

Healthy Weight Loss Using the Paleo Diet and Chiropractic

Jeffrey Tucker, DC, DACRB

As treating doctors, we need a strategy to deal with two of the major health problems of our time: obesity and diabetes. It will be critical for chiropractors to integrate their artistic dimension into the perspectives of food science, diet, nutrition, exercise, sustainability and philosophy. It has always been my personal philosophy as a chiropractor to help patients connect or reconnect to a more natural mind set. We live in a culture that extols processed foods. From sunrise to sunset, we move at a fast pace eating "fast foods." All we really need to do with any food plan is ask yourself, "How do you look, how do you feel, and how do you perform?" Our ancestors were lean and muscular and had to perform vigorous tasks to survive, therefore, I have turned to our ancestral eating style or Paleolithic diet ([Paleo Diet](#)) to help guide my patients out of being overweight, obese, pre-diabetic/Type 2 diabetic and to develop lean and muscular bodies.

Here is my weight loss program (you can call it an "anti-aging" program, "therapeutic lifestyle changes," or whatever fits you). I follow my patient's weight loss improvement using health and symptom questionnaires, biomarkers such as body composition analysis, measuring body fat percentage and lean muscle mass and baseline musculoskeletal function using the Functional Movement Screen (FMS). Some patients require blood tests that measure vitamin and mineral analysis. My current program recommendations are to encourage clients to participate in regular physical exercise (progressing the intensity), sun exposure (in order to maintain plasma 25-OH-D3 above 40 ng/ml), adequate sleep, and a diet similar to the one followed by early man (fish, shellfish, eggs from free range chickens, organic meat from free range, grass fed animals, fruits, vegetables, roots, tubers, nuts and seeds).

You cannot exercise your way out of a bad diet, but Insulin resistance might be related to too little muscle, therefore muscle building exercise is important and we need to teach our clients what the best exercises are. Recall that two glucose can enter into muscle and only one glucose can enter into fat. Therefore, a person with high body fat content can have excess glucose in the blood. In my daily practice, I see the combination of a Paleo Diet and exercise leading to more optimal health.

We have a genetically inbred sense of what is right for each of us. We are wired for foods that make us comfortable, foods that taste right, foods that look and smell beautiful, and foods that we ignore or dismiss, etc. In this day and age, our food choices are skewed. "Comfort foods" might not make us feel comfortable, "right choice" foods might not be whole foods, and foods that look "beautiful" are often the most processed and full of refined sugars. The Paleo Diet does not include processed foods, refined sugars, grains, vegetable oils and dairy. It's interesting to note that in 1799 we were introduced to sucrose; in 1858 feedlot processed meat; in 1913 oreo cookies; in 1921 Wonder Bread; in 1970 high fructose corn syrup. In 1980, the modern obesity epidemic began. It is no wonder how we get where we are today! The average calorie intake between 1970 - 2009 is about 425 kcal/day more. This is a 20% increase. Why? First, because of highly palatable processed foods and buffet servings; and second, because of food reward - behaviors are reinforced in response to food consumption. There has been a decline in consumption of home cooked meals and a significant rise of processed food, especially sugar. Extra calories are coming from eating

between meals, especially the highly processed, industrial foods. Processed foods are not allowed on a strict Paleo Diet program. The Western industrial food diet with abundant carbohydrates, causes fat gain whereas a low carbohydrate Paleo Diet is healthier and helps people lose weight.

Ten to eleven thousand years ago, the Agricultural Revolution took place. This changed our lifestyle because we developed the use of cereal grains as staple foods. Currently, eighty-five percent of all grains are consumed as refined grains. Grains are one of the major foods of our time. Grains are not on the Paleo Diet! The same revolution gave us the introduction of legumes and other plant foods. The domestication of animals gave us non-human milk in the human diet. Later on we were introduced to sucrose and distilled alcoholic beverages. Grains, dairy and legumes are Neolithic foods and lead to inflammation. The current antioxidant content of grains is zero, whereas our ancestral antioxidants content was about 50%, which came from fruits and vegetables. Seasonal fruits are on the Paleo Diet, but most people only eat cultivated non-organic fruits containing less antioxidants than what our ancestors were exposed to.

