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## THE WIDE RANGE OF THERAPEUTIC DIETS

There is no such thing as a one-size-fits all therapeutic diet suitable for everyone! Instead, there is a wide range of possibilities, and each person will have to find their spot on the nutritional spectrum that suits their particular metabolism. This file outlines various therapeutic diets in order of priority, with the most necessary steps first and the most therapeutically aggressive at the end.

#### 1. The Whole Foods diet

The first step in getting away from the SAD. Diet (Standard American Diet) is a whole foods diet, one that avoids all processed foods and hidden sugars. No one can expect to remain healthy over the long term without accomplishing this first step.

# 2. Deal with any significant food sensitivities

Because of the decline in the quality of our environment and our food supply over the past 50 years, food sensitivities have become increasingly common. Food sensitivities can be confusing, because the reactions they cause may be delayed and may not involve the intestinal tract and instead cause conditions such as eczema or asthma, frequent infections, sleep disturbances, mood changes, hyperactivity or ADD in children. For some people the relationship between eating the food and their adverse symptoms is obvious, but many require laboratory documentation to become aware of this problem. The most common food sensitivities I see are to gluten and dairy products. Additional food sensitivities that may need to be addressed include yeast, egg, soy, and corn.

I have written an outline of the gluten/dairy free diet and attached along with it an article by Dr. Rodney Ford, a gastroenterologist, indicating why compliance often must be very careful to see benefit from a gluten-free diet, particularly for those with a genetic predisposition to a strong reaction to gluten.

3. Avoid carbohydrates that are easily fermented by microbes in the intestinal tract It is often necessary to refine the gluten/dairy-free diet further, by eliminating the dietary starches that are easily fermented by the microbes in an out of balance intestinal flora. This includes many processed grain products such as white rice, and most gluten-free breads, baking, and pasta. These need to be replaced by less processed equivalents made from grains that are not as easily fermented. My file on reducing fermentable carbohydrates describes these healthier alternatives.

#### 4. On occasion, other food intolerances may be present.

Some people will react to natural compounds in food that are well tolerated by most people. Possibilities include fermentable short-chain carbohydrates (FODMAPS), nightshades, salicylates, phenols, lectins, and histamines. In such cases, the diet needs to be further modified to accommodate this intolerance.

### 5. Variations on a plant-based diet

Some people will thrive on a predominantly alkaline diet, emphasizing a high intake of predominantly raw fruits and vegetables, and may include a high intake of fresh raw juices. The usefulness of such diets is based more on clinical experience than scientific studies, but in selected cases, such diets have been helpful in healing osteoporosis, high blood pressure, arthritis, and even heart disease and cancer. There is a growing body of research suggesting that a vegetarian diet offers several long-term health benefits compared to a meat-eating diet, but such diets must be planned carefully to avoid potential nutrient deficiencies. (Vitamin B12, Iron, Calcium, Vitamin D, Omega-3 Fatty Acids, Zinc)

#### 6. Variations on the Paleo Diet: Further reduction in carbohydrate intake.

The next step that may need to be taken in a therapeutic diet is to eliminate carbohydrate even more strictly. Doing this has a stronger ability to normalize a severely dysregulated bowel flora, help with weight loss, and reverse insulin resistance. The Paleo diet and the keto diet are both becoming popular for this reason, but there is a difference between the two. The true ketosis diet is very high fat and designed to induce ketosis. Most people on a Paleo diet are simply following a healthy, balanced diet, and not needing to get into ketosis by limiting to a very specific amount of carbs. There are many versions of this type of diet, including the specific carbohydrate diet, the GAPS (Gut & Psychology Syndrome) diet, the Autoimmune Protocol (AIP) diet and the Dr. Terry Wahls dietary protocol. These dietary guidelines avoid all grain products, but vary in terms of the amount of starchy vegetables and fruit that are allowed. The GAPS, AIP, and Wahls diets are stricter versions of the average paleo diet, attempting to remove all potential inflammatory or immunogenic sources from food. Their goal is to help improve GI functioning while reducing both autoimmunity and inflammation. The AIP is stricter, avoiding all grains and products made from them, all dairy products, and foods containing lectins, including legumes, nightshade vegetables, and some or all seeds and nuts. The Wahls protocol allows sweet potatoes, yams, winter squash, and seeds and nuts. My file on Paleo diets includes a chart that outlines the difference between these various guidelines.

The food industry is cashing in on the popularity of the Paleo diet and producing processed food products labelled as 'Paleo". A lot of this is repurposed junk food that is best avoided.

