

# Your Care Clinics, LLC

5985 49<sup>th</sup> St. N. St. Petersburg, FL 33709 (727) 528-8997  
1258 W. Bay Dr. , Unit #F, Largo, FL 33770 (727) 588-7600

## Hypoglycemia Diet

### **Purpose**

Hypoglycemia is the term for a blood glucose level that is lower than normal. When foods are digested in the body, they are broken down into many nutrients. These nutrients are absorbed into the bloodstream to be used in performing various body functions. One of these nutrients is glucose, a sugar that provides fuel to the body. The process that regulates the amount of sugar in the blood is complex. Adrenaline is a part of this complicated process. Everyone has experienced a rush adrenaline at some time – that ‘love –at-first-sight’ feeling, or the pounding heart after narrowly escaping an accident. Adrenaline is produced by the adrenal glands located on top of the kidneys. The sudden release of adrenaline is what causes the symptoms of hypoglycemia – apprehension, hunger, sweating, rapid heartbeat and faintness.

Hypoglycemia can occur from certain illnesses, such as liver disease and some types of tumors. These conditions cause a type of hypoglycemia called organic hypoglycemia. They usually require specific medical treatment or surgery. There is another type of hypoglycemia. In some people, the body simply responds differently to the digestion of foods. Some foods are digested and absorbed rapidly, resulting in a burst of glucose entering the bloodstream. In most people the body adjusts smoothly. It would be like two children trying to balance a see-saw. There may be a slight teetering or swinging up and down as the children shift their weight to achieve the balance. In some people, however, the response is like an actively rocking see-saw swinging up and down. The body over-reacts and set the process in motion to reduce blood glucose. The result is glucose level that is too low. Then the body releases adrenaline, increasing glucose in the bloodstream. This is called Reactive Hypoglycemia – the body is simply over-reacting. It’s not easy to diagnose. However, it usually occurs consistently from one to three hours after a meal and returns to normal on its own. When no known medical causes are found, the diagnosis of reactive hypoglycemia is made. The best way to manage reactive hypoglycemia is have glucose enter the bloodstream at a steady even pace. This can be done with changes in eating habits.

## Special considerations

1. Simple carbohydrates and concentrated sweets: All carbohydrates can be broken down into glucose in the body. Some carbohydrates have a simple structure that easily breaks down into glucose. These are simple carbohydrates, commonly known as sugars. Table sugar, corn syrup, and honey are simple carbohydrates. Simple carbohydrates also occur naturally in fruits, milk, and other foods. They are digested rapidly, and this allows glucose to be absorbed into the bloodstream quickly. Therefore, meals that are high in simple carbohydrates can contribute to reactive hypoglycemia. Concentrated sweets such as candy, table sugar, soft drinks, cookies, cakes, and ice cream are mainly simple carbohydrates. Avoid these foods unless they are made with sugar substitutes. Read package labels to avoid foods containing sugars. Look for terms such as sugar, corn syrup, corn sweetener, or high fructose corn syrup.
2. Complex carbohydrates and proteins are important in the diet. They are a basic source of energy. Complex carbohydrates are many molecules of simple sugars linked together like beads on a string. They take longer to break down in the intestine, and this helps to keep blood glucose levels more consistent. Pasta, grains, and potatoes are complex carbohydrates. Proteins are made of amino acids that the body needs for growth and good health. Foods from animal sources contain protein, but so do legumes, nuts and seeds. Most food protein can be converted into glucose by the body, but since this process takes some time, the glucose gets into the bloodstream at a slower, more consistent pace. That is why people with reactive hypoglycemia should eat complex carbohydrates and protein for their energy needs, instead of simple carbohydrates.
3. Choose high fiber foods. Fiber is the indigestible part of plants. Insoluble fiber, such as wheat bran, does not dissolve in water. It adds bulk to the stool and causes it to pass through the intestine more quickly. Soluble fiber does dissolve in water, forming a sticky gel. It is found in the fibrous coatings of foods such as legumes, oat products, and pectin found in fruit. Soluble fiber delays stomach emptying, digestion, and absorption of glucose. Therefore, it helps to prevent hypoglycemia symptoms between meals. When making fruit choices, choose whole fresh fruits or those canned without added sugar instead of fruit juice. The added fiber helps to slow down the absorption of sugar.
4. Size and frequency of meals is very important for managing hypoglycemia. The body really can't tell the difference between the glucose in a candy bar and the glucose in a whole grain roll. The object is to manage the diet so glucose is released into the bloodstream slowly and evenly. Many people skip meals, and this is certainly not good for people with reactive hypoglycemia. Start out with three well-balanced meals. Include a small mid-morning, afternoon, and evening snack. If symptoms are not relieved, it may be necessary to divide the daily food intake into five or six smaller, well-balanced meals evenly spaced throughout the day. Include an evening snack. Choose more complex carbohydrates over

