



What are the facts?

**HEALTH INFORMATION
FOR WOMEN**

PUBLISHED BY

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The Women's Fund for Health Education and Resiliency is a 501 (c) (3) non-profit organization whose mission is to provide Houston area women and girls with the tools they need to be advocates for their health.

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This book has been reviewed for technical accuracy by medical professionals. It does not recommend exclusive courses of treatment or procedures to be followed nor does it intentionally exclude other acceptable information, methods of treatment or religious convictions.

Before acting on any information herein, the reader should consult with a physician.



Preface

Since 1979, The Women's Fund for Health Education and Resiliency has funded medical research and provided health education for women. Our educational programs and health publications have reached hundreds of thousands of women and girls in the Houston area with free preventive health information in English and Spanish.

What Are the Facts? was first published in 1985 with the conviction that current information will motivate women to seek healthier lifestyles and help them share the responsibility of making health care decisions with their physicians.

Since that time, revisions have been made to update the medical information and tens of thousands of women in Houston and surrounding areas have benefited from the preventive health information contained in the publication. Health care today must be a team effort. You must be an active partner with your doctor, pharmacist and even your insurance company in monitoring and managing your health.

Acknowledgement

The Women's Fund dedicates *What Are the Facts?* to **Wendy Haskell Meyer**, co-author of the original "*Women and Health – A Primer on Women's Health*," now named "*What Are the Facts?*" We gratefully acknowledge the following individuals and organizations for reviewing this version of *What Are the Facts?* for medical accuracy: **David J. Braden, MD**; **Igor M. Chermes, MD**, The Neurology Center; **Nina H. Dereska, MD**, Women's Pelvic Health and Continence Center; **Thomas Earthman, MD**; **John F. Eichelberger, MD**, Medical Clinic of Houston, LLP; **Karla Kurrelmeyer, MD**, Methodist DeBakey Cardiology Associates; **Sarah Lowell, RD, LD**; **Mary Tonry Neal, MD**, Volunteer Gynecologic Physician at San Jose Clinic; **Polly Niravath, MD** and **C. Kent Osborne, MD**, Lester & Sue Smith Breast Center—Baylor College of Medicine; **Lauren Phillips, MD**, Sugar Land Women's Health; **Marilyn Sumner**, Insights 4 Leaders; **William L. Winters, MD**, Methodist DeBakey Heart and Vascular Center. We are also forever grateful to **Jane Braden**, long-time Women's Fund advocate, for coordinating this version and for her unending enthusiasm.

It is vital that women remain aware of the ongoing changes occurring in medicine. We hope readers find *What Are the Facts?* to be a source of timely information and an inspiration for healthier lifestyles. It is made available at no cost.

The Women's Fund would like to express its unending appreciation to:
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Basics of Good Health

For Women



Now, more than ever, women need to be involved in their own health care. From prevention to proper screening to appropriate treatment—the responsibility begins with you! Hardly a day goes by without the announcement of another medical breakthrough. But despite the great strides made by medical research, until very recently the health status of women has been sadly neglected. Prior to 1994, when the U.S. government established the Office of Women's Health, research into women's health issues was significantly lacking.

After 1994 the National Institutes of Health finally began to enforce its long-ignored policy that any study or clinical trial that inappropriately excluded women would not receive federal funding. In 2013, women represented slightly more than half of the U. S. population—almost 51%. U.S. Census data predict that women will continue to represent slightly more than half of the country's total population for the foreseeable future.

Fortunately, you can take a number of simple steps to maintain or improve your health. Lifelong good health relies on adopting positive habits that you can incorporate into your everyday life. Healthy women:

- ✓ Are physically and mentally active.
- ✓ Don't smoke, abuse alcohol or prescription medications, or take recreational drugs.
- ✓ Maintain a healthy body weight.
- ✓ Eat a varied diet containing generous amounts of fruits, vegetables, whole-grain foods, peas, and beans.
- ✓ Get plenty of rest and maintain a positive attitude.

Healthy women adhere to other practical recommendations for good health. They use sunscreen to protect their skin from sun damage and to reduce their risk of developing skin cancers. Plus, preventing sun-related wrinkles is much easier than trying to erase them later. Taking additional preventative measures will reduce your risk of developing other conditions common to women. For example, consuming calcium-rich foods helps prevent the “brittle bone” disease osteoporosis.

Take a proactive approach to your health and healthcare. Don't be afraid to question your doctor about your symptoms or treatment. Ask your pharmacist to explain the side effects of the medications you are taking and whether these drugs might interact with one another. Does this sound like a lot of work? Actually, once you have positive, healthy habits in place, you will feel so much better, and it won't seem like any effort at all. There is no substitute for good health habits.

Nutrition and *Exercise*



Good nutrition and regular moderate physical activity are essential to the healthy woman. Nutrition experts—registered dietitians (RDs)—can help you develop your own personalized eating plan. You can find a dietitian at your local hospital or by visiting “Find an RD” through the Academy of Nutrition and Dietetics (<http://www.eatright.org/find-an-expert>). A dietitian will guide you to science-based nutrition information that is tailored to your individual needs.

What You Eat...

Choose foods that are nutrient dense (high in vitamins, minerals, proteins, and healthy fats). Carbohydrates, proteins, and fats (also known as macronutrients) from your diet provide the calories, or energy, that you need to get through the day.

Still confused about what to eat? The experts suggest a healthy eating plan. Your plan should include foods from all the food groups. There are five major food groups (fruits, vegetables, grains, protein, and dairy) and we should pick one item from each group for each meal. When we do this, we are getting the essential vitamins, minerals, and

nutrients we need. Our plate should look like the one below: $\frac{1}{2}$ should be fruits and vegetables, $\frac{1}{4}$ grains, and $\frac{1}{4}$ proteins.

Major Food Groups



How much we should eat depends on our age and activity level. Women ages 19 to 30 need about 1,800 to 2,400 calories a day and ages 31 to 59 about 1,600 to 2,200 a day. For sample eating plans visit www.MyPlate.gov.

Dairy – fat free or low fat are healthy choices (4 calories per gram).

Grains – aim for 50% of what you eat each day to be whole grains (4 calories per gram).

Fruits & Vegetables – fruits and veggies provide key nutrients and dietary fiber. (4 calories per gram).

Protein (beans, meat, and poultry) – 4 calories per gram.

Although Fat is not a food group it is still important to know that fats have – 9 calories per gram.

Make Half of Your Plate Fruits and Vegetables

Make your plate as colorful as possible! Fruits and vegetables that are red, orange, or dark green are great choices. Increasing the amount of fruit you eat can be as easy as adding it as a side dish or dessert at meals. Focus on fruits! Vary your Veggies!

Make at Least Half of Your Grains “Whole Grain”

Be sure to include whole-grain foods, such as whole wheat bread, brown rice, oatmeal, or bran cereal each day. Always look for the term “whole grain” on the label. Whole grain foods maintain all or most of the kernel of grain. With “refined” grains, the kernel has been removed along with important vitamins, minerals, and fiber.

One way to make sure at least half of your grains are whole grains is to simply substitute a whole-grain food for a refined food. This could be as simple as eating 100% whole wheat bread instead of buying white bread or switching to brown rice instead of white rice.

Go Lean with Protein

Another important way to improve or maintain your health is to choose lean protein foods. You can meet your protein needs in a variety of ways that are both nutritious and delicious.

Beans, nuts, soy, and seafood are lean protein sources that will add variety to your meals. Keep in mind that because nuts and seeds can be high in calories, you should enjoy them in moderation. Try to have seafood at least two times a week. Choose fish that are higher in good oils (such as omega-3 fatty acids) and lower in mercury. Trout and salmon are good choices.

You can also go lean with low-fat cuts of meat, such as round or sirloin and ground beef that is at least 90% lean. If possible, trim and drain fat from meats. Removing the skin from poultry also will remove fat and calories, making it a leaner food than it was before.

Eggs are a great source of lean protein, and egg whites by themselves are cholesterol-free and low in calories.

Calcium-Rich Foods

Calcium is an important part of a healthy diet because it helps build and maintain strong bones and teeth. Milk and milk products, such as low-fat and fat free milk, low-fat cheese, and yogurts, are great sources of calcium. Regular cream cheese, cream and butter are not part of the dairy food group because they are high in saturated fat and have little to no calcium.

Ways to increase calcium-rich, low-fat, or fat-free foods in your diet include changing to lower-fat milk and swapping full-fat dairy ingredients in recipes with lower-fat choices. If you are lactose intolerant and use soymilk instead of dairy milk, be sure to check the food label on soymilk to ensure that it has at least 300 milligrams of calcium.

Fat

Fat is a much more concentrated source of calories, producing 9 calories per gram. Consuming only a moderate amount of fat each day helps you control your caloric intake, which decreases the risk of obesity and helps decrease your intake of saturated fat. Dietary fat is found naturally in foods like fatty meats and whole milk, or it is added during cooking or at the table when foods are fried or smothered in butter, margarine, or a high-fat sauce or dressing. When you do use fat, choose olive, canola, corn, safflower, sunflower, or soybean oils for cooking and on salads.

The main categories of naturally occurring fats are saturated, polyunsaturated, and monounsaturated. Most foods that contain fat are a mixture of these three types. Trans fats are man-made fats that are created from polyunsaturated fats during food processing.

Saturated. The recommendation to eat less saturated fat and dietary cholesterol is aimed at decreasing your risk of heart disease—the biggest killer of women (see page 22). Saturated fat should account for less than 10% of your total daily calories.

Foods high in saturated fat include—

- ✓ Meat fat and poultry skin.
- ✓ Dairy foods, such as whole milk, butter, and cream.
- ✓ Egg yolk.
- ✓ Tropical oils, including palm kernel oil, coconut oil, and palm oil.
- ✓ Hydrogenated (or hardened) fats, such as shortening and margarine.

Unsaturated. Unsaturated fats are “healthier” fats typically found in plants, and they remain liquid at room temperature. Olive oil and canola oil are examples of unsaturated fats, especially monounsaturated fat.

