

Information for Cardiac Patients:



Your Role in
Optimal Treatment
and Prevention

 MASSACHUSETTS
GENERAL HOSPITAL

HEART CENTER

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Boston, MA 02114
www.massgeneral.org/heartcenter

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GENERAL HOSPITAL

HEART CENTER

INFORMATION FOR CARDIAC PATIENTS: YOUR ROLE IN OPTIMAL TREATMENT AND PREVENTION

This booklet was updated by a Cardiac Team
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THIRD EDITION

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SUGGESTED WEB SITES:

www.americanheart.org (*The American Heart Association*)
www.eatright.org (*The American Dietetic Association*)
www.trytostop.org (*Massachusetts quitline web site*)
www.quitnet.org (*quit smoking support program of Boston University School of Public Health*)
www.quitsmoking.about.com (*lots of net links to various quitting topics*)
nicotine-anonymous.org (*information on NA meetings by state*)
www.diabetes.org (*American Diabetes Association*)
www.heartcenteronline.com
www.MACVPR.org (*This has a list of Cardiac Rehab programs in MA.*)
www.massgeneral.org/cardiacprevention

RECOMMENDED READING LIST

American Heart Association Cookbook
Anger Kills by Redford Williams
Choices for a Healthy Heart by J. Piscatella
Eat, Drink, and be Healthy: The Harvard Medical School Guide to Healthy Eating
by Walter C. Willett with P.J. Skerrett
Cooking a la Heart by the Mankato Heart Health Program
Eater's Choice: A Food Lover's Guide to Lower Cholesterol
by Ron Goor, Ph.D. and Nancy Goor
*Harvard Guide to Women's Health**
by Karen J. Carlson, M.D., Stephanie A. Eisenstat, M.D., and Terra Ziporyn, Ph.D.
Heart Fitness for Life by Mary P. McGowan
Low-fat & Loving It by Ruth Spear
Low-Fat, Low-Cholesterol Cook Book by the American Heart Association
Low Salt Cook Book by the American Heart Association
*Menopause** by Isaac Schiff, M.D.
The New American Diet by Dr. William and Sonja Connor
Many of the above are available at the MGH General Store
**Indicates books written by MGH physicians*

Phone Numbers for More Information

MGH Phone Numbers

Anti-coagulation Unit	(617) 726-2768
Benson-Henry Institute for Mind Body Medicine	(617) 732-9130
Cardiovascular Disease Prevention Center	(617) 726-1843
Diabetes Associates	(617) 726-8722
Lipid Associates	(617) 724-6750
Nutrition Services:	
Boston	(617) 726-2779
Charlestown	(617) 724-8198
Chelsea	(617) 884-8300
North End	(617) 742-9570
Revere	(781) 485-6070
Cardiac Rehabilitation	(617) 726-1843
Quit Smoking Service	(617) 726-7443
Psychiatry	(617) 724-PSYC/(617) 724-7792
Reproductive Endocrine	(617) 726-8433
Social Service Department	(617) 726-2643
Addiction services	(617) 726-2712
Women's Health Associates	(617) 724-6700

Outside Organization Phone Numbers

National Network of Tobacco Cessation Quitlines	(800) 784-8669 (800)-QUITNOW
American Diabetes Association	(800) DIABETES / (800) 342-2383
American Dietetic Association	(800) 366-1655
American Heart Association (MA)	(508) 620-1700
American Lung Association	(617) 787-5864
Cancer Information Service National Cancer Institute	(800)422-6237 (800) 4-CANCER

STRATEGIES FOR A HEALTHY LIFESTYLE: YOUR ROLE IN OPTIMAL TREATMENT AND PREVENTION OF CORONARY HEART DISEASE

INDEX

Introduction – Action Plan	1
Activities and Exercise	4
Physical Activity	4
Guidelines	6
Warning Signs	8
Exercise	8
Sexual Activity	10
Smoking Cessation	12
Heart-healthy Eating	17
Weight Control/Reduction	17
Limit Fat Intake	18
Low Salt – Daily Weight	19
Emotional Responses	27
Stress	27
Depression	28
Alcohol Consumption	
Other Concerns	30
High Blood Pressure	30
Diabetes	31
Medications	34
Medications to Prevent Heart Attack	34
Aspirin/Plavix	34
Beta-Blockers	34
ACE Inhibitors	35
Medications to Reduce Risk Factors	35
Blood Pressure Medications	35
Statins	35
Nicotine Replacement	36
Vitamins	36
Prevention for Women	37
Warning Signs	37
Hormone Therapy	38
Conclusion	39
Resources	40
Telephone Numbers	40
Internet	inside back cover
Readings	inside back cover

INTRODUCTION

Welcome to Massachusetts General Hospital.

This booklet contains information about heart disease and the changes you can make in your life to reduce your risk for future cardiac events. You can improve the quality of your life and health if you follow these guidelines. Sometimes it can be hard to remember a lot of information when you are sick and not feeling well. We would like you and your family to take this booklet home and go over the information when you are ready to learn about keeping your heart healthy.

Heart disease is the leading cause of death in the United States. There are 13.2 million Americans with heart disease, and 500,000 deaths each year are due to coronary heart disease, or as it is also called, Coronary Artery Disease (CAD).

- Coronary Artery Disease (CAD) is a disease of the arteries that supply blood to the heart. Cholesterol or fat can build up inside the arteries and block the oxygen rich blood and keep it from reaching the heart muscle. A blood clot can also develop inside the artery and block the blood flow. When these arteries are blocked, a person may have angina and may be at risk for a heart attack. Men usually have CAD at a younger age than women, but women have an equal risk for CAD after menopause.
- Angina is a warning signal that the heart muscle is not receiving enough oxygen rich blood. Signs of angina can be a pain in the chest, shortness of breath, sweating, nausea, weakness, and/or muscle aches in the jaw, arm or shoulder. If the heart does not receive enough oxygen rich blood it can lead to damage of the heart muscle. If you have angina you need to stop your activity, rest and you may need to take a Nitroglycerin tablet under your tongue as directed by your health care provider. If the pain continues it may be a sign of a heart attack.
- Heart Attack is also called Myocardial Infarction (MI) and means that the heart muscle has been damaged because of a lack of oxygen rich blood. The warning signals for a heart attack are the same signs as Angina but last longer. Signs of angina can be a pain in the chest, shortness of breath, sweating, nausea, weakness, and/or muscle aches in the jaw, arm or shoulder. This is very serious and can cause an irregular heartbeat and even death. If you have the signs a heart attack, it is important to call 911 and be taken to your nearest Emergency Room.
- Sudden Cardiac Death can happen as a result of a heart attack. The

CONCLUSION

As you prepare for discharge from the hospital, you may be feeling a little overwhelmed. This is normal. Reading material in this booklet will provide you with helpful information. You may learn something new each time you go over these materials. Remember that you play the most important role in the treatment of your heart disease and prevention of further problems.

Before you leave the hospital, be sure that you understand what happened to you, what your risk factors are, and what the plan is for your continued medical care.

The information in this booklet, including the references for professional organizations and services, are excellent resources to assist you. Also, never hesitate to ask your primary care doctor, cardiologist and other health care providers about how to prevent further heart disease.



Hormone Therapy

Menopause

Menopause is a normal stage of a woman's life when her periods stop. During this time, her ovaries slowly stop making the hormones called estrogen and progesterone. A woman may know she is going through menopause when her periods become irregular or when she has hot flashes. This is usually between the ages of 45 and 55. The loss of estrogen puts women at risk for heart disease and bone loss.

Hormone Therapy also known as Hormone Replacement Therapy (HRT)

Hormone Therapy (HT) can be used to relieve the hot flashes, night sweats, and moodiness that sometimes comes with menopause. Hormone therapy gives the body small amounts of estrogen and progesterone to reduce these symptoms.

- **Long-Term use of Hormone Therapy**
The Women's Health Initiative (WHI) studies tell us that women should not take HT to prevent disease like heart disease or osteoporosis. These studies found that taking hormone therapy did not prevent heart disease. In fact taking hormone therapy slightly increased the risk of heart disease and stroke. It also increases the risk for breast cancer and blood clots in your lungs and legs.
- **Short-term use of Hormone Therapy**
Taking HT for 2 to 4 years to relieve hot flashes or night sweats that interfere with day-to-day life is safe for most women. There are also other types of HT and lifestyle changes to help relieve symptoms of menopause.

