

Fall 2008



BARI 2Day & 2Morrow

Dear BARI 2D Participant,

As the clinical phase of the BARI 2D trial draws to a close, we thank all 2,368 of you for your dedication to this very important research project. BARI 2D certainly would not have been a success without each and every one of you! Your steadfast commitment has provided us with limitless opportunities to advance knowledge of how diabetes and heart disease should be best treated in the future.

We hope that you enjoyed contributing to a research trial and that all of you have signed on for the BARI 2D POST, which will continue to collect information about your health via mail and telephone and will begin at the end of 2008. We don't want to lose contact with you because the information you can provide will be valuable for years to come! Look for important news about the POST in the mail. If you have any questions, please call your nurse coordinator or physician investigator.

We look forward to presenting the first results from the trial at the American Diabetes Association annual meeting in June 2009. We plan to notify you about the release of this data and will also post updates on our Web site: www.bari2d.org.

Heartfelt gratitude to all of you from:

The BARI 2D Study Group

Thank you Gracias Merci beaucoup *Thank you* Gracias Merci beaucoup
Gracias Merci beaucoup

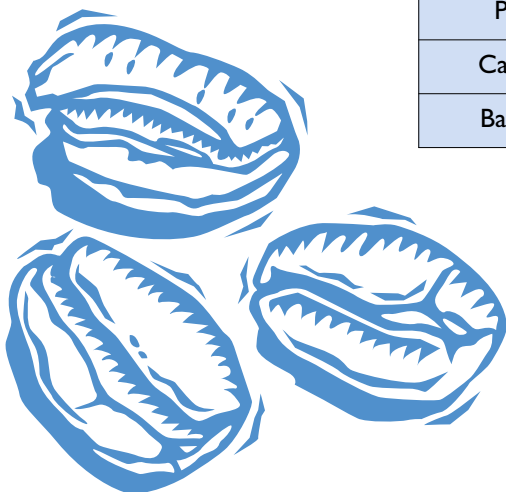
FOOD FOR THOUGHT: Caffeine and Your Blood Sugar

You may enjoy coffee, tea or chocolate. However, you may wonder how the caffeine in these and other foods affects your health. You may wonder whether caffeine affects your ability to control your blood sugar.

Caffeine is a natural ingredient found in coffee, tea and chocolate. Caffeine is added to cola beverages, “energy drinks” and even some medicines such as cold and headache remedies. Most adults consume the major part of their caffeine from coffee and tea, and to a lesser extent from cola beverages, chocolate products and medicines. For most healthy adults, the recommended maximum dose is 400 mg of caffeine per day or the equivalent of about two 8-ounce cups of brewed coffee. For some, consuming small amounts of caffeine may increase alertness or ability to concentrate. For others who are more sensitive to caffeine, or in the case of overconsumption, caffeine can lead to insomnia, headaches, irritability and nervousness.

If you have diabetes, it is important to be aware that the side effects of consuming caffeine can mimic those of high or low blood glucose. These side effects include headache, poor concentration or irritability and nervousness. Limiting your caffeine intake will make it easier for you to be aware of any symptoms of high and low blood glucose. If you feel any of the above symptoms, do not assume they are related to caffeine intake. Be sure to test your blood sugar level to confirm that it is within your target range.

Here is a list of items with their approximate caffeine content. Estimate your own daily intake to see if you are within the recommended daily dose of 400 mg or less. If above, consider reducing your intake gradually. Talk to your diabetes care provider if you are having any symptoms of high or low glucose.



	Milligrams of Caffeine
Coffee 8 oz. cup	
Brewed	235
Percolated or drip	118 – 179
Decaffeinated	3
Instant	76 – 106
Instant decaffeinated	5
Tea 8 oz. cup	
Average blend	43
Green	30
Decaffeinated tea	0
Cola Beverages, regular or diet 8 oz.	36 – 50
Cocoa Products	
Pre-prepared chocolate milk 8 oz.	8
Candy, milk or sweet chocolate 1 oz.	7 – 19
Baking chocolate, unsweetened 1 oz.	25 – 58

PATIENT SUCCESS STORIES: B.B.'s Story

B.B. joined the BARI 2D study in 2002 with multiple cardiac risk factors, including high blood pressure and type 2 diabetes. At the time, he was 5'10", weighed 226 pounds and his hemoglobin A1c was 7.2. He was randomized to the insulin-sensitizing group, and was already taking metformin for blood glucose control. He followed a vegetarian diet and would run an hour a day. At 3 months, B.B. complained of occasional chest pain related to his running, or perhaps due to his stressful job. A blood pressure pill was added to his regimen. After 9 months in the study, he found that his chest pain occurred more frequently, particularly if he didn't get enough sleep (which was the usual case). Before the year was out, he had a coronary angioplasty procedure; two stents were placed. Following this, he set up an exercise program with the goal of walking 2 hours every day. Unfortunately, there was not enough time to do this. He continued his vegetarian diet, which included frequent servings of grilled vegetables, nuts, fish, and biscuits made from his own recipe of oatmeal bran, soy, and sweetener.

