

FOOD FOR THOUGHT:

Size Does Matter!

Eating smaller portions of food is one of the easiest ways to cut back on calories, but it can also be one of the most challenging with the current trend of super-sizing. Many of us have begun to identify "super-sized" portions as the usual or normal serving size. For instance, muffin sizes have grown by 400 percent over the past decade, and many people now think that a huge muffin is the proper serving size one should consume.



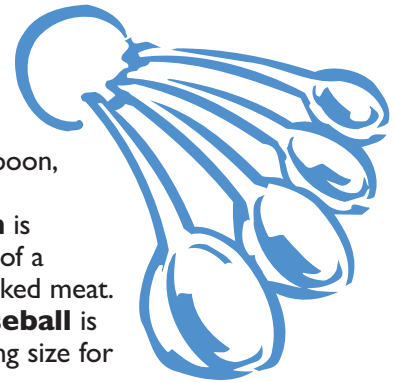
Even the "pros" get fooled by their visualizations: In one food consumption study, nutritionists were given a large spoon, a large bowl, or both, with which to serve themselves. ALL of them served up more than those who had regular-size utensils and dishes.

How do you know a reasonable portion of food when you see it? Visualize the recommended portion size when eating out, planning a meal, or grabbing a snack. For example, the amount of meat recommended as part of a healthful meal is 3-4 ounces—and it will look to be the same size as a deck of cards. Get out a measuring cup or a food scale and practice measuring some of your favorite foods onto a plate, so that you can see how much (or how little!) a ½ cup or 3-ounce serving is. This will help you "eyeball" a reasonable serving!

People with diabetes do not need to avoid any particular foods, but should eat moderate portions if weight control is an issue. The following are some ideas to help you create healthy portions:

- ◆ Use a smaller plate. This will satisfy your need to see a full plate.
- ◆ If you have food left after a meal, divide leftovers into healthy-sized portion packets before storing.
- ◆ Know the amounts that your favorite dishes hold. That way, you will know that your bowl of Cheerios is, say, 1 cup of cereal, approximately 1 carbohydrate exchange.

- ◆ Estimate portion sizes using everyday items: a woman's **fist**-size portion is about 1 cup; the **end of her finger** is about a teaspoon, while her **thumb** is a tablespoon. Her **palm** is approximately the size of a 3-ounce serving of cooked meat. A **tennis ball** or **baseball** is about ½ cup, the serving size for a piece of fruit.
- ◆ A large **egg** is about ¼ cup.
- ◆ Use a tall narrow glass for your beverage; it will look like more.
- ◆ If you buy foods in bulk, try re-packaging them into small portions before storing. Research shows that people eat more when large bags or packages are in use.
- ◆ Make healthy foods easy to grab. Example: keep cut-up raw vegetables in water in the fridge.
- ◆ Store snack foods out of sight, so that visual cues won't tempt you to eat them. Example: keep potato chips in your freezer or cupboard.
- ◆ Eat without distraction – turn off the TV!
- ◆ Eat slowly so that the message of fullness reaches your brain.



By utilizing these tips, you will easily enjoy smaller portions and be satisfied by eating just the right amount.



A Clinical Study
BARI 2D



BARI 2Day & 2Morrow

Fall 2007 / Winter 2008

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MESSAGE FROM THE BARI 2D COORDINATOR REPRESENTATIVE

Elaine Massaro, MS, RN, CDE, Northwestern University

Dear BARI 2D Participant:

On behalf of all BARI 2D coordinators, I would like to congratulate and thank you for all your hard work during your participation in this landmark clinical trial. We hope you are as pleased with your decision to participate in this research as we are to have you working with us. One of our goals is to help you become less anxious about the future and more confident in your ability to control both diabetes and heart disease. The research coordinator serves as your advocate, supporter and guide during your time in BARI 2D. We hope that this bond between you and your coordinator is indeed special and one of the greatest benefits of the program.

Clinic site coordinators play a vital role in the day-to-day management of the study as they assist participants on their self management journey. They wear the hats of clinical manager and coordinator of care, educator, specimen collector, scheduler and data entry specialist. As you can see, the coordinator is responsible for working closely with each component of the trial at their clinical site.

One of the goals of your coordinator and BARI 2D as a whole is to improve your overall health status by giving you the ability to gain a mastery over your health. When BARI 2D ends, we want you to not only feel you understand what to do and how to do it, but also feel that you want to do it, and know that you can do it. Your coordinator has helped you gain knowledge, learn more skills, develop the confidence and motivation to perform some of the appropriate behaviors, and develop the problem-solving and coping skills to overcome barriers to those behaviors.

At the conclusion of BARI 2D you will be equipped with the necessary tools to carry on with self-management in cooperation with your doctor(s). You will be able to better live with your diabetes and heart disease; YOU will control THEM instead of letting THEM control YOU.