[pb]As part of my weight loss program, I perform the Bio Electrical Impedance Test (body composition analysis) and get base-line information on body fat and lean muscle mass. I explain that making food choices is more important than counting calories or macronutrients for long-term health. I use the number of my client's lean body mass to recommend the number of grams of protein they should consume per day. For example, a male client that has 120 pounds of lean muscle mass would eat 120 grams of protein per day. Eating the types of proteins on the Paleo list usually induces an involuntary calorie restriction because protein makes you feel more satisfied. Try an experiment on some of your patients: add up the amount of protein (in grams) your clients are eating per day. I think you will find many are way under this formula amount.

Occasionally, I still recommend the Mediterranean Diet, but the Paleo Diet improves glucose tolerance more than a Mediterranean diet in individuals with ischemic heart disease. Foods regularly consumed during most of our prior evolution and the foods on the Paleo list, including meat, organ meat, eggs, fish, shellfish, vegetables, fruits, roots and nuts. Melons and berries are seasonal (not all year long like we consume now) and have the lowest fructose content. Allowed on the Paleo Diet are yams, sweet potatoes and taro. These contain starch that has not been shown to cause glucose intolerance.

Regarding fats, trans fatty acids are not allowed on the Paleo Diet. These did not even exist in the caveman era. Clients on a Paleo Diet are encouraged to eat monounsaturated fats such as avocados, avocado oil, hazelnuts, filberts, macadamia nuts, olives and olive oil. The amount of dietary fat is less important than the type of fat. Monounsaturated fats have a beneficial effect in the lipoprotein profile. As body fat goes up, a person's chance of diabetes and high blood pressure goes up. If these go up, your chance of kidney dysfunction goes up. An increased kidney dysfunction increases your chances of death. Increasing dietary acid increases urine calcium excretion. There is a forty percent decrease in urine calcium with the Paleo Diet. I often explain to patients about the different types of fats and the need for good fats in our diet. Fat-free is a mistake, low carbohydrate is the key to better health.

The Paleo diet encourages eating more vegetables and fruits (limiting dried fruits with additives) which supplies plenty of fiber (which usually comes from cereal grains in the typical Western diet). On a calorie per calorie basis, fruits and vegetables have, respectively, two and eight times more fiber than whole grains.

Foods on the Paleo Diet:	Foods not on the Paleo Diet:
Eggs; poultry; beef, buffalo, lamb, elk, venison, etc.; insects; fish, seafood, shellfish; pork; basically animal and bird muscle tissue, fat and organs	Dairy (except for human milk until 2-4 years old)
Plants	Cereal grains
Roots	Legumes
Tubers	Sugar
Berries and wild fruit	Isolated oils
Nuts (preferred are hazelnuts/ filberts, macadamia nuts, almonds)	Alcohol
Seeds (preferred are flax, sesame, pumpkin, sunflower)	Refined salt (Even sea salt would only be available for shore-based populations.)
Honey (occasional intake)	

Loren Cordain, Boyd Eaton, Robb Wolf, Mark Sisson, and Staffan Lindeberg, are some of the key researchers and authors of the Paleo Diet. A tremendous amount has been written about the Paleo Diet. Cordain estimated the following distribution for Pleistocene (the epoch of geologic time, about 1.6 million to 10,000 years ago, characterized by the disappearance of continental ice sheets and the appearance of humans) diets, as a percentage of total daily caloric intake: Protein (19-35%), Dietary Fat (28-58%) and Carbohydrates (22-40%). The Paleo Diet is a high protein diet (> 20% of caloric intake) which has been shown to improve obesity, dyslipidemia, insulin sensitivity, metabolic syndrome associated hypertension. Cordain suggests there is a hepatic urea synthesis limit (2.6 - 3.6 g/kg/day) that shouldn't be crossed.

Help your clients make better food choices. Calorie per calorie, fish, shellfish, meat, vegetables and fruit present a higher micronutrient density than cereal grains (especially the refined version), milk (with the exception of calcium), sugar and refined oils.

A Paleo Diet and strength training exercise, for the vast majority, is a way to lose fat, feel better, build a lean mass, learn not to obsess over hunger, and gain a measure of normal health. There is even more to it than that because all these things address mostly your body; not the mind, and not society as a whole. When we lived as a tribe, things that relate to the mind and society were probably not dismissed as irrelevant. During the Paleo Era, women and men were more equal than today. The rich and poor people were not divided like they are today. I can only imagine more of an

"us" versus "them" mentality.

I am convinced after using the Paleo Diet in my practice for several years that the Paleo Diet is safe and effective. Go cutting edge - go beyond the original practice of manipulation and attention to the nervous system - think weight loss, diabetes prevention, chronic disease prevention and even sustainability of the planet!