Despite these good habits, B.B.'s weight crept up. B.B. stated that he had not been as faithful to his diet as he should be. After 2 years in the study, he was fired from his job but felt relieved and renewed. Nevertheless, his stress level increased. B.B. said that he was motivated primarily by fear to improve his self-care. He set a goal for weight loss.

Stress continued, negatively affecting B.B.'s physical activity and diet. Although his wife was supportive, they continued to eat large meals of pasta. His son was verbally encouraging, but did not have time to join his father in swimming. B.B. said, "I need to get extreme now." His weight was up to 251 pounds. The cardiologist noted that B.B. was "slipping" with regard to management of his risk factors, "particularly his weight and cholesterol."

B.B. found a new job in a new city. Demanding work hours and the absence of family lead to more discouragement, lack of activity, weight gain and back pain. When his wife could visit, they would usually eat out and he over-ate.

Currently, B.B. weighs 263 pounds; his A1c is 6.6. With medication, he adequately controls his blood pressure and cholesterol. This spring, his wife moved to join him at his new job location. Although B.B. admits to his weight problem, he feels that things will improve now that his family is with him and that he has a handle on his new job. He continues to walk as much as possible throughout his day, eats low-fat vegetarian fare, and maintains a positive attitude. His success story is one of life, with its ups and downs. Life goes on, as does diabetes care.

BEATING DIABETES: Seven Successful Habits

Throughout your BARI 2D journey you were often reminded that you are in the driver's seat when it comes to managing your diabetes. Stephen Covey, author of "7 habits of Highly Effective People," adapted these habits to assist people with diabetes. As you read this summary, you will discover strategies that may help you turn change into a positive force.

Habit #1 BE PROACTIVE

You are free to choose your own action and take responsibility for them. That is exactly what "being proactive" means. Many things are beyond our control, but how you respond to these things is always within your control. Take a look at your diabetes self-care behaviors and apply "proactive" language: "I choose to eat healthfully," instead of, "I will have to eat healthfully," or "I choose to be active," rather than, "I have to be active." Adhere to these positive decisions to make things happen and take charge of your future.

Habit #2 BEGIN WITH THE END IN MIND

This term refers to creating a vision for your life, based on what is important to you. Making choices that match your values will guide your vision of what is happening around you. Now imagine a successful life with diabetes, then choose one self-care behavior and set a small goal. Here are a few examples: "Being Active" might be, "I will take a 15-minute walk every day." "Healthy Eating" might be, "I will switch from whole milk to skim milk."

Habit #3 PUT FIRST THINGS FIRST

This means prioritizing your tasks according to what is truly important to you. Try asking yourself this question: "What one thing could I do on a regular basis that would make a big positive difference in my life?" Take a behavior you find the hardest or most frightening and make it your first priority. Is it taking medication? Monitoring? Cutting down on portion sizes or junk food? When you keep your vision or values in mind, the challenge will seem easier.

Habit #4 THINK WIN-WIN

Win-win is a mindset that says: We are all different. If you value and respect the ideas of others, then your life will be more productive, rich and rewarding. Each of your self-care behaviors benefits from the advice, ideas or support of someone else. Think Win-Win by sharing your self-care goals, concerns and fears with family and friends. They can help you problem-solve and motivate you to keep on track. This is all about creating a positive energy of cooperation, which will lead to success in every area in your life.

Habit #5 SEEK FIRST TO UNDERSTAND, THEN TO BE UNDERSTOOD

One of the most powerful habits of a highly effective person is genuine listening. People with diabetes need to express their emotions, but the desire to listen should come first. Listening to your doctor or diabetes educator will enable you to learn the practical skills of self-care. Your family and friends need to be understood, too. This will enable them to be open to your needs. Then make yourself understood by seeing the situation through the other person's eyes. This will greatly enhance your healthy coping ability and open the door to creative win-win situations.

Habit #6 SYNERGIZE

Synergy occurs when two or more people work together to find a better solution than either could individually. It can be a creative and powerful aid to managing diabetes. Some examples of synergy might include working with your diabetes educator as you design a food plan or designing an exercise plan that suits your lifestyle.

