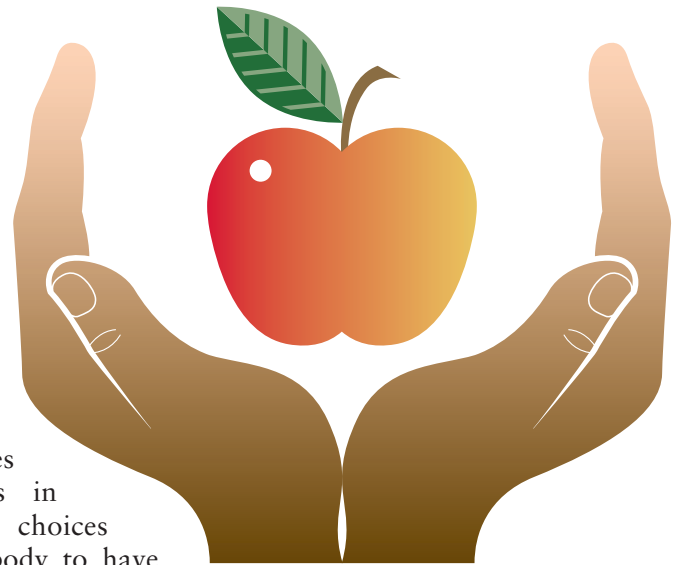


ON TRACK WITH BARIX

Support to Keep You On Track With a Healthful Lifestyle

ENERGY BALANCE



The secret to reaching a healthy weight is simple—consume fewer calories than you use. Bariatric surgery is a tool that helps you consume fewer calories. Let's start with a basic review of how calories work. A calorie is a measure of energy. Foods and beverages provide our bodies with energy. 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. If we consume more calories than our bodies require, 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. To lose a pound of fat, you must consume approximately 3500 fewer calories than your body needs.

The only nutrients that supply calories are protein (4 calories per gram), carbohydrate (4 calories per gram), and fat (9 calories per gram). Alcohol also supplies 7 calories per gram. The all-important vitamins and minerals that our bodies cannot function without come free of calories. Eliminating entire food groups or a specific nutrient has not proven to be effective at long-term weight loss. A more sensible approach is to consume a healthful mix of protein, carbohydrates and fat.

The Barix Nutrition Program does not focus on counting calories. It stresses important behaviors in making good food choices that will allow the body to have a healthful weight loss. *These behaviors include incorporating the following:*

- Six small high protein meals/snacks
- Small portion sizes of 3/4 – 1 cup of food at each meal
- Fluids consumed at least 5 minutes before and 30 minutes after meals to prevent “flushing” foods out of the pouch
- Foods and beverages with less than 2 grams of added sugars
- Limited amounts of food with a high fat content
- 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
- Regular exercise.
- Choosing the recommended number of servings from the *Barix Nutrition Guide*

When these behaviors are maintained, the result is adequate nutrition to nourish the body and support a healthful weight loss. Each time a follow-up visit is made, the nutritionist will review the foods and beverages that are chosen and make recommendations for changes if needed.

Choose calories that satisfy your hunger. For the first year or so after gastric bypass surgery most people find that they are not hungry and just getting in the recommended amount of protein is a challenge. But, after that first year many people find that they have a bigger appetite and can eat larger portions. Those who choose the adjustable gastric band may also find that they need to choose foods carefully to manage hunger. Two strategies are helpful. First, select foods that are solid. Very soft foods can act like a liquid, emptying quickly out of the pouch, leaving you looking for more. Very soft foods include things like yogurt, soup, pudding and

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applesauce. If you experience a lack of satisfaction from these types of foods, then limit the amount that you choose. The second strategy is to choose foods based upon their caloric density.

Choosing foods with a low caloric density enables you to feel satisfied with a lower overall caloric intake—helping you to reach and maintain your weight goal. Your body senses fullness or satiety after eating a certain weight of food no matter how many calories it contains. The caloric density of a food is simply the number of calories it provides per ounce. Caloric dense foods—those containing 68 calories or more per ounce—are no more filling than other foods. To calculate the caloric density of a food, divide the calories by the serving size in ounces. For example, an 8 oz serving of frozen chicken and vegetable bake dinner provides 360 calories. The caloric density is $360 / 8 = 45$. So this frozen entrée has a caloric density of 45. This is less than 68, so if the sugar and fat are in line, it is a good food choice. Fresh fruits and vegetables, lean meats, low fat dairy products and some whole grain products have a lower caloric density. Highly processed restaurant foods and fast foods tend to have a higher caloric density. Look at the chart at right for some examples.