Trans fat. Trans fat is another form of unsaturated fat that is created from polyunsaturated fats during food processing. Because trans fats tend to raise levels of bad cholesterol, the recommendation is to eat foods that do not contain trans fat.

Weight-Loss Diets

New diet programs are being promoted every day. Fad diets can be low in calories, which can help you lose weight in the short-term. However, they may lack important nutrients. Choosing a MyPlate approach to dieting is safer and more effective. The experts recommend a balanced, reduced-calorie diet based mostly on fruits, vegetables, lean protein, low-fat dairy, and whole grains. Using the least amount of added sugars and saturated fat when making food is the healthiest way to prepare food. When made this way they are nutrient dense foods.

Drinks

Let's not forget about what we drink! What we drink should also be included in our daily calories. It is suggested that we drink water more often than sugary drinks. This includes soft drinks and alcoholic beverages.

When drinking alcohol, it is recommended to drink in moderation. Moderate alcohol intake is defined as no more than one drink per day for women and two drinks per day for men.

Although drinking alcohol can be part of a healthy eating plan, such as reducing your risk of heart disease. Don't start drinking to prevent disease.

Nutrition Facts Label

The information given on food labels will help you make healthy food choices and take control of your health.

Serving size is the amount of food to which all other numbers on the label refer to. Sometimes a food seems nutritious until we compare servings size to how much we usually eat. On the label below one serving is 2/3 of a cup and contains 230 calories. If you ate 1 1/3 cups you would be consuming 2 servings for a total of 460 calories. All other numbers listed would double.

Be on the lookout for foods that are high in saturated fat, trans fat, cholesterol, sodium (salt), and added sugars. Choosing these foods often can lead to heart disease, diabetes, high blood pressure, and obesity. Reading the nutrition facts label will help you identify foods that may not be the best choices for your health.

START WITH:

- Serving size
- Serving per container
- Consider the calories
- 100 calories per serving is considered a moderate amount
- 400 calories or more is considered high

TOTAL FAT tells you how many grams in one serving. Recommended no trans fat and less than 10% saturated fat.

AS A GENERAL GUIDE:

- 5% Daily Value is low
- 20% Daily Value is high
- Choose nutrients wisely

% DAILY VALUE:

The percentage of the daily recommended allowance of each nutrient one serving gives you.

NUTRIENTS TO GET MORE OF:

Vitamin D, calcium, iron, and potassium-aim high.

NUTRIENTS TO GET LESS OF:

Saturated fat, sodium, and added sugars-aim low.

Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per serving	
Calories	230
% Daily Value*	
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

Cholesterol, Sodium, and Added Sugars

Cholesterol is found in foods, including meat, fish, poultry, egg yolk, and dairy products. It is never found in plant foods. You should limit your cholesterol intake to **less than 300 milligrams (mg) per day**. Skinless chicken, lean beef, or pork range from about 60 to 90 mg of cholesterol per ounce.

Sodium (salt) intake should be limited to **no more than 2,300 mg per day**. Be sure and read your food labels to know how much sodium is in your packaged foods. The American Heart Association recommends **no more than 1,500 mg of sodium per day** for the ideal heart health.

Added sugars should be limited to no more than 10% of your daily calories. Sugar is considered empty calories having no nutritional value. Eating too much sugar can increase blood levels of fats called triglycerides, which are known to increase the risk of heart disease. It also often leads to weight gain and increases the risk of becoming overweight. Excess weight, in turn, increases your risk of many health problems, including Type 2 diabetes.

Physical Activity

Regular moderate physical activity has been described as a potential fountain of youth. Did you know that being active can—

- ✓ Help you control your weight, build lean muscle, and reduce body fat.
- ✓ Help you maintain healthy bones, muscles, and joints.
- ✓ Reduce your risk of dying from coronary heart disease and of developing high blood pressure, certain cancers, and diabetes.
- ✓ Help control high blood pressure and the joint swelling and pain associated with arthritis.

- ✓ Reduce symptoms of anxiety and depression and improve mood and feelings of well being.

Physical Activity Guidelines for Americans:

- ✓ Stay active.
- ✓ Engage in at least 150 minutes per week of moderate-intensity exercise, or 75 minutes per week of vigorous aerobic activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity.
- ✓ Perform moderate- or high-intensity muscle- strengthening activities that involve all major muscle groups on two or more days a week.

The Way to Fitness

You don't have to be as physically active as an athlete to improve your fitness. Physical fitness refers to your ability to carry out daily tasks without becoming overly tired. As you increase your physical activity, you also increase the health benefits you receive.

The four components of fitness are cardiorespiratory fitness, muscular fitness, flexibility, and body composition. *Cardiorespiratory* fitness describes the strength and fitness of your heart and lungs. It also includes your heart's ability to pump blood and deliver oxygen throughout your body. *Muscular* fitness refers to the strength and endurance of your muscles. *Flexibility* is your ability to move your joints freely and without pain through a wide range of motion. *Body composition* concerns the percent of your body weight that is fat.

Physical Activity

Physical activity does not have to be strenuous to provide health benefits. At any age, women can benefit from moderate physical activity performed for at least 30 minutes on five or more days each week. This doesn't just refer to taking part in sports or participating in intense exercises. Running and biking are great workouts, but other activities such as taking a brisk walk, gardening, or housecleaning are also beneficial. The minimum recommendation for moderate physical activity is 30 minutes at least five days a week. For weight loss, the Institute of Medicine recommends at least 60 minutes of moderate to vigorous activity each day. If you haven't been physically active for a while (or ever), be sure to begin gradually. Aerobic exercise has many health benefits, but its greatest benefit is its ability to strengthen your heart.

Physical activities are described as being aerobic when they cause your heart and lungs to increase the supply of oxygen to your cells. Aerobic exercises include activities such as walking, jogging, swimming, and biking.

Strength Training

Strength training, on the other hand, works specific muscles intensely for a short period of time. Strength training is anaerobic, meaning that the activities don't require your body to increase its supply of oxygen to the cells. Strength training will build muscle mass, help keep your body strong and flexible, and increase your bone density, which helps prevent bone loss from osteoporosis. It is a good idea to consult a fitness expert for advice about the proper use of resistance machines, free weights, or resistance bands so that you get the most benefit from your workout and decrease your risk of injury.

Flexibility

Flexibility exercises help your joints move more easily. It is possible to be both aerobically fit and physically strong but not flexible. Stretching and yoga are two examples of flexibility activities that you can participate in to increase flexibility.

Making a Plan

Not sure how to start? Choose something that you enjoy doing. Many people find walking to be the ideal aerobic exercise. You don't have to buy a lot of expensive equipment—all you need is a good pair of walking shoes. You may want to walk with a friend because it is more difficult to find an excuse not to exercise when you have a “walk date” with someone else. Consistency is very important: Make being physically active as routine as brushing your teeth. Don't think about it—just do it!

Be sure to check with your doctor before starting any exercise program if you have any chronic health problems, such as heart disease, diabetes, or obesity (or are at high risk for these diseases). It's a good idea to check with your doctor if you haven't been physically active and/or are over age 50. A walking program doesn't usually present any risk; however, be sure to check before you start doing vigorous exercise.

Health *Monitoring*



Your first office visit is usually devoted to gathering your health history and receiving a physical examination by the doctor. Obtaining an accurate health history is by far the most important aspect of any visit to your doctor.

Each time you visit, be prepared to provide:

- ✓ Specific complaints or symptoms regarding your health— Be clear and truthful as to why you are there.
- ✓ Your past medical and surgical history.
- ✓ Current list of medicines, and supplements (vitamins) that you are taking.
- ✓ Any drug allergies that you may have.
- ✓ Your immediate family's medical history.
- ✓ Your social history, including: smoking, alcohol, recreational drugs, exercise habits, diet, changes in weight, psychological problems, emotional disorders and fears.
- ✓ Your past medical, surgical, gynecologic, sexual, and obstetrical history

This information may be recorded by a medical assistant before you see the doctor, or may be recorded by the doctor themselves. You may find that it is being recorded electronically rather than on paper.

After looking over your information, the doctor will first ask you to describe any symptoms that you have, and will ask about your medical history. Be as truthful and specific as you can, because untruthful answers will impede the doctor's ability to help you. The first exchange between you and the doctor will help them form an initial assessment of you and your health profile.

Next, you will be examined physically, and the length of the examination will depend on the problem you reported. It could be as short as a few minutes, or if you receive a complete examination as long as 30-45 minutes.

Let the doctor know about any serious concerns you have toward the beginning of your visit, and not when you are walking out the door to leave. If you have problems remembering your symptoms or your medical history, you may want to invite a family member or close friend to the appointment—someone who knows you well. If you bring a family or close friend to the appointment, they will be excused during your physical examination to provide privacy, and so that you can speak confidentially with the doctor.

At the end of the visit the doctor will give you an assessment, and may give you some recommendations:

- Laboratory tests or diagnostic studies— Be sure you understand why your doctor is requesting any tests, and don't be reluctant to ask the cost of each, and if they will be covered by your insurance. Some tests require pre-approval by insurance companies, which may slow the process down. Ask when and where the tests will take place, when the results will be ready, and what to expect next. Find out if you will receive the results by telephone, mail, or electronic mail, or if they go straight to your doctor.

- If your doctor recommends a procedure, ask why, and find out about any alternative options or risks that are involved. You may want to know what hospital or laboratory they are recommending for the procedure so you can confirm that they have a successful track record.
- Find out if you need any follow-up appointments or telephone calls with your doctor to check on your progress.
- If the doctor prescribes you a medicine, ask about any possible side effects, and when you can expect the medicine to start taking effect. Ask the doctor about how you should feel once the medicine begins working.
- Before leaving the appointment, be sure your expectations have been met. If not, let the doctor know about anything that was missing. Make sure to discuss any major problems early on in the visit so that your doctor has time to address them.