Summary

The WHI studies changed the views on hormone therapy. WHI confirmed that hormone therapy reduces fractures and increases risk for blood clots. What was surprising was that WHI showed that hormone therapy increased the risk for heart disease, stroke and dementia.

The best way to prevent heart disease is to have a healthy lifestyle. Eat right, keep a healthy weight and exercise regularly. If you have high blood pressure, diabetes, or high cholesterol, it is important to keep these in control. The WHI proved that women should not use hormone therapy to reduce their risk for heart disease.

For additional information contact:

- MGH Women's Health Associates at (617) 724-6700
- MGH Reproductive Endocrine Associates at (617) 726-8433
- MGH Vincent Gynecology Service at (617) 724-6850

damaged heart muscle can cause a very irregular heartbeat. The heart may suddenly stop beating and a person will stop breathing. Death will occur.

The number of deaths from CAD has decreased in recent years. One reason for the decrease is more public awareness of the risk factors that cause CAD. Risk factors are those things that may make it more likely for you to get CAD. There are risk factors you can change and others that you cannot change.

Risk factors you can change or control are level of exercise, smoking, body weight, cholesterol levels, stress levels, blood pressure, and diabetes. Risk factors you cannot change include a family history of CAD, age, race, gender, and menopause. A person with one risk factor is more likely to have CAD than a person with no risk factors. As your number of risk factors increases, so does your chance of getting CAD. Changing or getting rid of risk factors is an important step to achieving a healthy life.

After you are discharged from the hospital your doctor may recommend that you go to a Cardiac Rehabilitation Program. The program will teach you about controlling your risk factors for CAD. Information about these programs is included in the booklet as well as telephone numbers, web sites, and books you might find helpful.

We feel that it is very important for you to read, understand, and follow the guidelines in this booklet.

We hope for your success and applaud your efforts!

YOUR ACTION PLAN

During your stay at the Massachusetts General Hospital, your health care providers will be assessing your health and giving you vital information about your heart health and what you can do to improve it. Tests that will be done to help you protect your heart are a cholesterol profile and a glucose (sugar) level, blood pressure measurements, and height and weight measurement.

It is important that you work with your health care providers to make a lasting difference in your heart health. So let's begin by completing the following quiz with your health care provider:



Here is a quick quiz to find out your risk factors.

	YES	NO	Your values
Do you get less than a total of 30 minutes of physical activity on most days?			
Do you smoke?			
Has your doctor told you that your total cholesterol is 200mg/dl or higher, OR that your LDL is greater than 100 mg/dl?			Cholesterol ___ LDL ___ HDL ___
Do you have a body mass index (BMI)* score of 25 or more?			BMI ___
Is your blood pressure greater than 120/70 or higher, OR have you been told that your blood pressure is too high?			BP ___/___
Do you have diabetes OR a fasting blood sugar greater than 126 mg/dl OR do you need medication to control your blood sugar?			Fasting blood Sugar _____
Has a doctor told you that you have angina OR have you had a heart attack?			
Are you over the age of 55 years?			
Have your mother or sister had a heart attack before 65 years OR your father or brother before 55 years?			

*BMI (Body mass index) is a measure of body fat based on height and weight that applies to both adult men and women. Go to:

<http://www.nhlbisupport.com/bmi/bmicalc.htm> to calculate your BMI

This book is organized by starting with what you personally can do. This includes becoming more active, stop smoking, eating healthy, and how to reduce your emotional responses. There is information on managing your blood pressure, diabetes and taking medications for your heart, as well as information for women.

So lets get started:

PREVENTION FOR WOMEN

Warning signs of a Heart Attack

For many women, their first symptom of heart disease is a heart attack. Therefore, every woman should know how to identify the signs and symptoms of a heart attack. Ideally, treatment for a heart attack should start within one hour of the first symptoms. Recognizing the warning signs and getting help quickly can save your life. Not all heart attacks begin with sudden, crushing chest pain as is often shown on TV or in the movies. Many heart attacks start with mild, short-lived, discomfort.

Most women were found to have:

- Shortness of breath
- Weakness
- Fatigue
- Chest discomfort

Other signs include nausea, light-headedness, or breaking out in a cold sweat. If you think you, or someone else, is having a heart attack, you must act quickly, no more than 5 minutes, to call 9-1-1. Calling 9-1-1 will bring emergency medical personnel to begin treatment before you get to the hospital and could save your life.

No one plans on a heart attack, but it is important to develop a plan to deal with a possible heart attack. Taking the following steps can save your life or the life of someone you know.

- Learn the heart attack warning signs
- Talk with family and friends about the warning signs and the need to call 9-1-1
- Talk with your health care provider about your risk factors and how to reduce them



- **Nicotine Replacement**

Nicotine is a very addictive substance found in cigarettes. That's why it may be hard to quit smoking! Nicotine substitutes provide your body with nicotine to replace cigarettes. This can help you stop smoking. For example, the nicotine patch passes nicotine into the bloodstream. It slowly lessens the level of nicotine your body absorbs. Therefore, withdrawal symptoms are less. Side effects can include irregular heart beat, nausea, and also skin irritation (if you are wearing the patch).

- **Vitamins**

Do you need to take vitamins? Taking a daily multivitamin makes sense for most adults. Your body needs vitamins for growth, function and health. Minimal daily requirements may help prevent heart disease and other chronic illnesses. However, taking a multivitamin does not makeup for an unhealthy diet. Foods are still your best source of vitamins. Before taking vitamin supplements other than a standard multivitamin, check with your doctor. High doses of some vitamins can cause health problems.

ACTIVITIES AND EXERCISE

My Goal: to complete 30 minutes or more of moderate intensity physical activity on all or most days of the week.

Definitions

Physical activities and exercise are very important for people with heart problems. Physical activity is any activity or bodily movement that increases the body's need for oxygen and the amount of work that the heart has to do. Exercise is a special type of physical activity. Exercise is planned and regularly repeated to increase the strength and endurance of the heart and body. To improve our overall health, all of us should exercise regularly and increase our daily physical activity.

Are physical activities and exercise good for my heart?

Yes. Research studies have shown that physical activity and exercise may help decrease your risk of getting heart disease. If you already have heart disease, physical activity and exercise may keep your heart disease from getting worse.

Physical Activity and exercise protect the heart by:

- Lowering your blood pressure
- Lowering your body fat
- Lowering your blood fat levels
- Lowering your blood sugar
- Helping you to lose weight and maintain an optimal body weight
- Improving your circulation, muscle tone, and strength
- Lowering any stress, depression or anxiety
- Improving the way you feel about yourself

Even though you have heart disease, it is not too late to increase your activity and start exercising. The benefits of activity and exercise are not permanent so you should continue to exercise from now on.

Physical activity

How do I increase my activity?

While you are in the hospital:

You should begin your steps to a life-long habit of activity and exercise while you are in the hospital. Your health care providers will work with you to help you slowly increase your activity. For many people this means being out of bed and taking walks in the hall. When you are ready to leave the hospital, you may be given your own exercise plan to follow at home.

While I am at home:

After discharge from the hospital, you may feel tired and not have much energy. This is probably because of your decreased level of activity while you were in the hospital. Without activity, muscles may lose strength in just one week. Your muscles will get stronger through activity and exercise. Be patient though - even with regular exercise, it takes up to 4 to 6 weeks to get your muscles back into shape.

You also may feel as though you have a lot of catching up to do at home or at work. Try to keep in mind that all those unfinished tasks can wait. Your recovery is the most important task for you right now.

Here are some tips on starting or restoring a healthy lifestyle when you get home. You may want to share this section with your family, so they can support you during your recovery.

- Return to your usual bedtime routines. Go to sleep at the same time each night and try to sleep six to eight hours or more.
- Plan your activities during the day to allow time to rest between activities. Planning activities helps to avoid tension and stress.
- Plan a 20-minute rest period at least once each day. Stop and relax, as you need.
- Bathe or shower as instructed. Avoid extremely hot or cold water.
- Get dressed every day. This will help you feel in a “recovery” mood.
- Eat three well-balanced meals a day. Avoid large meals. Eat slowly. You may resume light household chores such as dusting, washing dishes, and making beds.
- Walk or perform your exercise program each day. Be sure you feel rested before you begin to exercise.
- You may walk up and down stairs as you feel able to. At first, plan your day so you don’t have to go up and down the stairs too often.
- Ask your healthcare provider when you can start driving.
- Listen to your body signals and change your activity level as needed.

Should I avoid certain activities?

