Stone Age Diet* in 1975 that discusses in detail how our ancestors ate, and the benefits of consuming that kind of a diet (Fallon & Enig, 1999). Joseph Walter Voegtlin graduated as a doctor from University of Washington Medical School in 1954 (Dr. Joseph Walter, 2011). He was a medic and surgeon until he retired in 1992. The Paleo Diet is the only diet that Voegtlin made contributions to; however, he often researched nutrition when he was not occupied with his career.

The research of Weston Price also contributed to the start of the Paleo Diet because he studied what our tribal ancestors used to consume. He discovered from his travels in the 1930s that there was a commonality of consuming animal fat in the diet years ago, and that there was better overall body development when a proper

diet was consumed (Morell, 2000). . Dr. Weston Price is now considered to be the "Isaac Newton of Nutrition" (Morell, 2000). Dr. Price, a dentist, spent his life researching how diet affects the teeth and the rest of development in different isolated human societies. He published his discoveries and thoughts from his studies in a volume titled *Nutrition and Physical Degeneration*.

In 1988, Doctor S. Boyd Eaton also contributed to the development of the Paleo Diet by publishing *The Paleolithic Description* in which he argues that the cave man diet was low in saturated fat and salt, but rich in fiber from plant foods (Fallon & Enig, 1999). S. Boyd Eaton along with Melvin Connor are considered to be the "founding fathers" of the Paleo Diet. Together they published *Paleolithic Nutrition: A Consideration of its Nature and Current Implications* in the New England Journal of Medicine in 1985 (*The Paleolithic Diet*, 2013). Eaton and Connor have contributed to many different studies and published multiple different works about the Paleo Diet, but their most recent publication was *Paleolithic Nutrition, Twenty-Five Years Later* in 2010. They published this to keep the information on the Paleo Diet as up to date as possible.

Consumer Reviews

"I started to lose weight at a stable rate, and as predicted by the science, it didn't seem to matter at all how many calories I ate. I didn't exercise any more than normal; if anything, I was exercising less. My weight loss plateaued and stabilized at around 75 kg, which I presume is my "natural" weight. Some people report a short period of adaptation after going Paleo, during which time they felt a little tired.

Although this is normal, I didn't experience it at all. An attractive consequence, is that I no longer notice peaks of hunger throughout the day, and don't find myself feeling the desire to snack. (I understand part of this has to do with starting the day with a high fat breakfast.) More than a year after having started, I've never felt better in my life. I'm leaner, more muscular than ever, have lots of energy, and just feel great." (Henderson, 2011)

"I just want to say that I first started to lose weight when I switched to a low-carb diet, but continued to eat lots of dairy and soy, as I was a vegetarian. I have always been a size 12-14, and was quite pleased when I dropped to a size 10 by eliminating bread, pasta and sugar from my diet. I still experienced occasional fatigue and lots of digestive upset, though, and it wasn't until I took an allergy test and found I was allergic to grains and dairy - and subsequently cut both completely out of my diet that I started to feel the energy and vitality for which I have been searching for years. I'm also allergic to most beans, so my only alternative source of protein was meat. I started to eat lean, unprocessed meats and fresh fruits and veggies, and my energy was not only soaring, but my depression lifted, my skin became smoother and softer, and I dropped down to a size 4 without even trying to lose weight! (I've never been less than a size 10 in my life!) Anyways, I effortlessly maintained that level of vitality and a size 4 until I started to eat rice flour, oats, processed meats and candy. I quickly gained 15lbs and fell into depression once again, leading me to realize that once on a paleo diet, it must become a way of life. The foods that Dr.Cordain describes as detrimental to our health (grains, dairy, legumes) are

indeed factors in all sorts of health problems. If you are a possible buyer of this book, please take note of this, you cannot expect to lose weight and then go back to your usual style of eating. Buy this book and undertake Dr.Cordain's suggestions only if you are ready to change your lifestyle - it will be well worth it, I promise! In any case, I have since started back on the paleo-lifestyle route (feeling better already and have lost 5lbs in one week), with the help of Lauren Cordain's book, and it has been an invaluable resource for me. I have beeen waiting for him to write a book for a while now, as I have been reading interviews and papers written by him on [...] since I first started on the paleo nutrition route 2 years ago." (*Customer Reviews*, 2002)