You are a part of our "BARI 2D family" and we appreciate your participation and greatly value your time and effort. We realize that it is a big commitment for you to come see us every three months. Your participation has not only had a positive impact on your health, but will provide information that will help people like you who have heart disease and diabetes. People like you who join research studies are indeed very special people. When the BARI 2D results are published, you will be proud to have been a part of this study along with other volunteers and researchers around the world.

Sincerely,

Elaine Massaro MS, RN, CDE

Elaine Massaro



PATIENT SUCCESS STORIES: ZC's Story

Patient from Prague, Czech Republic

ZC had been treated for diabetes since 1974, and for hypertension since 1990. A few years before joining BARI 2D she started taking insulin, but her diabetes was not controlled. She was continually exhausted and kept gaining weight. At every hospital visit she'd ask, "Why doesn't insulin work for me?"

In 2004, at the age of 68, she was hospitalized for shortness of breath and chest pains. Testing showed that she had coronary artery disease and that she was a suitable candidate for BARI 2D. She was enrolled in the study in 2004.

The hardest thing for the BARI 2D team to do was to improve her diabetes. When she first joined the study, ZC had an HbA1c level of 8.6, and her glucose levels were very variable even during the day. In addition, she had other complications associated with diabetes.

To begin, the team concentrated on improving ZC's knowledge about her illness. For example, they talked about what she and her family liked to eat and about the choice and preparation of foods.

Gradually, they moved on to looking at how she could measure her glucose levels more effectively. As she says herself, "I was really scared about what could happen to me, but I got more confident as the diabetologist changed my insulin doses gradually and I felt a lot better." The type of insulin was also changed to better fit her daily routine. Every step took time, but the results have really been worth it.

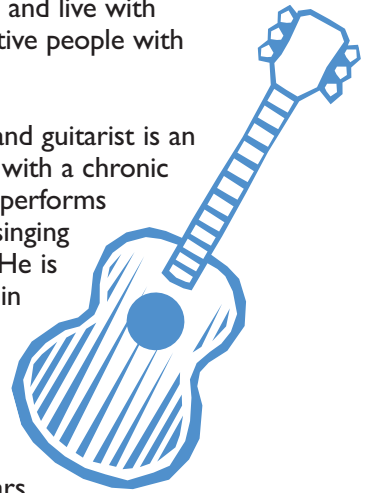
She's now in the third year of the study and her diabetes has been well controlled for the last 2 years. Her HbA1c rarely goes above 7 now and her glucose levels are really stable, with no hypoglycemic episodes.

During her time on BARI 2D, ZC has lost about 25 pounds, and feels better than she has for years. "I'm much calmer and happier and can really enjoy life now without worrying like before," she says. These are the real benefits of the work she put in to dealing with the management of her illness.

BEATING DIABETES: Passionate People with Diabetes

Sometimes it helps to know how others cope and live with diabetes. Here are some examples of very active people with diabetes who are role models to many:

Mr. B.B. King, the renowned blues singer and guitarist is an inspirational role model for individuals coping with a chronic disease such as diabetes. At the age of 82, he performs up to 250 concerts a year around the world, singing and playing the blues with relentless passion. He is out on the road, playing for people, recording in the studio or appearing on TV commercials. Don't expect to find him in semi-retirement. Did you know he has diabetes?



Mr. Jay Hewitt is an Ironman Triathlete. He was diagnosed with type 1 diabetes 15 years ago. It was after the diagnosis that he started training to become an Ironman Triathlete which involves long distance swimming, cycling and running. He didn't let the lifestyle changes required to control blood sugar hold him back. He incorporates them into his challenging life of training and racing. He suggests finding a system that works for you in blood sugar control and physical training. He also recommends starting small when embarking on a fitness plan.

Mr. Scott King began a radio show about diabetes that transformed into a magazine, then a flourishing website: www.DiabetesHealth.com. He has edited over 5,000 articles on diabetes, with the goal of improving the lives of people with diabetes. His mother developed type 2 diabetes after he started the magazine and she remains a source of inspiration for his work. Mr. King has a fulfilling career despite being diagnosed with type 1 diabetes at the age of 17.

Mr. Doug Burns is Mr. Universe 2006. He was diagnosed with type 1 diabetes at the young age of 7. He was a slight child who at 12 was inspired by the physique of the biblical Samson. He then started a program of exercise and weight training. He also decided to use a glucometer to improve his glucose control. By the age of 15, he was power-lifting. He later started body building and has reached the pinnacle of this endeavor. He speaks at diabetes conferences where he emphasizes that he too faces the same daily challenges that all people with diabetes do. He admits to having days when he does not feel like training. He believes that the discipline required to manage his diabetes has enabled him to train successfully as an athlete.