# 7. The Ketogenic Diet: further reduction of carbohydrates, combined with a very high fat intake

The ketogenic diet is higher in fat, while the Paleo diet tends to be higher in protein. A keto diet is essentially a very strict high-fat, moderate-protein and low-carb diet. With carbohydrate intake severely limited to a range of 20–30 grams of net carbs daily and protein limited, fats provide 75% -90% of daily calories. The body enters a state known as ketosis, burning fat rather than carbohydrate or protein for fuel. Ketones are produced, which are acids your body can use as fuel. Ketosis is an individualised process, and some people will need a more restricted carbohydrate intake than others to begin producing sufficient ketones. Ketones are a brainhealthy fuel source with neuroprotective effects, and researchers are investigating the possible benefits of the keto diet for conditions such as Alzheimer's disease, Parkinson's disease, and psychiatric conditions such as schizophrenia and bipolar disorder.

The Classical Ketogenic Diet, created for those with epilepsy, consists of getting 75 percent of calories from sources of fat (such as oils or fattier cuts of meat), 5 percent from carbohydrates and 20 percent from protein. This diet has to be strictly followed at all times, with careful measuring all foods with a gram scale, and regular monitoring of ketone production. Common side effects include bad breath, constipation, indigestion, and low blood sugar when first beginning the diet. For children, the diet sometimes is started in hospital to allow monitoring.

A modified ketogenic diet is a less strict version that can still safely provide health benefits, including weight loss, reversal of insulin resistance and diabetes, lowering high blood pressure, and healing some psychiatric illnesses. Carbohydrate intake still needs to be tracked in order to stay in ketosis, but this does not have to be done with the same precision as with the classical ketogenic diet. Here is a breakdown of the macronutrient percentages for a modified keto diet:

- Fat: 50-55% of total daily calories from fat.
- **Protein**: 30-35% of total daily calories from protein.
- Carbohydrates: 15-20% of total daily calories from carbs.

The ketogenic diet can be harmful if not done properly. The high intake of fat requires that it be of high quality, and the meats are best organic. This diet requires effort and discipline and for convenience people may turn to processed 'keto' foods as their main food source. This can result in consuming too much protein and unhealthy fats. This, combined with limits on nutrient-rich fruits, vegetables and grains can be a concern for long-term health.

#### 8. The Carnivore Diet vs. the Nose to Tail diet.

The carnivore diet is a diet that focuses primarily on meats but also allows fish and other animal products such as eggs and butter. One caution with this diet is our bias towards lean meat. Traditional hunter gatherers consumed the entire animal they hunted, providing a diet of extremely fatty animal meats, including organ meats, bone marrow and brains. A carnivore diet consisting exclusively of lean meats is excessively high in animal protein, potentially causing protein toxicity that can be particularly dangerous to pregnant women and newborns. (The acute form of this condition is called rabbit starvation or *mal de caribou*, arising because rabbit and caribou meat is very low in fat). Nose-to-tail eating means not only consuming the muscle, but every other edible part of an animal. Nose-to-tail eating is traditional eating. Excellent nose-to-tail keto fats include tallow, and lard, while organ meats like liver, kidney, sweetbreads, and beef heart will give your body an abundance of vitamins and m no not yet inerals.

Because this diet is entirely animal based, it is important to find sources of toxin and antibiotic-free meats. To avoid protein toxicity, the fat intake must be increased to resemble that of a ketogenic diet, which is much more sustainable over the longer term. On a nose-to-tail carnivore diet, the macronutrient levels typically follow specific ratios. While there may be slight variations, the usual proportions of macronutrients are approximately 70-85% of daily calories from fats, 15-30% of calories from protein, and carbohydrates are kept extremely low, 10% of total calories or less. The high fat/low carbohydrate intake maintains a state of ketosis. A diet, which focuses on consuming only animal-based products can lead to several nutrient deficiencies due to the exclusion of plant-based foods, including vitamin A (unless the diet includes liver and other organ meats), vitamin C, folate, fibre, potassium, and antioxidants.

Some websites on the nose to tail diet to look at:

A website written by a food archaeologist:

 $\underline{https://www.westonaprice.org/podcast/231-eating-nose-to-tail/\#gsc.tab{=}0}$ 

A website written by an MD:

https://www.doctorkiltz.com/nose-to-tail/

A website written by a nutritionist:

https://carnivorestyle.com/carnivore-diet-macros/

One of the most cost-effective ways to eat nose-to-tail is to buy a share of an animal from a local organic farmer.

The Carnivore diet can increase the risk of developing kidney stones. Here are some key points:

**High Protein Intake**: The diet's high protein content can lead to increased levels of calcium and uric acid in the urine, which are common components of kidney stones

**Lack of Fiber**: The absence of plant-based foods means there's no dietary fiber, which can disrupt gut bacteria and potentially increase the risk of kidney stones

Uric acid or Oxalate Levels: Although the Carnivore diet eliminates oxalate-rich plant foods, the liver can produce oxalate from excess protein, contributing to kidney stone formation. Uric acid stones are also a possibility.