Yes. These are some of the activities you should avoid:

- Activities that require reaching above your shoulders for a long period of time, such as painting a ceiling or hanging drapes.
- Bending forward for a long period of time, such as digging a hole or shoveling snow.
- Lifting, pulling or pushing anything that causes you to hold your breath or make you strain. Some examples of this are, lifting heavy objects (briefcase, suitcase, laptop, laundry basket), opening a stuck window or doing heavy yard work.

- ACE Inhibitors/ARBs
Angiotensin Converting Enzyme (ACE) Inhibitors or Angiotensin Receptor Blocking (ARB) agents are used for several reasons:

- To treat high blood pressure
- Reduce the risk of heart attack
- To treat heart failure and reduce the risk of heart failure after a heart attack

ACE inhibitors and ARBs allow the blood vessels to relax and this lowers your blood pressure. ACE inhibitors keep the body from making angiotensin II, a chemical that narrows blood vessels. They also help lower the amount of sodium and water in the body. Side effects can include cough and dizziness.

- Blood Pressure Medications

High blood pressure is when the heart has to work harder than normal to push blood throughout the body. By taking medication to lower your blood pressure, you can help prevent a heart attack, stroke and heart failure. There are different types of blood pressure medications. Your doctor may prescribe more than one medication to help lower your blood pressure. Each one may work in a different way to help lower your blood pressure. Even after your blood pressure is lowered, you may still need to take the medicine! Do not stop taking the medication on your own!

- Statins

High blood cholesterol is a risk factor for heart disease and stroke. That’s why it’s important to have your cholesterol checked. There are two types of cholesterol: HDL (good) and LDL (bad). A high level of LDL equals a higher risk of heart disease. Therefore, the priority is to keep the LDL level low (less than 70mg/dl). Sometimes diet and exercise aren’t enough to bring your cholesterol down. Drug therapy is then needed. The first drug to try is one of the “Statins”. These are:

Statins block the formation of cholesterol in your liver. Possible side effects include stomach pain or cramps, constipation and muscle pain. It is important to tell your doctor if you have any of these. Rarely, a patient will develop abnormal blood tests of the liver so you should have your liver function tests evaluated by your health care provider.

- Nitroglycerin

Nitroglycerin is used to treat or prevent angina. It is available as a tablet to put under your tongue, as a spray, and as a paste. Your health care provider will tell you how much of this medication to use and how often. If you have angina, sit down to use this medication. If you have angina, use nitroglycerin every five minutes until pain is gone for up to fifteen minutes.

You should **CALL 911** and request an ambulance to bring you to the hospital if you have chest pain lasting more than 15 minutes or requiring more than 3 nitroglycerin tablets for relief.



MEDICATIONS

You will be given prescriptions when you leave the hospital for medications that you will be required to take. Set up a schedule of when you will take your medications so that 'missing' doses can be reduced. Keep track of your supply so you know when you will need to call for a refill or will need to get a new prescription from your healthcare provider. If you plan on receiving medications through the mail, make sure to ask for a second prescription to use for this purpose. If you have concerns about being able to afford your medications, please inform the nurse or your health care provider.

Some of the common medications that maybe prescribed for you are:

- **Aspirin**
Aspirin is a blood thinner. It is the most common drug used to prevent blood clots. Aspirin keeps special cells in the blood, called platelets, from sticking together to form a clot. A cardiac patient needs to take some form of aspirin unless given special instructions not to take aspirin. The most common side effect of aspirin is stomach upset. It may help to take a coated or "buffered" aspirin to protect your stomach. Aspirin rarely causes ulcers, but if you have a history of ulcers or bleeding in your stomach, tell your doctor.
- **Plavix**
Plavix is also a blood thinner. If you had angioplasty or a stent placed in your blood vessel, you will most likely need to take Plavix. [A stent is an expandable metal tube that holds the blood vessel open.] Plavix helps keep platelets in the blood from sticking together, preventing clots from forming on the metal surface of the stent. Plavix may upset your stomach and can rarely cause ulcers.
- **Beta-Blockers**
Beta-blockers are used for several reasons:
 - To treat high blood pressure
 - Relieve angina (chest pain)
 - Reduce the risk of a second heart attack
 - Correct irregular heart beats

They help the heart beat slower and with less force. This lowers your blood pressure and makes less work for the heart. Side effects can include unusual tiredness, dizziness, and decreased sexual function.

If you had cardiac surgery, avoid the following activities for two to three months:

Mowing the lawn	Lifting babies and children
Raking leaves	Vacuuming
Moving the furniture	Lifting weights or anything heavier than 10 pounds

- All people with heart problems should avoid shoveling snow for at least 2-3 months and then discuss with your health care provider.
- **You should stop any activities that cause angina or the warning signs of a heart attack.**

Guidelines

This is a guideline for you to use to develop an exercise routine over the next 4 weeks. STOP exercising if you experience any of the signs and symptoms listed under "warning signs".

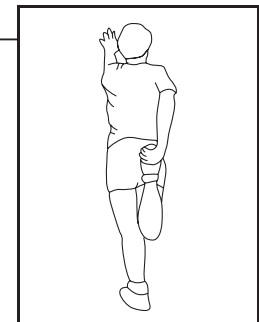
Stretches

(The following section reproduced with permission © An Active Partnership for the Health of your Heart, 1990. Copyright American Heart Association)

Stretching is an important part of your exercise program. It can reduce muscle soreness, make you more flexible and help prevent injuries. To help keep all your moving parts in good shape, spend five to ten minutes a day on the stretches below. Try to do each stretch at least once a day, preferably just before or after your exercise session. Always stretch with a slow, steady motion. Never bounce! For best results, spend at least 20 to 30 seconds on each stretch. Don't push your body until it hurts. Stretching should feel good, and never be painful. If it hurts — stop!

Quadriceps stretch

Purpose: Stretch quadriceps on front of thigh.
Starting Position: Stand against the wall with the left hand against the wall for stability.
Action: With the right hand, hold the right foot, and bring the heel towards the buttocks. Repeat with left hand and left foot. Keep the standing leg slightly bent at the knee.
Repeat: two to three times with each foot



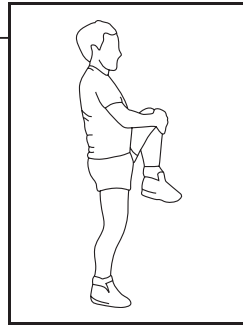
Hip stretch

Purpose: Stretch the back of the thighs.

Starting Position: Standing.

Action: With your hands, bring one knee up to your chest. Then repeat with other knee.

Repeat: four to six times with each leg



Calf stretch No. 1

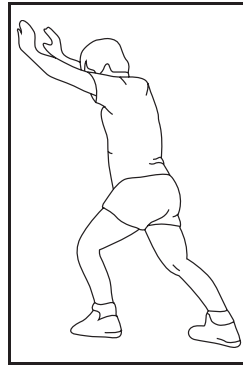
Purpose: Stretch the calf.

Starting Position: Lean against a wall or tree.

Bend one leg, and place the foot on the ground in front of you. The other leg should be placed behind you.

Action: Slowly move your hips forward, keeping your lower back flat. Be sure that the heel of the back foot is flat on the floor, and the toes are pointed straight ahead. Repeat with other leg forward.

Repeat: Three to five times each side



Arm circles

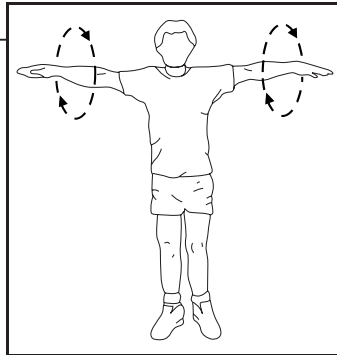
Purpose: Loosen and rotate the shoulder joint.

Starting Position: Reach your arms out at shoulder level.

Action: With your head and neck relaxed, rotate your arms in small circles, first forward and then backward, for 10 to 15 seconds.

Rest your arms at your sides briefly, then repeat.

Repeat: Three to five times



Side bend (Not for cardiac surgical patients)

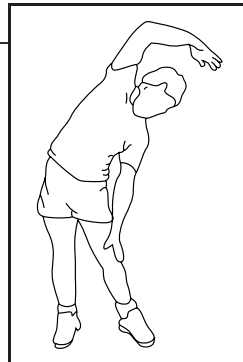
Purpose: Stretch sides of trunk and shoulders.

Starting Position: Stand with your feet shoulder-width apart.

Action: Stand with right arm over your head, and bend trunk directly to the left, keeping both feet flat and knees slightly bent.

Hold for 10 seconds, then repeat on other side.

