# Yoga Therapy for Hypoglycemia Written by Mei Ho

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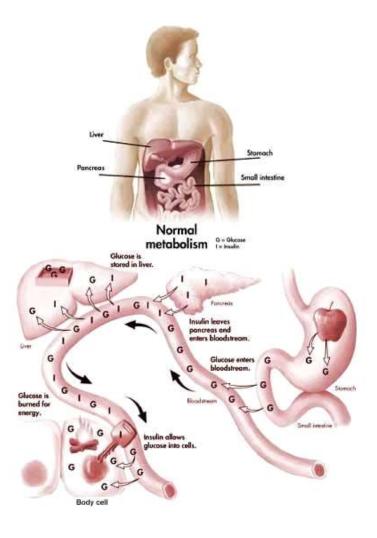
Canada

## Yoga Therapy for Hypoglycemia

## **Description of Hypoglycemia**

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 of 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 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 sets the process in motion to reduce blood glucose. The result is a 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 is not easy to diagnose. However, it usually consistently from one to three hours after a meal and returns to normal on its own. When



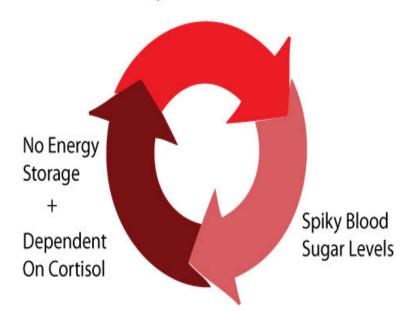
no known medical causes are found, the diagnosis of reactive hypoglycemia is made.

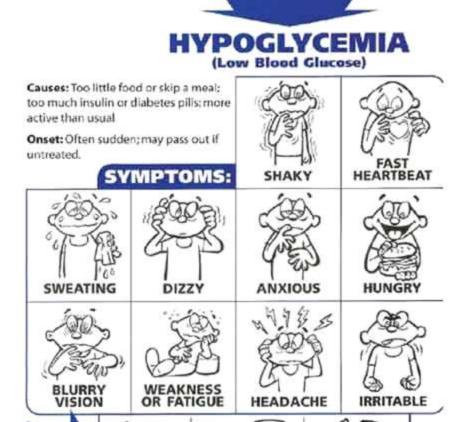
## Signs and Symptoms of Hypoglycemia

- become confused or disoriented
- lose consciousness
- have a seizure
- cold, clammy or sweaty skin
- pallor
- difficulty concentrating
- shakiness, lack of coordination
- irritability, hostility, and poor behaviour
- a staggering gait
- fatigue
- nervousness
- excessive hunger
- headache
- blurred vision and dizziness
- abdominal pain and nausea

# HYPOGLYCEMIA MODEL

Irregular Food Intake





CHECK your blood glucose right away, if you can't check, treat anyway.

TREAT

TREAT by eating 3 to 4 glucose tablets or 3 to 3 hard candles you can chew quickly (such as peppermints), or by drinking 4-ounces of fruit juice, or 1/2 can of regular soda pop.

CHECK

CHECK your blood glocore again after 15 minutes. If it is still low, treat again, if symptoms don't stop, call your bealthcare provider.

# **Common Medical Treatments for Hypoglycemia**

CHECK

CAN YOU

DO?

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. I will discuss more in detail regarding eating habits later in this paper.

The acute management of hypoglycemia involves the rapid delivery of a source of easily absorbed sugar. Regular soda, juice, lifesavers, table sugar, and the like are good options. In general, 15 grams of glucose is the dose that is given, followed by an assessment of symptoms and a blood glucose check if possible. If after 10 minutes there is no improvement, another 10-

15 grams should be given. This can be repeated up to three times. At that point, the patient should be considered as not responding to the therapy and an ambulance should be called.

The equivalencies of 10-15 grams of glucose (approximate servings) are:

- Four lifesavers
- 4 teaspoons of sugar
- 1/2 can of regular soda or juice

Many people like the idea of treating hypoglycemia with cake, cookies, chocolates and brownies. However, sugar in the form of complex carbohydrates or sugar combined with fat and protein are much too slowly absorbed to be useful in the acute treatment of hypoglycemia.

Once the acute episode has been treated, a healthy, long-acting carbohydrate to maintain blood sugars in the appropriate range should be consumed. Half a sandwich is a reasonable option.

If the hypoglycemic episode has progressed to the point at which the patient cannot or will not take anything by mouth, more drastic measures will be needed. In many cases, a family member or roommate can be trained in the use of glucagon. Glucagon causes a rapid release of glucose stores from the liver. It is an injection given intramuscularly to a patient who cannot take glucose by mouth. A response is usually seen in minutes and lasts for about 90 minutes. Again, a long-acting source of glucose should thereafter be consumed to maintain blood sugar levels in the safe range. If glucagon is not available and the patient is not able to take anything by mouth, emergency services (for example 911) should be called immediately. An intravenous route of glucose administration should be established as soon as possible.

With a history of recurrent hypoglycemic episodes, the first step in treatment is to assess whether the hypoglycemia is related to medications or insulin treatment. Patients with a consistent pattern of hypoglycemia may benefit from a medication dose adjustment. It is important that patients check blood glucose values multiple times a day to help define whether there is a pattern related to meals or medications.