Habit #7 SHARPEN THE SAW

Sharpening the saw is about keeping all parts of yourself sharp. Physical: Keep in shape by being active. Mental: Work on achieving goals that will build your confidence and self-esteem. Social: Strengthen your relationships with family and friends. Spiritual: Take time to focus on things that bring a sense of peace and meaning such as walking and meditating, praying or giving service to others.

As you move forward, keep learning and growing and you will quickly see that diabetes has not changed your life. You have changed your life. Where you take it from here, only you can imagine.



Pasta with Grilled Chicken and Turkey Sausage

Makes eight servings.

Ingredients:

- 1/2 cup Orange juice
- 1 garlic clove, minced
- 1 tsp minced ginger
- 2 tsp Olive Oil
- 16 oz Penne Rigati Pasta (or any shape you like)
- 1 pound Lean Chicken Strips
- 1/2 pound Turkey Sausages
- 1/2 box of Cherry Tomatoes (rinse well with cold water)
- One stem fresh Broccoli (rinse well with cold water)
- 1 jar of Spaghetti Sauce, low sodium, if possible (26-ounce jar)
- 2 tbsp. Parmesan Cheese

Cooking Instructions:

In a bowl combine orange juice with minced garlic and ginger and marinate the chicken at least for 6 hours before cooking. Heat olive oil in a large skillet until very hot. Drop the chicken strips and cook both sides until brown. Add the turkey sausages and the spaghetti sauce and reduce heat to low, cover and simmer for 15 minutes. Cut the cherry tomatoes in half and cut the stems from the broccoli and add to the sauce. Prepare the pasta according to package directions and drain well. Toss pasta with sauce mixture and sprinkle with cheese.

Nutrition Information:

(per serving)

Calories: 395
 Protein: 24 grams
 Carbohydrate: 56 grams
 Total Fat: 9 grams
 Saturated Fat: 3 grams
 Dietary Fiber: 10 grams

Exchanges:

1 serving = 2 vegetable, 3 lean meat, 3 carbohydrate, 2 fat

Beat of BARI 2D: KEEPING THE BEAT!



During BARI 2D, we have been keeping an eye on your overall status every three months. However, now that you will be transitioning or have been back to your primary doctor, it is a good idea to know when you should have certain tests done to keep your heart healthy. We have set the rhythm and now it is time for you to keep up the beat (the beat of routine follow-up visits, that is).

Ask your doctor to review your treatment plan with you. Bring in your medication list to each visit. Ask questions like, "Are my treatments working?" "Are my risk factors under control?" "Is what I'm doing in line with the latest recommendations?" "What are my target numbers for A1c, BP, and cholesterol?"

Keep your ABCs of diabetes on target:

You can lower your risk by keeping your ABCs of diabetes on target with wise food choices, physical activity and medication. Losing weight can also help you manage your ABCs and prevent heart disease. Every step you take will help. The closer your numbers are to your targets, the better your chances of cutting your risk of having a heart attack or stroke. If you smoke, get help to quit.

A is for A-1-C: Every 3months

An A1c is the blood glucose (sugar) check "with a memory." It calculates your average blood glucose for the past 2 to 3 months. The American Diabetes Association (ADA) recommends that people aim for an A1c below 7.

B is for blood pressure: Every office visit

Your blood pressure numbers monitor the force of blood inside your blood vessels. When your blood pressure is high, your heart has to work harder than it should. The ADA recommends that you keep your blood pressure below 130/80 (read as "130 over 80") mmHg. Taking medicine to lower blood pressure can reduce your risk of stroke, heart attack, congestive heart failure and kidney disease.

If you take a drug and notice any uncomfortable side effects, ask your doctor about changing the dosage or switching to another type of medicine.

C is for cholesterol: Every year

Your cholesterol numbers tell you the amount of fat in your blood. Some kinds, like HDL cholesterol, help protect your heart. Other kinds, like LDL cholesterol, can clog your blood vessels and lead to heart disease. Triglycerides are another kind of blood fat that raises your risk of heart disease. Your doctor may check your cholesterol more often until you reach your target goals. The chart below provides the targets suggested by the ADA.

Type of Blood Lipid

ADA Targets

LDL cholesterol

Below 100 mg/dl Your doctor may advise you to aim for an even lower target number, for example, less than 70

HDL cholesterol

for men

Above 40 mg/dl

for women

Above 50 mg/dl

triglycerides

Below 150 mg/dl

Resources:

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES; National Institutes of Health National Heart, Lung, and Blood Institute; www.diabetes.org; Taking care of your heart.

BARI 2D Frequently Asked Questions

Q: Now that I am nearly finished with my active participation in BARI 2D, how can I best be in control of my diabetes care and heart health?