Repeat: Three to five times each side



For further information, contact:

- Your primary care physician
- MGH Diabetes Associates 617-726-8722
- The American Diabetes Association Massachusetts Affiliate (888) DIABETES or (888) 482-4580
- The American Diabetes Association (800) 232-3472 or visit their Website: www.diabetes.org
- MGH Nutrition Services:
 - MGH Main Campus (617) 726-2779
 - Bunker Hill Health Center (617) 724-8198
 - North End Health Center (617) 742-9570
 - Chelsea HealthCare Center (617) 884-8300
 - Revere HealthCare Center (781) 485-6070



Women with diabetes can develop coronary artery disease early in life. Usually women develop CAD 10 years later than men after they have gone through menopause. But if they have diabetes, women can develop CAD earlier.

What are the major complications of diabetes?

Diabetes is linked to other complications as well. Some of these problems may take years to develop and may not occur in everyone with diabetes. The goal of diabetes management is to prevent the following complications.

- *Eye:* damage to the blood vessels of the retina of the eye and cataracts can cause vision problems. It is important that you see an ophthalmologist on a regular basis.
- *Kidneys:* damage to the blood vessels in the kidney can lead to kidney failure.
- *Nerve damage (Neuropathy):* nerve damage can cause pain, discomfort, or numbness in the feet, and increases the accidental injury to the feet.
- *Legs and Feet:* blood vessels get stiff and narrow in the legs, much as it does in the heart. This can cause pain or cramps in the legs while walking. Having both vascular disease (blood vessel narrowing) and neuropathy (nerve damage) can lead to serious problems in the feet and legs of diabetics.

What can I do to decrease my chance of having complications?

- *Control your blood sugar level:* This includes monitoring your blood sugar level and taking your medication as directed. People who have diabetes should check their blood sugar at home. You can learn to do this from your health care provider or diabetes educator. Good control of the blood sugar will reduce your chance of having many of the complications of diabetes, notably the heart, eye, kidney and nerve complications. It is very important that blood sugar values stay as close to the normal range as possible. Frequency of blood sugar testing is individualized, and goals are determined by your physician and/or diabetes educator.
- *Stop smoking:* This is one of the most important things you can do. It may not be easy, but it is very important to prevent the complications of diabetes. (Refer to the section on Smoking)
- *Lose Weight:* Lose those extra pounds to achieve your ideal body weight. Overweight people who lose weight and improve their blood sugar levels will also lower the other risks for CAD; high cholesterol and high blood pressure.
- *Watch your diet:* Follow a diet that includes complex carbohydrates (starches) and fiber, but avoid sugar since it easily raises the blood sugar. People with diabetes should see a nutritionist for dietary recommendations.
- *Exercise:* Set up and follow an exercise plan as prescribed by your health care provider: Exercise has been shown to prevent diabetes and can improve blood sugar levels.

General warning signs

If you have any of these signs or symptoms (during any physical activity, exercise or sexual activity) you should stop what you are doing and rest. Do not resume the activity until you have spoken to your health care provider.

- Angina or pain, tightness, discomfort in the chest, jaw, arms, neck or back
- Unusual shortness of breath
- Lightheadedness, dizziness, confusion
- Irregular heartbeats
- Excessive tiredness or tiredness that lasts longer than expected after exercise
- Unusual pain or discomfort in your muscles or joints

You or your family should **CALL 911** and request an ambulance to bring you to the hospital if you have any of the following symptoms:

- Chest pain lasting more than 15 minutes or requiring more than 3 nitroglycerin tablets for relief
- The same signs or symptoms that originally brought you to the hospital and are not relieved by nitroglycerin
- Severe shortness of breath
- Loss of consciousness

Exercise

Is it safe to start to exercise?

Yes it is. But it is important to allow your heart time to heal. Some people feel fine and may even forget that they have a problem with their heart – but you should start slowly with light exercise. You will be given an exercise program that allows you to gradually increase and progress your activity and exercise for the first 4 weeks. After about 4 weeks, you should be able to build up to harder exercise but your healthcare provider will tell you how to do this.

Aerobic exercises are the best type of exercises for your heart. These exercises keep you moving, increase your breathing and use the large muscles in your arms and legs. Walking, swimming and bicycling are good examples of these exercises. Walking is one of the best exercises for your heart and also for your bones and muscles. Walking is also something that everyone knows how to do and does not require any special equipment. Getting into a routine of walking will make your body more fit and help you to do other exercises more easily. To increase your heart's fitness, slowly work up to walking 20 to 40 minutes a day and repeat this on most days of the week. A schedule to follow over the next 4 weeks will be provided to you by a physical therapist or other healthcare provider.

How much and how hard can I exercise?

Your exercise program is a guideline for you to follow. In general, you should be able to exercise for 20 to 40 minutes without stopping. At first, you might not be able to exercise for this long. If this happens you may want to slow your pace or exercise for a shorter amount of time. It is important for you to decide what is good for you and to increase your activity and exercise as you feel able to.

It is important for you to monitor how hard your body is working while you are exercising. The Borg Scale is one way to measure this.

BORG PERCEIVED EXERTION SCALE	
6	
7	very, very light
8	
9	very light
10	
11	fairly light
12	
13	somewhat hard
14	
15	hard
16	
17	very hard
18	
19	very, very hard
20	

The scale uses numbers and words to help you figure out the best way to pace yourself when you exercise. The number 6 means a very low level of activity and effort while the number 20 means a very high level of activity and effort.

In general, during your early recovery from the hospital, you should be in the range of 10 to 11 (fairly light) on the scale. Most people work up to 11-13 or a moderate level. An exercise test may be useful after the initial recovery period to identify an exercise prescription or exercise guidelines. In addition, an exercise test can help to establish safe levels of exercise for you. Your healthcare provider should always direct exercise and activity above this level. Your healthcare provider will help you choose the best exercise level for you when you leave the hospital and for the future.

Diabetes

What is diabetes?

Diabetes mellitus (usually simply called “diabetes”) is a condition in which the glucose (sugar) level in the blood is high because the body does not have enough insulin or does not respond to insulin to keep your sugar level under control. Insulin is made in the pancreas and controls the level of sugar in the blood by helping the cells in the body use the sugar as fuel.

There are different types of diabetes:

- “*Type 1 Diabetes*” Type 1 diabetes is an autoimmune disorder in which the immune system destroys the cells of the pancreas and the pancreas makes little to no insulin. In the past it was called Juvenile Onset diabetes.
- “*Type 2 Diabetes*,” is the most common form of diabetes. There are 3 problems that may cause your sugar level to rise: 1. “insulin resistance”- your muscles don’t take in sugar from your blood, 2. your liver may release too much sugar, 3. your pancreas doesn’t make enough insulin. In the past it was called Adult Onset Diabetes

How is diabetes treated?

The methods of treatment may vary depending on the type of diabetes you have. Patients with Type 1 Diabetes require insulin from the onset, diet, exercise, and weight loss. The focus of treatment for people with Type 2 Diabetes is diet, exercise and weight loss. Oral medications can be used to treat Type 2 diabetes, when diet alone is not enough to control the blood sugar level. Oral medications help the pancreas make more insulin, control the liver from releasing too much sugar, slows the digestion of carbohydrates, and increase the sensitivity to insulin.

Sometimes oral medications may not help in controlling Type 2 Diabetes. If this happens insulin injections may be needed to lower the blood sugar. Most people can learn to give themselves insulin shots.

How is diabetes related to heart disease?

People with diabetes are at a high risk for coronary artery disease. High levels of sugar in the blood make the arteries stiff and narrow and can lead to a block in the blood flow to the heart. People with diabetes are also at risk for having high blood pressure and high levels of triglyceride and cholesterol in the blood. Heart attacks are more likely to be more severe in people who have diabetes. Many people with diabetes will not have the typical chest pain (angina) of coronary artery disease. You should watch for other symptoms, such as having unexpected shortness of breath with exercise or exertion. All symptoms should be reported to your health care provider.



OTHER CONCERNS

High blood pressure

High blood pressure (hypertension) is a major risk factor for heart disease, kidney disease and heart failure. It is also the most important risk factor for stroke.

What can you do to control high blood pressure?

