What is hypoglycemia (low blood glucose)?

The human body is designed to ensure that BG is maintained at a steady level as the energy source required for its function. Despite this, the BG level may be found to be lower than usual due to some cause. As a rule, when the body tries to elevate BG when it falls below 70 mg/dL, symptoms occur specifically in association with this process and are called the symptoms of “hypoglycemia”. You need to be aware of this process and watch for any symptoms of hyperglycemia, which may occur with BG > 70 mg/dL or, conversely, may not occur with BG < 70 mg/dL.

Symptoms of hypoglycemia

Symptoms of hypoglycemia include those listed in the figure. Be aware that if you experience hypoglycemia frequently you may have no subjective symptoms associated with low blood glucose. This is “hypoglycemia unawareness”.

Causes of hypoglycemia

- Medication or insulin overdose
- Meals taken at different times or in different amounts than usual
- Insufficient carbohydrate intake
- Falls in BG during or after a high-impact/long-lasting exercise
- Falls in BG during drinking or bathing
- Heightened efficacy of medications associated with successful lifestyle modification
How to deal with your hypoglycemic episodes

• Always carry with you glucose or some other option ready for hypoglycemia.
• Take 10 g of glucose or 150-200 ml of water containing glucose whenever you feel you have some symptom of hypoglycemia.
• Take a meal, as you should, when you have hypoglycemia at a meal time.
• Take a carbohydrate-rich meal soon after remission of your symptom. Take carbohydrates equivalent to 80 kcal if you have 1 hour or more before your next meal.
• Do not use chocolate, among the sweets, to deal with your hypoglycemia, as it is likely to be absorbed only slowly.
• Be careful not to take too much glucose, as this may lead to an acute increase in BG later.
• Be sure to take pure glucose if you are taking an α-glucosidase inhibitor, as this drug delays carbohydrate digestion and absorption.

What to do to prevent recurrent or severe hypoglycemia

• Learn to take your medications and inject your insulin properly.
• Be sure to carry with you glucose at all times, so you can deal with hypoglycemic episodes as they occur.
• Try to live an orderly life.
• Tell your doctor about any hypoglycemic episode or symptom suggestive of hypoglycemia you have had.
• Familiarize your family or those around you with the symptoms of hypoglycemia and how to deal with hypoglycemic episodes, so you can depend on them for help in dealing with your hypoglycemic episodes.
• Carry with you your diabetes card at all times, so those around you can take care of you, as required, during your hypoglycemic episodes.
• Drivers should have plenty of glucose-rich foods in their cars at all times. Do not hesitate to ask your doctor or nurse if you have any concern about dealing with your hypoglycemic episodes.