

Paleo Diet

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Abstract

The Global increase in chronic and diet related metabolic diseases has focused interest in Paleolithic diet. The Paleo Diet allow us to tap into our genetic potential and start a healthy lifestyle. It includes whole, unprocessed foods that resemble what they look like in nature. Paleo diet has the potential to supply ample amounts of all important micronutrients, due to its focus on whole foods, food diversity and food quality, Various researches also shows that Paleo diet is the healthiest way to eat since it is a nutritional approach that works with our genetics to help us stay strong, lean and prevent us from wide spectrum of diseases.

Keywords: Paleo Diet; Genetics; Chronic Diseases; Unprocessed Foods; Micronutrients.

Introduction

Farming and Multiple technological advances created impact on human dietary pattern. Modern humans were genetically the same as our ancestors. Paleo diet follow a nutritional plan based on the eating habits of our ancestors in the Paleolithic period, between 2.5 million and 10,000 years ago. The Paleolithic diet is also called the paleo diet, caveman diet or stone-age diet.

Wide variability exists in the way the diet is interpreted. However, the diet typically includes vegetables, fruits, nuts, roots, meat, and organ meats while excluding foods such as dairy products, grains, sugar, legumes, processed oils, salt, and alcohol or coffee [1].

Research in biology, biochemistry, Ophthalmology, Dermatology and many other disciplines indicate it is our modern diet, full of refined foods, trans fats and sugar, that is at the root of degenerative diseases such as obesity, cancer, diabetes, heart disease, Parkinson's, Alzheimer's, depression and infertility. – Robb Wolf.

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Essentials of Paleo Diet

A paleo diet is rich in all essential elements of a healthy diet. The aim of a paleo diet is to return to a way of eating that's more like what early humans ate. The belief is that the human body is better suited to that type of diet than to the modern diet that emerged with farming. They lived eating such foods and were free of diseases like diabetes, obesity, and heart disease. So the Paleo diet is promoted as a way of improving health [2].

The scientific literature generally uses the term "Paleo nutrition pattern", which has been variously described as:

- "Vegetables, fruits, nuts, roots, meat, and organ meats" [3];
- "vegetables (including root vegetables), fruit (including fruit oils, e.g., olive oil, coconut oil, and palm oil), nuts, fish, meat, and eggs, and it excluded dairy, grain-based foods, legumes, extra sugar, and nutritional products of industry (including refined fats and refined carbohydrates)" [4] and
- "avoids processed foods, and emphasizes eating vegetables, fruits, nuts and seeds, eggs, and lean meats".

According to Cordain's 2002 book, Paleo diet includes

- 55% of daily calories from seafood and lean meat, evenly divided
- 15% of daily calories from each of fruits, vegetables, and nuts and seeds

- No dairy, almost no grains (which Cordain described as “starvation food” for Paleolithic people), no added salt, no added sugar.

Building A Healthy Paleo Diet

Lean Proteins

Lean proteins support strong muscles, healthy bones and optimal immune function. Protein also makes you feel satisfied between meals.

Fruits and Vegetables

Fruits and vegetables are rich in antioxidants, vitamins, minerals and phytonutrients that have been shown to decrease the likelihood of developing a number of degenerative diseases including cancer, diabetes and neurological decline.

Healthy fats from nuts, seeds, avocados, olive oil, fish oil and grass-fed meat Scientific research and epidemiological studies show that diets rich in Monounsaturated and Omega-3 fats dramatically reduce the instances of obesity, cancer, diabetes, heart disease and cognitive decline. One of the greatest deviations away from our ancestral diet is the amounts and types of fat found in modern grain feed animals vs. the amounts and types of fats found in grass fed or wild meat, fowl and fish. Wild meat is remarkably lean, and has relatively low amounts of saturated fats, while supplying significant amounts of beneficial