- *Take your medications* as your health care provider prescribed. It is important that you keep taking your medication because high blood pressure doesn't usually cause symptoms. Taking action to control your blood pressure by taking your medications avoids many life-threatening disorders. You should know the reason why you are taking each medication and its side effects. Tell them if you are having any side effects or problems with the medication.
- *Stop smoking.* Look at section on smoking.
- *Start an exercise program* and stay at a healthy weight. Being overweight is associated with cardiovascular disease, and it is also a risk factor for high blood pressure. You should target your weight goal to a body mass index (BMI) of less than 25. Each 2 pounds that you lose usually causes a drop in your blood pressure by 1-2 mm. Please look at the section on exercise for ideas about losing weight and increasing your activity.
- *Reduce your cholesterol level.* Look at the section on Dietary Changes to Improve Cholesterol Levels.
- *Limit your salt (sodium) intake.* As a rule of thumb, you should eat less than 2400 milligrams of table salt a day. If you have high blood pressure, your health care provider may tell you to eat even less salt. Ask them how much salt you can have each day. When you are shopping for food, look for products that say "low sodium". By law, products labeled "low sodium" have less than 140 milligrams per serving. Read the label of each food product that you buy to see how much sodium is in each serving. Be aware of "hidden sodium" in canned and fast foods.
- *Limit the amount of alcohol* your drink. More than three drinks per day can raise blood pressure. For example, for women, one drink per day is considered moderate drinking. Count as one drink, 12 ounces of beer, 5 ounces of wine or 1.5 ounces of hard liquor.

Tips for Success

- Find a comfortable place to exercise especially when the weather outdoors is too cold, too hot or humid. Many people say that malls, health clubs and high school gyms are good choices.
- Begin each exercise session warm ups and finish with cool downs. It gives your heart and body time to adjust with the change in pace.
- Warm up at a slower pace of exercise for 5 minutes.
- After your warm up perform some gentle stretching (see page 6)
- Exercise at a medium pace for 20 to 40 minutes.
- Cool down at a slower pace for 5 minutes before stopping exercise.
- Walk on level ground.
- Avoid walking up hills. If not, zig zag up the hill.
- You should be able to talk without losing your breath when exercising. If you can't, slow down.
- If you are really tired after walking or if it takes more than 1 to 3 minutes to recover, then you probably did too much. Next time, slow down or don't walk for as long a time.
- Wait one or two hours after eating a meal before you walk or perform other physical activity or exercise.
- Drink plenty of non-caffeinated fluids unless your healthcare provider tells you not to.
- Check with your doctor before starting to play more active sports such as golf, tennis, or contact sports.
- Listen to your body signals and change your activity as needed.

Sexual activity

In general, it is safe for you to have sex once you go home. Your chance of having heart problems during sex is low as long as it is with your usual partner and in your usual manner. The effort you use during sex is about the same as walking briskly for several minutes or climbing two flights of stairs. You should be aware of your effort and watch for any warning signs of heart problems as you would with any other activity or exercise.

It is important to talk to your loved one about your fears and concerns. Be open and honest about how you feel.

Men who are currently using medicines that contain nitrate, such as nitroglycerin and Isordil should not use Viagra®, Cialis® and Levitra®. If these drugs are taken together they may lower the blood pressure too much. Be sure to talk to your healthcare provider about this.

If you develop any of the symptoms on page 8, it is important to stop and relax. You will then need to call your health care provider as soon as possible.

Cardiac Rehabilitation/Secondary Prevention Programs

Cardiac Rehab is indicated for a variety of pts who have been diagnosed with heart disease, which includes but is not limited to diagnoses such as heart attack, angina or who have undergone coronary bypass surgery, coronary artery stenting or a balloon procedure, valve surgery or cardiac transplantation. Cardiac Rehab is also appropriate for patients with chronic heart failure.

The goals of cardiac rehab (also known as "secondary prevention") are:

1. to prevent disability resulting from heart disease, irrespective of the person's age or occupation,
2. to prevent further heart events
3. to prevent more hospitalizations due to heart disease
4. to prevent death from cardiac causes

The cardiac rehab program includes individually prescribed exercise and interventions designed to modify coronary risk factors. The benefits of cardiac rehab and secondary prevention are broad and compelling and have demonstrated reductions in death from heart disease.

In coordination with your PCP and cardiologist, the program staff provides services and counseling *specific to your individual risk factors* as well as individualized nutritional guidance/advice, guidance for weight management, and a prescription for exercise and activities of daily living. Additionally, effective and healthy stress management strategies are a focus and include instruction in specific and diverse techniques.

The MGH Cardiac Rehab Program /MGH Cardiovascular Disease Prevention Center can be reached at:

The CV Disease Prevention Center/MGH Heart Center
25 New Chardon Street, Suite 301, Boston, MA 02114
Telephone (617)726-1843 - Web site: www.massgeneral.org/cardiacprevention
The cardiac rehab staff can also help facilitate your involvement in a program closer to your home if you prefer.

Heart Attack Primary Prevention Program

If you or a family member has been diagnosed with heart disease, there may be some important cardiac health considerations for your family members.

The Heart Attack Primary Prevention Program is available to family members with a history of premature heart disease to assist with identifying and managing cardiac risk factors and preventing the onset of heart disease. This program can be reached at:

The MGH Heart Attack Primary Prevention Program
The CV Disease Prevention Center/MGH Heart Center
25 New Chardon Street, Suite 301, Boston, MA 02114
Telephone (617) 726-1843 - Web site: www.massgeneral.org/cardiacprevention

- Move: go to another room
- Sit quietly and breathe deeply for one or two minutes
- Walk! Exercise is the best way to help reduce stress.

Try out several of these tips and see what works for you!

Cardiac rehabilitation programs can help you learn how to control stress in your life. This treatment will be helpful for your heart, health and well-being.

For additional information, contact:

- Your Primary Care Physician

Massachusetts General Hospital contacts:

- MGH CR Program/MGH CV Disease Prevention Center (617) 726-1843
- Benson-Henry Institute for Mind Body Medicine (617) 732-9130
- Social Service Department (617) 726-2643
- Psychiatry Department (617) 724-7792



Why Highlight Depression?

Studies have shown that depression is very common among people with heart disease. In fact, depression has been shown to be as much of a risk factor for heart disease as smoking is. It is important for you to talk to your health care provider should you experience any of the symptoms listed above or any other changes in your physical or emotional state. Many people attribute symptoms to their heart disease that may in fact be symptoms of depression.

It is important to identify and seek treatment for depression as studies have shown that depression is very treatable and remaining depressed increases your risk for even more serious heart problems or other diseases. Most heart patients can safely take medications for depression that may be prescribed or some patients do well in more traditional talk therapy. Most often a combination of both provides the best results.

A lot of times family members and loved ones can tell when you are stressed or depressed. They may be able to see what you can't see. Family members need to learn how to show concern but not be too protective. They need to show support but let you work on your own stress and problems.

A number of people have stress and/or depression after a serious life event or change (like a severe illness, heart attack, cardiac surgery, or illness in a loved one). It is important to recognize stress and/or depression as it may cause problems with:

- Recovery from your current medical condition or recent surgery.
- Ability to reduce your cardiovascular risk factors (i.e. losing weight, stopping smoking and exercising regularly).
- Risk of having another heart attack or dying.
- Ability to feel better and enjoy your life.

Many of the symptoms of stress can be confused with the symptoms of heart disease, or some of the side effects of cardiac medications. It is important to tell your health care provider if you are experiencing any of these symptoms.

How can I reduce stress?

There are many ways you can begin to reduce your levels of stress:

- Identify stress in yourself - keep a diary
- Find new ways to adapt, change, or avoid stressful situations
- Relax and exercise regularly
- Use emergency stress stoppers such as:
 - Count to 10
 - Break big problems down into smaller parts that you can manage
 - talk to someone about whatever is troubling you

SMOKING

How does smoking affect the heart?

Smoking is a major risk factor for heart disease. While there are over 4,000 chemicals in cigarettes, the main components that harm the heart are nicotine and carbon monoxide. Nicotine can stimulate the heart to beat faster, raise blood pressure, and constrict the blood vessels. Carbon monoxide is a gas that, when inhaled into the lungs, replaces oxygen in the blood. This deprives your heart and blood vessels of oxygen, causing damage and making the heart work harder. The chemicals in smoke can also cause the blood to clot and interfere with the absorption of your medications.

Is it too late to quit now?

No matter what your age, the single most important change you can make for the health of your heart is to stop smoking. One immediate benefit is a reduced rate of new heart attacks. Within a year your risk for future heart attacks will be cut in half and within 2 to 3 years the risk of a heart event will be almost the same as a nonsmoker.

What will help me quit now?

