
HEARTBEAT

Cardiovascular Health Study

Spring/Summer 1994

Annual Clinic Visit: It's that time

CHS staff have begun calling our participants to schedule the fifth follow-up clinic visit for the Cardiovascular Health Study, and we are looking forward to seeing you again soon.

You may be wondering why CHS continues to repeat many of the same procedures and questions each time you come in for a clinic visit. It might seem that once we have obtained certain information, we would not need to ask or test for it again.

But in order to understand how diseases progress and how risk factors may change, CHS investigators need to compare these conditions and factors in the same participant year after year. That's why we continue to repeat the

same questions and procedures year after year. It provides our investigators a basis for comparison to draw conclusions about risk factors and the progression of disease in older adults.

This year's clinic visit will include procedures you have become familiar and comfortable with: interviews about what's happening in your life, a review of your medical history and the medicines you are taking, blood pressure and heart rate measurements, and short evaluations of your current physical and cognitive function. The entire exam will take about two hours. If you need transportation, the clinic will provide it for you. Just let the scheduler know when s/he calls.

Echocardiography in the Cardiovascular Health Study:

How we see with sound

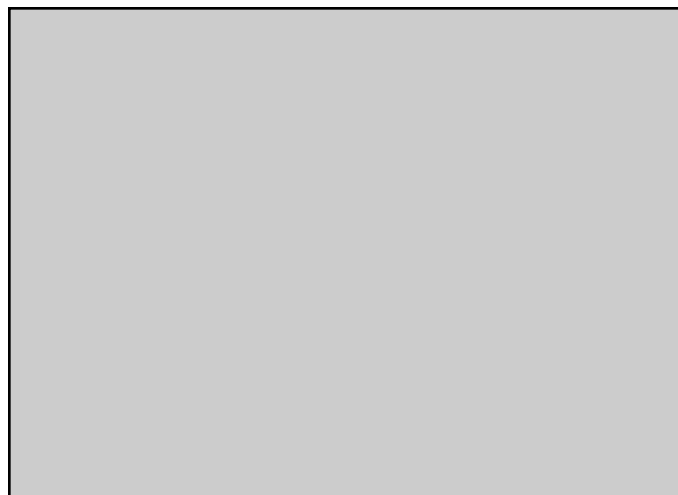
John Gottdiener, MD
Director, Echocardiography Laboratory
Georgetown University Medical Center

During the upcoming CHS exam, participants will receive a second echocardiogram. The procedure was first done at the initial CHS clinic visit.

Echocardiography is a clinical technique that allows physicians to obtain images of a beating heart and actually visualize the blood flow through chambers and valves of the heart, with no pain or risk to the participant.

Like the sonar techniques used to identify schools of fish and other undersea objects, echo uses sound waves to obtain diagnostic information. A combination sound emitter and receiver (echo probe), about the size of a cigar, is held against the chest wall of the participant. The probe emits sound waves at a frequency of about two to three thousand cycles per second, far too high to be audible to the human ear (hence the term "ultrasound.")

The sound waves bounce off structures within the heart and are assembled by the echo machine into moving images shown on a television monitor. These images can be



A technician uses an echo probe to create images of a volunteer's heart. - (Photo courtesy of Toshiba America Medical Systems, Inc.)

seen by the participants during the exam, and actually look like living slices of the beating heart. Blood flow is measured using the Doppler principle, where the frequency of sound changes as the sound waves are reflected by red

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Walking: Easy, fun, and *good for you!*

Jan Busby-Whitehead, MD
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What's the easiest, most effective, and safest way to stay fit at any age? Without a doubt, it's walking.

The natural process of aging can bring with it a loss of muscle mass, strength, and lung capacity. But exercise, particularly walking, may help prevent or slow this process.

Walking is something almost everyone can do. It doesn't require any special equipment, other than a comfortable pair of shoes that fit well and provide some support. You can enjoy a walk outside on a pretty day, but if the weather's bad, you can just walk around the house. Many people have taken up "mall walking," a good way to get exercise, be with other people, and see what's on sale.

A consistent walking program can help maintain your optimum weight and strengthen your cardiovascular system. It will help keep joints flexible and muscles toned. Some studies show that walking may help prevent (and even treat) hypertension, obesity, diabetes, and osteoporosis.

And walking isn't just good for you physically - it's also one of the best ways to reduce stress and combat depression. Many people who take up walking on a regular basis report a feeling of well-being and accomplishment, and some psychotherapists are now beginning to prescribe a regular walking program as part of patient treatment.

In a study of the leisure-time activities of a group of Harvard alumni, participants who exercised the least had the greatest risk for death from all causes. Participants who exercised the most - walking as many as three miles a day - lived the longest.

In the past, research showed that 20 to 30 minutes of continuous aerobic exercise was most effective in improving overall cardiovascular fitness. But a recent study has shown that three 10-minute walks during the same day have as much impact on fitness as one 30-minute walk. And regular low-level exercise is actually more beneficial than infrequent bursts of strenuous exercise.

It's good for your heart, your energy level, your health, and your mental attitude. So what are you waiting for? Get out there and walk!

Before you begin any exercise program, it's a good idea to ask your physician which activities and what level of exercise are best for you.

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blood cells as they flow through the heart.

The Doppler principle is experienced in daily life by the rise and fall in pitch of an automobile horn as the car first moves toward us, then away. (In some cases, application of the Doppler principle can be expensive, since highway troopers use Dop-

pler radar to measure the speed of cars on the road.)

Humans are not the only creatures to use sound waves to detect and measure moving objects. Whales, porpoises and bats rely on natural ultrasound to detect friendly and unfriendly objects in their environment.