concentrated sweets, and try to include some insoluble fiber and protein with each meal.

5. Fats like those in whole milk, cheese, and meats should be limited. A low-fat diet has been shown to help in treating hypoglycemia. When selecting dairy products and meats for protein; choose lean meat, skim milk products and eggs in moderation. Use oils sparingly.
6. Sweeteners such as sorbitol, saccharin, and aspartame (Equal and Nutrasweet) do not contain sugar or calories and may be used in hypoglycemia diet. If you have questions about them, consult your physician or registered dietitian.
7. Alcohol is high in calories and can cause hypoglycemia all by itself. Therefore, people with reactive hypoglycemia should avoid or limit alcohol.
8. Caffeine should be avoided. Caffeine stimulates the production of adrenaline. So does reactive hypoglycemia. Therefore, caffeine in the diet can make symptoms worse because the production of adrenaline is increased.
9. Body Weight: Excess weight has been shown to interfere with the body functions that regulate glucose. So if you are overweight, reducing to the proper body weight could help to control reactive hypoglycemia.

### Sample Menu

<b>Breakfast</b>	<b>Lunch</b>	<b>Dinner</b>
<ul style="list-style-type: none"> <li>• Orange juice ½ cup</li> <li>• Cornflakes ¾ cup</li> <li>• Whole wheat toast 1 slice</li> <li>• Margarine 1 tsp</li> <li>• Sugar-free jelly 1 tsp</li> <li>• Skim milk 1 cup</li> <li>• Coffee/creamer/sugar substitute</li> </ul>	<ul style="list-style-type: none"> <li>• Lean hamburger 2 oz, hamburger bun, 1 lettuce/tomato slice</li> <li>• Cooked carrot ½ cup</li> <li>• Tossed salad/Italian dressing 1 Tbsp</li> <li>• Fresh apple 1</li> <li>• Sugar-free gelatin</li> <li>• Skim milk 1 cup</li> </ul>	<ul style="list-style-type: none"> <li>• Baked chicken breast 2 oz</li> <li>• Baked potato ½ medium</li> <li>• Green beans ½ cup</li> <li>• Dinner roll 1</li> <li>• Diet margarine 1 tsp</li> <li>• Diet soda</li> </ul>
<b>Snack</b>	<b>Snack</b>	<b>Snack</b>
<ul style="list-style-type: none"> <li>• Orange 1 med</li> </ul>	<ul style="list-style-type: none"> <li>• Skim milk 1 cup</li> <li>• Graham crackers 3</li> </ul>	<ul style="list-style-type: none"> <li>• Cranberry juice 1/3 cup</li> <li>• Peanut butter 1 Tbsp</li> </ul>

		• Saltine crackers 6
--	--	----------------------

### The Above Sample Diet Provides the Following

Calories	1760	Fat	50 gm
Protein	90 gm	Sodium	2000 mg
Carbohydrates	232 gm	Potassium	3300 mg