Calories do count, but you should not have to count calories every day for the rest of your life. Most of us are creatures of habit so develop good habits and the energy equation will work out. To make sure that your habits are supporting a negative energy balance (for weight loss) or a neutral energy balance (for weight maintenance) keep a food and exercise log for a couple of weeks. Be sure to measure your food for this short period of time—that bowl of cereal may actually be two portions instead of one.

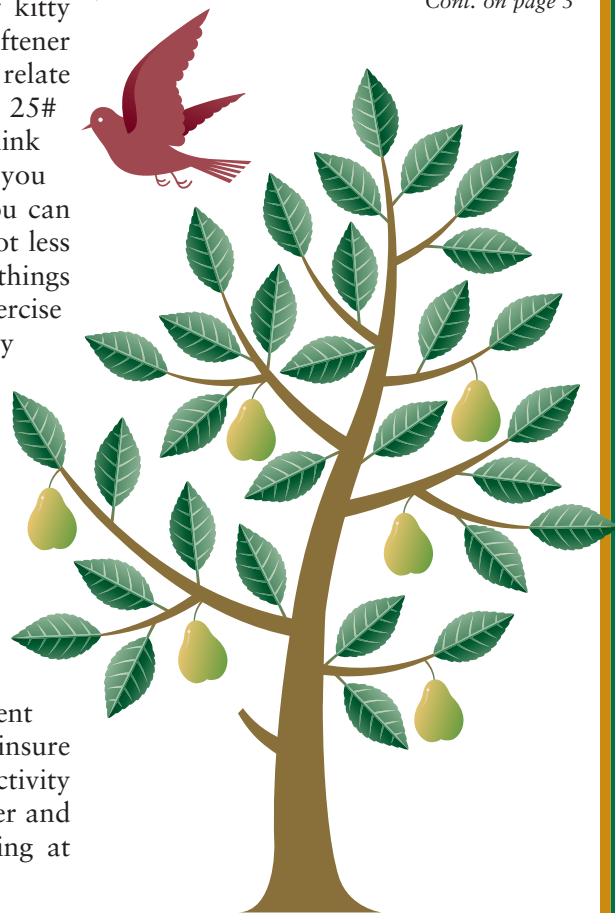
CALORIC DENSITY

FOOD	SERVING SIZE	CALORIES	CALORIC DENSITY
Apple	5 oz	81	16
McDonald's Grilled Chicken Cobb Salad	10.7 oz	280	26
Grilled Chicken Breast	3 oz	142	47
Light Bread, 1 slice	.7 oz	35	50
Mc Donald's Hamburger	3.7 oz	240	65
Arby's Beef and Cheddar	6.9 oz	480	70
McDonald's Quarter Pound Hamburger	6.1 oz	430	70
Regular Bread, 1 slice	1.1 oz	70	72
Arby's Cheddar Curly Fries	6 oz	460	77
Arby's Curly Fries	3.8 oz	310	82
McDonald's Fish Filet	5 oz	410	82
Arby's Chicken Finger 4 pack	6.7 oz	640	96
Arby's Mozzarella Sticks	4.8 oz	470	98

Regular exercise can tip the caloric balance. Keep in mind that as you lose weight, it takes less energy for your daily activities. Every move that you make from washing the breakfast dishes to walking to your car takes less energy. Think about your weight loss in terms of large bags of kitty litter, dog food or water softener salt—just something you can relate to carrying. Have you lost a 25# bag of dog food or two? Just think about carrying those bags with you throughout your day. Now you can see that you are expending a lot less energy just doing all of the things you do in a day. A regular exercise program can increase your daily energy expenditure and make up for the energy it took to carry around that excess weight. In addition to the calorie expenditure of exercise, those who maintain a regular exercise program throughout the weight loss phase limit the muscle tissue loss. This results in a higher daily energy (calorie) requirement or metabolism. A great way to insure that you are getting adequate activity each day is to wear a pedometer and make sure that you are walking at least 10,000 steps each day.