A: As a participant in BARI 2D, you have been provided with the knowledge, tools and skills you need to self-manage your diabetes and to live a heart healthy lifestyle. Listed below are 7 points of self-care to help you focus on what is important:

- 1. Healthy Eating:** Eating heart healthy foods, monitoring portion sizes and knowing the best times for you to eat are central to managing diabetes. Weight control is also a very important part of successful self-care that can also impact your blood pressure and blood cholesterol levels.
- 2. Being Active:** Regular activity is important for overall fitness, weight management and blood glucose and blood pressure control.
- 3. Monitoring:** Daily monitoring of blood glucose provides people with diabetes information on how food, physical activity and medications affect their blood glucose levels.
- 4. Taking Medication:** Effective drug therapy in combination with healthy lifestyle choices can lower blood glucose levels and reduce risk of complications from diabetes as well as keep your blood pressure and blood cholesterol within acceptable ranges.
- 5. Problem Solving:** Sharp problem solving skills are a must when you have diabetes. For example, if you have a high or low blood glucose episode, or get sick, you will need to adjust and make good decisions about food intake, activity and medications.



6. Healthy Coping: Coping with diabetes depends on a positive frame of mind. As part of BARI 2D, you have learned what can be controlled and have set self care goals for yourself. You have also had an outlet for discussing your concerns and fears. Continue talking about what's on your mind with your health professionals, family and friends.

7. Reducing Risks: Preventing complications from diabetes and maximizing overall health depend on reducing risk in all areas. Quitting smoking and getting regular eye, foot and dental checkups are excellent ways for you to feel in charge of your health to prevent problems down the road.

Q: Where can I get the most accurate and helpful information so I can remain in control of my health?

A: The first good place would be your doctor and other health professionals you see regularly for your diabetes and heart check-ups. Try to see your diabetes doctor every three to six months.

There are several excellent Web sites you may want to check for the most up to date and useful information about diabetes and heart disease.

For diabetes information you can access the American Diabetes Association Web site: www.Diabetes.org

For information about heart disease you can look at the American Heart Association Web site: www.Americanheart.org

If you do not have access to a computer at home, public libraries are a great place to get help in finding health information on the internet or in book form.

We wish you the best of luck on the road to good health!

MOVING RIGHT ALONG: Stretching

The value of stretching is often underrated. Stretching is important for all ages and fitness levels. Stretching can be gentle or challenging—just ask anyone who practices yoga. Moving slowly and gently through a stretch can increase flexibility. Holding a stretch for a minute increases the intensity.

We know that after the age of 40, men and women have less elastin, a special protein that keeps muscles, tendons, ligaments and other tissues flexible. This means that after exercise or exertion, muscles can sometimes feel sore.

Being inactive can make muscle and joint pain feel worse. Inactivity prevents blood from flowing to the sore area to heal it. Daily stretching can improve circulation and restore flexibility.

Try these two simple stretches while seated. They will benefit the individual who has limited mobility, as well as the person who sits at a desk for most of the day. Before stretching, take four or five slow, deep breaths. Walk around for two to three minutes. This also helps increase circulation.

Use a straight back chair without arms. Sit up straight. Make sure your back is supported. Keep your feet flat on the floor.

Arm stretch

Let your hands rest on your thighs, palms down. Extend your right arm in front of your body. Slowly raise your right arm up to shoulder level, and then above your head. Hold your arm

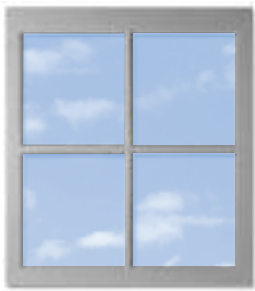
above your head and make a circle with your hand to the right and to the left. Now, move your extended arm back to shoulder height. Bend your elbow and rest your hand on your thigh. Do the same stretch with your left arm. Repeat the stretch three times, alternating arms each time. Increase by one repetition each day until you are able to perform the stretch eight times with each arm.

Leg lift

From the same seated position, extend your right leg until the heel is 8 – 10 inches from the floor. Make a circle with your toes to the right and then to the left as you hold your leg above the floor. Lower your right leg returning to the bent knee position. Perform the same action with your left leg. Repeat the stretch three times, alternating legs each time. Increase by one repetition each day until you are able to perform the stretch eight times with each leg.

Remember to stretch only to the limit that you are comfortable. Be sure to avoid bounding or jerky movements that could injure muscles or joints. To make any stretch more intense, move through it very slowly and hold the stretch 20 – 60 seconds before returning to the starting position.

For more health and fitness information, visit www.prevention.com.



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