



CLASSIC KETOGENIC DIET

For the dietary management of severe epilepsy or other physician-prescribed situation that suits the ketogenic diet.

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WHAT IS IT AND HOW DOES IT WORK?

The classic ketogenic diet is a treatment format used in the care and management of severe epilepsy. The ketogenic diet can reduce epileptic seizures. Treatment is initiated on the order of a physician.

During the period of dietary management, nutritional content is precisely planned. The diet consists of fats in abundance, an amount of protein determined in accordance with individual needs, and very few carbohydrates. Fats are an important source of energy in the ketogenic diet. With the body beginning to use fats in place of glucose as a source of energy, the metabolism changes and ketones are formed in the blood. The total number of ketones can be measured from the blood and urine. The goal is to achieve ketosis, as a result of which epileptic seizures can decline.

Implementing the diet requires precision. The need for nutrients is calculated individually. Four to five meals are enjoyed each day and the object is to distribute them evenly over the day. The need for fluids is also assessed individually, but it is important to drink enough. The diet is fine-tuned during treatment in accordance with need. The period of the diet is set individually.

HOW LONG SHOULD THE DIET BE OBSERVED?

Initially, two to three months is recommended to try the diet out. After this, the benefits obtained by the diet can be properly assessed. If the programme brings about a good treatment reaction – if, in other words, the number of seizures is reduced – this type of care can be continued for many years.

IS IT NECESSARY TO STAY AT A HOSPITAL DURING THE DIETARY MANAGEMENT PERIOD?

Dietary management is usually started at a hospital. This way the reactions of the body can be monitored precisely in a safe environment. If needed, dietary management can also be initiated on a controlled basis at home. At the beginning of dietary management, nausea, fatigue or listlessness may emerge as the body starts to use fats as a source of energy. These symptoms generally recede during the first couple of weeks. Sufficient consumption of liquids is important. Blood samples are taken daily during the introductory period so that ketosis can be confirmed and well-being ensured.

While the introductory period is in progress, the implementation of the diet is supervised by a physician, nurse and nutritionist. The nutritionist and nurse supervise the implementation of the diet at home. It is recommended that personal assistants and other individuals closely involved in the daily routine are present in the counselling situations.

HOW FREQUENT ARE THE CONTROL VISITS?

Control visits are typically scheduled at one-, three- and six-month intervals from the start date and thereafter each half a year. Well-being, growth and blood counts are monitored regularly during the dietary management period.

Control visits with blood tests ensure sufficient intake of nutrients and prevent excessive lipid elevations. Lipids can be influenced by the quality of fats in the diet.

WHAT CAN BE EATEN DURING DIETARY MANAGEMENT?

The diet often consists of regular foodstuffs such as meat, fish, egg, vegetable oil and a small quantity of vegetables, berries and fruits. The diet can be implemented and supplemented with clinical food preparations intended for the diet that are rich in fats. The nutritionist plans an individual menu for everyone, based on implementation of dietary management. Each type of food used in the meals is weighed with a precision of one gramme in preparing the food, and each serving is separately prepared. Food preparation therefore requires time and precision. A digital household scale is essential for food preparation. Many foods can be frozen for later consumption.



WHAT IF FOOD INTAKE IS BY TUBE FEED?

If tube feeding is in use, nutrition continues quite similarly along the same lines as that described above. Ready preparations in liquid or powder form suitable for the ketogenic diet are used as tube-feed alternatives. Powder preparations are mixed with water before dosage. The preparations are used in the same way as previously for tube-feeding.

CAN THE TREATMENT CAUSE ADVERSE EFFECTS?

Negative side effects are individual. Adverse effects can be, for instance, constipation due to the slowdown of stomach functions. This is due to the large concentration of fats in the food and small amount of fibre. Introducing fibre supplements or medications counteracting constipation may be required.

During dietary management, your weight may increase or decrease. The nutritionist fine-tunes the diet in accordance with the requirements. Sometimes ketosis may deepen excessively or blood sugar may decline too much. These situations are corrected by the consumption of sugary juice.

ARE VITAMIN OR DIETARY MINERAL PREPARATIONS NEEDED?

All who implement the ketogenic diet require food supplements during the dietary management period, by which the sufficient intake of protective nutrients is assured.

HOW DIFFICULT IS IT TO IMPLEMENT THE DIET?

Implementation of the diet is not normally regarded as particularly difficult, but it demands time, precision and commitment. Some regard the exact limitations on meal times and quantities as hard to do in practice.

WHAT HAPPENS IF I ACCIDENTALLY EAT SOMETHING THAT IS EXCLUDED BY THE DIET?

If by accident some food item you have eaten contains plenty of carbohydrates, your state of ketosis will be halted and your incidence of seizures may increase. It is nevertheless possible to restore ketosis by switching back to the planned diet. The time involved in restoring ketosis after it has been disrupted is individual.

SHOULD MY MEDICATION BE CHANGED?

At the outset of dietary management, medication is generally kept the same as before. If the total number of epileptic seizures after beginning dietary management decreases, the medication regimen can be modified in accordance with the physician's instructions.

During dietary management, it is good to be in regular contact with the nutritionist, nurse and attending physician.

Useful links:

www.epilepsia.fi
www.matthewsfriends.org
www.charliefoundation.org

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Nutricia's preparations are clinical nutrient products and they should be consumed under the guidance of a health professional.