

Summer 2005



BARI 2Day & 2Morrow

Message from the BARI 2D Lifestyle Intervention Management Center Co-Directors

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Dear BARI 2D Participant:

When you volunteered for the BARI 2D study, you signed on as a partner with researchers around the world who hope to find out how to best treat persons, like you, who suffer from diabetes and heart disease. You also signed on to receive a special kind of care called "coordinated care," which we believe provides the best chance of managing your diabetes and heart disease.

Coordinated care is a system that addresses all of the problems and needs of patients who have combinations of chronic illnesses, such as diabetes and heart disease. People who receive coordinated care benefit from programs based on scientific evidence that are designed to address their specific needs and goals. In addition, these programs and treatments are monitored and adjusted in order to ensure that participants progress towards their goals.

The first step in coordinating your care when you joined the BARI 2D study was to determine the type of medication and coronary intervention for your diabetes and heart disease. Adopting healthy behaviors is another important approach for improving the health of patients with diabetes and heart disease. These behaviors include eating a healthy diet, getting regular exercise and, if you are a smoker, quitting.

A Lifestyle Intervention Management Center has been created to help participants adopt a healthier lifestyle. All BARI 2D participants across all of the clinical sites can now receive additional tools and resources directed towards helping them achieve their personal health goals. These resources include pedometers, food and activity diaries, educational and motivational materials, and a comprehensive program designed to help you succeed at weight management.

As co-directors of this new management center, it is our hope that your participation in this important study will not only uncover the best treatment for people with heart disease and diabetes, but that your personal health will be improved due to the lifestyle changes that we helped you achieve. ■

Sincerely,

Sheldon H. Gottlieb *Jeanine Albu*

Sheldon Gottlieb, MD

Jeanine Albu, MD



PORK TENDERLOIN WITH PESTO

Makes 4 servings

1 1/4 pounds pork tenderloin, trimmed
2 Tbsp chopped fresh rosemary
2 Tbsp chopped fresh thyme
1 Tbsp toasted pine nuts
2 cloves of garlic, crushed
1/4 cup olive oil

To make pesto, combine spices and place in a food processor or blender. Process until blended and mix with olive oil and spread on pork. Grill or bake in oven for 6 to 8 minutes on each side until done.

Each serving contains:

239 calories
26g protein
0g carbohydrate
14g fat
106mg sodium
314mg potassium
80mg cholesterol ■



From the American Diabetes Association,
Special Celebrations and Parties Cookbook.

BEAT OF BARI 2D: Let's Learn the Facts About Cholesterol and Triglycerides

In the last issue of BARI 2Day & 2Morrow, we learned from our “ABCs” that “C” is for cholesterol. We received so many questions, we thought it would be important to learn more about “fats.”

Fats within the body are often referred to as “lipids.” Lipids come from two sources: internal (formed in the body, primarily by the liver) and external (foods that you eat).

There are two major classifications of fats: cholesterol and triglycerides. We know that it's important to watch our cholesterol and triglycerides, but why? Even though cholesterol and triglycerides provide certain benefits, too much can be a bad thing.

Too much cholesterol and triglycerides in your blood can build up within the walls of your arteries, forming plaque and restricting blood flow. This condition can lead to heart disease, the number one killer of both men and women in the United States.

In the BARI 2D study, you are monitored for four types of lipids:

- ◆ Total Cholesterol: a measure of all cholesterol in the bloodstream.
- ◆ Low-density lipoproteins (LDL-c): referred to as “bad cholesterol.”
- ◆ High-density lipoproteins (HDL-c): referred to as “good cholesterol.”
- ◆ Triglycerides: come from dietary sources and are produced by the liver.

The good news is that you can take steps to control your cholesterol and triglycerides. You can change your lifestyle to include:

- ▼ Healthy diet: Making changes in your diet can help keep your cholesterol levels under control.
- ▼ Regular Exercise: Incorporating a regular exercise program into your life can bring many benefits.

In addition to a healthier diet and adding exercise, your BARI 2D physician may determine that medication is a necessary part of your overall therapy.

When medication is prescribed, always take it exactly as your doctor advises. Take the medication at the same time every day. Never stop or change medication without talking with your doctor first. Always consult with your doctor about over-the-counter medications or supplements before taking them. ■

Did you know...

Incremental changes in your lifestyle can positively impact your health and will last longer than trying to change everything at once.

PATIENT SUCCESS STORIES: R.E.'s Story

R.E. first knew he had coronary artery disease when he had a heart attack at age 43. He came for an angiogram 18 months later and was identified as eligible for the BARI 2D study. He had Type 2 diabetes for 5 years. Although he lived 5 hours from the study center, he came to the city regularly for work and decided to join BARI 2D.