Future Office Visits

The same rules apply for all of your future doctor's visits. If you have a significant health problem that remains unresolved, it is important that you involve a family member or close friend in the discussions with your doctor. Another set of ears and another point of view are important things to have, and you may want a second opinion from them or from another doctor. Sometimes your doctor may recommend a second option as well, and if appropriate, it should not be discouraged. Remember to let your doctor know if you need extra time to discuss major problems.

Once a doctor accepts responsibility for your care they are obligated to continue their care until you change doctors, or until they find another doctor to take their place.

Heart and *Artery Diseases*



You may not know that diseases of the heart and arteries (such as heart attack, high blood pressure, and stroke) are just as dangerous for women as for men. These diseases—known collectively as cardiovascular disease—are the biggest killers of women and account for the deaths of more than half a million American women each year.

You need to be familiar with the warning signs of heart attack and stroke. It is also important to know what to do if you believe you are experiencing one of these life-threatening conditions.

Warning Signs of a Heart Attack

- ✓ Chest discomfort that typically occurs in the center of the chest and may feel like an uncomfortable pressure, squeezing, fullness, or pain. It may be mild or severe and may come and go.
- ✓ The pain may or may not spread down the left arm.
- ✓ Discomfort in other areas, such as in one or both arms, the back, neck, jaw, or stomach.

- ✓ Shortness of breath, either before or during chest discomfort.
- ✓ Nausea, light-headedness, or breaking out in a cold sweat.

Warning Signs of a Stroke

- ✓ Sudden numbness or weakness of the face, arm, or leg, especially on one side of the body.
- ✓ Sudden confusion or trouble speaking or understanding.
- ✓ Sudden trouble seeing in one or both eyes.
- ✓ Sudden trouble walking, dizziness, loss of balance, or lack of coordination.
- ✓ Sudden severe headache with no known cause.

What To Do...

If you experience any of these symptoms, and they last five minutes or more, call 911 or the emergency medical services (EMS) immediately. Make note of what time your symptoms started. Even if your symptoms last less than five minutes, you should still contact your doctor. If you can't get help from EMS, have someone drive you to the nearest emergency room. Do not drive yourself unless you have no other choice.

What Happens in Heart and Artery Disease?

Atherosclerosis is the underlying process in most heart attacks and strokes. It is the gradual clogging of an artery, the type of blood vessel that carries oxygen-containing blood away from the heart and throughout the body. When the inside of the artery wall is damaged, a series of changes takes place. These changes result in the buildup of a waxy substance called plaque on and within the artery's inner wall.

Plaque buildup narrows the artery and reduces blood flow. The complete blockage of a narrowed artery is often caused by a blood clot, which acts like a cork in a narrow-neck bottle.

When cells that depend on the damaged or blocked artery for blood—the body's source of oxygen and nutrients—are deprived of blood flow, they can be damaged or even die. A blocked artery in the heart causes the most common type of heart attack. A blockage in an artery in the neck or brain results in an ischemic stroke, the most common kind of stroke.

Risk Factors for Heart and Artery Disease

There are two types of risk factors for heart disease — those you can change and those you can't. Many of the major risk factors for heart and artery disease can be modified and improved. Both heart disease and stroke are often the result of atherosclerosis, and they have many of the same risk factors.

- ✓ High blood level of cholesterol, especially a high level of LDL cholesterol.
- ✓ High blood pressure.
- ✓ Smoking (see page 77).
- ✓ Inactive lifestyle.
- ✓ Overweight and obesity (see page 86), especially fat around the waist.

Other risk factors that can be improved are:

- ✓ Low blood levels of high-density lipoprotein cholesterol (HDL cholesterol).
- ✓ High blood level of triglycerides (fats in the blood that provide energy to the body).Diabetes (see page 42).

You also have an increased risk of stroke if you have heart disease, artery disease, atrial fibrillation (when the upper chamber of the heart quivers instead of contracting), transient ischemic attacks (TIAs or “mini-strokes”), and/or certain blood disorders. The unchangeable risk factors for heart disease and stroke include age, sex, race, and family history.

- ✓ The risk of developing heart disease or having a stroke increases with age.
- ✓ Until women reach menopause, they have a lower risk of heart disease than men.
- ✓ More men than women have strokes, but more women die of stroke.
- ✓ Compared with white women, African-American women have twice the risk of heart attack, a one-third higher death rate from heart disease, and a much higher risk of dying from a stroke.
- ✓ Having a close relative who developed heart disease (especially at an early age) or who had a stroke increases your risk of heart attack or stroke.

Cholesterol

Cholesterol is a fatty substance naturally present in your body. For your blood to carry cholesterol throughout your body, it is combined with protein to form a particle called a lipoprotein. Cholesterol combined with LDL is deposited in your artery walls, forming a hard plaque that enlarges over time and narrows the artery. However, HDL actually removes cholesterol from plaque, making it smaller. This is why LDL is often called “bad cholesterol” and HDL is referred to as “good cholesterol.”

As a rule, you want your blood level of total cholesterol to be less than 200 mg/dl, your LDL less than 130 mg/dl, and your HDL 35 mg/dl or above (the higher the better!).

Remember: You want the LDL level to be low and the HDL level to be high!

To lower your blood level of LDL and raise your HDL, you should:

- ✓ Follow a diet that provides no more than 25-30% calories from fat, with less than 10% of your daily calories coming from saturated fat.
- ✓ Consume omega 3 fatty acids (good fats) found in fish such as salmon also raises HDL
- ✓ Limit your average intake of dietary cholesterol to less than 200 milligrams per day.
- ✓ Consume 20 to 30 grams of fiber each day.
- ✓ Increase your overall physical activity and participate in regular moderate exercise.
- ✓ Balance the calories you consume with your physical activity to reach a desirable weight.

Triglycerides

Triglycerides are the most common type of fat in food and in your body. High levels of triglycerides in the blood increase the risk of heart disease, especially in women. (A normal triglyceride level is less than 150 mg/dl.) You may be able to reduce your triglyceride level by losing excess weight, increasing your exercise, stopping smoking, and limiting your intake of sugar, sugar-containing foods, and alcohol (which can significantly increase triglyceride levels). Avoiding high fructose corn

syrup or foods containing fructose also can reduce triglycerides. In addition to reducing your intake of saturated fat to less than 7% of your daily calories and your dietary cholesterol to no more than 200 mg per day, you may want to include oily fish in your diet. Oily fish, like salmon, contains omega-3 fatty acids, which help lower triglyceride levels.

High blood pressure

High blood pressure (hypertension) is one of the major risk factors for heart disease and is the greatest risk factor for stroke. Blood pressure is a measurement of the pressure that blood exerts on the inside of an artery wall. The top number in a blood pressure reading—systolic blood pressure—represents the pressure when your heart squeezes and pumps. The bottom number—diastolic blood pressure—measures the pressure when the heart is relaxed. National blood pressure guidelines regarding what is considered normal or high have changed over the years. These new guidelines reflect the importance of controlling your blood pressure.

Blood Pressure Categories



BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

If you didn't have high blood pressure before, there's a good chance you do now.

You may be able to lower your blood pressure by:

- ✓ Quitting smoking (see page 78).
- ✓ Reaching and maintaining a desirable weight (see page 87).
- ✓ Taking part in regular physical activity (see page 15).
- ✓ Avoiding excessive alcohol intake (see pages 13, 79).
- ✓ Cutting down on your sodium intake.
- ✓ Consuming adequate amounts of potassium, calcium, and magnesium.

Early diagnosis and treatment is an important part of preventing the negative consequences of high blood pressure. Be sure that your blood pressure is checked every time you visit your doctor or clinic. If you do have high blood pressure, it is very important that you take your prescribed medication as directed by your doctor.

Second *Largest Killer*



Cancer is the second leading killer of American women. A woman has an estimated one-in-three chance of developing some type of cancer during her lifetime. Cancer is a disease in which the genetic material in a cell is damaged, making the cell abnormal. A cell can be damaged by cancer-causing agents (carcinogens), which include chemicals, viruses, radiation, and overexposure to sunlight. If abnormal cells begin to grow and multiply uncontrollably, a tumor may develop. In some cases, a person may inherit genetic material that has been changed, or mutated. Certain genetic mutations increase the likelihood that exposure to carcinogens will lead to cancer.

Following a healthful diet and getting regular exercise may reduce a person's likelihood of developing cancer.

The American Cancer Society has published guidelines for diet and other lifestyle factors to help prevent cancer:

- ✓ Don't smoke!
- ✓ Limit your consumption of alcoholic beverages (if you drink at all). More specifically, drinking 3 or more alcoholic drinks each week leads to a higher risk of breast cancer.
- ✓ Eat a variety of healthful foods, with an emphasis on plant sources—fruits, vegetables, beans and peas, and grain products, such as breads and cereals.
- ✓ Limit your intake of high-fat foods, especially those from animal sources, such as high-fat meats and full-fat dairy products.
- ✓ Be at least moderately physically active for 30 minutes or more on most days of the week. Activities that raise your heart rate, such as running or moderate walking, have been shown to reduce cancer risk.
- ✓ Achieve and maintain a healthy weight throughout life with a body mass index between 20 and 25. You may calculate your body mass index at <http://nhlbisupport.com/bmi/>.
- ✓ Breast feeding has been shown to reduce the risk of breast cancer.

Breast Cancer

Breast cancer is the most common type of cancer in American women and is the second biggest killer (after lung cancer). During the course of a lifetime, one out of every eight women will develop breast cancer.

Known risk factors for breast cancer include—

- ✓ Family history of breast cancer, especially in a mother, sister, or daughter.
- ✓ Older age—risk increases as you get older.
- ✓ Obesity after menopause.
- ✓ No pregnancies or pregnancy after age 30.
- ✓ Starting menstrual periods at a young age (under age 10).
- ✓ Late menopause (over age 52).
- ✓ Consumption of alcoholic beverages.
- ✓ Use of combination hormone therapy (estrogen plus progestin) following menopause.

Slight increase in breast cancer with hormonal contraceptives, but overall risk of breast cancer in hormonal birth control users remains low.

