National Eating Disorder Information Centre

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Bariatric Surgery and Eating Disorders

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> Bariatric surgery is the easy way out for people wanting to lose weight. People who have bariatric surgery end up with an eating disorder. People who have bariatric surgery regain all the weight they lost.

These are some of the common myths about bariatric surgery, which has been performed in increasing numbers in Canada and across the world over the past 10 years. In Canada, rates of bariatric surgery increased 4-fold from 2006–2007 to 2012–20131 as obesity rates also increased. As more people consider and undergo bariatric surgery, it is important to understand what it is, how eating changes, and the relationship between bariatric surgery and eating disorders.

INTRODUCTION TO BARIATRIC SURGERY

"Bariatric surgery" is an umbrella term for a variety of elective procedures that lead to weight loss by surgically changing the digestive system. The primary purpose is to treat health problems that are often associated with obesity, such as type II diabetes, sleep apnea and heart disease. Procedures are generally categorized into two different types: "restrictive" procedures reduce the volume of food a person can eat by decreasing the size of the stomach, and "malabsorptive" procedures limit the absorption of calories and nutrients in the digestive system. Some types of bariatric surgery are both restrictive and malabsorptive. Commonly performed procedures are the laparoscopic adjustable gastric band (also known as the "lap band"), roux-en-y gastric bypass (often more simply called a "gastric bypass"), and sleeve gastrectomy (also known as the "sleeve"). Some governments fund bariatric surgery because the health and quality of life improvements that typically result from such procedures reduce health care costs significantly more than the cost of surgery itself. With the development of minimally-invasive or laparoscopic techniques, the risk of dying from bariatric surgery has also significantly decreased. To qualify for surgery in most programs, individuals must have a body mass index (BMI) of 35–40 with at least one obesity-related health condition, or a BMI of above 40 with or without an obesity-related health problem. Prior to being approved for surgery, patients' medical and mental health is assessed to ensure they are ready. Clinics at which surgery is performed also provide information about how to eat and what to expect after surgery to help people make an informed decision.

EATING AND WEIGHT LOSS AFTER BARIATRIC SURGERY

Contrary to the belief that bariatric surgery is the "easy way out" to weight loss, people who undergo surgery must afterwards make significant changes to their eating and lifestyle. With every type of bariatric surgery procedure, the first few months after surgery involve a careful eating progression beginning with liquids, full fluids, pureed foods, and finally, solid foods. People commonly vomit unintentionally if they eat too quickly, too much, or because their new digestive system cannot tolerate certain

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foods. It is important to ensure that protein needs are met to help with healing and prevent muscle loss during weight loss, but eventually protein needs are the same as for individuals who have not undergone bariatric surgery. Water must be sipped slowly rather than gulped, which can make it challenging to stay hydrated. In addition, daily multivitamin/mineral supplements must be taken for life.

Once someone who has had bariatric surgery is able to eat solid foods, the volume must be limited to about 1–2 measuring cups in total per meal, depending on the density of the food. It is important to establish an eating plan that involves 3 meals and 1–3 snacks each day to ensure adequate nutrition. Each mouthful of food must be chewed many times because the smaller stomach is less able to physically break down food. Over time, most people are able to eat a wide variety of foods, including foods they enjoyed before surgery. However, this may vary depending on the type of surgery. For example, people who undergo a gastric bypass often experience 'dumping syndrome' if they eat foods high in sugar or fat. Dumping syndrome is very uncomfortable and is characterized by sweating, abdominal discomfort and diarrhea. Eventually, as the body adjusts and people learn how their post-surgery digestive system responds to certain foods and amounts of food, it is often possible to incorporate small portions of these foods. In this way, bariatric surgery is a tool to help reduce portion sizes and improve food choices.

The first year after surgery also involves the most rapid and drastic weight loss – on average, 64% of excess weight loss occurs in the first 6 months[1]. However, only approximately 5% of people who undergo bariatric surgery will reach a BMI of 251. Note that higher pre-surgery BMIs come with greater weight loss – but also higher post-surgery maintenance BMIs[2]. On average, people achieve and maintain a BMI of about 30 after bariatric surgery[1]. They tend to reach their lowest post-surgery weight 18–24 months after undergoing surgery, and although most people do not regain all the weight they lose, a modest regain (about 20 lbs) often occurs[3].

