

ON TRACK WITH BARIX

Support to Keep You On Track With a Healthful Lifestyle

Calories & Weight



How bariatric surgery, modified food behaviors and exercise can tip the scale towards healthy weight loss.

Let's start with the basics. A **calorie** is a measure of energy. Foods and beverages provide our bodies with energy. The nutrients that supply calories are protein (4 calories per gram), carbohydrates (4 calories per gram), and fat (9 calories per gram). The all-important vitamins and minerals that our bodies cannot function without come free of calories. Our bodies use energy for each and every function, from the beating of our hearts and the digestion of food to going on a hike. The basic equation is that if we consume more calories than our body requires, the extra energy is stored as fat tissue. If energy output is greater than energy intake, energy from fat tissue is released and weight loss occurs. If only it were that simple.

Our bodies are very complex machines with safeguards put in place to prevent us from starving to death in times of famine. So the basic theory, "eat less and exercise more to lose weight" isn't the whole

picture. After all, everyone knows someone who eats a lot and remains slim and another who smells food and gains weight. And what about the phenomenon of rapid weight gain that follows a weight loss?

Remember this:
*your body is your slave;
it works for you.*
Jack LaLanne

Let's take a look at some of the factors that come into play.

First is the realization that almost any attempt to lose weight is met with huge resistance from the body. Once you stop the diet, medication, or exercise program, or reverse the surgery, you quickly regain weight. Can anyone relate? One reason for this frustrating paradox may be that obesity causes permanent changes to nerve cells in the brain, virtually locking in the new set point. The only way to possibly keep the weight off is to continue the diet,

medication, or exercise program indefinitely, or not reverse the surgery. Lesson learned; don't even start the cabbage diet unless this is your lifelong weight loss plan.

Ghrelin, a hormone released from the stomach, regulates hunger, metabolism and insulin response. When food intake is limited, ghrelin levels increase, putting into place a myriad of factors leading to a strong desire to eat. Not only that, but the calories ingested very efficiently plump back up the fat cells that you worked so very hard to deflate.

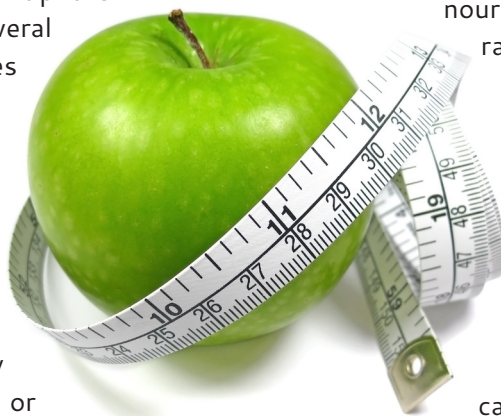
Leptin is another hormone impacting weight. How frustrating is this, if you lose 10% of your excess weight, your body becomes more efficient and energy expenditure decreases by 20%, requiring a lower and lower calorie level to lose additional weight? A decrease in leptin is primarily responsible for

this survival response. Seems like a simple solution would be to inject a bit of leptin; unfortunately it looks like this does not work.

Regular exercise can tip the calorie balance in several ways. First, calories are required for the activity. Second, exercise promotes the maintenance of or increase in muscle tissue, resulting in a higher daily energy (calorie) requirement or metabolism. But, even more than tipping the calorie balance, the positive impact of exercise on weight loss and maintenance may be due to the metabolic changes that occur from regular exercise (decreased insulin resistance, reduced cortisol and others), a decrease in stress levels, improvements to the quality of sleep, improved mood, and enhanced self-esteem. It's not as simple as calories in and calories out.

Bariatric surgery reduces the effectiveness of the body's resistance to weight loss in some pretty amazing ways.

- It is a permanent solution helping the body overcome the set point. A decrease in caloric intake (via small portions) can be maintained indefinitely.
- The restrictive component of the gastric band, gastric bypass and gastric sleeve surgeries signals your body that it is full after eating a small amount of food (about $\frac{3}{4}$ cup) in contrast to the amount of food required to fill a football-sized stomach.



- Gastric bypass and gastric sleeve surgeries decrease the ghrelin response. Many post-surgery patients do not experience true hunger and learn to eat to nourish their bodies rather than in response to hunger.
- The gastric bypass surgery results in malabsorption of some of the calories ingested, creating a larger caloric deficit.

It is clear that bariatric surgery is a very effective tool to help people reach and maintain a healthy weight. Utilizing the tool properly will produce the greatest results. The Barix Clinics program does not focus on counting calories, but it does have several components that cause a reduction in calorie intake. It stresses important behaviors when making good food choices that will allow for a healthful weight loss.