"I decided to do some research on losing weight and having success with the Atkins diet earlier, I started with the low carb diet. I downloaded a Jimmy Moore podcast and one of the first one's I listened to was with Mark Sisson. I bought Mark's book, The Primal Blueprint, and that's where it all started. I made a lifestyle change and learned all I could about the Paleo or Primal way of eating.

I eventually found your podcast and learned a lot from listening you your show. I went from a very chubby 220 down to 180 pounds with not much effort! My heartburn, sore joints, bad skin (pimples) and other health issues disappeared. Once I went Paleo the fat started melting away and there it was, the muscle I knew I had! I was lean again and felt and looked much younger than I am. Many guys my age don't look anything like they did in their early 20's but going on the Paleo diet will give you that body you once had. Give your cells the right fuel and they'll do the rest.

I'll never go back. Now that I learned what the human body does with certain foods it's easy to say no to sugar and grains. I feel better at 41 years old than I did at 26, it's amazing." (Kresser)

After reading these reviews, among many others, the most common result of the Paleo Diet is weight loss. Many people also say that they have an increase in energy, and that their overall mood has improved. In the first review, the user stated that they lost weight, gained muscle, feel great, and no longer have the urge to snack from hunger. The second review explains that the Paleo Diet was the most successful for them in regards to weight loss. The third user said that they lost weight, and that their health problems went away after going on the diet. Overall, users of the Paleo Diet seem to be satisfied with the results. They are happy with their weight loss, improved energy, and enjoy the healthy foods they are consuming.

Professional Reviews

"New York City nutritionist Jennifer Andrus sees some nutritionally wise principles in the diet, such as the lean meats and fish, and fruits and vegetables, but says it's not necessary to go to the extremes of the Paleo crowd. "It eliminates dairy, legumes and some other foods that can be healthy part of one's diet." While she shares the Paleo crowd's concern about modern convenience foods and sweets, she is also worried about our present-day gluttony. "I think processed food deserves the

criticism, but probably not because we haven't evolved; more likely because we eat too much of it and most of it is nutritionally void."" (Sachs, 2014)

"Would I recommend the Paleo Diet?

No. Though I think there are some major upsides to so-called Primal diets, I am not a proponent of restrictive diets of any kind. Here's why: virtually no one maintains restrictive eating over a long period of time, and it's healthy eating over the long term (a.k.a. decades) that leads to good health and a long life.

I've never met a single person, nor read about people in research, who has maintained a low-carb (which is what Paleo is, essentially) diet for more than a year or two.

Plus, I'm a huge fan of beans and whole grains. When you buy high quality grain products, eat a wide variety of grains, and make healthy meals with beans or other legumes, these foods actually improve your health as opposed to harm it. This has been proven in population studies (e.g. the Greeks & other Mediterranean populations) time and time again.

However, I will say this: Nearly all of us would benefit from taking some of the Paleo "themes" and applying them to our lives much of the time: Eat more vegetables, fewer carbohydrates (especially refined carbs), less sugar, and buy only sustainably-raised meats, poultry and fish. These parts of The Paleo Diet are consistent with widely accepted nutrition research, and would help all of us – me included – achieve better health." (Winslow, 2014)

"The Paleolithic (Paleo) diet, also called the "Caveman" or "Stone Age" diet, centers around the idea that if we eat like our ancestors did 10,000 years ago, we'll be healthier, lose weight and curb disease. "A quick and pithy definition of the Paleo diet is—if the cavemen didn't eat it then you shouldn't either," says Academy Spokesperson Jim White, RDN, ACSM/HFS. That means foods that can be hunted, fished or gathered: meat, fish, shellfish, poultry, eggs, veggies, roots, fruits and berries. No grains, no dairy, no legumes (beans or peas), no sugar, no salt. Why? "According to proponents, our bodies are genetically predisposed to eat this way. They blame the agricultural revolution and the addition of grains, legumes and dairy to the human diet for the onset of chronic disease (obesity, heart disease, and diabetes)," says White.