Most people have thought about quitting at some point but there always seems to be a good reason to quit tomorrow. Having a serious heart problem is often a strong motivator to finally quit altogether. Without preparation and knowing what to expect it can be very hard to quit. Even if you find it easy right now, once you are home and back in your familiar surroundings you may feel the urge to return to smoking.

We would like to suggest some things you might do to make the process successful and a little easier.

A good **first step** is to think of all the reasons you might want to quit smoking and write them down. If you have smoked for many years it might be hard to remember what life was like without cigarettes. Try looking forward to what life might be like without being chained to cigarettes. Write down all your reasons for choosing not to smoke. For example, your breath will be fresher, your clothes won't smell of smoke, you'll be able to climb stairs without feeling short of breath. The more reasons you can come up with the better. Look at this list every day as a reminder of why you are not smoking.

The **second step** is to make a solid commitment to quitting. Signing a “Quit Smoking” contract with a trusted friend, spouse, or your health care provider is a way to do this. If never smoking again is too hard to commit to, sign a contract that you will not smoke for the next month - and then renew it. A sample contract is at the end of this section.

Once you are at home you can expect three types of urges:

Let’s look at these one by one:

(the following section was adapted with permission © *An Active Partnership for the Health of your Heart*, 1990. Copyright American Heart Association):

1. The Physical Urge

You’ve heard that people can be addicted to cigarettes. Nicotine is a powerful drug. When inhaled it reaches your brain in 7 seconds. It releases chemicals that make you feel relaxed and give you pleasure. Until you have been off nicotine for a few months you are likely to feel deprived and crave nicotine. The good news is that these feelings can last only a few minutes and then go away - whether you have the cigarette or not. Physical urges will still keep coming for a while, but these will get fewer and farther apart as time goes by.

2. The Feeling of Being Deprived

You may have used cigarettes for all sorts of reasons; everything from getting rid of hunger pangs to coping with awkward social moments, giving yourself a quiet moment, to rewarding yourself for a job well done. You’re bound to feel deprived, for a while. This is the time to think of new rewards and pleasures that you can substitute for smoking. Maybe it’s calling a good friend, buying some flowers, or listening to music. Try making a list of rewards before you go home.

3. Habit

It’s not easy to change habits- but you can keep your old habits from sneaking up on you and taking you by surprise. You will need to think ahead to the times when your body is programmed to want a cigarette and learn how to cope with these times- without smoking. More ideas follow...

Stress and Depression

What is stress?

Stress is a reaction your body has to an event or events that are threatening. Everyone may have symptoms of stress from time to time. It is important to remember that not all stress is bad. Positive stress gets you up and moving each day. However, certain types of long lasting stress can increase the risk of heart disease. The body reacts in these ways when it is under stress:

- Adrenaline flows (the feeling you get when frightened)
- Breathing speeds up
- Heart rate speeds up
- Blood pressure rises

How does stress affect me?

Stress affects everyone in different ways. You might have physical symptoms like tense muscles, headaches, or an upset stomach. You might have emotional symptoms instead like being worried, sad, or anxious. It is important to see how stress affects you. If you can see your own body’s cues, you can then do something about it.

Some people may have emotional symptoms such as:

- *Anxiety*: a sense of unease or worry about your health or other problems.
- *Depression*: feeling sad, discouraged, hopeless, irritable or feeling down on yourself, changes in eating and sleeping patterns, lack of interest in activities, excessive crying, increased restlessness or irritability, decreased energy, thoughts of death or suicide, or increased feelings of guilt.
- *Anger*: having a short fuse, being frustrated, annoyed or impatient
- *Mood swings*: sudden changes in emotion

Some emotional symptoms are common the first few weeks after you get out of the hospital. If they don’t go away please let your health care provider know.

Some people may not notice any “emotional” symptoms. They may notice other symptoms instead, such as:

- Not being able to sleep
- Aches and pains often related to muscle tension
- Crying easily
- Unable to concentrate on things

Suggested cookbooks and magazines

American Heart Association Cookbook Fourth Edition
Cooking a la Heart by the Mankato Heart Health Program
Dean Ornish's Program for Preventing Heart Disease by Dean Ornish, M.D.
Eat, Drink & Be Healthy by Walter Willet M.D.
Eater's Choice: A Food Lover's Guide to Lower Cholesterol by Ron Goor. Ph.D.
and Nancy Goor
The Good Food Gourmet by Jane Brody
Low-Fat & Loving It by Ruth Spear
Low-Fat, Low-Cholesterol Cook Book by the American Heart Association
Low Salt Cook Book by the American Heart Association
Moosewood Restaurant Low-Fat Favorites
The New American Diet by Dr. William and Sonja Connor
Cooking Light magazine
Vegetarian Times magazine

Suggested web sites

www.eatright.org (The American Dietetic Association)
www.americanheart.org (The American Heart Association)
www.mayoclinic.com (Choose Foods and Nutrition from the pull-down menu.
Mayo Clinic Health Oasis Virtual Cookbook)
navigator.tufts.edu/ (Tufts Nutrition Navigator)

Nutrition Services Contact Information:

Inpatient Registered Dietitian _____

Outpatient Registered Dietitian _____

Emergency urge control

Here are some other tips for dealing with sudden urges to smoke:

- Follow these three simple steps:

Stop! Think Act

- When you get an urge to smoke just say **Stop!** out loud or in your head. Think about your reasons for choosing not to smoke, and then **Act: Deep** breathe; drink water; do something else; delay giving into the urge by distracting yourself from the thought. Remember the urge will go away in a few minutes. In fact you have probably already been using this technique while in the hospital just naturally!
- Not having cigarettes around is critical. Ask someone to throw away any remaining cigarettes or do so yourself as soon as you are home.
- Make up a "survival kit", filled with cigarette substitutes like hard candy and chewing gum, and distractions like little puzzle books and a squeeze ball.
- Try not to get too tired or hungry. Make a point of eating three good meals a day and have snacks on hand if you are going to need them. Get plenty of rest.
- If you drink coffee or tea, cut down for a few weeks, for two reasons: the drink may remind you of cigarettes and the caffeine may make it hard for you to relax. When you do drink it choose a place you don't normally sit, or a place where smoking is prohibited.
- Learn to relax. Many ex-smokers say taking a few deep breaths when experiencing an urge helps a lot.
- Get in the habit of regular exercise. Make exercise part of your plans every day.
- Write down how much money you used to spend on cigarettes each day: _____. Now multiply by 100: _____. Remember, that's about how much you will save in three months.
- Now take that money you are saving and treat yourself!

Where can I get more help?

While in the hospital:

If you are having urges that are difficult to manage while you are in the hospital, talk to your health care provider. There are nicotine replacements and other medications (for example, Zyban® also known as Wellbutrin) that can help you get through this period. Speak to your doctor or nurse practitioner about obtaining prescriptions before leaving the hospital. You might consider even starting something while you are still in the hospital.

Ask your nurse for additional information and watch the American Heart Association's "Quitting Smoking" video for more hints to curb your urges. This and other helpful videos are available by request on the TV in your room.

Ask for a referral to the **Quit Smoking Service** and a counselor will come to see you while you are still in the hospital. The counselor can talk to you about **Quitworks** or other free telephone counseling programs for after discharge.

Note to Spouse, Relative or Friend

Your role can be very important – but not as a policeman or watchdog. Concern and fear for your loved one often turns into nagging. Unfortunately, nagging can often make people want to smoke.

We suggest you follow these guidelines:

- Be practical. Make sure there is plenty of low fat food available. Suggest things to do that are entertaining, or distracting, or that help pass the time.
- Ex-smokers can be irritable for a while after they quit. Be patient! These are withdrawal symptoms that will soon fade away.
- **If you smoke**, the best thing to do is to quit. If you're not ready to quit yet, then don't light up in front of your ex-smoker. If possible smoke outside, and hide all cigarettes.
- Help to establish the house as a smoke-free zone.

Recent quitters primarily need your support and understanding. Just be a good listener.

After discharge:

You may wish to contact the following agencies for continuing help and support:

- **MGH Quit Smoking Service - (617) 726-7443**
- **National Network of Tobacco Cessation Quitlines - 1 (800) 784-8669 or 1 (800-QUITNOW)**

- Reduced calorie mayonnaise and salad dressings
- Poultry without skin.

Invest in the following cooking tools

- Non-stick frying pan
- Steamer

When dining out:

- Phone ahead. Ask if they can meet your requests.
- Fish, chicken, and meat are generally lowest in fat and calories when boiled or baked. Ask for your food to be cooked without butter or other fats.
- Request grilled, steamed, poached, or baked food rather than fried.
- Avoid entrees with cheese or cream sauces.
- Order salad dressing, gravies on the side. Use small amounts.
- Order a soup or salad to help fill you up.
- Take extra food home or split an entrée.

