Eating Disorders in Women With Type 1 Diabetes

By Conni Bergmann Koury, and Gary Scheiner, MS, CDE

People with diabetes must pay intense attention to meal planning and nutrition to properly manage their condition. This routine diabetes management can sometimes lead to a preoccupation with food. Worry about eating the "wrong" foods creates an unhealthy perspective that can contribute to the development of an eating disorder.1,2 This is most common in teenage girls and young women who are already at an increased risk for eating disorders.3,4

WOMEN WITH TYPE 1 DIABETES AT INCREASED RISK

Girls and young women with type 1 diabetes have more than twice the risk of developing eating disorders as their peers without diabetes. It certainly does not help that intensive insulin treatment—the current standard of care—tends to tighten glycemic control, which in turn isassociated with weight gain. It is fair to say that issues specific to the self-management of (eg, diabetes careful monitoring of diet, frequent blood glucose exercise, and may contribute measurement) to the development of eating disorder symptoms in women with diabetes.5

Eating Disorders in Women with Type 1 Diabetes

The most common features of eating disorders in girls and young women with type 1 diabetes are:

- dissatisfaction with their body weight and shape and desire to be thinner
- dieting or manipulation of insulin doses to control weight
- binge eating.

The two main eating disorders are anorexia nervosa and bulimia nervosa. People with anorexia have a distorted perception of their body and dramatically restrict their food intake to stay thin. Bulimia is a condition in which individuals repeatedly eat excessive amounts of food and then purge through vomiting or laxative use.6.7

Investigators reported in *Diabetes Spectrum* a study of adolescent girls 12 to 18 years old with type 1 diabetes in which 45% admitted to binge eating, 38% to dieting for weight control, 8% to self-induced vomiting, and 2% to laxative abuse.8 Additionally, among these girls, 14% admitted to deliberately not taking enough insulin as a means of controlling weight. When the investigators studied this group of girls again, they were about 19 years old, the percentage who admitted to eating disorder and weight-loss behavior was even higher: binge eating 53%, insulin omission 34%, and dieting 54%.

DIABULIMIA

It does not take long for most people with Type-1 to learn the relationship between the amount of insulin taken and their weight. It is estimated that 10% to 20% of girls in their mid-teen years and 30% to 40% percent of late teenaged girls and young adult women with diabetes skip or alter their insulin doses to control their weight a condition that has been referred to as "diabulimia." According to the Juvenile (JDRF), Diabetes Research Foundation diabulimia and its associated behaviors can have both devastating and permanent effects on the body.6

When a person with type-1 diabetes intentionally takes less insulin than what is needed to match carbohydrate intake and endogenous glucose production, blood sugar levels rise and some of the excess calories are "purged" through the kidneys. This results in rapid weight loss, similar to when a person with bulimia purges the food he or she consumed, hence the term "diabulimia."

Recognizing the symptoms

Skipping or restricting insulin doses to lose weight is a well-known issue among diabetes specialists, however, few others are familiar with it. This may make it difficult for parents and doctors to recognize the symptoms.

Warning signs can include:

- changes in eating habits (eating more but still losing weight)
- unexplained weight loss
- · unexplained high blood sugar
- low energy levels
- frequent urination

The acute effects of high blood glucose levels are dehydration, fatigue, impaired healing, mood changes, and diminished mental and physical capabilities. In a state of absolute insulinopenia, , an individual can develop diabetic ketoacidosis.5 Chronic hyperglycemia (particularly severe hyperglycemia) greatly increases the risk for retinopathy, nephropathy, neuropathy and macrovascular disease at an unusually early age. $\Box 7 \Box$

A report in *Diabetes Care* found that insulin restriction in women with type 1 diabetes is associated with a three times higher rate of death than women who use appropriate insulin doses at 11 years follow-up.9

GETTING HELP

According to Ann Goebel-Fabbri, PhD, a clinical psychologist at the Joslin Diabetes Center whose research focuses on the link between eating disorders and diabetes, treatment for an individual who severely restricts or skips insulin doses requires both an eating disorder specialist and a diabetes management team in order to be effective.6

If you are concerned that one of your clients may have an eating disorder, refer them to a mental health counselor who specializes in the treatment of eating disorders. "[The eating disorder specialist] should be willing to collaborate openly and directly with the diabetes specialist," Dr. Goebel-Fabbri said in a news release from the JDRF. "This two-way relationship will allow healthcare professionals to understand and treat the eating disorder as well as teach patients how to safely manage their diabetes, both of which are essential for recovery.

And don't forget, major behavior changes don't take place overnight. Negotiate with your client to make small, gradual changes designed to improve (but not *perfect*) their glycemic control.

Dr. Goebel-Fabbri also recommends teaching that food is not toxic. "It is important for people to strive for a balanced, flexible approach to eating," she said. "Kids and families need to learn to eat a tremendous variety at different times and still cover insulin appropriately."

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