At the time of enrollment, he was having pain after walking two blocks. He had a long history of high blood pressure and, more recently, high cholesterol. He weighed 102 kilograms (224 pounds). He had no family history of heart disease and had previously stopped smoking. He was randomized into the revascularization arm of the study and successfully had a short stent placed in each of three main coronary arteries in December 2001. Although he was feeling well, he had a positive exercise test and heart scan in 2003 as part of the study's follow-up. This prompted another angiogram with a stent placed in an artery that had become more narrowed.

Nine months later, R.E. had more angina and an angiogram revealed re-narrowing in the new stent. Re-ballooning and radiation treatment were successfully performed. Drug-eluting stents were unavailable at this time. By February 2004, his symptoms had returned and bypass surgery was performed. After some problems with his heart rhythm, another angiogram was performed in December 2004. His grafts looked good and after changing some medications, R.E. has been doing well. He gets regular exercise and now weighs 95 kilograms (a loss of 15 pounds), maintains a blood sugar around 6.0% and has recently reduced his diabetes medication.

Despite doing his best to manage his health, R.E. has had a struggle with recurrent angina and coronary narrowing. However, his perseverance and determination to get better have served him well. He feels the study has provided him with the diabetes care and the close cardiology monitoring he needs. We think R.E. is his own success story. ■

BEATING DIABETES: Diabetes Checkups

Regular medical checkups are vital to your diabetes care. Your doctor examines your body to look for warning signs of diabetes complications and tests your blood and urine to help monitor your condition.

Prepare for your checkup

Knowing what to expect at each visit and preparing yourself for the checkup can help you take a more active role in preventing diabetes complications. Below are a few suggestions.

- ✓ One of the most important things you can do on the day of your clinic visit is to **TAKE YOUR MEDICATIONS AS USUAL**, unless specifically instructed not to.
- ✓ Take your blood sugar record with you to every clinic visit. Note activity levels and foods that may be affecting your blood sugar results. Look for patterns and trends which may be helpful for your doctor to know.
- ✓ Make a list of all your medications, including vitamins and other supplements, and the times you take them.
- ✓ Make a list of questions to help you remember to get all the answers you need. Some questions you might want to ask your doctor include:
 - What tests are you getting and when will you know the results?
 - Do you have early signs or symptoms of diabetes complications?
 - Is any complication you've developed improving or becoming worse?
 - Do you need to lose weight?
 - What blood sugar level indicates that you need to immediately call your doctor or seek emergency care?
 - Who should you call if you have a question during the week, at night or on weekends?

Bring a notebook or a friend

Some people become anxious during their checkups and have difficulty remembering everything that was discussed. Consider taking a family member or friend with you if you would like someone else to listen to what your doctor tells you.

If you don't have someone to go with you to your appointment, be sure to take a pen and paper to write down the information your doctor gives you. Writing things down will help you remember. ■

Adapted from "Diabetes Checkups," Mayo Clinic.

Did you know...

For every 1% reduction in A1c, the risk of developing diabetic eye, kidney or nerve disease drops 40%.

FOOD FOR THOUGHT: Get Healthier with Whole Grains

Whole grains are nutritional gems waiting to be rediscovered. Used by our ancestors for making bread and other dishes, they were replaced with refined versions during the industrial revolution. White flour replaced whole grain flour and processed cereals have become the norm at the breakfast table. But these refined products have less nutritional value than the whole grains from which they are derived.

The whole grain consists of three parts:

1. Bran (outer layer): high in fiber and contains most of the grain's minerals. Bran also contains vitamins and other nutrients.
2. Germ (inner layer): rich in antioxidants, B vitamins, vitamin E, trace minerals and healthy unsaturated fats and other nutrients.
3. Endosperm (middle layer): contains complex carbohydrates, proteins and small amounts of B vitamins.

The refining process removes the bran and germ, leaving only the endosperm. This process removes protein, fiber and key nutrients, thus making the food less valuable, less tasty and less satisfying.

Choosing to eat whole grains will provide you with the nutritional benefits of all parts of the grain. Studies show that people who regularly eat whole grains reduce their risk of developing certain diseases such as cancer or bowel disorders.

You can help manage your heart disease and diabetes and improve your overall health by including whole grains in a healthy eating plan. Your BARI 2D team members are ready to assist you in any way they can.

Other benefits of eating whole grains and fiber-rich foods:

- ◆ Whole grains increase the amount of soluble fiber in your diet. Other foods rich in soluble fiber include beans, lentils, chickpeas, vegetables such as celery and broccoli, nuts and seeds.
- ◆ Fiber helps to regulate the body's digestive system.
- ◆ Fiber helps to lower LDL ("bad") cholesterol.
- ◆ Fiber may also help to control your blood sugar.
- ◆ Whole grains and other fiber-rich foods promote a feeling of fullness, thus reducing the chance of overeating.
- ◆ You have the "satisfaction" of eating healthy and a more pleasurable eating experience with more taste, texture and variety.