### Food Groups

Group	Recommend	Avoid
<b>Meat and Meat Alternatives</b>	All lean meat and poultry, seafood, peanut butter, nuts and seeds, limit eggs to four per week including those used in cooking.	Fatty and heavily marbled meats, hot dogs, salt pork, cold cuts, sausage, bacon, fried meats, or those prepared with sweetened sauces
<b>Breads, Grains &amp; Potatoes*</b>	Enriched or whole grain bread and rolls; English muffins, unsweetened cereals; potatoes; rice; pasta and noodles; crackers; pretzels; popcorn plain cakes and cookies made with allowed oils, low fat milk, & sugar substitute	Presweetened cereals; sweet rolls; pastries; donuts with sugar topping, glaze, and filling; frosted capes; pies' cookies
<b>Milk &amp; Milk Products</b>	Skim milk, 1% fat milk, nonfat dry milk, evaporated skim milk, plain or artificially sweetened non-fat yogurt, buttermilk, cocoa with sugar substitute, puddings made with allowed milk & sugar substitute low-fat skim milk cheeses	Whole or 2% milk, cream, chocolate milk, ice cream and ice cream products, flavored or fruited yogurt, milkshakes, sundaes, malted milk, sweetened pudding and custard, cocoa mixes, processed cheeses, cheese spreads
<b>Vegetables*</b>	Dark green or yellow vegetables (eaten daily), all other raw or cooked vegetables, legumes (beans, peas, and lentils)	Any glazed or sweetened
<b>Fruits*</b>	Citrus fruit (eaten daily) raw fruit or fruit canned in natural juice or water, drained fruit	Any canned in heavy syrups, candied fruit.
<b>Beverages</b>	Decaffeinated coffee. Tea, and herbal teas, water; diet decaffeinated sodas; unsweetened fruit juice	Sweetened fruit juice, ades and punches; alcohol; regular and caffeinated sodas
<b>Fats &amp; Oils</b>	Unsaturated vegetable oils such as corn, safflower, sesame, soybean, sunflower, peanut, canola, or olive oil; salad dressings and mayonnaise made with these oils	Visible fat, poultry skin, fried foods, high-fat sauces and gravies, butter, shortening, hydrogenated oils, coconut oil
<b>Miscellaneous</b>	Jelly, jam or gelatin with sugar substitute or unsweetened; herbs; spices; seasonings; vinegar; lemon juice; broth; unsweetened pickles' sugar substitutes' homemade soups with low-fat broth	Sugar, jam, jelly, honey, syrup, molasses, candy, sweetened gelatin, dietetic chocolate candy, sherbet, fruit ice, popsicles, creamed soups.

\***Complete Carbohydrates** (breads, grains & potatoes are good sources, but some fruits & vegetables also contain them)

### Some Food Sources of Fiber

<b>Insoluble Fiber</b>	<b>Soluble Fiber</b>
<ul style="list-style-type: none"> <li>• Whole grains; including wheat, rye, brown rice, bran &amp; cereals</li> <li>• Cabbage, Brussels sprouts, broccoli &amp; cauliflower</li> <li>• Root vegetables</li> <li>• Dried peas and beans</li> <li>• Apples</li> </ul>	<ul style="list-style-type: none"> <li>• Citrus</li> <li>• Strawberries</li> <li>• Oatmeal</li> <li>• Dried beans and other legumes</li> <li>• Apples</li> </ul>

### What Counts As One Serving

<b>Group</b>	<b>Amount</b>
<b>Breads, cereal, rice &amp; pasta</b>	<ul style="list-style-type: none"> <li>• Bread, 1 slice</li> <li>• Cooked rice or pasta, ½ cup</li> <li>• Cooked cereal, ½ cup</li> <li>• Ready-to-eat cereal, 1 oz</li> </ul>
<b>Vegetables</b>	Chopped raw or cooked vegetables—½ cup, leafy raw vegetables-1 cup
<b>Fruits</b>	<ul style="list-style-type: none"> <li>• Fruit or melon wedge, 1 piece</li> <li>• Juice, ¾ cup</li> <li>• Canned fruit, ½ cup</li> <li>• Dried fruit, ¼ cup</li> </ul>
<b>Milk, yogurt, and cheese</b>	<ul style="list-style-type: none"> <li>• Milk or yogurt, 1 cup</li> <li>• Natural cheese, 1 ½ cup</li> <li>• Process cheese, 2 oz</li> </ul>
<b>Meat, poultry, fish, dry beans, eggs &amp; nuts</b>	Cooked lean meat, poultry or fish, 2 ½ or 3 oz count ½ cup of cooked beans, or 1 egg, or 2 Tbsp of peanut butter as 1 oz of lean meat
<b>Fats &amp; Sweets</b>	LIMIT CALORIES FROM THESE especially if you need to lose weight