The Modified Atkins Diet

What is the modified Atkins diet?
The Modified Atkins diet is a special high-fat diet that is used for difficult to treat seizures. Heavy cream, butter and vegetable oils provide the necessary fat. The diet allows all protein rich foods such as meat, chicken, eggs and fish. It completely eliminates sweets such as lollies, biscuits and desserts. Other carbohydrate rich foods such as bread, potatoes, rice, pasta and cereals are not allowed in the first month on the diet then may be introduced later.

What is the difference between the Ketogenic diet and the Modified Atkins Diet?
The Modified Atkins Diet is less restrictive than the Ketogenic Diet. It allows unlimited amounts of protein foods and fats are encouraged. Food does not need to be weighed and recipes do not need to be precise. Carbohydrate foods are counted and spread throughout meals with the aim to keep within the daily limit.

Who can be helped by the diet?
Children and teenagers with uncontrolled seizures may be helped by the diet. There is no way to predict beforehand whether it will be successful. Children with feeding tubes and infants should be commenced on the Ketogenic Diet as there is a special formula designed for this purpose.

How effective is the diet at controlling or eliminating seizures?
Studies that have followed children on the diet for long periods reveal that around 50% of children treated with the Modified Atkins Diet have greater than 50% seizure reduction. Greater rates of seizure reduction are seen in some children with specific epilepsy syndromes.

How does the diet work?
No one is certain how the diet works. A metabolic change occurs in the body which affects brain chemistry. One theory attributes the anti-seizure effect of the diet to the ketones that the ketogenic diet produces. Ketones are the products of fat breakdown. Our body normally burns glucose (sugar) for energy. The body can use these ketones as a source of energy instead of glucose. The ketones circulate through the blood in the body and then are excreted into the urine.

How soon does it take for the diet to reduce or eliminate seizures?
The diet can become effective within 1-2 weeks or can take up to 3 months. Each child is unique and has different seizure patterns and frequency.

Will anti-seizure medications be reduced after my child goes on the diet?
The reduction of seizure medication will be made if the child’s seizures improve over time. Some children are able to have their medications completely discontinued. Medications may act stronger with the Modified Atkins Diet therefore close medical monitoring is necessary.
What would happen if my child “cheated” on his/her diet?
If a child ate or drank something that was not part of his/her diet, they could experience a seizure within a short period of time due to a loss of ketosis.

Is the diet healthy for my child?
The diet alone does not contain enough vitamins or minerals. A nutritional deficiency could develop without supplements. Generally a multivitamin and mineral supplement plus calcium is prescribed for each child while on the Modified Atkins Diet. It is also important that the child drinks adequate liquids while on the diet.

How long is the diet used for?
The diet is generally used for a period of 2 years if it is helpful in reducing or eliminating seizures. If the diet is not helpful, it will be stopped within a few months.

Are there any adverse effects of the Modified Atkins Diet?
The most common adverse effect of the diet is constipation. There are dietary options to prevent this problem including eating high fiber vegetables that are allowed on the diet and drinking enough water. A less common adverse effect is kidney stones. This problem can be prevented by making sure that the child drinks adequate water.

Will my child lose weight with this Atkins diet?
The aim of the original Atkins diet is for weight loss. The Modified Atkins Diet is purely aimed at reducing seizures thus the dietitian will keep track of your child’s growth to determine if a change in calories is needed to ensure normal growth.

Will the diet cause high cholesterol?
Most children do not develop high cholesterol levels while on the diet. If a child develops high cholesterol or lipids, the diet can be modified to lower these. Lipid levels are drawn prior to starting the diet and at regular intervals throughout the course of the diet.

Are there any special tests that are needed before starting the diet?
There are blood tests that may be needed to determine if the diet is safe for your child. These include metabolic tests to rule-out fatty acid disorders or a carnitine deficiency.

Reference:
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