

INFORMED CONSENT FOR KETOGENIC DIETARY THERAPY

What is the ketogenic diet?

A ketogenic diet is a specially formulated low-carbohydrate diet designed to lower blood glucose and insulin levels into a healthier range. When glucose and insulin levels fall below a certain point, it becomes much easier for the body to begin burning fat and releasing ketones into the bloodstream, and those ketones can be used by the brain for energy, healing, and protection. You can observe this shift to “fat-burning mode” happening in your own body by checking your urine or blood for ketones.

What are the risks involved in following a ketogenic diet?

The ketogenic diet is considered safe for most adults, so long as it provides adequate protein, fat, calories, and micronutrients, and so long as health conditions and medications are carefully monitored. However, there are some health conditions and medications which may NOT be compatible with transitioning to ketogenic diet, including pregnancy, breastfeeding, being underweight, and taking certain diabetes medications.

It is well established that adults do not require any dietary carbohydrate to support life and health because the body can manufacture all the carbohydrate (glucose) it needs so long as enough protein and fat are available. However, the shift from a high-carbohydrate diet to a low-carbohydrate diet can temporarily cause uncomfortable side effects, depending on your personal health circumstances.

Common keto-adaptation effects (these usually resolve within 5 to 10 days): lightheadedness, headaches, moodiness, nausea, fatigue, difficulty concentrating, exercise intolerance, palpitations, insomnia, leg/foot cramps, constipation, and carbohydrate cravings.

Psychiatric keto-adaptation effects (these usually resolve by week 3): In some cases, there may be a temporary worsening of depression, anxiety, manic symptoms, agitation, or irritability.

Medication-related keto-adaptation effects: Serious and potentially dangerous side effects are possible when the ketogenic diet is combined with certain medications, most commonly medications for high blood sugar, high blood pressure, heart disease, or fluid retention.

Uncommon ketogenic diet side effects: While far less common, there are some side effects that may occur even after the early adaptation phase, including excessive weight loss, persistent insomnia, persistent depression or other mood issues, persistent constipation, episodes of diarrhea, increased sensitivity to alcohol and other substances, increased sensitivity to medication, and kidney stones. If you have a personal or family history of kidney stones, please let me know before beginning a ketogenic diet.

Every effort will be made to minimize the occurrence of side effects, including proper salt supplementation and close clinical monitoring, but if the diet ever feels too physically or psychologically uncomfortable for you, it can simply be stopped. Consuming about 50 grams of carbohydrate (preferably from whole foods—for example, two pieces of fruit or two potatoes) will usually bring relief from ketogenic diet side effects within an hour or two.

There is no special risk for nutrient deficiencies because the ketogenic diet I recommend consists primarily of nutritious whole foods and includes enough protein, fat, and calories to ensure that requirements for all essential nutrients are met. Nutrient supplementation will be recommended if needed in your case.

What are the potential benefits of a ketogenic diet?

When blood glucose and insulin levels are brought into a healthy range with a ketogenic diet, many health benefits are common which vary from one individual to another, depending on their health status prior to the initiation of the diet. Examples include reduction in need for diabetes medications, healthy body fat loss, improved appetite control, improved blood pressure control, reduction in triglyceride levels (blood fat), increase in HDL cholesterol levels ("good" cholesterol), increased energy, improved mental clarity, reduction in anxiety, and more stable mood.

A century of scientific research and clinical experience has shown that ketogenic diets can be a safe and effective strategy for controlling epileptic seizures, demonstrating that ketogenic diets can stabilize brain chemistry. Emerging scientific and clinical work in recent years finds that ketogenic diets appear to improve many aspects of brain function and may therefore be a helpful tool in the management of a wide variety of brain illnesses, including many psychiatric conditions. For example, there have been published case reports of people experiencing significant relief from binge eating, bipolar mood patterns, and schizophrenia, and there have been small clinical trials noting improvements in autism, and slight improvements in thinking, memory, and/or quality of life in people with early Alzheimer's disease. More rigorous clinical trials are already under way around the world, so new research results in the field of psychiatry are on the horizon.

In my clinical experience with hundreds of patients, most people experience at least some degree of clinical improvement if they follow a ketogenic diet for at least six weeks. Some people enjoy full relief from psychiatric symptoms without the need for psychiatric medication, some people can eventually reduce their use of psychiatric medications, and a small number can completely discontinue psychiatric medication.

It is important to acknowledge that the formal study of ketogenic diets specifically for the treatment of psychiatric conditions is in its infancy; most published evidence at this time is still limited to animal studies, small pilot studies in humans, and isolated case reports. It is also important to acknowledge that there are some people who experience no psychiatric benefit from the ketogenic diet.

Alternatives to the ketogenic diet

If we decide that the ketogenic diet isn't right for you, or if you prefer not to attempt a ketogenic diet, there are other dietary strategies we can consider that don't require significant carbohydrate restriction, including whole foods diets and elimination diets.