## Nutrition Tips for Reactive Hypoglycemia After Bariatric Surgery

Reactive hypoglycemia (also called postprandial hypoglycemia, hyperinsulinemic hypoglycemia, or noninsulinoma pancreatogenous hypoglycemia) is characterized by recurrent episodes of symptomatic hypoglycemia occurring two to four hours after a high-carbohydrate meal (or oral glucose load).

Patients who have undergone bariatric surgery, especially those in whom the pylorus is bypassed (gastric bypass, biliopancreatic diversion/duodenal switch), may experience reactive hypoglycemia. The dietitian is key to helping these patients manage symptoms.

## **Symptoms**

Patients may experience any of these symptoms one to three hours after a meal high in carbohydrates: hunger, feeling shaky, dizziness, sleepiness, sweating, anxiety, feeling weak, confusion, heart palpitations, fatigue, aggression, tremors, fainting, or loss of consciousness.

## **Dietary Modifications**

Work with your patients to help them identify and eliminate from their diets simple sugars, concentrated sweets, high-fat foods, alcohol, caffeine, and lactose (possibly). They also should avoid skipping meals or consuming meals comprised only of carbohydrates.

Focus on how you can help patients modify their diets, including the following:

- plan mini meals spaced equally throughout the day (three to four hours);
- make low-volume choices;
- consume high-protein levels at each eating occasion, pairing protein choices with complex carbohydrates, fruits, and vegetables;
- choose healthful fats; and
- separate food and fluid intake by 30 to 60 minutes.

Soluble fiber from guar gum, glucomannan, and pectin and alpha-glucosidase inhibitors, (eg, acarbose) or somatostatin analogs (eg, octreotide) can help delay gastric emptying, increase small intestine transit time, and slow glucose absorption.

## **Patient-Specific Tips**

Acknowledge that everyone may have different triggers for low blood sugar or reactive hypoglycemia. Advise patients to keep detailed food journals that you can review to identify patterns (eg, timing and amount eaten as snacks, meals, and drinks; blood sugar levels; feelings).

Encourage patients not to use foods or drinks with added sugar to boost low blood sugar levels, as this can cause blood sugar crashes and spikes.