Beyond the basic energy balance equation is an area that researchers continue to learn more about every day. Everyone knows someone who appears to eat a lot and remains slim and another who seems to smell food and gain weight.

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FEMALE					
Calories Required at Specific Age (1.2 activity factor)					
HEIGHT		AGE			
inches	cm	20	30	40	50
57	145	1168	1112	1055	999
58	147	1194	1138	1081	1025
59	150	1220	1164	1108	1051
60	152	1246	1190	1134	1077
61	155	1272	1216	1160	1103
62	157	1299	1242	1186	1129
63	160	1325	1268	1212	1155
64	163	1351	1294	1238	1181
65	165	1377	1320	1264	1208
66	168	1403	1346	1290	1234
67	170	1429	1372	1316	1260
68	173	1455	1399	1342	1286
69	175	1481	1425	1368	1312
70	178	1507	1451	1394	1338
71	180	1533	1477	1420	1364
72	183	1559	1503	1446	1390

MALE					
Calories Required at Specific Age (1.2 activity factor)					
HEIGHT		AGE			
inches	cm	20	30	40	50
62	157	1449	1381	1313	1245
63	160	1499	1431	1363	1275
64	163	1549	1481	1413	1345
65	165	1599	1531	1463	1395
66	168	1649	1581	1513	1445
67	170	1699	1631	1563	1495
68	173	1748	1680	1612	1544
69	175	1798	1730	1662	1594
70	178	1848	1780	1712	1644
71	180	1898	1830	1762	1694
72	183	1948	1880	1812	1744
73	185	1998	1930	1862	1794
74	188	2048	1980	1913	1844
75	191	2098	2030	1962	1894
76	193	2148	2080	2012	1944
77	196	2198	2130	2062	1994



And what about the phenomenon of rapid weight gain that follows a weight loss? If you cut your caloric intake too low will your body conserve energy to maintain its fat stores? Do fat cells really communicate with our brains? There is a complex interplay between the brain, the stomach, the intestines and the nervous system.

The hypothalamus is the center in the brain that controls appetite and metabolism through several identified hormones and neurons. The gut alone produces over 20 known messengers that impact this system. It has been hypothesized that there is an impairment in this system in those who are morbidly obese. There are differences in the way that our bodies handle calories and the calorie equation may not be as simple as it first appears. As scientists learn more about how all of this works together, we can utilize what we do know about energy balance to tip the scales in our favor. Your Barix nutritionist can help you to establish a healthful calorie goal. You may want to estimate your caloric needs by looking at the charts to the left.

To sum it all up, calories do count, although counting calories is not necessary if you focus on the Barix Nutrition Program recommendations.

Making healthful lifestyle choices will enable you to reach and maintain your weight loss goals without feeling like you are following a lifelong diet.

REWARD YOURSELF

This month, you could earn a **\$25 GIFT CERTIFICATE** 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 \$25.00 gift certificate. Include your name and contact info with your entry—make sure your recipes follow Barix nutritional guidelines. Tips must be submitted by October 31, 2007. Please send comments, ideas, recipes and “It Worked For Me” tips to Deb Hart, RD, LD at dhart@foresthealth.com.

OTHERS CARE PLEASE SHARE

Please tell us about the lives that have changed because you shared your weight-loss story. Submit your story to <http://www.barixclinicsstore.com/id190.html>. What you have to say may be printed in this publication or on our website and can serve as inspiration to all.

REQUEST A FREE BROCHURE FOR YOU OR A FRIEND

at 800-282-0066, or www.barixinfo.com



NUTRITION NIBBLER

Scientists at the University of Texas Southwestern Medical Center at Dallas have discovered a gene that keeps flies and mice from getting fat. The gene is called Adipose or Adp. The scientists were able to show that genetically engineered mice with the Adp gene became skinny. Adp seems to work in a dose related manner so the more Adp activity, the leaner the mice became. “This is good news for potential obesity treatments, because it is like a volume control instead of a light switch. It can be turned up or down, not just on or off,” researcher Jonathan Gaff, MD, PhD stated. This research adds to the pool of information about the complex mechanisms that impact obesity. The development of drugs to target this system are years off.

WHAT'S NEW?

Nectar® has two new flavors that are sure to please. They called Nectar Sweets and their rich flavor has just the right amount of sweetness. One of our Barix new product testers described the taste as “the best protein supplement that I have ever had!” The two flavors are Chocolate Truffle and Vanilla Bean Torte. At just 100 calories, a scoop has 23 grams of protein, 0 fat and 0 carbohydrates.