Therefore, it is very important for people considering or undergoing bariatric surgery to have realistic expectations about weight loss and to have goals unrelated to a specific weight or BMI. While following post-surgery eating guidelines and exercising regularly are important and facilitate weight loss, they do not guarantee a certain weight will be achieved. Instead, patients should be strongly encouraged to focus on non-weight related goals like improved health, more physical energy, and greater mobility. These are the outcomes that truly lead to a better quality of life as individuals can participate more easily in activities like bike riding, going to an amusement park with family members, or travelling. Embracing non-weight related goals may be challenging due to internalized weight stigma[4], whereby individuals with obesity who tend to experience societal stigma, internalize negative beliefs about themselves and their worth. It can thus be very difficult to practice self-acceptance and body acceptance when one's body does not conform to the cultural ideal of thinness.

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There are several approaches that can be helpful in addressing these challenges. The principles offered by the Health at Every Size movement[5], which celebrates body diversity instead of specific weights or BMIs, encourages finding joy in physical activity, and eating in a balanced manner, are applicable to life both before and after bariatric surgery. Mindful and intuitive eating principles and practices[6] can also be beneficial for both pre- and post-surgery patients. Mindful eating involves paying careful attention to the eating process, including the flavours, textures and other sensory aspects of food, and identifying feelings of hunger, fullness and satisfaction. Considering these factors in a non-judgmental, curious way helps people make wiser choices about when, how much, and what to eat. Similarly, intuitive eating[7] involves distinguishing between emotional and physical hunger, rejecting the dieting mentality, and making peace with food through respecting your body's needs.

EATING DISORDERS AFTER BARIATRIC SURGERY

You may have noticed that many of the post-surgery eating behaviours and experiences described above are similar to symptoms observed in people with eating disorders. At this time, the research on eating disorders after bariatric surgery is limited. It is not well-understood why people develop eating disorders, and it is unclear how many people develop eating disorders. In addition, the scarcity of research makes it difficult to predict who will develop an eating disorder. Bariatric surgery candidates tend to have higher rates of binge eating and other mental health difficulties compared to individuals with obesity not seeking surgery[8], but binge eating is not a rule-out for surgery[9]. It is also possible for someone who has never had an eating disorder to develop one for the first time after bariatric surgery. Fortunately, most people who undergo bariatric surgery do not develop an eating disorder and in fact experience many physical and mental health benefits.

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Overall, people's eating behaviours improve after surgery, with decreases in binge eating and increases in their sense of control over eating[9]. Although it is normal for people to regain a small amount of weight after reaching their lowest weight, if this weight gain continues or is more significant, it is usually due to factors like difficulty coping with food urges[10], eating to soothe painful emotions[11,12], regularly eating past the point of fullness, and eating continuously throughout the day or grazing[13]. When disordered eating develops post-surgery, it has been found to predict poorer weight loss and high levels of distress[14]. Excessively restricted eating may emerge when weight loss slows and, in turn, fear of weight regain increases[15]. The biggest fear of people who have undergone bariatric surgery is that they will regain the weight they lost – an understandable fear given their history of obesity, repeated diets and weight gain after diets, and obesity-related medical problems. Most people are able to cope with this fear and eating disorders post-surgery *are* quite uncommon. When it does develop, BMI tends not to fall as low as it does in those who have not had surgery. While many individuals vomit due to discomfort caused by eating certain foods, particularly in the first few months after surgery, a few may also induce vomiting to prevent weight gain[9]. Given the overlap between post-bariatric surgery eating behaviours and eating disorder symptoms, it is important to understand the person's motivation for the engaging in the behaviours, the source of their distress, and how preoccupied they are with the behaviours and their weight. Medical causes like gastric ulcers must also be ruled out.

BODY IMAGE AND BARIATRIC SURGERY

Body image dissatisfaction tends to lessen after bariatric surgery. One study of 145 patients 6 months after surgery found that body image improved substantially[16]. However, the speed of weight loss and the dramatic changes in body shape and size can challenge one's identity and be emotionally uncomfortable. Prior to bariatric surgery most people have struggled with obesity for years, if not decades, and have become accustomed to living in a certain sized body and all that entails. This includes concerns about being in public and physically fitting into certain spaces, shopping for clothing, and reactions from others. A common experience after surgery is the "mind-body lag", where after surgery people feel that, even though they have lost a great deal of weight, they still feel the same size or that their appearance is unchanged. The reasons for this are not well understood. At the very least, because most people who undergo surgery have struggled with their weight for many years, the dramatic change in weight and body shape does not register emotionally as quickly as the physical changes occur.