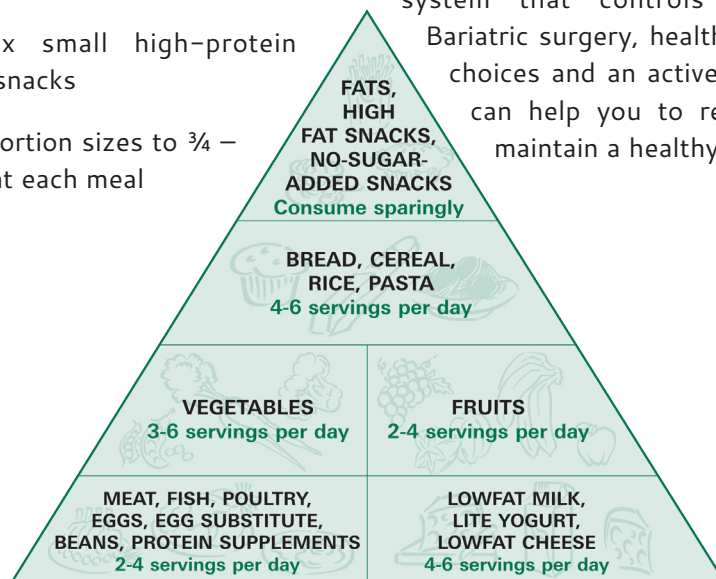
These behaviors are:

- Eat six small high-protein meals/snacks
- Keep portion sizes to $\frac{3}{4}$ – 1 cup at each meal

- Drink fluids 5 minutes before and 30 minutes after meals to prevent “flushing” foods out of the pouch/sleeve
- Avoid foods and beverages with more than 2 grams of added sugars
- Limit food with a high fat content
- Obtain adequate fluid — choose calorie-free fluids except for up to 6 oz of juice daily and up to 24 oz of skim milk
- Daily multi-vitamin and mineral supplementation as recommended
- Exercise regularly
- Choose the recommended number of servings from the Barix Nutrition Guide*
- Get adequate sleep
- Manage stress

By following the guidelines, the result is adequate nutrition for a healthful weight loss. To sum it all up, calories do count, although they are only one part of a complex system that controls weight.

Bariatric surgery, healthful food choices and an active lifestyle can help you to reach and maintain a healthy weight.



*BARIX NUTRITION GUIDE

Recipes

Peanut Butter Cookies

- 1 cup Simply Jif peanut butter, creamy or crunchy
- 1 1/3 cups Splenda
- 1 egg
- 1 teaspoon vanilla extract

Preheat the oven to 350 degrees F. Grease a large baking sheet.

In a mixing bowl, combine peanut butter, 1 cup of Splenda, egg, and vanilla; stir until mixed well. Roll the dough into small balls. Place the balls on the prepared baking sheet. With a fork dipped in Splenda, press a crisscross design on each cookie.

Bake for 12 minutes, remove from the oven, and sprinkle the cookies with the remaining Splenda. Cool slightly before removing from pan. Makes 16 cookies.

NUTRITION INFORMATION

PER COOKIE: 88 calories, 4 grams protein, 7 grams fat, 3 grams carbohydrate, 70 mg sodium.



Summer Fruit Cobbler

- 4 cups sliced, peeled peaches or 16-oz pkg frozen peach slices (no-added-sugar)
- 2 cups raspberries
- 1/4 cup cold water
- 4 tablespoons Splenda
- 4 teaspoons cornstarch
- 1 tablespoon lemon juice
- 1/2 teaspoon ground cinnamon
- 1 cup all-purpose flour
- 3/4 teaspoon baking powder
- 1/4 teaspoon baking soda
- 1/8 teaspoon salt
- 1/3 cup plain low-fat yogurt
- 1/4 cup egg substitute
- 2 tablespoons margarine, melted

Preheat oven to 400 degrees F. Combine peaches, water, 2 Tbsp Splenda, cornstarch, lemon juice, and 1/4 tsp. cinnamon in a saucepan. Let stand for 10 minutes.

In a medium bowl, mix together flour, 2 Tbsp. Splenda, baking powder, baking soda, 1/4 tsp. cinnamon, and salt. In another bowl mix together yogurt, egg sub and melted margarine. Add the egg and flour mixtures together and stir until moistened.

Cook peach mixture over medium heat, stirring until thickened and bubbly. Stir in raspberries and continue to stir gently until heated through. Transfer to a 2-quart baking dish.

Drop biscuit topping in small mounds on top of the hot filling. Bake for 20 minutes. Serve warm. Makes 9 servings.

NUTRITION INFORMATION

PER SERVING: 115 calories, 4 grams protein, 2 grams fat, 22 grams carbohydrate, 105 mg sodium.