### Yoga Therapy View - Chakra Focal Point of Hypoglycemia

The chakras can be used as a map to assess and discover blockages in the body and provide a treatment plan. For Hypoglycemia, the 3rd chakra vortex of energy is the meridian point being affected.

- Manipura: the solar plexus chakra.
- Located between the navel and the base of the rib cage.

 Seat of the emotions. Gives us a sense of personal power in the world.

Colour: yellow

• Element: fire

Vowel Sound: OO (you)

• Psychological Function of Manipura chakra: "I can", or I have the right to take action

• Age of development: 18 months postnatal to 3 years

Needs: to manifest one's power, autonomy and will

• Blockage in Manipura: blockage manifests as anger or a sense of victimization including dominating, blaming, aggressiveness, constantly active, workaholic, and perfectionist.

Common illnesses deriving from blockage in this chakra: ulcers, diabetes, **hypoglycemia**, anorexia, nervosa, bulimia, stress related ailments, indigestion, insomnia, panic attacks, headaches, muscle tension, skin irritation, nervous disorders, allergic reactions, chronic fatigue.

### Yoga Remedies for Hypoglycemia

Diet: Eat low glycemic foods. Millet, quinoa, nuts, celery or carrot sticks, lentils, dahl. Avoid alcohol, smoking and coffee.

Daily Exercise: Power walking, swimming, aerobics that helps perspiration but not exhaustion

#### Asanas:



1) Boat: This exercise strengthens the belly muscles, the legs and the lower back. It is also beneficial to those with kidney, thyroid, prostate and intestine problems. The Boat Pose is a great stress reliever and also improves digestion.



2) Half locust: The Locust Pose strengthens the abdominal muscles as well as the legs and arms, relieves stress, and improves posture.



3) Locust: Same set up as half locust except you raise the arms fully. Take note: avoid doing this pose if you have chronic back injury









- 4) Bow: This exercise expands the chest, mobilizes the entire spinal column, and can be a welcome change to the usual movement of your body. The Bow Pose is a good exercise to improve posture and strengthen the back muscles.
- 5) Garland/ squat: This Asana makes the ankles more supple and provides a good stretch to the back of the lower legs, the back, and the neck muscles. Malasana also offers a nice moment of rest for the legs during intense Yoga sessions.
- 6) Child: The Child Pose is a relaxation pose which is used to normalize the circulation after the Head Stand and to give a counter stretch to the spine after the backward bends. It is a resting pose that can be done to precede or follow any pose. Performing the Child Pose stretches the hips, thighs and ankles gently. It also helps relieve stress and fatigue, and calms the brain. However, you need to observe caution in practicing the Child Pose when you are suffering from diarrhea or knee injury as it may worsen your ailment when not done properly. Pregnant women should also avoid doing the Child Pose. Practicing under the supervision of an experienced Yoga teacher is advised.

#### Meditation and Pranayama:

#### Other considerations:

Laughing Yoga - since emotions is being affected in hypoglycemia, the first thing to do is to change your mood. If you are depressed, if you are unhappy, you cannot be healthy. Start by laughing everyday! Laughing provides us with the natural inner massage, and through change of mood it can account for up to 30% of cure.

Holistic Healing: Emotional Healing

As referenced by Stephane Bensoussan, emotional health in a psychological model is an absence of negative emotion. In holistic approach, in the present we can watch the flow of movement, and we don't want to correct negative emotions because they are an indication that something is not healing.

Taking the 5 step approach to emotional healing:

Step 1 - acknowledging the need for healing. Client must first acknowledge that s/he is hurting. If there's any denial, emotional healing cannot start.

Step 2 - recognizing the cause of pain. Client seek the source of pain. In most cases, it resides in the client's childhood.

Step 3 - cleansing the wound. Just as a physical wound on the body needs cleansing, so does an emotional wound. Client cleanses the inner wound by bringing light and love to this area and forgiving the guilty parties.

Step 4 - letting go. As mentioned by Jani Chapman in her workshops on yoga therapy, "water under the bridge" concept is very important to release the pain of the past and choose to move forward into living in the present.

Step 5 - moving forward. Client is called to action and to move forward. When s/he is able to take positive action towards moving forward, inner change has taken place.

#### **Nutrition Facts**

Following a hypoglycemia diet gives the body all the calories, protein, minerals, and vitamins necessary to meet the Recommended Dietary Allowance (RDA) for healthy adults.

#### **Special Considerations**

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.

Complex carbohydrates and proteins are important in the diet. They are a basic source of energy. Complex carbohydrates are0many 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.

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, oav products, and pectyn 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.

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.

- 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.
- Sweeteners such as sorbitol, saccharin, and aspartame (Equal® and Nutrasweet®) do not contain sugar or calories and may be used in a hypoglycemia diet. If you have questions about them, consult your physician or a registered dietitian.
- Alcohol is high in calories and can cause hypoglycemia all by itself. Therefore, people with reactive hypoglycemia should avoid or limit alcohol.
- 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.
- 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.