Hypoglycemia and Diet

PHYSICIANS COMMITTEE FOR RESPONSIBLE MEDICINE
5100 WISCONSIN AVE., N.W., SUITE 400 • WASHINGTON, DC 20016
PHONE (202) 686-2210 • FAX (202) 686-2216 • PCRM@PCRM.ORG • WWW.PCRM.ORG

What Is Hypoglycemia?

Hypoglycemia, also known as low blood sugar, is a relatively rare condition. The symptoms include shakiness, weakness, faintness, headaches, mental dullness, and confusion. Such symptoms can be caused by any number of other problems, including stress. The only way to diagnose hypoglycemia is through a glucose tolerance test—the same type of test used to diagnose diabetes.

Effects of Hypoglycemia

Glucose is a type of sugar found in the blood. Eating a meal causes blood glucose levels to rise. Normally, as levels of glucose in the blood increase, the pancreas produces insulin. The insulin causes body cells to absorb the glucose and a gradual drop in the blood sugar level results. In a person with hypoglycemia, the body produces too much insulin in the presence of glucose. This causes a sudden drop in the blood sugar level.

The High-Protein Myth

Doctors used to recommend eating sugar-restricted, high-protein meals four or more times a day to help control hypoglycemia. But such treatment may actually impair glucose tolerance in patients.[1] The main sources of protein for many individuals—animal products—are also high in fat which can contribute to the development of diabetes,[2,3] as well as numerous other health problems, from heart disease to breast cancer.

Hypoglycemia and Diet

The best way to control hypoglycemia is through a diet similar to that used to control diabetes mellitus: a reduction in simple sugars, a large intake of complex carbohydrates, and frequent feedings. Candy, sodas, and even fruit juices (which manufacturers often sweeten with lots of sugar) are all high in sugar and should be avoided. Foods that are high in soluble dietary fiber slow carbohydrate absorption and help to prevent swings in blood sugar levels. For some, fruits may also be a good addition as fructose—the natural sugar in most fruits—does not require insulin to be absorbed into the body cells.

Also advised is an increase in meal frequency. Eating more than three meals per day helps to maintain blood sugar levels and to prevent the onset of hypoglycemic symptoms. The following menu is a one-day meal plan that puts these hypoglycemia guidelines into action.

Breakfast
- 1 cup of hot whole grain cereal like oatmeal, oat bran, or Wheetena
- 1 slice of whole grain bread
- 1 piece of fruit

Snack
- 1 slice of whole grain bread
- carrot and celery sticks

Lunch
- Salad with raw vegetables, beans (chickpeas, kidney beans, etc.), sunflower seeds, and a non-fat, dairy-free dressing
- 1 slice of whole grain bread
- 1 piece of fruit

Snack
- 4 crackers (preferably whole wheat)
- 1 piece of fruit

Dinner
- 1 cup of brown rice, pasta, bulgur, or 1 large baked potato
- ½ cup of beans or tofu
- 1 to 2 cups of cooked vegetables

Snack
- 2 cups of plain popcorn
- 1 piece of fruit

References

1. Anderson JW, Herman RH. Effects of carbohydrate restriction on glucose tolerance of normal men and reactive hypoglycemic patients. Am J Clin Nutr 1975;28:748.
2. Hindsworth H. The physiological activation of insulin. Clin Sci 1933;1:1.
3. Anderson J. Update on HCF diet results. HCF Newsletter 4: June 1982, Lexington, KY.