To assess your individual risk of breast cancer based on your personal risk factors, you may calculate an estimate of your risk using the Gail Model, accessible at <http://www.cancer.gov/bcrisktool/>. If you have a higher than average risk, consult a breast oncologist for the best ways to minimize that risk.

Early detection is critical to beating breast cancer. Your two best weapons against breast cancer are monthly breast self-examinations and annual mammograms beginning at age 40. You can also lower your risk by taking part in vigorous physical activity or exercise, maintaining a healthy weight, and limiting alcohol intake to two alcoholic drinks per week.

Breast self-examination

If you are still menstruating, do your regular breast self-examination a few days after your period ends. If you use oral contraceptives, do your self-exam on the day you begin a new pill pack. After menopause, examine your breasts on the first day of each month.

Undress to the waist for your breast self-examination. You may find it easier to do part of the examination in the shower, with your breasts lathered with soap.

➤ Sitting or standing...

Raising your right arm, use the pads of the index and middle fingers of your left hand to touch every part of the right breast, gently feeling for a lump or thickening. Repeat the process, using the fingers of the right hand to examine the left breast. It doesn't matter which breast you examine first.

➤ Sitting or standing before a mirror

With your arms at your sides, look carefully for changes in the size and shape of each breast. Look for any irregularities—puckering, dimpling, reddening, changes in skin texture, or pushed-in or misshapen nipples. Check for these same changes while resting your hands on your hips and again with your hands behind your head. Gently squeeze both nipples and look for a discharge.

➤ Standing or sitting with your arm out to the side and resting on a firm surface.

Use the same small circular motion you used on your breasts to examine the underarm area. This is also breast tissue. If you feel any lumps in your underarm, contact your doctor for further evaluation.

See your doctor immediately if you find—

- ✓ New lumps.
- ✓ A lump or thickening that doesn't shrink or become less noticeable after your next period.
- ✓ Any redness of the breast, puckering, or dimpling.
- ✓ Any change in the shape or size of your breast.
- ✓ Discharge from your nipple(s), especially if it is bloody or dark or it appears without your squeezing your nipple.
- ✓ Your nipple directed inward pointing in a different direction.

➤ **Lying down (on your back)...**

Put a towel or pillow under your right shoulder and place your right hand behind your head. Examine your right breast with your left hand. Move your hands gently in small (dime- sized) circles, starting at the outermost top edge of your breast and spiraling in toward the nipple. Examine every part of the breast. Repeat with the left breast. Your gynecologist will do a clinical examination of your breasts during your regular visit and/or when you have your Pap smear.

Mammogram

A mammogram is a low-intensity x-ray that is capable of detecting breast cancer before the growth is large enough to be felt. The earlier breast cancer is diagnosed, of course, the better your chance of saving your breast. Although mammograms are not foolproof, they do save lives. Women should start having annual mammograms, beginning at age 40.

Fibrocystic Breasts

Fibrocystic—lumpy or fibrous—breasts are not a disease. However, the presence of these noncancerous lumps can make it more difficult to identify new cysts or to find potentially cancerous lumps. If you have fibrocystic breasts, it is especially important for you to do a monthly self-examination so that you can become familiar with the shape, size, and location of lumps and can detect any changes. You may want to do your breast self-examination about a week after your period because the lumps may become slightly larger and feel tender just before your period. Limiting your caffeine intake may reduce tenderness in fibrocystic breasts.

Lung Cancer

Did you know that more women in the United States die from lung cancer than from breast cancer? It is estimated that each year almost 69,000 women die of this disease. Although the number of new cases of lung cancer has been declining in men for many years, it has only recently begun to decrease in women, and the rate of decline is lower in women than in men. The fact that many women continue to smoke partly accounts for this difference.

Cigarette smoking is the most important risk factor in lung cancer. If you don't smoke, don't start! If you do smoke, stop! (see page 78). Other risk factors for lung cancer include exposure to certain industrial substances, some organic chemicals, radon, asbestos (which is particularly dangerous for smokers), radiation, air pollution, tuberculosis, and second-hand smoke.

Lung cancer is difficult to diagnose in its early stages because the symptoms often don't occur until the disease is advanced. Take steps to reduce your risk factors and be sure to see your doctor if you have—

- ✓ A persistent cough.

- ✓ Streaks of blood in material coughed up.
- ✓ Chest pain.
- ✓ Recurring pneumonia or bronchitis.
- ✓ Unexplained weight loss.

Uterine/Endometrial Cancer

The uterus and endometrium are described on page (110). Endometrial cancer is the most common cancer of the female reproductive tract and is responsible for about 6,800 deaths in the United States each year. Exposure to the hormone estrogen is the main risk factor for endometrial cancer. Estrogen is the major sex hormone in women and is produced primarily by the ovaries. Factors that increase your exposure to estrogen include—

- ✓ Use of estrogen-replacement therapy (estrogen alone, without a progesterone-like drug).
- ✓ Use of the drug tamoxifen.
- ✓ Early menarche (early start of menstrual periods).
- ✓ Late menopause.
- ✓ Never having given birth.
- ✓ Failure to ovulate or having irregular cycles.
- ✓ Being obese (very overweight).
- ✓ Diabetes.
- ✓ Polycystic ovary syndrome.
- ✓ Family history of uterine/endometrial cancer.

The addition of progesterone/progestin to estrogen offsets the increased risk of endometrial cancer associated with the use of estrogen alone.

The early signs and symptoms of endometrial cancer are abnormal uterine bleeding or spotting, often occurring after menopause. You should have a yearly pelvic examination by a health professional—preferably your gynecologist. It is recommended that pelvic examinations be performed when medically necessary. If you are having vaginal symptoms/concerns/complaints, you should be evaluated by a health professional – preferably a gynecologist. The following measures may lower your risk of uterine cancer: taking oral contraceptive pills, achieving and maintaining a healthy body weight, and engaging in regular exercise.

Cervical Cancer

The cervix is illustrated on page (103). Although the death rate for cervical cancer is declining in the United States, this cancer is still responsible for an estimated 4,100 deaths per year. Thanks primarily to wider use of the Pap smear, cervical cancer is now often caught before it spreads, particularly in women under age 50. The Pap smear detects changes in cervical cells that are not cancerous themselves but may be a warning sign that cancer could develop. Many authorities believe a routine Pap smear can lead to the prevention of almost all cases of cervical cancer.

Risk factors for cervical cancer include—

- ✓ Infection with the human papillomavirus (HPV), which is spread through sexual contact.

You increase your risk of getting HPV if you—

- ✓ Have sex at an early age.

- ✓ Have sex with multiple partners or partners who have had multiple sex partners.
- ✓ Smoke (see page 78).
- ✓ Are infected with the human immunodeficiency virus (HIV).
- ✓ Have a poor diet, without enough fruits and vegetables.
- ✓ Have a family history of cervical cancer.

It is recommended that all receive a vaccine that will protect them from contracting HPV related cancers. If a woman up through age 26 did not get the vaccine as a child, she can still get the vaccine.

Cervical cancer causes almost no symptoms in its earliest stage, which makes a routine Pap test especially important. When symptoms do occur, they most often include abnormal vaginal bleeding or spotting, bleeding or spotting after intercourse, pain with intercourse, or an abnormal vaginal discharge. You may want to ask your doctor about the new approaches available for Pap smear screening.

Ovarian Cancer

The ovaries are illustrated on page (102). Ovarian cancer is the leading cause of death related to the female reproductive system. In the United States, ovarian cancer kills more than 14,000 women each year.

Major risk factors for ovarian cancer include—

- ✓ Increasing age.
- ✓ Never having had children or having them late in life.
- ✓ A family history of ovarian cancer or other cancers, including breast or colon cancer.

On the other hand, pregnancy and the use of oral contraceptives

appear to reduce a woman's risk of developing ovarian cancer.

If ovarian cancer shows any warning signs in its early stages, they are typically vague—gas, nausea, indigestion, frequent urination, a change in bowel habits, a feeling of bloating, or pelvic discomfort. As the tumor grows, some women attribute their enlarged abdomen to gaining weight and don't mention it to their doctor. As a result, ovarian cancer often isn't diagnosed until late in the disease. If you are a woman over age 40 with vague disturbances of the digestive tract (stomach discomfort, gas, and/or bloating) that don't go away and can't be explained by any other cause, you may need a thorough evaluation for ovarian cancer. A pelvic exam performed periodically is your best chance for early detection.

Colorectal Cancer

Colorectal cancer refers to cancers of the colon and rectum. Even though the death rates for colorectal cancers have dropped in the last 20 years, this disease still kills almost 29,000 American women each year.

Risk factors for colorectal cancers include—

- ✓ Age—more than 90% of cases are in people over age 50
- ✓ Family or personal history of colorectal cancer, polyps (noncancerous growths protruding from the intestinal lining), or inflammatory bowel disease.
- ✓ Physical inactivity.
- ✓ High-fat and/or low-fiber diet and a low intake of fruits and vegetables.
- ✓ Smoking.
- ✓ Obesity.
- ✓ Alcohol consumption.

Signs and symptoms of colorectal cancer include a change in bowel habits, blood in the stool, and bleeding from the rectum.

Recent research suggests that estrogen-replacement therapy, nonsteroidal anti-inflammatory drugs (NSAIDs, including aspirin), and calcium may reduce the risk of colorectal cancer. But NSAIDs can lead to serious internal bleeding if overused. If you have a family history of colorectal cancer, you should discuss the pros and cons of NSAID use with your doctor.

Skin Cancer

Skin cancer is the most common cancer in the United States, and it is the most rapidly increasing form of cancer. More than one million cases of basal cell or squamous cell skin cancers occur each year. Basal cell cancer is the most common type of skin cancer; squamous cell cancer is found mainly on the head, face, and hands—areas exposed to the sun. Although both of these skin cancers have a cure rate of more than 95%, they can cause considerable damage and disfigurement if left untreated.