Using Echocardiography, CHS researchers measure the thick-

ness of the heart walls and the size of the chambers, and will determine how vigorously the heart pumps blood. Much will be learned about possible changes in the functioning of the heart valves with age.

And all of this will be accomplished within a half hour examination, using techniques in use well before humans appeared on earth!

Make That Backyard Barbecue A Heart-Healthy Feast

Keep good nutrition in mind when you plan the menu for your backyard barbecue this summer. Healthy eating is a good habit to get into - not only for yourself, but for your friends and family as well.

You can prepare low-calorie, low-fat, high-nutrition foods that your heart and circulatory system will love even if you're grilling outside and feeding a crowd. Eating right is an every-day commitment, so when you plan the menu for your backyard barbecue, be sure you include:

* Fruits, vegetables, and breads

*Turkey, chicken (without the skin) or fish -roasted, baked, grilled or broiled; or a low-fat beef recipe like the one below.

*Skim or low-fat milk, low-fat cheese, and low-fat mayonnaise and butter substitute

You should avoid:

*Eggs (skip the deviled eggs this time), fried foods and creamy sauces

*Fatty meats, hot dogs (unless they are low-fat turkey), sausage and bacon

*Whole milk, cream, cheese and butter

Following these American Heart Association tips will help you have a hearty - and healthy - barbecue. Here are some delicious low-cholesterol recipes from the American Heart Association Cookbook*:

Oven-Barbecued Chicken

vegetable oil spray
1 tablespoon dry mustard
1/4 cup water
Fresh ground black pepper
1/4 cup white or cider vinegar,
or to taste
3 tablespoons vegetable oil
(canola or safflower)
2 tablespoons chopped onion
(optional)
1/2 cup chili sauce or ketchup
2 1/2 to 3 pound frying
chicken, cut into serving
pieces, skinned, all visible
fat removed
3 tablespoons Worcestershire sauce

Preheat oven to 350 degrees. Lightly spray a large baking pan with vegetable oil. Combine all ingredients except chicken in a saucepan over medium-high heat. Reduce heat and simmer 10 minutes. Set aside.

Rinse chicken pieces and pat dry; arrange in prepared pan. Pour half of the barbecue sauce over chicken and bake, uncovered, 50 to 60 minutes, basting with remaining sauce every 15 minutes.

Optional Barbecue Cooking Method: Immerse chicken in sauce, then cook over charcoal. Boil remaining sauce and use to baste chicken frequently. Makes 4 servings.

Nutrient Analysis per Serving

344 calories	3g saturated fat
33g protein	8g polyunsaturated fat
12g carbohydrate	5g monounsaturated fat
92mg cholesterol	8g total fat
578mg sodium	

Marinated Steak

2 pounds top sirloin steak, all visible fat removed
1/4 cup fresh lemon juice
3/4 cup vegetable oil (canola, corn, olive, safflower,
soybean or sunflower)
3 tablespoons dry white wine
1/2 cup chopped onion
2 tablespoons finely chopped fresh
rosemary
2 tablespoons finely chopped fresh
sage
1 tablespoon dijon mustard
3 cloves garlic, minced
1/2 teaspoon salt

Place steak in an oblong glass baking pan and set aside. Combine all other ingredients in small bowl. Pour marinade over steak and turn to coat evenly. Cover and refrigerate several hours or overnight, turning meat occasionally.

Preheat grill. Grill steak
Serves 6.

over hot coals.

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Nutrient Analysis per Serving

344 calories 3g saturated fat
 33g protein 8g polyunsaturated fat
 12g carbohydrate 5g monounsaturated fat
 92mg cholesterol 8g total fat
 578mg sodium

Parsley Potato Salad

2 cups diced cooked potatoes
 1/2 tablespoon chopped pimiento
 1/2 cup diced celery
 1 tablespoon chopped onion
 2 tablespoons chopped fresh parsley
 1/2 tablespoon cider vinegar
 1 teaspoon dry mustard
 1/2 teaspoon celery seeds
 Fresh ground black pepper to taste
 1/4 cup light, reduced-calorie
 mayonnaise
Garnish: Pimiento strips

In a large bowl, combine all ingredients except mayonnaise and pimiento strips. Toss lightly, cover and refrigerate for several hours.

A few hours before serving, add mayonnaise and stir to mix well. Cover and return to refrigerator.

Serve in lettuce cups and garnish with small strips of pimiento. Makes 6 servings.

Nutrient Analysis per Serving

79 calories 0g saturated fat
 1g protein 1g polyunsaturated fat
 12g carbohydrate 1g monounsaturated fat
 3mg cholesterol 3g total fat
 71mg sodium

Quick-and-Easy Baked Beans

2 16-ounce cans no-salt-added vegetarian baked beans in tomato sauce
 2 16-ounce cans no-salt-added barbecue beans
 1/2 cup chopped onion
 1 cup no-salt-added tomato sauce
 2 tablespoons low-cholesterol, low-fat margarine or butter substitute
 2 tablespoons molasses or firmly packed brown sugar
 2 teaspoons dry mustard

Preheat oven to 350 degrees. Place ingredients in a 3-quart casserole dish in the order listed.

Toss lightly to mix well. Bake uncovered 45 to 60 minutes. Makes 12 servings.

Nutrient Analysis per Serving

192 calories 1g saturated fat
 10g protein 1g polyunsaturated fat
 34g carbohydrate 1g monounsaturated fat
 5mg cholesterol 3g total fat
 54mg sodium

*American Heart Association Cookbook, Fifth Edition, American Heart Association. Published by Times Books, A Division of Random House, Inc. 1973, 1975, 1979, 1984, 1991.

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