Other famous people with diabetes include:

Halle Berry, Bobby Clarke, Jack Benny, James Cagney, Jackie Gleason, Mary Tyler Moore, Mae West, Mikhail Gorbachev, Winnie Mandela, Howard Hughes, Steve McCaffery, Johnny Cash, Miles Davis, David Crosby, Freddy Fender, Ella Fitzgerald, Peggy Lee, Rigo Tovar, Thomas Edison, Arthur Ashe, Beto Avila González, Billie Jean King, Sugar Ray Robinson, Chris Jarvis and Paul Cézanne. Which ones inspire you?

Source: *Diabetes Health E-Newsletter*
www.DiabetesHealth.com



SPAGHETTI AND VEGETABLE CASSEROLE

Everyone will enjoy this delicious whole wheat pasta dish. Portion leftovers into freezer containers and they will make a great lunch or quick dinner.

Makes 4 Servings: 1 cup vegetable mixture and 1/2 cup pasta per serving

Ingredients:

- 6 ounces dried whole-wheat spaghetti
- 2 teaspoons olive oil
- 1/2 medium green bell pepper, cut into 1-inch pieces
- 2 medium garlic cloves, minced
- 1/2 medium eggplant (about 8 ounces), diced
- 1 small yellow summer squash (about 4 ounces), diced
- 1 small zucchini squash (about 4 ounces), diced
- 1 14.5-ounce can no-salt-added diced tomatoes, undrained
- 1 8-ounce can no-salt-added tomato sauce
- 1 teaspoon dried oregano, crumbled
- 1/4 teaspoon salt
- 1/4 teaspoon crushed red pepper flakes
- 2 medium green onions, thinly sliced
- Vegetable oil spray

- 1 cup (about 4 ounces) shredded part-skim mozzarella cheese
- 1/4 cup (about 1 ounce) shredded or grated Parmesan cheese

Cooking Instructions:

1. Prepare the spaghetti using the package directions, omitting the salt and oil. Drain well in a colander. Set aside.
2. In a medium sauce pan over medium heat, add oil and swirl to coat the bottom. Cook the bell pepper and garlic for 2 to 4 minutes or until the bell pepper is tender-crisp, stirring occasionally. Stir in the eggplant, yellow summer squash, and zucchini. Cook for 4 to 8 minutes, or until the vegetables are almost tender, stirring occasionally. (Add water, 1 tablespoon at a time, if the vegetables start to stick to the pan.) Stir in the undrained tomatoes, tomato sauce, oregano, salt and red pepper flakes. Increase the heat to medium-high and bring to a boil. Reduce the heat and simmer for about 10 minutes, or until the flavors have blended. Stir in the green onions.

3. Pre-heat oven to 350 degrees. Lightly spray an 8-inch square baking pan with vegetable oil spray.
4. Spoon half the spaghetti into the baking pan. Spoon half the vegetable mixture over the spaghetti. Sprinkle with half the mozzarella and half the Parmesan. Repeat with the remaining spaghetti mixture.
5. Bake for 20 to 25 minutes or until the cheese is melted and the casserole is heated through.

Nutrition Information:

Per Serving:
 Calories: 336
 Total Fat: 9g (Saturated Fat 4g; Polyunsaturated Fat 1g; Monounsaturated Fat 3.5g)
 Cholesterol: 22mg
 Sodium: 433mg
 Carbohydrates: 49g
 Dietary Fiber: 11g
 Protein: 18g

Exchanges per 1/4 recipe:

- 2 Starch
- 4 Vegetable
- 1 Lean Meat
- 1 Fat

BEAT OF BARI 2D: Emotions and your Heart

Psychologists once maintained that emotions were purely mental expressions generated by the brain alone. We now know that this is not true – emotions have as much to do with the heart and body as they do with the brain. Of the bodily organs, the heart plays a particularly important role in our emotional experience. The experience of an emotion results from the brain, heart and body acting in concert.

The heart is in a constant two-way dialogue with the brain. Our emotions change the signals the brain sends to the heart and the heart responds in complex ways. Many studies have found that the risk of developing heart disease is significantly increased for people who often experience stressful emotions such as irritation, anger or frustration. These emotions create a chain reaction in the body – stress hormone levels increase, blood vessels constrict, blood pressure rises, and the immune system can be weakened. If we consistently experience these emotions, it can put a strain on the heart and other organs and eventually lead to serious health problems.

On the other hand, when we experience heart-felt emotions like love, care, appreciation and compassion, the heart can produce a smooth rhythm. These harmonious heart rhythms, which reflect positive emotions, may be indicators of more positive heart health.