Melanoma is the most serious and potentially deadly type of skin cancer. Although only 5% of new cases of skin cancer are melanoma, this disease accounts for almost 80% of skin cancer deaths—a total of 7,600 deaths per year. Melanoma has a high risk of spreading to other organs of the body, especially the lungs and liver.

Risk factors for skin cancer include—

- ✓ Frequent, long-term exposure to the ultraviolet rays of the sun or tanning lamps.
- ✓ Having fair skin, freckles, and/or light-colored hair.
- ✓ Family history and/or personal history of skin cancer.

- ✓ History of severe sunburns early in life (increases the risk of basal cell cancer and melanoma).
- ✓ On-the-job exposure to coal tar, pitch, creosote, arsenic compounds, or radium.
- ✓ Many and/or unusual moles. Signs and symptoms of basal cell and squamous cell skin cancers include a—
- ✓ Pale, wax-like, pearly lump.
- ✓ Red, scaly, sharply outlined patch.

Melanomas often start as small, mole-like growths that increase in size and change color. The warning signs of melanoma are as simple as your knowing your ABCDs.

A = Asymmetry. One half of the mole doesn't match the other half.

B = Border irregularity. The edges of the mole are ragged, notched, or blurred.

C = Color. The mole has variations of shades of tan, brown, or especially blue-black.

D = Diameter. The mole is greater than about one-fourth inch in diameter, or larger than the diameter of the eraser on the end of a graphite pencil.

Here are a few tips on preventing skin cancer:

- ✓ Avoid or limit your exposure to the sun when its ultraviolet rays are the strongest—between 10 a.m. and 4 p.m.
- ✓ When you have to be outdoors: Wear sunglasses, cover as much of your skin as possible with a hat that shades your face, neck, and ears and wear a long-sleeved shirt and long pants.

- ✓ Always use sunscreen when you are outdoors and reapply it at regular intervals.

The strength of a sunscreen is listed as its SPF (sun protection factor). Use a sun- screen with an SPF of 15 or higher. It is especially important to protect children from sunburn; being sunburned in early childhood can greatly increase the risk of adult melanoma.

Early diagnosis is critical in skin cancer. You should do a regular self-exam of your skin (perhaps at the same time you do your monthly breast examination). Watch for changes in skin growths or the appearance of new growths. If you see any scaliness, oozing, bleeding, changes in the color or size of a mole, lump, or nodule, or changes in itchiness, tenderness, or pain, report it to your doctor.

Additional resources—

Dr. Susan Love's Breast Book. Susan M. Love, Elizabeth Love and Karen Lindsey.

The Breast Cancer Survival Manual: A Step-by-Step Guide for Women with Newly Diagnosed Breast Cancer. 6th edition. John Link.

Breast Cancer Overview by the American Cancer Society. American Cancer Society.<http://www.cancer.org/cancer/breastcancer/overviewguide/index>

Chronic *Disease*



Diabetes is a chronic disease that affects about 17 million Americans. It is estimated that 9.1 million American women—or almost 9% of all women in the U.S.—have diabetes.

Diabetes develops when the process by which your body uses food to produce energy isn't working properly. The problem lies with the hormone insulin, which is essential to regulating blood sugar levels and to enabling sugar to pass into the body's cells. Diabetes is typically described as either type 1 or type 2.

Roughly 10% of U.S. adults have diabetes; however, 17% of these people have not been diagnosed. Among people older than age 60, the prevalence of the disease increases to 23%. Type 2 diabetes accounts for 90-95% of all cases of diabetes, with type 1 diabetes and other forms representing the remaining 5-10%. People who have diabetes are at risk for small blood vessel complications, including retinopathy (a serious eye condition), kidney disease, and the nerve disease diabetic neuropathy, and have an increased risk for heart disease. Type

2 diabetes is accompanied by hypertension in about 75% of people with the disease and by hyperlipidemia (high blood levels of lipids, or fats) in more than half of adults with diabetes. This triad of diabetes, hypertension, and hyperlipidemia is considered a significant cardiac risk.

Type 1 diabetes is considered to be an autoimmune disease, in which the immune system attacks an organ, mistakenly perceiving it to be a “foreign invader.” Type 1 diabetes results from an autoimmune attack on the insulin producing beta cells of the pancreas. Beta cell destruction is rapid in infants and children and slower in adults. In young people, a dangerous condition called ketoacidosis is often the first sign of the disease. Older individuals may be diagnosed on the basis of high blood sugar and positive autoantibodies (antibodies that attack normal cells). Diabetes is diagnosed by a hemoglobin A1c (hemoglobin with sugar attached) level greater than 6.5% and a plasma glucose level of 126 or greater after an overnight fast. The general symptoms of diabetes include excessive urination, thirst, or hunger; fatigue; and a glucose reading of 200 or higher.

Type 1 accounts for 5% to 10% of all diagnosed cases, and type 2 is responsible for the rest. Type 2 diabetes develops when insulin is produced but is insufficient to lower a person’s blood sugar level. A recent study in women found that sugar intake does not directly affect the development of type 2 diabetes. Two other types of diabetes are gestational diabetes, which can develop during a pregnancy and then disappear when the baby is born, and diabetes that is related to other conditions, such as surgery, certain drugs, infections, and other illnesses.

Although the exact cause of type 2 diabetes isn’t known, a number of risk factors have been identified. These include—

- ✓ Being overweight.
- ✓ Having a family history of diabetes.

- ✓ Having had high levels of blood sugar during pregnancy.
- ✓ Having had a baby weighing nine pounds or more at birth.
- ✓ Being over 45 years of age.
- ✓ Having high blood pressure.
- ✓ Not exercising regularly.
- ✓ Having low HDL cholesterol or high triglyceride levels.
- ✓ Being African-American, Hispanic, or Native American.

Additional resources—

Mayo Clinic Diabetes Diet.

Diabetes A – Z. What You Need to Know About Diabetes—Simply Put.
American Diabetes Association.

Weak *Bones*



Osteoporosis is an abnormal loss of bone mass, which can lead to weak bones that break easily or collapse. The most noticeable physical effect of osteoporosis is “dowager’s hump,” the forward curving of the spine in the upper back that may occur in older women. A bone density test can determine if you are losing bone mass or have osteoporosis.

Osteoporosis is the primary cause of hip fracture, which can lead to permanent disability, loss of independence, and even death. This disease is the underlying cause of 2 million fractures per year, mainly in the hip, spine, and wrist. More than 34 million Americans have low bone mass, putting them at risk of developing osteoporosis, and 10 million already have osteoporosis—80% of whom are women. Half of all women past age 50 will suffer a fracture related to osteoporosis.

Osteoporosis can be prevented in most people. In addition, new medications have been developed that can slow bone loss and even increase bone formation. There is no cure for osteoporosis and no guaranteed way to prevent it. However, it can be delayed and may be less serious if you take preventive measures throughout your lifetime.

Risk Factors for Osteoporosis

Factors that influence the development of osteoporosis include gender, race, bone structure and body weight, family history, and certain health-related factors.

- ✓ Women are at higher risk than men.
- ✓ Caucasian and Asian women are at higher risk than African-American or Hispanic women.
- ✓ Short, small-boned, and thin women are at greater risk.
- ✓ To some extent, the tendency to have fractures may be inherited.
- ✓ Osteoporosis is a recognized complication of having an overactive thyroid or rheumatoid arthritis.
- ✓ Long-term use of cortisone-like drugs and anticonvulsants is also associated with the development of osteoporosis. Some risk factors can be changed. These include lack of estrogen (due to menopause or problems with the endocrine glands), diet, and lifestyle.

Estrogen Level

The hormone estrogen protects you from losing excessive amounts of calcium from your bones. Your risk of osteoporosis increases when estrogen levels decrease, either at natural menopause or at early or surgical menopause. Some women use estrogen or hormone therapy (see page 134) to decrease their risk of developing osteoporosis. However, if a woman does not wish to take estrogen, a number of other medications, such as bisphosphonates, calcitonin, parathyroid hormone, selective estrogen receptor modulators (SERMs), and a drug called teriparatide can stimulate bone formation. Bone loss also

increases when menstruation stops as a result of excessive exercise or the eating disorders anorexia and bulimia (see page 89). It is extremely important to prevent bone loss.

Dietary Factors

The amount of calcium you consume throughout your life influences your bone mass (weight and density of your bones). Bone mass gradually begins to decrease when women reach their 30s, and those who have a higher bone mass are at a lower risk of osteoporosis. Recommendations for calcium intake for adult women are—

- ✓ 1,000 milligrams per day for all women aged 19 – 50.
- ✓ (800-1,200) milligrams per day for women aged 51 and older.

Some experts recommend slightly different calcium intakes to help prevent osteoporosis—

- ✓ 1,000 milligrams per day for all women aged 25 to 50 and for women aged 50 to 65 who are on estrogen therapy.
- ✓ 1,500 milligrams per day for women aged 50 to 65 who aren't on estrogen replacement therapy and for all women over age 65.

In order for your body to use calcium, you must have a sufficient supply of vitamin D. Your body produces vitamin D when you are exposed to sunlight. On average, you need only 20 to 40 minutes of sunlight on your hands, arms, and face (without sunscreen) three times per week. Dark-skinned people need more exposure, and light-skinned people need less. Most people get only a small amount of vitamin D from foods; however, most milk is fortified with vitamin D.

Your risk of osteoporosis may increase if you consume excessive amounts of alcohol or caffeine or if you have an eating disorder, such as anorexia or bulimia (see page 89).

Lifestyle Factors

Several lifestyle factors influence your risk of osteoporosis.

- ✓ Smoking increases your risk. If you smoke, **STOP!**
- ✓ Being inactive also is associated with a higher risk of osteoporosis. Don't be a couch potato. **GET MOVING!**
- ✓ Regular weight-bearing exercise, such as walking, reduces your risk of osteoporosis.