On one hand, this way of eating encourages including more fruits and vegetables and cutting out added sugar and sodium—which aligns with the 2010 Dietary Guidelines for Americans. The combination of plant foods and a diet rich in protein can help control blood sugar, regulate blood pressure, contribute to weight loss and prevent Type 2 diabetes, says White.

But a typical plan also exceeds the Dietary Guidelines for daily fat and protein intake and falls short on carbohydrate recommendations, according to a review from U.S. News & World Report. The exclusion of whole grains, legumes and dairy can be risky as well. "These foods are nutrient-rich and contain important vitamins and minerals such as calcium and vitamin D. Without these foods, supplementation is necessary," says White. "Eating this way ... can be very healthy but the lack of certain foods may result in certain deficiencies."

Eliminating whole grains and dairy is not necessarily the ticket to ending disease and ensuring weight loss. Whole grains contain dietary fiber, which may help reduce your risk of heart disease, cancer and diabetes, and other health complications. And studies suggest that dairy may play a role in weight loss. "The crux of the problem, with respect to grains and dairy, stem from over consumption, and as with anything, excess quantities will become problematic," explains White.

The Paleo diet might also be hard to sustain. "We live in a society where it is not possible to eat exactly as our ancestors ate. For example, wild game is not readily available as most of the meat we consume has been domesticated. And the plant food we eat has also been processed rather than grown and gathered in the wild," says White. "While strict conformity is not realistic, it is possible to modify the plan, eating only wild caught fish, grass-fed meat, and organic fruits and vegetables." But even that can be hard to follow because of lack of variety, need for planning, supplementation and cost, White adds." (Denny, 2013)

Nutritional professionals seem to have similar opinions regarding the Paleo Diet. In the first review, the nutritionist states that the ideas of the Paleo Diet are good in that people are eating less processed foods and more of the healthy unprocessed options. However, she does not think that it is necessary to go to the extreme that the Paleo Diet does in order to maintain a healthier lifestyle. The registered dietitian from the second review does not like the Paleo Diet because it restricts people from eating in all of the necessary food groups. However, they also state that some of the principles of the Paleo Diet (more vegetables, less sugar,

fewer carbs) can be beneficial to our overall health if applied to our diet. The third professional also says that some components of the Paleo Diet are beneficial while others should not be recommended. Overall, nutritional professionals seem to agree upon the idea that some of the rules for the Paleo Diet have the right ideas in mind, but that the diet itself goes too extreme and cuts out some important components of a well-balanced diet.

Evaluation of the Diet

Cumulatively, the group believes that the paleo diet is too restrictive. Not allowing for dairy, grains, or processed foods is not only unrealistic but also not beneficial to the consumer, as they will be missing essential vitamins and minerals. It is not a realistic approach to food from a nutritional and environmental standpoint. It is also not fully nutritionally adequate because of lacking micronutrients such as riboflavin and probiotics. However, some nutrients are very high such as fiber, antioxidants, iron, and zinc. Also, protein is very high in this diet, whereas carbohydrates are very low. If the consumer has excess protein that the caloric content their body doesn't require, then it will be stored as fat. Overall, this diet is not a healthy option because of the necessary foods and nutrients it lacks.

Recommendation

Overall, the group would recommend a few of the diet's principles. For example, for a person who has high blood pressure and has several factors that increase their risk of cardiovascular disease, the paleo diet would lower their cholesterol and saturated fat intake, and thus lower their risk over time. We agree that the diet should only be used as a guideline and not followed to the extreme and not allowing any exemptions. Regardless of the great reviews that the diet has, there are enough nutrients that are lacking to be of concern. Overall the diet is too restrictive and unrealistic for the average consumer.

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