

# HYPOGLYCEMIA AFTER BARIATRIC SURGERY



## What is reactive hypoglycemia?

After bariatric surgery, you may experience reactive hypoglycemia:

- Hypoglycemia means low blood sugar
- Reactive hypoglycemia is having low blood sugar after eating a meal. (Especially after eating foods that are high in sugar or simple carbohydrates).

## How do I know if I have reactive hypoglycemia?

You have reactive hypoglycemia if you have:

Any symptoms listed below a 1 to 3 hours after having a meal or snack AND those symptoms go away after eating or drinking.

## What are the symptoms of reactive hypoglycemia?

You may feel one or more of these:

- Hungry
- Shaky
- Dizzy
- Sleepy
- Sweaty
- Anxious
- Weak
- Confused

## What should I do if I think I have reactive hypoglycemia after having a meal or snack?

Having low blood sugar is not good for your overall health and can be serious.

- When you have the above symptoms, check your blood sugar.
- If your blood sugar is less than 70mg/dl, you need to treat it to bring your sugar above 70mg/dl. Follow the steps on the next page.

## What Should I do if my blood glucose is <70mg/dl?

- Chew 3 to 4 dextrose or glucose tablets (Glucotab) **OR**
- Drink  $\frac{3}{4}$  cup (175 ml) of juice
- Take a snack that contains carbohydrate **AND** protein.
- Wait 15 minutes and check your blood sugar again.
- If your blood sugar is still below 70mg/dl treat repeat the above.
- Examples of snacks are mentioned below.
- Avoid sweet foods like cookies, cake, candy (Blood glucose will rapidly go high and shortly will rapidly fall).

## How can I prevent reactive hypoglycemia?

You can help prevent reactive hypoglycemia by following your diet guidelines for bariatric surgery.

- Eat 3 healthy meals and 2 healthy snacks each day and keep portion small.
- Space meals and snacks 2 to 3 hours apart.
- Cut food into very small pieces, chew well before swallowing.
- Eat protein at each meal and snack time (see protein sources next page).
- Increase fiber intake from natural sources (fruits, vegetables, whole grains and cereals), or take it as a supplement prescribed by your doctor or dietician.
- Limit caffeine.
- Use sugar replacement such as Splenda , Sweet N low instead of table sugar
- Avoid food containing lactose ( milk and derivatives)
- Avoid or limit alcohol.
- Avoid food that are very hot or very cold. Best at room temperature.
- Avoid sweets like cookies, cakes, candy, pop, juice and sweet drinks

- Instead of sugars and simple carbohydrates, eat a complex carbohydrate with protein
- Avoid Fluids with meals, drink liquids only between meals.

## Try putting any of these together (Carbohydrate with protein)

### 1- Choose Complex Carbohydrates such as:

- Whole wheat crackers
- Whole wheat bread
- Whole wheat pita
- Whole grain rice
- Potatoes
- Whole grain Cereal
- Vegetables

With

### 2- Proteins such as:

Cheese, Egg, Legumes, Tofu, Nuts, Yogurt, Meat, Chicken, Fish

## After treating hypoglycemia what snack should I take?

- Crackers and cheese
- Pita and hummus
- Nuts and yogurt
- Melba toast and peanut butter

## Is there any role for medications?

Yes, if the diet modification is not enough, your doctor will discuss with you couple of helpful medications to be taken.

## What if the medication did not help?

Then your doctor will discuss with you a surgical option, but this is reserved for the very severe cases when the medicines is not useful.

1. Eisenberg et al ASMB Position Statement on Postprandial Hyperinsulinemic Hypoglycemia after Bariatric Surgery. Surgery for Obesity and Related Diseases 13(2017)371-378Fujoka Follow-up of Nutritional and Metabolic Problems After Bariatric Surgery. Diabetes Care 2005;28 (2): 481-484.
2. Richard Millsstein et al. Hypoglycemia after gastric bypass: an emerging complication. Cleveland Clinic Journal of Medicine. 2017 April;84(4):319-328
3. <https://www.stjoes.ca/search.jsp?query=hypoglycemia&submit=%C2%A0%C2%A0%C2%A0%C2%A0>