If you don't exercise regularly, **START NOW!**

Troubling *Behavior*



Alzheimer's disease is a progressive degenerative disease of the brain, and it is not a normal part of aging. This disease affects a person's memory and thinking as well as the ability to carry out day- to-day activities. Alzheimer's disease occurs most commonly in the elderly; however, in rare circumstances people under 50 may be affected. This memory-robbing condition affects an estimated 5.2 million Americans, and is the sixth leading cause of death. Although the risk of Alzheimer's disease increases with age, the majority of older people do not develop this disease.

Problems in the following areas may suggest the onset of Alzheimer's disease.

- ✓ *Learning and remembering new information.* Do you repeat things you say or do? Do you forget conversations or appointments? Do you forget where you put things?

- ✓ *Handling complex tasks.* Do you have trouble performing tasks with several steps, such as cooking a meal or balancing your checkbook?
- ✓ *Reasoning ability.* Do you have trouble solving everyday problems at work or home, such as knowing what to do if a plumbing leak floods your kitchen floor?
- ✓ *Ability to judge space and position.* Do you have trouble driving your car or finding your way around familiar places?
- ✓ *Language.* Do you have trouble finding the right words to express yourself?
- ✓ *Behavior.* Do you have trouble paying attention? Are you more irritable or less trusting than usual?

Of course, the fact that you sometimes misplace your keys or experience some of these other signs doesn't necessarily mean that you are developing Alzheimer's disease. However, if you or someone close to you notices problems, you should probably have your memory checked. Tell your doctor immediately or ask for a referral to a specialist because getting a good work-up and an accurate diagnosis is very important.

Currently, Alzheimer's disease has no cure. However, when the diagnosis is made early, several medications can improve some of the symptoms in the early stages of the disease. It is extremely important to continue to pursue cognitive challenges and stimulation, participate in physical exercise, and strengthen social interactions.

Foreign *Invaders*



In recent years physicians and scientists have become more aware of certain conditions that were once considered to be figments of a patient's imagination.

Fibromyalgia

Three to six million Americans have symptoms of fibromyalgia syndrome (FS), and about 90% of these are women. FS typically first appears in young or middle-aged women; however, the condition typically is not diagnosed until after age 50. Obviously, many women have symptoms for a number of years before they receive a correct diagnosis. FS is typically identified through a process of elimination, after all the other possible causes of the symptoms have been eliminated. Although the cause of FS is unknown, it may be triggered by physical stress, poor sleep, an injury, exposure to cold or dampness, surgery, physical trauma, infection, or a long period of psychological stress.

Symptoms of fibromyalgia include—

- ✓ Excessive general fatigue and lack of energy.
- ✓ Poor sleep that leaves the person feeling unrested.
- ✓ “Tender” points located in the upper back, tops of the shoulders, upper central chest below the collarbone, back of the neck, and near the elbows, knees, buttocks, and hip bones.
- ✓ Skin sensations such as burning, prickling, itching, or tingling.
- ✓ Anxiety.

There is no cure for fibromyalgia but there are certain treatments and medications to reduce pain and improve quality of life. Discuss with your care provider what is best for you.

Diseases of the Immune System

Your immune system consists of special cells and organs that protect your body from foreign invaders, such as bacteria and viruses. It recognizes these foreign invaders, called antigens, and then forms antibodies that can destroy or neutralize them.

AIDS (acquired immune deficiency syndrome) is an infectious disease in which the human immunodeficiency virus (HIV) attacks the immune system. HIV/AIDS is typically considered to be a sexually transmitted disease (see page 130).

Allergies

Allergies arise when your immune system mistakes one or more harmless substances (allergens) for harmful antigens. You may be allergic to animals, dust, mold, foods, and/or drugs—almost anything. Allergies affect an estimated 40–50 million Americans. Hay fever (pollen allergy) is the most common allergy, affecting more than 18

million Americans, 10 million of whom are women.

A variety of possible symptoms are associated with different types of allergies. These include a runny nose, sneezing, swelling of the face, throat, hands, feet, and/or genitals; watery or swollen, inflamed eyes; or hives (itchy bumps) on the chest, arms, and/or trunk. Doctors now believe that asthma has an allergic component.

Allergic reactions that are most likely to cause very serious symptoms include reactions to bee, wasp, hornet, or fire ant stings and to peanuts, tree nuts, shellfish, and fish. A condition called anaphylaxis is a severe allergic reaction that can be fatal. Its symptoms include fainting or loss of consciousness, swelling of the throat (a smothering feeling), and asthmatic spasms (coughing, shortness of breath, and/or wheezing).

Autoimmune Diseases

In autoimmune diseases, your immune system attacks your body's own normal cells and tissues. Most of these diseases tend to be more common in women than in men, but scientists do not yet know why.

➤ **Systemic Lupus Erythematosus.** Systemic lupus erythematosus, or lupus, typically appears between ages of 15 and 45. About 1.4 million Americans have some form of lupus, and 90% of those are women. Lupus is a chronic inflammatory disease in which the body's immune system attacks its own connective tissues and various organ systems. This leads to inflammation and damage to various parts of the body, which may include the heart, lungs, skin, joints, kidneys, blood vessels, and brain.

Because the symptoms of lupus are often vague and tend to differ from one person to another, they can suggest any number of diseases and conditions. This makes lupus difficult to diagnose. See your doctor if you have any of the following symptoms—

- ✓ A red, butterfly-shaped rash over your cheek and nose.
- ✓ Extreme fatigue, even after sufficient sleep.
- ✓ Painful, achy, or swollen joints for more than three days.
- ✓ Unexplained fever of more than 100 degrees for more than a few days.
- ✓ Sensitivity to sunlight that triggers a rash (scaly, disk-shaped sores) in areas exposed to the sun, including your face, arms, upper back, scalp, and ears.
- ✓ Sores in your mouth that have lasted for more than two weeks.
- ✓ Chest pain when you breathe deeply or cough.
- ✓ Seizures or convulsions.
- ✓ Fingers and/or toes that become white and/or blue, numb, or uncomfortable in the cold.

➤ **Multiple Sclerosis.** In multiple sclerosis (MS), part of the coating that protects the nerve cells in your brain or spinal cord is destroyed, reducing the brain's ability to send messages to the rest of the body. About 400,000 people in the U.S. have MS, and the disease is two to three times more common in women than in men. MS usually develops between the ages of 20 – 50.

MS is different in each person. Some people continue to have mild symptoms, whereas others have symptoms that become progressively worse over time. MS ebbs and flows, and severe attacks may be separated by periods in which the symptoms lessen or go away.

Symptoms of MS include—

- ✓ Severe fatigue.
- ✓ Weakness or paralysis of one or more limbs.
- ✓ Blurred or double vision, pain when moving one eye, and/or rapid, involuntary eye movements.
- ✓ Problems with bladder and/or bowel control.
- ✓ Lack of coordination, difficulty with balance, an unsteady walk, and dizziness.
- ✓ Trembling in a hand, arm, or leg.
- ✓ Tingling, numbness, or other unusual feelings in the arms, legs, face, or trunk of the body.
- ✓ Decreased sensation during sex.

Symptoms tend to become worse when body heat rises because of fever, exercise, a hot bath, or very warm weather.

➤ **Autoimmune Thyroid Disorders.** Your thyroid gland plays an important role in how well your body functions. This little butterfly-shaped gland, which is located in your neck, produces hormones that tell every part of the body how fast to work and how to utilize energy. Two of the most common thyroid disorders—Graves' disease and Hashimoto's thyroiditis—are autoimmune diseases. Graves' disease is the most common cause of an overactive thyroid gland, or hyperthyroidism. People with Graves' disease produce antibodies that cause their thyroid to produce too much thyroid hormone. Graves' disease is 3-4 times more common in women than in men and usually develops between the ages of 20 and 40. If not treated, Graves' disease can cause heart damage, abnormal heart rhythms, and calcium loss from bones.

Common symptoms of Graves' disease include—

- ✓ Muscle weakness.
- ✓ Nervousness.
- ✓ Fast heartbeat and “palpitations.”
- ✓ Shakiness or trembling hands.
- ✓ Weight loss, even though food intake remains the same.
- ✓ Feeling warmer than usual, increased sweating.
- ✓ Bulging eyes with a “pop-eyed” appearance.

Other symptoms may include light or irregular menstrual periods, frequent stools, hair loss, skin changes, and/or a goiter (enlarged thyroid gland that looks like a swelling in the neck).

Hypothyroidism is the opposite of hyperthyroidism. People with hypothyroidism have an underactive thyroid gland that produces too little thyroid hormone. The most common cause of hypothyroidism is an autoimmune disease called Hashimoto's thyroiditis, which is a chronic inflammation of the thyroid.

Common symptoms of hypothyroidism may include—

- ✓ Feeling slow or tired.
- ✓ Feeling cold.
- ✓ Being sleepy during the day, even after sleeping all night.
- ✓ Slow heart rate.

- ✓ Poor memory.
- ✓ Difficulty concentrating.
- ✓ Muscle cramps.
- ✓ Weight gain.
- ✓ Husky voice.
- ✓ Thinning hair.
- ✓ Dry and coarse skin.
- ✓ Feeling depressed.
- ✓ Heavy menstrual flow.
- ✓ Milky discharge from the breast.
- ✓ Infertility.
- ✓ Goiter.

Don't automatically assume that you are suffering from hypothyroidism if you have one or two of the symptoms listed above. However, if any of your symptoms concern you, be sure to report them to your doctor.

➤ **Chronic Fatigue Syndrome.** The cause of chronic fatigue syndrome (CFS) isn't fully understood, but it is believed to involve the nervous system (brain and spinal cord) and the immune system. It is estimated that more than half a million Americans have CFS or a similar condition. CFS is most common in women under age 45.

CFS symptoms usually appear suddenly, often following an episode that resembles a viral infection. Two criteria are used to diagnose CFS:

- An unexplained, persistent, debilitating fatigue and weakness with even moderate exertion that lasts at least six months and interferes with your life.
- At least four of the following symptoms also must be present and have lasted (or recurred) for six months:
 - ✓ Difficulty remembering what you did a few minutes ago.
 - ✓ Sore throat.
 - ✓ Tender lymph nodes in the neck and under your arms.
 - ✓ Muscle pain.
 - ✓ Pain in several joints (without redness or swelling).
 - ✓ Headaches of a new type, pattern, or severity.
 - ✓ Unrefreshing sleep.
 - ✓ Lack of energy after exercise, lasting for more than 24 hours.