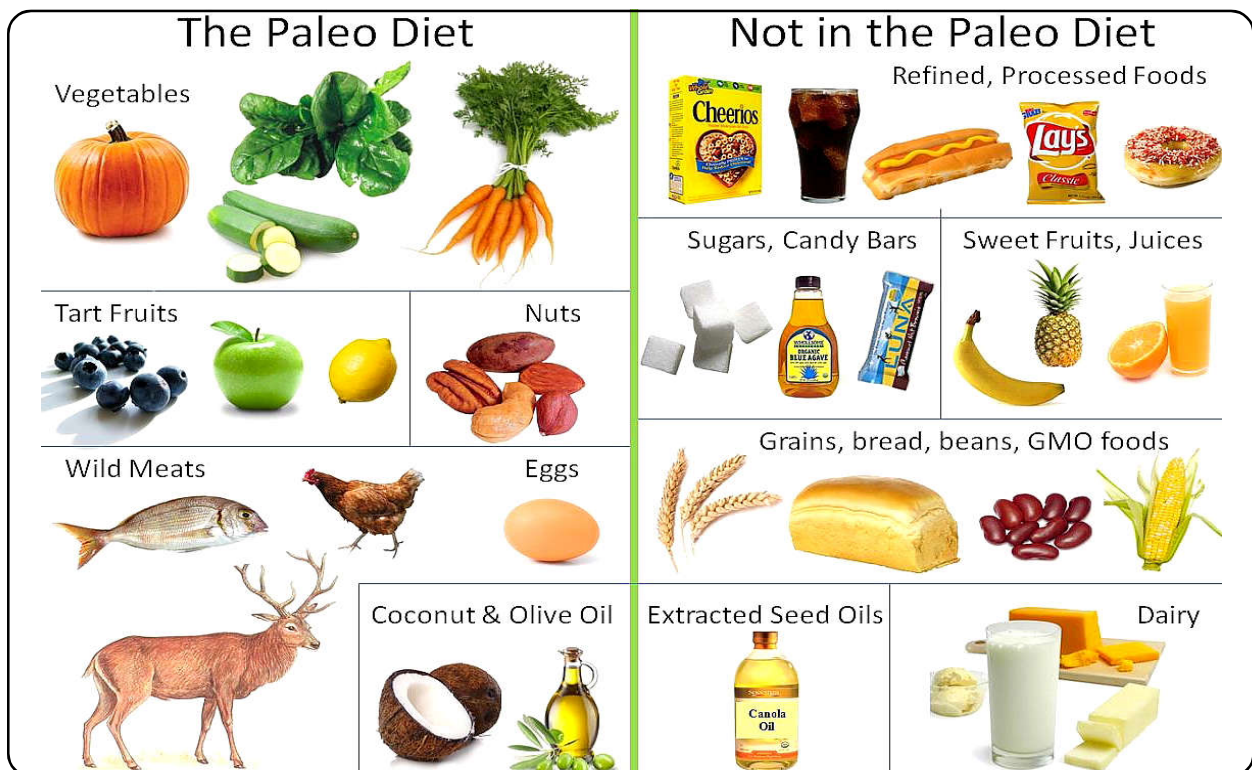
omega-3 fats such as EPA and DHA. Prof. Cordain and his team analyzed the complete fatty acid profile from several species of wild deer and elk. The message is that free range meat is far healthier than conventional meat [5].

Foods to be Taken

- Grass-produced meats
- Fish/seafood
- Fresh fruits and veggies
- Eggs
- Nuts and seeds
- Healthful oils (Olive, walnut, flaxseed, macadamia, avocado, coconut)

Foods to be Avoided

- Cereal grains
- Legumes (including peanuts)
- Dairy
- Refined sugar
- Potatoes
- Processed foods
- Salt
- Refined vegetable oils [6]



Health Benefits of a Paleo Diet

For most people the fact the Paleo diet delivers the best results is all they need. Improved blood lipids, weight loss, and reduced pain from autoimmunity is proof enough.

Does it Work for Diabetes?

Paleo diet have a low glycaemic load despite being composed mostly of carbohydrates. It improves plasma glucose and other markers of glycaemic control.

A randomised controlled trial of the Palaeolithic versus Mediterranean-like diet in 29 patients with ischemic heart disease and impaired glucose metabolism over 12 weeks was conducted by Lindeberg et al. Their study showed that both groups lost approximately the same amount of weight; however, the Palaeolithic group showed a significantly decreased waist circumference and improved glucose sensitivity [7]. Again this study was elaborated in 2009 by other researchers, comparing Palaeolithic and diabetic-like diet, Palaeolithic diet showed improved HbA1c, diastolic blood pressure, lipid profile, weight and waist circumference, and there was no statistically significant change in C-reactive protein [8].

Cardio Vascular Disease

According to the CDC, cardiovascular disease is the number one cause of death in the United States. Interestingly however, Paleolithic ancestors and contemporarily studied hunter-gatherers showed virtually no heart attack or stroke while eating ancestral diets. A study was conducted by Frassetto et al among nine non-obese, sedentary, healthy volunteers, comparing the Palaeolithic diet to their usual diet. Results showed significant reductions in blood pressure with improved arterial distensibility, insulin sensitivity and plasma lipids among Paleolithic diet volunteers, all unrelated to body weight [9].

Another longer term trial on the Palaeolithic diet was performed by Mellberg et al. They conducted a randomised controlled trial of 70 women who were obese and post-menopausal, and they compared the Palaeolithic diet to a reference diet based on the Nordic Nutrition over a two-year period .

The Palaeolithic group lost significantly more weight than the group on the reference diet at six months, although this was not sustained at the 24-month mark. The Palaeolithic diet group lost more

body fat and lean tissue than the reference group. Both groups showed similar improvements in blood pressure, CRP and cholesterol [10].