Featured Product

Barix Cards

Designed by a local artist, these cards are a perfect way to express your support for someone who has made the choice to improve his or her health through bariatric surgery.

The **New Life** card depicts a butterfly that has emerged from its cocoon. It is available either with the message "Free...Finally free" or blank for you to express your own sentiments.

The **New Day** card pictures a gorgeous sunrise scene. It is available either with the message "A New Day Dawns...Welcome to Your New Life" or blank for you to create your own message.

The **Journey** card is a beautiful rendering of a country road leading off into the distance and is available either with the message, "A Journey Begins...I'll Be with You Every Step of the Way" or blank for your own words.

These cards are featured in August for just \$3.45 with free shipping.

REWARD YOURSELF

This month, you could earn a SPECIAL GIFT for your "It Worked For Me" tips or recipes! Just submit as many recipes and "It Worked For Me" tips as you like. The most original and creative will be awarded a special gift from our online store. Include your name and contact info with your entry—make sure your recipes follow Barix nutritional guidelines. Tips must be submitted by August 31, 2011. Please send comments, ideas, recipes and "It Worked For Me" tips to Deb Hart, RD, LD at dhart@foresthealth.com.

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RECONSTRUCTIVE SURGERY

To receive a **FREE RECONSTRUCTIVE SURGERY** guide, call 800-282-0066 or send us an email at rc@barixclinics.com with your name and contact information. Our reconstructive surgery program is currently performed at our centers in Michigan, Ohio, and Pennsylvania. **Call us today for more information!**

SHARE YOUR SUCCESS

Tell us about how your life has changed as a result of your weight loss surgery. Your story may be printed in this publication or on one of our websites and can serve as an inspiration to others.

Submit your story online (http://www.barixclinicsstore.com/share_your_story.html).

We'd love to hear from you.

QUESTIONS ABOUT FINANCING YOUR SURGERY?

Call a Barix Patient Service Representative at 800-282-0066

It Worked for Me

The Barix Forums are about people supporting each other through tough times and WOW moments. No one can quite understand what you are going through like someone who has walked in your shoes. Here is just one example of a posting (edited) that supports the person posting and also inspires others. If you have not checked out the forums, what are you waiting for? Just create an account and find the support you need (forum.barixclinics.com).

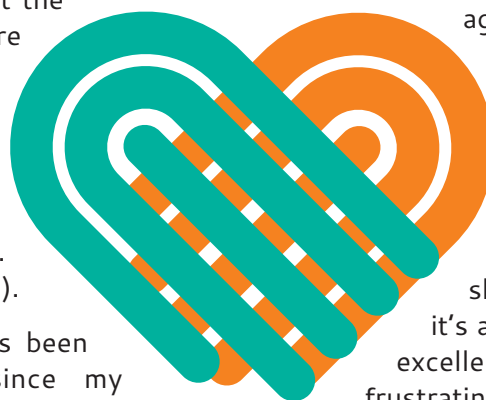
Posting: It has been 15 months since my surgery and to date I have lost 92.6 pounds! It has been a long and frustrating road at times, and although the 1-2 pounds per week is not always exciting, it does add up! I want to encourage everyone to keep looking forward. I still wish the band would do the work for me, but as soon as I came to terms with the fact that it wouldn't, I began making progress. You do have to make good choices, and I think the best means of success is

to follow some sort of meal plan and track calories. Keep up the good work, everyone, and celebrate all the little successes because they add up to big successes!

Response 1: Wow, that is wonderful. I have been at a stall for several months not gaining but not losing. I go for a fill soon and hope I can start to lose again. Like you say, it is slow but you are losing and that's what counts.

Response 2: Congrats to you! The loss is slow but at least it's a loss. Keep up the excellent work. It can get frustrating and discouraging, but only if we let it.

Response 3: Reading your post has encouraged me. I just went in for a fill and to my surprise, I did not get a fill, but had to have some fluid removed. I was eating "slider" foods and gaining. Since having fluid removed I have lost 3# and am eating much better. I haven't been on the message board for quite a while, but I know it helps me when I do.



In the News

Bariatric surgery is cost effective for a range of individuals. A past study indicated that bariatric surgery was mostly cost effective for young patients with very high BMIs. This study neglected to take into account obesity-related health issues. Once these health issues were taken into account, it was found that bariatric surgery is a good value for even those with BMIs in the 30-35 range. The study found an increase in life expectancy of 6 years and a 65% resolution of obesity-related health problems. Hopefully, insurance companies will take note.

REQUEST A FREE BROCHURE

for you or a friend. Call us at 800-282-0066, or log on to www.barixinfo.com