Although many people with CFS improve with time, most have some loss of normal functioning for several years. However, the symptoms usually do not appear to become worse with time. It is important for people with CFS to maintain a healthy lifestyle—eating a balanced diet, getting enough rest, and exercising regularly.

Additional resources include—

The Lupus Book: A Guide for Patients and Their Families by Daniel

Common Causes of Pain in Women

Damaging *Changes*



Pain occurs when your pain receptors sense damaging changes in the body, which are translated to the brain as pain.

Headaches

More than 45 million Americans have headaches, and 28 million Americans have migraines. Migraines are three times more common in women than in men. Most headaches are classified into three main categories—muscle tension headaches, migraine headaches, and drug-rebound headaches.

Muscle-tension headaches. These headaches are caused by tension in the muscles of the neck, shoulders, and/or head. They may result from an uncomfortable position, fatigue, or social or psychological stress. They often begin in the morning or early afternoon. If you have a muscle tension headache, you may feel—

- ✓ Steady, moderately severe pain above the eyes or at the back of your head.
- ✓ Tight pressure, like a band around your head, in addition to the pain.
- ✓ Pain spreading over the entire head, and sometimes extending into the back of your neck and shoulders.

Migraine headaches. These headaches are two to three times more common in women than in men. In women, migraines often begin between the ages of 10 and 30 and tend to run in families. Migraines consist of recurrent, throbbing, moderate-to-intense pain that usually, but not always, affects one side of the head. These headaches are caused when arteries in the brain first constrict and then enlarge, putting pressure on surrounding pain receptors. Migraines usually appear suddenly, but some people experience symptoms about 10 to 30 minutes before the actual migraine begins. These warning symptoms can include depression, irritability, or restlessness; nausea or loss of appetite; loss of vision in a particular area, or jagged, shimmering, or flashing lights.

Substances that have been found to cause or trigger migraines in some people include—

- ✓ Chocolate, nuts, aged cheese, citrus fruits, bananas, dairy products, pickles, and cured meats; alcoholic drinks (particularly red wine); and foods containing sulfites.
- ✓ Monosodium glutamate, a flavor enhancer often used in other foods.
- ✓ Birth control pills.
- ✓ Reserpine (medication used to control high blood pressure)

Some people take medicine every day for headache pain. But this may lead to drug-rebound headaches, which are chronic headaches that occur when you try to stop daily use of a pain medication.

- ✓ Headaches that don't fall into the two previous categories can have a number of causes, including—High blood pressure.
- ✓ Eye problems.
- ✓ Sinus problems.
- ✓ Brain conditions, such as a brain tumor, an infection in the brain or its surrounding tissues, or a build-up of blood around the brain.
- ✓ Other conditions such as syphilis or tuberculosis.

Over-the-counter pain medications are effective for most common headaches. However, don't ignore frequent headaches because you think they aren't important. Mention the problem to your doctor.

TMJ

Temporomandibular joint disorder (TMJ) refers to a group of painful conditions affecting the jaw joint and the muscles you use to chew. Approximately 7 million Americans have pain associated with chewing, TMJ, or both. TMJ is three times more common in women than in men.

The causes of TMJ aren't clear. A severe injury to the jaw or jaw joint can cause TMJ or arthritis of the jaw. Some authorities believe that physical and/or mental stress can cause or aggravate TMJ symptoms.

Signs and symptoms of TMJ include—

- ✓ Pain in the jaw joint and/or pain or spasm in the chewing muscles (the most common symptom of TMJ).
- ✓ Limited movement of the jaw joint and/or locking of the jaw.

- ✓ Radiating pain in the face, neck, or shoulders.
- ✓ Painful clicking, grating, or popping of the jaw joint when the mouth is opened and shut.
- ✓ A sudden change in your bite (the way the upper and lower teeth fit together).

Other symptoms that may be related to TMJ include headaches, earaches, dizziness, and hearing problems.

TMJ is typically treated by a dentist and/or a physician. As a rule, treatment for TMJ should be simple and reversible; that is, not consisting of permanent changes in the joint or face.

Urinary Tract Infections

Urinary tract infections (UTIs) affect 20% of women at some point in their lifetime. They most often affect the bladder but may spread to the kidneys. UTIs are commonly caused by bacteria from the skin around the anus that enter the urethra (the tube that empties urine from your bladder). Because UTIs are bacterial infections, they can be treated with antibiotics. Prompt treatment is important to prevent the infection from spreading to your kidneys.

Warning signs for UTIs include—

- ✓ Pain or burning when you urinate.
- ✓ Frequent need to urinate, often passing only a little urine.
- ✓ Feeling tired, shaky, and washed out.
- ✓ Chills and fever.
- ✓ Soreness or pain in your lower abdomen, back, or sides (below your ribs) or an uncomfortable pressure above the pubic bone.

You can help prevent UTIs by—

- ✓ Using proper wiping techniques after using the toilet— always wipe from front to back.
- ✓ Washing your genital and anal areas (from front to back) daily and before and after intercourse.
- ✓ Drinking plenty of water and other fluids to help flush bacteria out of your urinary tract.
- ✓ Urinating frequently to help remove bacteria before they have a chance to multiply. Don't resist the urge to urinate.
- ✓ Avoiding feminine hygiene sprays and scented douches.
- ✓ Practicing safer sex (see page 123).
- ✓ Taking showers instead of tub baths.

Endometriosis

Endometriosis is a common health problem in women. The tissue that normally lines the uterus or womb grows outside of your uterus and on other areas in your body where it doesn't belong. This responds to hormonal changes by growing and bleeding like the lining does during your period.

The most common symptoms are pain, just before or during your period or pain with sex. Many women have no symptoms.

Endometriosis may affect more than 11% of American women between 15 and 44. It is especially common among women in their 30s and 40s and may make it harder to get pregnant. Several different treatment options can help manage the symptoms and improve your chances of getting pregnant. Always check with your care provider for additional information.

Chronic Pain and Chronic Pelvic Pain

Chronic pain is a general term for pain that lasts beyond the normal healing time after an injury or illness. After age 65, an estimated 80–85% of Americans have a significant health problem that can result in chronic pain. Younger women may have more head, abdominal, and chest pain; older women have more frequent joint pain. Many women with chronic pain have significant symptoms of depression and a reduced quality of life.

Chronic pelvic pain (CPP) affects 15% of American women and is the underlying cause for at least 10% of the hysterectomies performed in the United States. Although there is no generally accepted definition of CPP, it is usually considered to be pelvic pain that lasts longer than 3–6 months, is not associated with the menstrual cycle, and is not relieved by narcotic painkilling drugs. CPP can have a number of causes, including pelvic inflammatory disease, endometriosis, and adhesions in the pelvis, among others.

Urinary *Incontinence*



Urinary incontinence (lack of bladder control) is an inability to hold your urine until you can get to a toilet. This condition affects more than 13 million Americans and is twice as common among women than men.

The bladder stores urine and controls its release by tightening special muscles (sphincters) around the urethra, a tube that carries urine out of the body. When it is time to urinate, the bladder walls contract and the sphincter muscles relax, allowing urine to be forced out of the bladder into the urethra and removed.

Urinary incontinence is more common in women because of the structure of the female urinary tract and the stresses involved in pregnancy and childbirth. The condition is sometimes blamed on menopause, but it is not an unavoidable part of aging. Remember—urinary incontinence is treatable.

The main types of urinary incontinence are:

- ✓ Stress incontinence: Urine leaks in response to any movement that puts pressure (stress) on the bladder, such as coughing, sneezing, or laughing. Stress incontinence is the most common form of urinary incontinence in women and is treatable.
- ✓ Urge incontinence: In urge incontinence, urine leaks for no apparent reason. Typically, a woman feels a sudden urge to urinate. The condition is usually caused by inappropriate contractions of the bladder wall. Women with the condition may find that their bladder empties after they drink a small amount of water, during sleep, or even when they touch water or hear it running. Urge incontinence may result from damage to the muscles or nerves of the bladder or to the nervous system itself.
- ✓ Functional incontinence occurs in people who have difficulties in thinking, moving, or communicating that prevent them from reaching a toilet in time. For example, a person with Alzheimer's disease may not be able to plan a timely trip to the bathroom.
- ✓ Overflow incontinence means that your bladder is always full and continually leaks urine. This condition, which is uncommon in women, may result from weak bladder muscles or a blocked urethra.
- ✓ Other forms of incontinence include mixed incontinence (a combination of both stress and urge incontinence) and transient (temporary) incontinence, which may be triggered by medications, urinary tract infection, reduced mental ability, or other causes.

Your doctor can usually treat urinary incontinence. Treatments may include exercises or electrical stimulation to strengthen bladder muscles, biofeedback, bladder training, or medications, among others.

Extreme *Anxiety*



Stress

Modern life is not simple. Your ability to recognize and cope with the variety of stresses in your life has a lot to do with your quality of life. Everyone talks about being stressed, but what is stress anyway?

It was a challenge for our ancestors to stay alive. When danger approached, they had to be able to turn and fight for survival or escape. This is called the “fight-or-flight” response. When you believe that you are in danger, certain chemical and physical changes automatically take place in your body. These changes are the same whether the danger is real—a car running a red light and about to hit you—or only seems to be real—footsteps behind you on a dark, deserted street. The fight-or-flight response causes a number of hormones to be produced and dumped into your bloodstream where they bring about a variety of physical effects.

A certain amount of stress can be good for you; however, in today's world, you often have these stress responses in situations in which they don't help you. You probably don't actually plan to sock your boss in the jaw (fight) or run for the stairs (flight). This means that for many hours each day your body may be experiencing the physical results of high levels of these hormones, such as tensed muscles, faster heart rate, and increased blood pressure. In fact, stress has been associated with a number of illnesses, including high blood pressure, heart disease, ulcers, allergies, asthma, and migraine headaches.

