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# Nutrition Matters

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## Diet Tips for Hypoglycemia

### What is Hypoglycemia?

"Hypoglycemia" is a medical term meaning low blood sugar. It also refers to frequent episodes of low blood sugar. People who have hypoglycemia must eat a diet high in fibre and complex carbohydrate (starch).

### Background

The human body needs to have a constant supply of sugar (glucose) to provide energy to the body. It gets this glucose from the foods we eat.

The amount of sugar circulating in the blood-stream remains fairly constant. However, blood sugar varies slightly after meals, strenuous exercise, or periods of fasting.

A complex hormonal system controls blood sugar levels in the body. Too much or too little sugar in the blood can be harmful to the body.

When the blood sugar is chronically high, the condition is called diabetes. When low blood sugar levels occur regularly, it is called hypoglycemia. If the blood sugar drops **rapidly** to below the normal minimum level hunger, weakness, sweating, anxiety and a racing pulse may be felt. If the blood sugar drops **slowly** to a very low level irritability, confusion, headache and slurred speech may be experienced.

A person is usually diagnosed as hypoglycemic when the symptoms of low blood sugar occur regularly and a low blood sugar level is confirmed by a lab test.

### Hypoglycemia should be diagnosed by a doctor.

True hypoglycemia is not very common. But hypoglycemic episodes may be quite common and can be caused by irregular meals, low-carbohydrate diets, and high-sugar snacks or meals consisting of sugar and alcohol.

There are other causes of hypoglycemic symptoms, besides low blood sugar. These include poor circulation, poor lung function, dehydration, depression, stress, and even eating a large meal (which diverts blood to the digestive tract so the blood-flow to the brain is reduced).

The most common type of hypoglycemia occurs after eating and is often called "reactive" hypoglycemia.

### Is there a treatment? Yes.

The best treatment for reactive hypoglycemia is a diet high in complex carbohydrate (starch) and fibre, and low in simple sugars, such as honey, molasses, syrups, and table sugar. This diet helps to prevent hypoglycemic episodes in both normal and hypoglycemic people.

### What does a high-carbohydrate, high-fibre, low-simple sugar diet look like?

The diet contains lots of vegetables, whole grains, and fruits as these foods contain starch and fibre.

## Diet Tips

1. Include small frequent meals (up to six per day) that contain good sources of complex carbohydrate (starch) and fibre and some protein. Good sources of starch and fibre include: vegetables, fruits, whole grain breads, cereals, and legumes (beans, peas and lentils).
2. Avoid concentrated simple sugars as they are rapidly absorbed into the bloodstream. Concentrated simple sugars are found in many foods: table sugar, honey, syrups, jams, jellies, icings, sweet deserts, commercial cakes and cookies, candies and soft drinks. These foods are also low in nutrients and are **NOT RECOMMENDED**.

Some very nutritious foods contain simple sugars. Examples include milk, fruits and vegetables such as carrots, beets, squash, turnip and sweet potatoes. These foods are included in the diet because they contain nutrients. Most contain fibre which helps to slow the absorption of sugars into the blood.

Another source of simple sugars is fruit juice. Avoid fruit juices, at least initially, since the sugar from juice is very rapidly absorbed and will raise the blood sugar within minutes. After good blood sugar control is established, juice may be used in **small amounts at mealtimes**.

3. Avoid alcohol and caffeine if they cause symptoms.
4. Include foods containing complex carbohydrate, protein, and/or fat in each meal/snack. Protein and/or fat are digested and absorbed more slowly into the blood stream.

## Buyers beware:

Many remedies such as extra vitamins, herbs and supplements are sold as cures for hypoglycemia. There is no cure but, control is fairly easy.

Remember:

- eat regularly, don't skip meals
- eat small, frequent meals, at least three per day and something before bed
- avoid foods with concentrated sugars
- eat more fibre-containing, complex carbohydrate foods
- maintain a healthy weight

### Sample Menu

#### Morning

Oatmeal with skim or 2% milk; whole grain toast, peanut butter; small orange or half banana.

#### Mid- morning snack

Raisin bran muffin

#### Noon

Tuna salad in whole wheat pita; raw vegetable sticks; fresh fruit; skim or 2% milk

#### Mid- afternoon snack

Whole grain crackers; small cube of cheese

#### Evening

Baked chicken breast; baked potato; carrots; broccoli; bean salad; baked apple; oatmeal cookie

#### Evening snack

Whole wheat toast; margarine or butter; skim or 2% milk

**Note:** Portion sizes can be varied according to the energy needs of the individual.