Excess loose skin after weight loss can be a significant concern for many after bariatric surgery as some degree of excess skin occurs in about 95% of patients. This can contribute to increased body image dissatisfaction and distress and may lead to food restriction in the mistaken belief that consuming fewer calories will help shrink the skin. For some people the excess skin can cause medical problems, as skin folds, especially around the abdomen, can chafe, and become red, painful, and even infected. The only lasting solution is body contouring surgery or plastic surgery, which does not tend to be covered by government health care plans.

EATING DISORDER TREATMENT AFTER BARIATRIC SURGERY

If an eating disorder is suspected after bariatric surgery, it is important for the person to undergo an assessment, ideally with a health professional who is knowledgeable about both eating disorders and bariatric surgery. This can be challenging, especially in smaller communities, and traditional eating disorder programs are usually not structured to accommodate post-bariatric surgery patients. These programs often include standardized meal plans and group dining, a real obstacle for bariatric surgery patients who often have intolerances to particular foods and cannot consume large volumes of food. However, treatment programs have more recently become willing to treat individuals who have undergone bariatric surgery. This requires transparency with the other patients, modified meal plans, and ongoing collaboration with the bariatric surgery centre if possible. Patients who develop eating disorders after bariatric surgery have much in common with people who develop eating disorders who have not had bariatric surgery in terms of emotional, cognitive, and behavioural symptoms. Thus, standard eating disorder treatments are likely to be appropriate. So far, no bariatric surgery-specific eating disorder treatment has been widely accepted as the evidence-based standard. When individuals look for treatment in the community, they should ideally find a professional who has an understanding of bariatric surgery or who can consult with mental health professionals and/or dietitians familiar with bariatric surgery.

CONCLUSION

Bariatric surgery can be a positive life-changing intervention for individuals with health and mobility problems stemming from obesity. However, it requires a careful weighing of the pros and cons, realistic expectations, and a willingness and ability to make substantial, enduring lifestyle changes. Eating disorders can develop after bariatric surgery for reasons that are not yet well understood. While the rates are low, they present with similar symptoms and negative consequences as typical eating disorders. Existing treatments for eating disorders can be effective, provided the treating clinicians have an accurate understanding of bariatric surgery.

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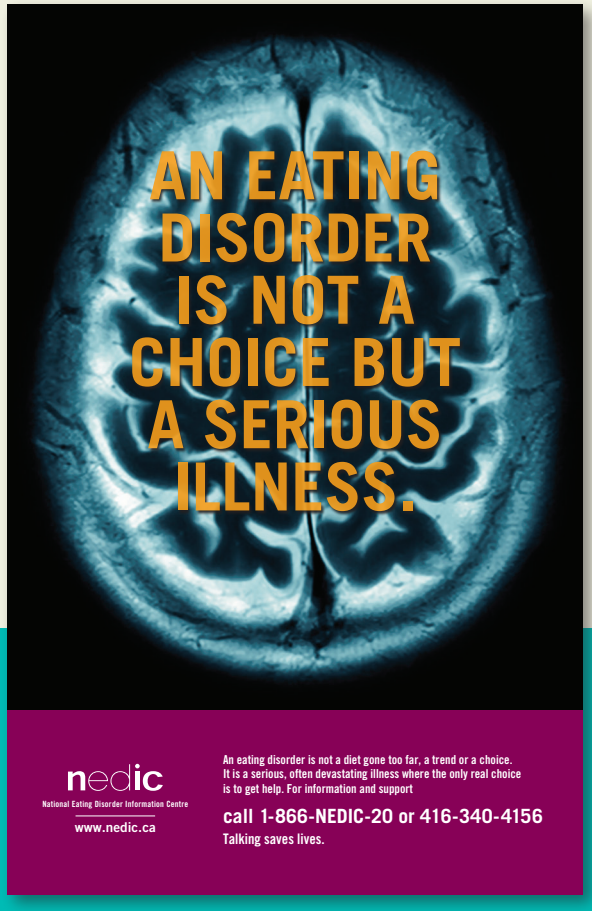
FEBRUARY 1–7, 2017

Eating Disorder Awareness Week

NEDIC and organizations across Canada are working to debunk the stigma surrounding eating disorders by spreading the message that eating disorders are not a choice. Join us using the hashtags **#EDAW2017** and **#NotAChoice**, and visit NEDIC.ca for more details.



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