Some ideas for low fat snacking

1 small fresh fruit	1 Yogurt
½ cup canned fruit packed in water or juice	12 Baked potato chips
½ cup frozen yogurts	1 Pria bar
14 Kashi TLC Crackers	8 plain mini popcorn cakes
2 large rice cakes	air popped popcorn

- A Registered Dietitian can help you with an eating plan that is just right for you. Ask your health care provider about a referral to an outpatient nutrition clinic or cardiac rehabilitation program.

Portion size guidelines

Understanding portion sizes is the key to maintaining a healthy body weight and meeting your vitamin, mineral, and calorie needs daily. Here are a few tips to get you started.

ONE PORTION OR SERVING OF ...	IS EQUAL TO ...
Milk, yogurt and cheese 2-3 servings/day	1 cup milk or yogurt 1 1/2 ounces of cheese (size of 2 dice)
Meat, poultry, fish, dried beans, eggs and nuts 2-3 servings/day	2-3 ounces of cooked lean meat 1/2 cup cooked dry beans 1 egg 2 TB peanut butter or 1/3 cup nuts
Vegetables and fruit at least 5 servings/day	1 cup raw leafy vegetables 1/2 cup cooked 3/4 cup vegetable juice 1 medium apple, orange 1 small banana 1/2 cooked or canned fruit 3/4 cup fruit juice
Bread, cereal, rice, and pasta 6-11 servings/day	1 slice of bread 1 ounce ready-to-eat cereal 1/2 cup cooked cereal, rice, or pasta

Helpful hints when cooking light

- Roast, bake, broil, grill, steam, microwave, stir-fry with 1 tablespoon oil, or less.
- Get flavor/moisture from:
 - Herbs/Spices (parsley, oregano, cumin, pepper, etc.)
 - Broth (vegetable, chicken, beef, fish, clam juice/broth)
 - Wine (red, white, sherry, sake)
 - Flavored vinegar's (balsamic, tarragon, raspberry)
 - Pungent oils (sesame, chili oil)
 - Vegetables (garlic, onions, peppers, celery, carrots)
 - Fruit (lemon, lime, orange juice, jams, pineapple, citrus zest)
 - Yogurt/evaporated skimmed milk/non-fat sour cream
 - Sharp cheeses (parmesan, romano, feta)

Outside Organizations:

Ask about free stop smoking material and program referrals.

- American Lung Association** (800) 586-4872
- American Heart Association** (800) 242-8721
- National Cancer Institute** (800) 422-6237

Suggested web sites:

www.trytostop.org (Massachusetts quitline web site)

www.nicotine-anonymous.org (non-profit 12-Step fellowship program)

www.smokefree.gov (created by the National Cancer Institute)

www.stopsmokingdoctors.com (nationwide registry of smoking cessation services)

No Smoking Agreement

I, _____ agree to stop smoking as of _____.

I also agree to ask for support from my doctor, nurse, family and friends as needed during my journey on becoming a nonsmoker. If I should have a slip or a near slip that undermines my confidence, I will call my support person, who is _____.

Signed _____ Date _____

Witness _____ Date _____



HEALTHY EATING GUIDELINES

Part I

Achieving a healthy weight and choosing healthy foods can reduce your risk for heart disease.

What can you do?

- Try to achieve and maintain a healthy weight.
- Choose healthy fats.
- Include high fiber foods daily.
- Include soy proteins and legumes as an alternative to meats in your diets.
- Limit salt and salty foods.

How do you do that?

Achieve or maintain a healthy weight:

Most adults need about 11 calories per pound to maintain their weight. You need to eat fewer calories than that to lose weight. Calories are a form of energy (think about the gasoline for your car). There is no magic when it comes to weight loss. No pills, fad diets, or gadgets work in the long run. The safest and most successful way to lose weight is to do it slowly about 1 to 2 pounds per week. You do not need to “go on a diet”. You need to make changes in your eating habits and exercise regimen that you can continue over a lifetime. Types of exercise that use oxygen to provide energy to muscle raise your heart rates. Simple activities such as walking, running, dancing, gardening and other activities all burn calories (even a little helps!).

Choose healthier fats:

Diet plays an important role in the prevention of heart disease. Making simple changes in the amount and type of fats can reduce blood cholesterol levels and your risk for heart disease.

- Fats provide the most concentrated source of calories. There are four kinds of fats in foods you eat: saturated, monounsaturated, polyunsaturated and trans fat. It is important to remember to decrease total fat consumption.
- Saturated fat and trans fat (bad fats) raise the level of cholesterol and your risk for heart disease. They are usually of animal origin. They are found in meats, whole milk, cream, cheese, butter, etc. but also found in some vegetable fats (coconut oil, palm oil and cocoa butter). These fats are usually hard at room temperature.
- Trans fat also known as hydrogenated oils are mostly found in margarines, shortenings, peanut butter, commercial baked goods and fried foods.

FOOD GROUPS	EAT LESS:	REPLACE WITH:
PROTEIN (2-3 servings a day)		
MEAT/POULTRY/FISH:	Fatty red meat (heavily marbled steaks, ribs) Processed meats: Bologna, salami, regular ham, and pastrami. Liverwurst, organ meats, cold cuts, hot dogs, bacon, sardines, and sausage. Dark meat poultry	Meat: Lean flank, rump, or london broil, lamb leg, ground turkey breast. Pork: Tenderloin (trimmed, roasted) boneless sirloin chop, boneless top loin chop, boneless loin roast, pork loin chop. Turkey: White breast meat or 98% fat-free deli meats Fish: All fresh/frozen fish. Tuna (canned in water) Poultry: without skin
VEGETARIAN SOURCES:	Fried tofu Whole fat refried beans Shells of taco salads	Peanut butter, veggie burgers, tofu, tempeh, TVP (texturized vegetable protein) TSP (texturized soy protein), bean dishes, soynuts, baked tofu
EGGS:	Egg yolks (limit to 3/week)	Egg substitutes, Egg whites
FOOD GROUPS	EAT LESS:	REPLACE WITH:
DAIRY: (2-3 servings/day)	Whole milk, whole milk cheeses, yogurt	Skim or 1% milk, reduced-fat cheeses low-fat sour cream, soy milk, rice milk
	Butter	Low-fat tub margarine (look for first ingredient as liquid canola oil) butter sprinkles, apple butter, fruit spread, Promise Ultra®, Olivio®, Smart Balance®, Smart Beat®, Benecol®, Take Control®
	Cream	Evaporated skim milk
	Ice cream	Non-fat or low-fat yogurt, ice cream, ice milk, sherbet, sorbet, Tofutti®
FATS & OILS (Use sparingly)	Butter, coconut oil, palm oil, palm kernel oil, lard, bacon, hydrogenated fats and foods where these are found	Unsaturated oils: canola, olive, safflower, sesame, soybean oil, tub margarine (review above list), low-fat salad dressings, olive oil, flaxseed oil
FRUITS & VEGETABLES (At least 5 servings a day)	Vegetables prepared with butter or cream	Fresh, frozen, low sodium canned or dried
BREADS, GRAINS, PASTA & CEREALS (6-11 servings a day)	Coissants, donuts, muffins, pies, cakes, cookies	Fig bars, ginger snaps, animal crackers, graham crackers, angel food cake, low-fat granola bars
DESSERT	Breads in which oil, butter, or eggs are major ingredients	Whole-grain breads, cereals, bagels, English muffins, breadsticks, matzos, low sodium saltines, melba rounds, low sodium pretzels



HOW FOOD LABELS CAN HELP YOU EAT BETTER

Most packaged foods now have a label called "Nutrition Facts." This label tells you what you're really eating. By comparing the labels on products, you can plan a balanced diet and cut down on fat, salt, and sugar for better health.

Calories from Fat

Calories from fat should be 30 percent or less of your total daily calories. Look for foods that have the fewest calories from fat.

Total Fat and Saturated Fat

Total fat and saturated fat are shown in grams (g). The fewer grams, the better. Grams of saturated fat should be less than one-third of your total grams of fat.