Protects from Cancer

A 2014 study analysed the incidence of colorectal polyps versus the diet history given on a standardised dietary questionnaire and found that greater adherence to the Paleolithic diet pattern is associated with lower risk of sporadic colorectal adenomas. Fruits and vegetables have certainly been shown to be protective against cancer [11].

Reduces Weight and Creates Satiety

Since Paleo diet's focus on protein from lean meat and seafood it makes people feel full more quickly and so can help people eat less [12]. A pilot study was conducted in 2008 in which 14 healthy volunteers were placed on the Palaeolithic diet over the course of three weeks. Across all participants, there was a significant mean weight loss of 2.3 kg over the three weeks and a mean decrease in waist circumference by 0.5 cm. Systolic blood pressure improved slightly and there was also a stark rise in C-reactive protein [13].

A 2013 study also tested the satiety of the Palaeolithic diet, by comparing with the diabetic diet, in a randomised crossover trial of 13 patients with type 2 diabetes. The Palaeolithic diet resulted in greater satiety quotients for energy, energy density and glycaemic load per meal than the diabetic diet. They concluded a Paleolithic diet is more satiating per calorie than a diabetes diet in patients with type 2 diabetes and it was seen as instrumental in weight loss [14].

Conclusion

Due to civilization modern population develops many health problems and chronic diseases. Researches prove that the aspects of the Paleo diet advise eating fewer processed foods and less sugar and salt. The evidence related to Paleolithic diets is best interpreted as supporting the idea that diets based largely on plant foods promote health and longevity, at least under conditions of food abundance and physical activity [15]. It is judicious for Modern humans to remember their evolutionary heritage and increase their intake of vegetables and fruits and decrease their intake of animal fats and domesticated grains.

References

1. Paleolithic diet https://en.wikipedia.org/wiki/Paleolithic_diet.
2. "Caveman fad diet". NHS Choices. 9 May 2008. Retrieved 25 December 2015.
3. Tarantino, G; Citro, V; Finelli, C. "Hype or reality: should patients with metabolic syndrome-related NAFLD be on the Hunter-Gatherer (Paleo) diet to decrease morbidity?". *Journal of Gastrointestinal and Liver Diseases*. 2015; 24 (3):359-68.
4. Manhiemer, Eric W; van Zuuren, Esther J; Fedorowicz, Zbys; Pijl, Hanno. "Paleolithic nutrition for metabolic syndrome: systematic review and meta-analysis". *Am J Clin Nutr*. 2015 August 12; 102(4):922-32..
5. What Is The Paleo Diet? robbwolf.com/what-is-the-paleo-diet.
6. What to Eat on the Paleo Diet . thepaleodiet.com/what-to-eat-on-the-paleo-diet.
7. Lindeberg S, Jonsson T, Granfeldt Y, et al. A Palaeolithic diet improves glucose tolerance more than a Mediterranean-like diet in individuals with ischaemic heart disease. *Diabetologia* 2007; 50: 1795-807.
8. Jönsson T, Granfeldt Y, Ahren B, et al. Beneficial effects of a Paleolithic diet on cardiovascular risk factors in type 2 diabetes: A randomized cross-over pilot study. *Cardiovasc Diabetol*. 2009; 8:35.
9. Frassetto LA, Schloetter M, Mietus-Synder M, Morris RC Jr, Sebastian A. Metabolic and physiologic improvements from consuming a paleolithic, hunter-gatherer type diet. *Eur J Clin Nutr*. 2009; 63:947-55.
10. Mellberg C, Sandberg S, Ryberg M, et al. Long-term effects of a Palaeolithic-type diet in obese postmenopausal women: A 2-year randomized trial. *Eur J Clin Nutr*. 2014; 68:350-57.
11. Whalen KA, McCullough M, Flanders WD, Hartman TJ, Judd S, Bostick RM. Paleolithic and Mediterranean diet pattern scores and risk of incident, sporadic colorectal adenomas. *Am J Epidemiol* 2014;180: 1088-97.
12. Katz DL, Meller S. "Can we say what diet is best for health?". *Annu Rev Public Health*. 2014; 35:83-103.
13. Osterdahl M, Kocturk T, Koochek A, Wandell PE. Effects of a short-term intervention with a paleolithic diet in healthy volunteers. *Eur J Clin Nutr*. 2008; 62:682-85.
14. Jönsson T, Granfeldt Y, Ahren B, et al. Beneficial effects of a Paleolithic diet on cardiovascular risk factors in type 2 diabetes: A randomized cross-over pilot study. *Cardiovasc Diabetol*. 2009; 8:35.
15. Nestle, Marion. "Paleolithic diets: a sceptical view". *Nutrition Bulletin*. 2000 March; 25 (1):43-7.