Research shows that many folks are worried that stress will affect their health, yet many deal with stress by overeating or drinking too much alcohol. These reactions may reduce stress in the short term but contribute to an unhealthy lifestyle that can negatively affect your body and increase risk factors for heart disease.

So, try to identify the sources of emotional distress in your life and look for ways to reduce and manage them. Avoid trying to fix every problem at once. Focus instead on changing one existing habit and set reasonable goals for change. Talk about your emotions! Enlist the support of friends and family as you try to identify what is bothering you. Do not ignore the symptoms of depression. Feelings of sadness or emptiness, loss of interest in ordinary or pleasurable activities, reduced energy, and eating and sleep disorders are warning signs particularly if they last more than two weeks. With your health care provider, you may want to develop a plan of action for combating stress.

There is increasing awareness of the importance of maintaining a healthy emotional state for those recovering from heart-related illnesses as well as for those maintaining heart health. So, take a walk, eat heart-healthy AND talk about what's on your mind. Your heart will thank you for it!

BARI 2D Frequently Asked Questions

Are Energy Drinks good for me?

- An energy drink is a beverage advertised to improve physical endurance, enhance concentration and increase vitality. The beverage industry created the term energy drink to promote and sell new products to consumers. The term energy drink appeals to us more than the accurate definition – a sweet beverage with large amounts of caffeine and sugar. We should not confuse “energy” with feeling energetic.
- Although the main ingredients in most energy drinks are water, sugar, and caffeine, some contain other unusual ingredients such as guarana (principal source of caffeine), taurine (an amino acid), carnitine (a product of two amino acids) and vitamins, which offer claims of additional health benefits. Currently it isn't clear if the short-term effects, like improved performance, are due to the caffeine, the sugar, the other herbal ingredients, or the combination of all ingredients in the beverage.

What about the sugar?

- * Generally, the sugar in an energy drink provides a quick spike in the blood glucose level while the caffeine increases mental alertness and endurance. Most energy drinks contain five to eight teaspoons of sugar and 12-18 milligrams of caffeine per ounce. An 8-ounce (240 ml.) serving can have 24-32 grams of carbohydrates and 80-145 milligrams of caffeine. Many energy drinks are packaged in quantities that are larger than a single recommended serving, so it is easy to consume more sugar and caffeine than you realize.



- * Because energy drinks create a spike in the blood glucose level, they are not advised for individuals who have diabetes and already have a challenge with blood glucose management. Depending on your nutrition plan, the amount of sugar in one 8-ounce (240 ml.) serving of an energy drink can be half of the recommended carbohydrate intake of an entire meal for a person with diabetes.

How will the caffeine affect me?

- ▲ Individuals react differently to the stimulant caffeine. Caffeine can increase heart rate and blood pressure, prevent sleep and dehydrate the body. The additional caffeine in energy drinks may cause unwanted side effects or interact with some cardiac medications.

If energy drinks are mixed with alcohol, what will the effect be?

- These drinks are not harmless when mixed with alcohol. They can have undesired secondary effects such as nausea and vomiting. In addition, people tend to drink more because the mixture and its effects camouflage the state of intoxication.

Where does water fit in?

- ◆ Water is an ideal beverage. Lack of an adequate water intake creates feelings of fatigue and mental dullness. Plain water is easily absorbed, doesn't contain carbohydrate additives, and is readily available at any water tap or fountain. Water quenches thirst and hydrates the body. Using a thin slice of lemon or lime in water can provide a crisp refreshing taste. Sipping small amounts of water frequently during the day, especially in hot weather or when exercising is essential to avoid mild dehydration and fatigue.

MOVING RIGHT ALONG: Small Doses of Exercise Add Up!

Going to a gym for exercise isn't the only way to stay fit. If you don't want to join a gym or wear special exercise clothes, you can still be more physically active for good health. Always be sure to check with your doctor first before adding more exercise to your routine.

There are alternatives to an intensive style of workout – and some may actually work better for you than going to a gym.

Several research studies have confirmed that exercising in 10 or 15 minute intervals throughout the day is at least as effective as exercising all in one hour each day. In fact, getting more movement throughout the day might even be better for your body than being very active for only one hour and inactive for the other 23.

One reason people make exercise a regular habit is that it makes them feel good. It adds to the quality of life. You feel so much better that you might just be encouraged to go back out tomorrow. That's when you know you have established the exercise habit!

There are many times of the day where you might be able to add a few minutes of activity. What about getting up and walking around the house during each commercial of your evening television show? Or dancing to music as you dust the house? It sounds silly but it is contagious. The more you move, the better!

Even if you haven't been active much, just adding five minutes a day of activity can get you started. Many people think that they have to do a lot all at once. So they don't bother at all. The opposite is really true – it really doesn't take that much at one time. Every little bit helps!