Cholesterol

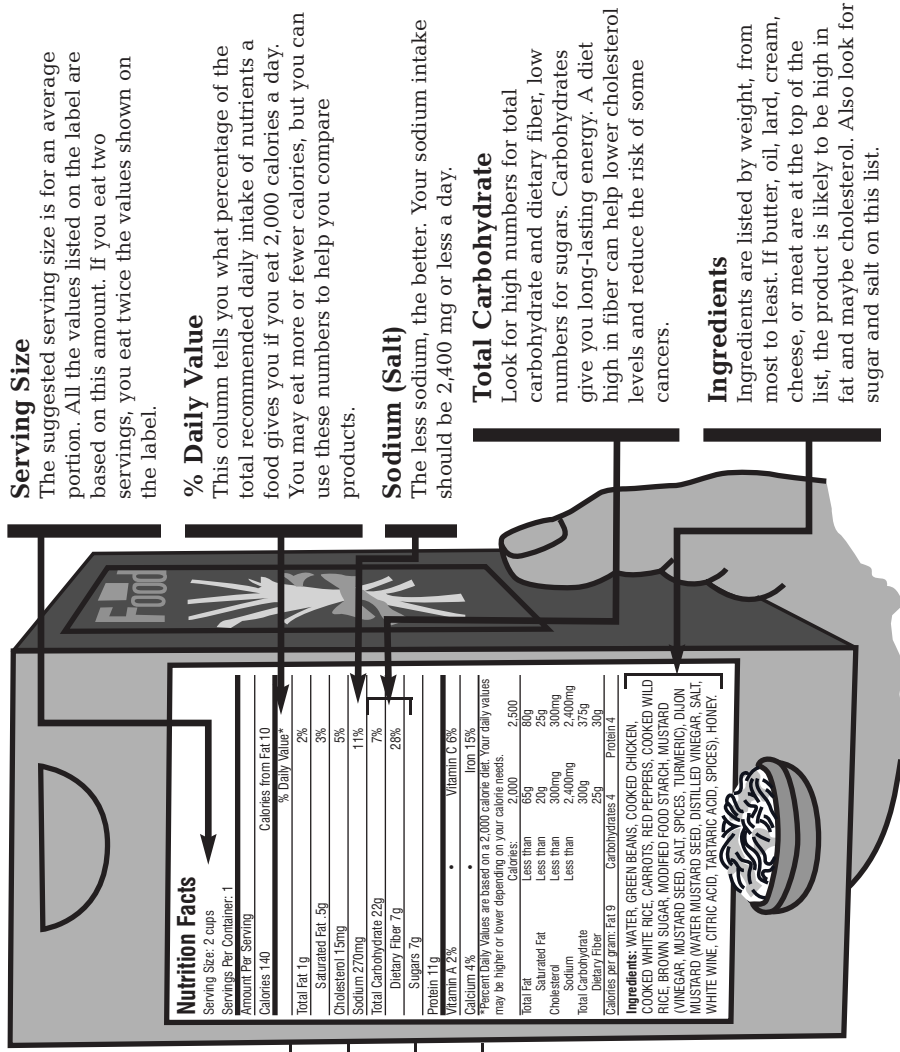
The less cholesterol, the better. Too much cholesterol can lead to heart disease. Your goal should be to eat less than 300 mg of cholesterol a day.

Protein

You need about 45-60 grams of protein a day. You get protein from poultry, fish, meat, eggs, milk, cheese, nuts, beans, grains, and some vegetables.

Vitamins and Minerals

You need 100 percent of each of these in your daily diet. Choose foods with the highest values. Most foods won't give you all you need of any one vitamin or mineral, however.



- Monounsaturated and polyunsaturated fats lower your blood cholesterol when they take the place of saturated fats. They are usually a fat of plant origin and are liquid at room temperature. Some good sources of monounsaturated fats are canola oil, olive oil and peanut oil.
- Omega – 3 fatty acids also lower your risk for heart disease. Salmon, soybean and flax seeds are good sources of omega-3 fatty acids.

Unsaturated Fats: Healthy Fats

Monounsaturated Fats <ul style="list-style-type: none"> • Canola oil • Olive oil • Peanut oil 	Polyunsaturated Fats <ul style="list-style-type: none"> • Safflower oil • Sunflower • Corn oil • Soybean oil
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Omega 3 fatty acids: Healthy Fats

Fish - highest sources <ul style="list-style-type: none"> • Atlantic Mackerel • Trout • Pacific herring • Northern salmon • Albacore tuna 	Vegetable <ul style="list-style-type: none"> • Flaxseed oil • Canola oil • Soybean oil • Soy products
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Saturated fats: Bad Fats; avoid/use sparingly

Animal Sources <ul style="list-style-type: none"> • Red meat • Processed meats (i.e. cold cuts, sausage, hot dogs) 	Vegetable Sources <ul style="list-style-type: none"> • Vegetable shortening, palm kernel oils • Tropical oils (i.e. coconut, palm) 	Dairy Sources <ul style="list-style-type: none"> • Whole milk • Cheese • Ice cream • Butter • Sour cream • Cream-based soups • Creamy dressing 	Miscellaneous Sources <ul style="list-style-type: none"> • Baked products • Fried foods • Cocoa butter (i.e. chocolate) • Nuts (i.e. cashew, macadamia)
Trans Fats: Bad Fats, AVOID Cookies, Crackers, Chips, Some margarine, Processed baked goods, Some peanut butter			

Include high fiber foods:

Fiber is the part of a plant-based food that your body cannot digest and absorb. Foods high in fiber lower your blood cholesterol levels. Dietary fiber is found in whole grains (whole wheat breads and cereals), legumes (dried beans and peas), fruits (apples, pears), and vegetables. We recommend you eat a minimum of five fruits and vegetables a day. When regularly eaten as a part of your diet, fiber has been shown to help lower cholesterol.

The American Heart Association recommends a total dietary fiber intake of 25 to 30 g/d from foods, not supplements, to ensure nutrient adequacy and maximize the cholesterol-lowering impact of a fat modified diet.



Good Sources of Fiber

Cereal: 100% Bran, Oatmeal, All-Bran
Fruits: apricot, apple with skin, strawberries
Vegetables: green peas, beans, spinach, broccoli
Nuts and seeds: walnuts, almonds, sunflower seeds
Whole wheat breads, English muffin (oatbran)

Include Soy Protein and legumes as an alternative to meat in your diet:

Soy claims were approved by the Food and Drug Administration (FDA) in 1999. They suggest soy protein combined with a diet low in saturated fat and cholesterol may reduce the risk of heart disease. Twenty five(25) Grams(gm) of soy protein daily is required to show significant cholesterol-lowering effect. Legumes such as lentils, chickpeas, black-eyed beans and peas are very good choice. They are low in fat and high in protein. They are also a good source of fiber.

Soy protein Sources

Soy milk, 8oz (6-10g)
Soy Yogurt, 6oz (6g)
Edamame Soybeans, 1/2 cup (6g)
Soy nuts, 1/4 cup (15g)
Glennys Soy crisps, 14 crisps (10g)
Tofu, 1 cup (15-20g)

Limit your Salt (Sodium) Intake:

Sodium is an essential nutrient for good health. However, the body needs only 230 milligrams (mg) per day, which is equivalent to 1/10 teaspoon of salt. Low sodium (salt) diet may be beneficial for people with high blood pressure, kidney diseases, congestive heart failure and some other conditions that contribute to fluid retention. Try to reduce your sodium intake to no more than 2400 milligrams per day.

Some ways to limit salt (sodium):

- Avoid using table salt in your diet
- Avoid using salt during cooking
- Limit convenience or processed foods
- Read Food Labels for sodium per servings: try to choose foods with less than 140 mg. per serving.

Daily Weights

If you have been asked to weigh yourself daily, weigh yourself at the same time each day and keep a record of your weights.

If your weight increases more than 3 pounds in one day or 5 pounds in two days, call your health care provider.

Part II

You know what to eat and what to avoid from the above section. Let us now talk about ways to help you choose the right foods.

- Shopping tips
- Reading labels
- Portion size guidelines
- Helpful hints when cooking light
- Dining out
- Low fat snacking ideas

Shopping tips to get you started

A healthy diet starts by using fresh foods and limiting the use of processed foods. Using the shopping tips will help you plan meals that will keep your heart healthy and help you stay a healthy weight.

- Purchase more fresh fruits and vegetables, whole grain products and legumes.
- Buy more fish, chicken, and turkey instead of beef, pork, lamb, and veal.
- Buy lean cuts with the least visible fat or marbling.
- Select skim or 1% milk over 2% or whole milk.
- Select low fat cheeses with less than 5 grams of fat per ounce.
- Buy soft margarine with the least amount of saturated fat.
- Read labels for nutritional facts and ingredient lists.