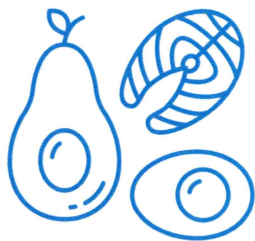


Medically supervised ketogenic diets are the current standard of care treatment for Glut1 Deficiency, but there are special considerations for their use in this disease.



What are ketogenic diets?

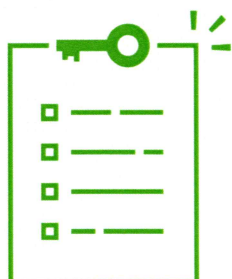
Ketogenic diets are high fat, adequate protein, and low carbohydrate diets that encourage the body to use fat as our main source of energy instead of carbohydrate. When the body breaks down fat, ketones are produced and can be used for energy in place of glucose. There are several variations of medical ketogenic diets designed to treat seizures and in addition are used for treating other neurological, metabolic, and psychiatric disorders.

Why use ketogenic diets for Glut1 Deficiency?

Glucose is the primary energy source for all cells, but they can also use ketones. Since people with Glut1 Deficiency don't get enough glucose transported to their brains, ketogenic diets can help provide an alternative fuel through ketones, which use a different transporter to reach the brain. Ketogenic diets may also help in other ways we don't yet fully understand.



Key points about ketogenic diets in Glut1 Deficiency:



- ketogenic diets help improve most symptoms, especially seizures, for most patients
- some symptoms may continue despite good levels of ketosis
- the choice of ketogenic diet type is tailored to individual needs and preferences
- the optimal level of ketosis can vary between individuals
- ketogenic diets may provide benefits to brain metabolism and function beyond ketosis
- early treatment may lead to better outcomes
- ketogenic diets are a medical treatment - physician and dietitian supervision are essential

Transitioning to ketogenic diets for Glut1 Deficiency:

The transition period for people with Glut1 Deficiency starting a ketogenic diet is important to consider. The brain is already low in glucose, so further restriction of carbohydrates may cause symptoms to worsen temporarily until ketones reach therapeutic levels. Diet changes should not be made until under the care of a medical professional with ketogenic diet experience.



Find support:



Glut1 Deficiency families often use ketogenic diets for years and even decades, so they become very skilled and knowledgeable and learn many strategies. Turn to the community to hear their personal experiences, learn how to make the demands of the diet easier, and get fresh ideas, but for matters that involve fundamental changes to your prescribed and individualized treatment, please turn to your healthcare team for medical advice.