Easy tips for eating more whole grains:

- * Make a habit of reading food labels. Verify the fiber content as well as the amount of calories, fat and carbohydrates in the foods you eat. For example, when selecting a cereal, choose one with more fiber listed on the food label. It will likely contain more whole grains.
- * Choose high quality bread made of whole grain flour. Vary selection with whole grain wheat, rye or oat flours. Select breads that also contain whole grains mixed in with the flour.
- * Select hard rolled oats for cereal and cook lightly.
- * Switch from white rice to brown rice.
- * Select pasta that contains whole grain flour.
- * Keep a selection of items, such as wheat germ, oat bran and cracked wheat, in your pantry and add to recipes or sprinkle on cereal.
- * Try these whole grains and add some variety, taste and nutrition to your menus:

Brown rice	Sorghum
Buckwheat	Triticale
Bulgur (cracked wheat)	Whole grain barley
Whole wheat	Whole grain corn
Millet	Whole oats/oatmeal
Popcorn	Whole rye
Quinoa	Wild rice

The United States Department of Agriculture (USDA) Food Pyramid and Canada's Food Guide recommend choosing whole grains as part of a healthy diet. Talk to your BARI 2D dietitian or team member about including whole grains in your diet. ■

Resources: *CalorieKing.com*, *USDA MyPyramid*, *Canada's Food Guide*.

Did you know...

Popcorn makes a great whole grain snack. One cup of air-popped popcorn has 1.2g of fiber and only 31 calories and 0.3g of fat. Go easy on the butter though - a tablespoon will add a whopping 98 calories and 11g of fat!

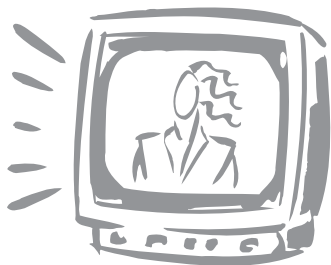


BARI 2D Frequently Asked Questions

We seem to be inundated these days with medical news stories. We hear about them on TV and read about them in newspapers and magazines. So how can you judge the results of a medical report and know when to be skeptical and when not? The following are some questions you can ask yourself.

Is the report about real people with real diseases or is it about preliminary results obtained from animal studies?

When a treatment has been studied only in animals, study results cannot be directly translated to humans until human trials are conducted.



What kind of numbers are we talking about?

Often, trials are conducted on only 50, 100, or 500 people. A single study may be widely reported in the news, but in

order to provide hard evidence, it must be supported by repeat trials. Studying larger groups of people, over longer periods of time, will give stronger evidence than a small, one-time trial.

Who is sponsoring the trial? Does the sponsor have a financial interest in the research outcomes?

You may want to be more skeptical if a trial's sponsor has a vested interest in a positive outcome. This doesn't mean that the research isn't good, but you would probably want to be more skeptical than if the trial were funded by the National Institutes of Health, for example. (BARI 2D is funded by the National Heart, Lung and Blood Institute, a division of the National Institutes of Health.)

Is the source trustworthy?

You should try to make the distinction as to whether the source is trying to promote a product or service or is primarily providing health information.

Based on the results of a study, should you make changes?

It is important to be well informed, but always ask your doctor for guidance in deciding if any study results are right for you. ■

Excerpt from the May 2005 Mayo Clinic Women's Healthsource, "Office Visit" supplement. Used with permission.

MOVING RIGHT ALONG: Fidget to Fitness

You will love this NON-exercise activity!

When you were growing up, you were most likely told to "stop fidgeting" and "sit still." Now we want you to forget those words of wisdom from your mom and get moving a little more.

Research has shown that small movements can make a big difference toward burning calories and losing weight. Some of these fidgeting activities can be done at your desk, in the car, on the sofa, at the table, in a doctor's waiting room or anywhere your healthy heart desires.

- X Tap your toes.
- X Shake or bounce your leg while sitting.
- X Tap a pen/pencil.
- X Drum your fingers on the table or desk.
- X Shift your position while sitting.
- X Sit with good posture, back straight and shoulders back.
- X Stretch arms and legs frequently while sitting.
- X Chew gum (sugar free, of course).

- X Stand while talking on the phone.
- X Pace while standing, keep your arms moving.
- X Dance while doing chores.
- X Get up to change the TV channel (hide the remote).
- X Stand or walk during television commercials.
- X Get off the bus one stop early.
- X Park a little farther from the shopping mall, grocery, work, etc.

You could burn HUNDREDS of extra calories a day and lose a couple of pounds a month.

If you are walking, swimming or biking, keep up the good work and add a little fidgeting during those down times. But for those of you whose health conditions keep you from aerobic exercise, fidgeting is a great NON-exercise option. ■

A Clinical Study
BARI 2D



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