IT WORKED FOR ME

Submitted by Sherri C. on the message boards at www.barixclinicsstore.com

I had surgery in January (2007). I have committed myself to not touching pop at all. Since I was successful at eliminating all caffeinated and carbonated drinks, I choose not to start drinking them again. Culligan Water sells a water additive called Splash. It is sugar free, full of vitamins and tastes awesome! It beats the heck out of the powered additives that don't taste nearly as sweet as this stuff.

I drink 4-6 glasses of water at work with this added (which is in a liquid form so it mixes much better too) and add a packet or 2 of Splenda. It makes it taste just like Kool-Aid. Blue Bunny makes fabulous ice cream for any sweet tooth issues. Just can't go crazy because the calories are still high. Remember we didn't have surgery so that we could go back to doing all the “old” things. We had it so that we could be and have all the “new” things.

Note: If you haven't been to the message boards—check them out at www.barixclinicsstore.com. Caring support, good information and lots of encouragement from other patients is what you will find.



QUESTIONS

ABOUT FINANCING YOUR SURGERY?

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

CONSIDERING SURGERY

Knowledge is power. It can calm fears, speed the process, enhance decision-making and put you in control. Increase your knowledge by researching weight loss surgery, talking to others who have had weight loss surgery online, ask questions of the Barix staff and attend support groups.



"I learned about the strength you can get from a close family life. I learned to keep going, even in bad times. I learned not to despair, even when my world was falling apart. I learned that there are no free lunches. And I learned the value of hard work."

Lee Iacocca

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!

RECIPES



BAKED PITA CHIPS

- 12 pita pockets
- 1/2 cup (120 ml) olive oil
- 1/2 teaspoon (1 g) ground black pepper
- 1 teaspoon (6 g) garlic salt
- 1/2 teaspoon (0.7 g) dried basil
- 1/2 teaspoon (0.6 g) dried chervil

Preheat oven to 400 degrees F (200 degrees C). Cut each pita pocket into 8 triangles and place on a lined cookie sheet. In a small bowl, combine the olive oil and spices. Brush each triangle with the oil mixture. Bake in preheated oven for 6-7 minutes or until brown and crispy. Makes 24 servings (4 triangles).

NUTRITION INFORMATION PER SERVING: 125 calories, 3 grams protein, 5 grams fat, 18 grams carbohydrate, 246 mg sodium.



BAKED SPINACH ARTICHOKE DIP

- 1 (14 oz) can artichoke hearts, drained and chopped
- 1/2 (10 oz) package frozen spinach, thawed and chopped
- 1/2 cup fat free sour cream
- 1/4 cup fat free Miracle Whip
- 1/2 cup fat free cream cheese
- 1/4 cup Romano cheese, grated
- 1/4 teaspoon minced garlic

Preheat oven to 375 degrees F (190 degrees C). Mix all ingredients and place in a small baking dish. Cover and bake in preheated oven for 20 minutes. Uncover and put back in oven to brown for 5 minutes. Makes 24 servings.

NUTRITION INFORMATION PER SERVING: 39 calories, 2 grams protein, 1 gram fat 3 grams carbohydrate, 145 mg sodium. Serve with baked pita chips or cut veggies.

RED PEPPER HUMMUS

- 1 (16 oz) can garbanzo beans, drained and rinsed
- 1 tablespoon (15 ml) olive oil
- 1 medium red bell pepper cut into 1/2 inch pieces
- 1 tablespoon (15 g) tahini
- 1 fresh lime juiced
- 1- 1/2 tablespoons (20 ml) water
- 1/2 teaspoon (3 g) salt
- 1/4 teaspoon (0.5 g) ground black pepper
- 1/4 teaspoon (0.7 g) garlic powder

Add all ingredients to a food processor or blender. Blend until smooth. Makes 8 servings.

NUTRITION INFORMATION PER SERVING: 101 calories, 3 grams protein, 3 grams fat, 15 grams carbohydrate, 318 mg sodium. Serve with baked pita chips or cut veggies.



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[www.barixclinicsstore.com/
newsletter_sign_up.html](http://www.barixclinicsstore.com/newsletter_sign_up.html)