

Hypoglycemia

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Hypoglycemia is a disorder caused by an abnormally low level of blood sugar (glucose). It is a valid clinical entity that affects about one out of every 1000 Americans, many of whom also have diabetes. There are two kinds of hypoglycemia: reactive and fasting. Reactive hypoglycemia, the most common, produces symptoms 3 to 5 hours after a meal or after the use of oral hypoglycemic drugs like Orinase and Glucotrol. Fasting hypoglycemia is rare and usually appears in severe disease states such as pancreatic tumors, severe liver damage, some cancers, and in excessive insulin intake as is often seen in diabetics.

The signs and symptoms of hypoglycemia include headache, depression, anxiety, irritability, visual disturbances, heavy sweating, mental confusion, incoherent speech, bizarre behavior, and seizures. A blood sugar level below 50 mg/dl is also typical of someone with this disorder.

Some of the causes of hypoglycemia are as follows: Oral hypoglycemic drugs as mentioned above; certain other medications like quinine, and some uncommon endocrine disorders like Addison's disease. The most important causes of hypoglycemia are lifestyle factors. Heavy alcohol consumption initially induces hypoglycemia but eventually contributes to high blood sugar levels and diabetes; a diet high in refined sugar and processed foods and low in fiber is a major contributor to this disorder. The excessive production of insulin caused by high intake of simple sugars over long periods leads first to hypoglycemia and then to increased insulin secretion and eventually insulin insensitivity and type II diabetes.

The American diet is typically low in fiber and high in refined sugar, flour, white bread, polished rice and other simple carbohydrates. It has been shown that such a diet is strongly associated with blood sugar abnormalities. Refined sugars are quickly absorbed into the bloodstream, causing a rapid rise in blood sugar. This causes the beta cells in the pancreas to secrete lots of insulin which then drives down blood glucose levels to the point where hypoglycemia results. The sudden drop in glucose levels then causes the adrenal glands to release epinephrine (adrenalin) which quickly increases glucose levels in the blood. In time, the adrenal glands become exhausted and can no longer respond appropriately. Absence of the appropriate response leads to reactive hypoglycemia. If blood sugar mechanisms continue to be stressed by ingesting refined carbohydrates, the body eventually becomes insensitive to insulin or the pancreas becomes exhausted and the reactive hypoglycemia becomes type II diabetes.

Hypoglycemia impacts health in a number of ways. The association between hypoglycemia and impaired mental function is well known. It is also implicated in depression, but the connection is often missed by physicians. There is also reason to believe that hypoglycemia plays a role in aggressive and criminal behavior since many

violent and impulsive criminals have been diagnosed with reactive hypoglycemia. One type of premenstrual syndrome is associated with reactive hypoglycemia during one phase of the menstrual cycle. Hypoglycemia has been shown to be a common precipitating factor in migraine headaches. There is also substantial evidence that reactive hypoglycemia is a significant factor in the development of atherosclerosis.

Therapeutic Approach:

Diet is of the utmost importance. All simple, processed and concentrated carbohydrates must be avoided. Consumption of complex carbohydrates should be encouraged. These include such vegetables as spinach, turnip greens, tomatoes, root vegetables like carrots and beets, broccoli, radishes, legumes, and most fruits. Regular fruit consumption may actually help control sugar cravings. Meals should not be skipped. Frequent small meals are preferred to large meals since they help to stabilize blood sugar levels. Alcohol should be avoided because it increases insulin levels. Caffeine is a stimulant and most stimulants contribute to higher insulin levels, including nicotine in tobacco.

Vitamin and mineral supplementation is usually necessary because many nutrients are critical to proper carbohydrate metabolism. A good multi vitamin/mineral preparation along with a stress B complex taken at breakfast is usually adequate. Because chromium deficiency leads to insulin resistance, it is important to take between 200 and 400 micrograms of this mineral a day.

Exercise is an essential component in reversing insulin resistance. A graded exercise program should be developed that is appropriate to an individual's fitness level which elevates heart rate at least 60% of maximum for half an hour a minimum of three days a week. It is important not to over exercise, and in the case of strenuous exercise, it is important to eat enough food in the form of balanced meals. Most reputable health clubs can make a referral to a certified personal trainer if a structured fitness program is desired. However, a good pair of walking shoes may be all that is needed.

The supplements mentioned above are available at all health food and vitamin stores.

These nutritional suggestions are not intended to treat or cure disease and or be used as a substitute for sound medical advice. This information should be used in conjunction with the services of a trained, licensed health care practitioner. If you are under a doctor's care, seek advice before taking supplements or starting a new exercise program.