Are You Suffering from Stress?

It isn't always easy to determine whether your stress level is normal or if you are overstressed. The American Medical Women's Association developed some checklists to help you evaluate your stress level.

1. Are you often nervous and/or anxious?
2. Do you often feel depressed or sad?
3. Are you frequently grouchy or moody?
4. Do you often become frustrated?
5. Do you forget things?
6. Do you have trouble thinking clearly?
7. Do you worry a lot about decisions?
8. Do you have a hard time learning new information?
9. Do you have trouble sleeping—insomnia?
10. Are you constantly bothered by negative thoughts—
always seeing the downside of things?
11. Do you have trouble sitting still?

12 Do you have a lot of accidents?

13. Do you bite your fingernails or cuticles?

If you answered 'yes' to many of these questions, you may well be overstressed. You should seek professional help if you:

- ✓ Are depressed, anxious, and/or irritable.
- ✓ Notice changes in your appetite or sleep.
- ✓ Have trouble with relationships.
- ✓ Have a decreased ability to do your job.

A psychiatrist, psychologist, or therapist can help you determine your need for treatment and develop a treatment plan with you.

Physical symptoms of stress

If you suffer from one or more of the following symptoms most of the time, you may be experiencing extreme anxiety and stress. Because these symptoms may also indicate a physical disorder, be sure to see your doctor if they are sudden, severe, or persist:

- ✓ Burning sensation in your chest.
- ✓ Back pain.
- ✓ Burping.
- ✓ Muscle tension.
- ✓ Feeling faint or dizzy.
- ✓ Headaches.
- ✓ Head cold that continues longer than usual.

- ✓ Shaky hands.
- ✓ Diarrhea.
- ✓ Ringing in your ears.
- ✓ Constipation.
- ✓ Grinding your teeth.
- ✓ Pounding heart.
- ✓ Unexplained hives or skin rashes.
- ✓ Chest pain.
- ✓ Sweaty, cold hands.
- ✓ Loss of appetite.
- ✓ Shortness of breath.
- ✓ Nausea and/or vomiting.
- ✓ Indigestion or gas.
- ✓ Stomach pain.

Coping with Stress

To gain control of your life and reduce your stress, you need to change your behavior and then learn how to turn off the physical symptoms of stress.

Change your behavior

A number of behavioral changes can help you cope with stress. Changing a habit may sound simple, but it takes patience and practice.

- ✓ Allow yourself to have leisure time without having earned it.
- ✓ Set reasonable goals for yourself each day.
- ✓ Learn to share responsibility with others.
- ✓ Don't try to be perfect—no one is perfect!
- ✓ Don't try to do too many things at once.
- ✓ Focus on one thing at a time.
- ✓ Learn to recognize your natural high and low energy times each day and plan your activities around them.
- ✓ Decide that it is okay to ignore some requests or to wait before answering them.
- ✓ Learn to say “no.”
- ✓ Try to identify the source (or sources) of your stress.
- ✓ Ask for help.

Turn off the symptoms of stress

Taking short, shallow breaths may indicate a very stressed state. Deep breathing, on the other hand, can carry needed oxygen to your muscles, helping them to relax. Sit up straight and breathe in deeply through your nose (for a count of two) and exhale slowly through your mouth (for a count of four).

Practice relaxation techniques. In progressive relaxation, you tense and then relax the muscles in your body—working through your

feet, legs, back, chest, head, and face. Then relax your whole body. Another method is to use visualization (vivid imagination) to picture yourself in a quiet, pleasant place. Be there! Hear the sounds—smell the pleasant odors—feel the breeze, the touch of grass, or the caress of warm water on your skin—or you may prefer some other relaxation technique that you find in a book or on tape. Relaxation techniques should be practiced regularly. Before long, you will be able to slip into your relaxed mode whenever you are under stress. Yoga, meditation, and mindfulness are also enjoyable and effective stress reducers.

Exercise those tight muscles. Go for a walk. Do some stretching exercises. Swing your arms. Shrug your shoulders to loosen up tight shoulder and neck muscles. Exercise is a proven method of reducing stress.

You can't avoid having some stress. The important thing is to recognize when you have chronic, harmful stress and to choose to do something about it.

Sad *“Blues”*



Most people have the “blues” at one time or another. For example, it is normal to feel depressed for a time in response to certain situations, such as the death of a loved one. However, if your “down” times last a long time, interfere with your ability to carry out routine tasks, or leave you unable to lead a normal life, you may be suffering from a depressive mood disorder. Depressive mood disorders involve your body, mood, and thoughts.

Each year an estimated 12 million American women experience some type of mood disorder. These disorders affect about twice as many women as men. The three major types of mood disorders are—major depression, dysthymia (mild recurring depressed moods), and manic-depression (bipolar disorder).

Major depression is characterized by symptoms that last for at least two weeks, but the symptoms can last for months or years.

People with major depression have some or all of the following symptoms—

- ✓ Continuing sad, anxious, or empty mood.
- ✓ Loss of interest or pleasure in activities, including sex.
- ✓ Restlessness, irritability, or excessive crying.
- ✓ Feelings of guilt, worthlessness, helplessness, hopelessness, or pessimism.
- ✓ Sleeping too much or too little; early-morning awakening.
- ✓ Loss of appetite and/or weight loss or overeating and weight gain.
- ✓ Decreased energy and fatigue.
- ✓ Thoughts of death or suicide, or suicide attempts.
- ✓ Difficulty in concentrating, remembering, or making decisions.
- ✓ Continuing physical symptoms that do not respond to treatment, such as headaches, digestive disorders, and chronic pain.

Dysthymia is described as mild depression, but it has a profound effect on the lives of the women who suffer from it. A person with dysthymia may have some or all of the symptoms mentioned above, but the symptoms are less severe than in major depression and are not totally disabling. However, the symptoms may drag on for two years or more, preventing the person from functioning well or feeling good.

Individuals with **bipolar disorder** (manic-depressive disorder) have cycles of being depressed alternating with feelings of mania.

Symptoms of mania include—

- ✓ An abnormally elevated mood.
- ✓ Irritability.
- ✓ Insomnia, or, need for extra sleep
- ✓ Delusions of grandeur (false feelings of importance).
- ✓ Increased talking.
- ✓ Racing thoughts.
- ✓ Increased activity, including sexual activity.
- ✓ Noticeably increased energy.
- ✓ Poor judgment that leads to risk-taking behavior.
- ✓ Inappropriate social behavior.

Bipolar disorder can cause serious life and relationship problems. Early diagnosis and treatment are essential.

Certain factors in a woman's life may make her more likely to suffer from depression. Postpartum depression, for example, can range from a few days of the "blues" after the baby is born to depression that is severe enough to greatly affect quality of life. Many times, young mothers may become depressed in addition to experiencing the stress and demands of caring for an infant.

Seasonal affective disorder (SAD) is a type of depression that follows the seasons of the year. It is four times more common in women than in men. The most common type of SAD is winter depression, which usually begins in late fall or early winter and goes away by summer.

Summer depression begins in late spring or early summer. SAD may be related to changes in the amount of daylight you receive each day. Winter SAD can be treated with a special type of light therapy.

Some researchers have found an association between depression and pessimistic thinking, low self-esteem, and excessive worrying. Depressed individuals may also believe that they have little control over life events. As a part of this, women who have been abused— physically or psychologically— are more likely to develop depression or bipolar disorder.

If you think you are suffering from depression, get help without delay! Treatment may include both talk therapy and medication, and it can ease the symptoms in a majority of people who suffer from depression or bipolar disorder.

Substance *Dependence*



The dictionary describes an addiction as a physical or psychological dependence on a substance or behavior that is beyond voluntary control. This definition covers a wide variety of substances— tobacco, alcohol, and drugs (both prescription and illegal). Men are twice as likely as women to be dependent on or to abuse alcohol or illicit drugs.

Smoking

Many women are now aware that smoking is linked to an increased risk of heart attack, stroke, various types of cancer, chronic lung disease, and reproductive problems. Women who smoke and use birth control pills are much more likely to have a heart attack or stroke than women who don't. However, growing numbers of women have been taking up this deadly habit. Current estimates indicate that almost 23% of women smoke.

Every woman who smokes or considers taking up this “killer” habit should know the following facts:

- ✓ Women who smoke have more than twice the risk of dying during a given year than nonsmoking women.
- ✓ Smoking is a major cause of lung cancer (and several other cancers), stroke, heart disease, and chronic lung disease, among other conditions.
- ✓ Each year, more than 178,000 women die prematurely from smoking- related diseases.
- ✓ Cigarette smoking contributes to nearly one-third of all cancer deaths in women.

Breaking the smoking habit...

It isn't easy to stop smoking—but you can do it!

- ✓ Set a target date to stop smoking and put it in writing.
- ✓ Pick a time when you won't be under too much stress.
- ✓ Throw out all your cigarettes, matches, lighters, and ashtrays the night before.
- ✓ Tell your friends you are quitting smoking and ask them not to smoke around you.
- ✓ Identify and avoid situations that trigger your desire to smoke. Watch yourself when you are drinking coffee, talking on the phone, watching television...anything that you associated with smoking in the past.
- ✓ Make new habits that aren't mentally associated with smoking. For example, start your day with tea instead of coffee and a cigarette.

- ✓ Try deep breathing to calm down when you're feeling tense. Take a slow deep breath, count to five, and exhale. Do this 10 times.
- ✓ Keep busy. Exercise and be physically active.
- ✓ Keep low-calorie foods around for the times that you feel an urge to put something in your mouth.
- ✓ You may want to try nicotine chewing gum, patches, or inhalers. They aren't for everyone, however. Ask your doctor about the use of other stop-smoking aids.
- ✓ Don't get discouraged and give up if you slip and have a cigarette. Most smokers slip three to five times before they quit for good.

There are several medicines available to help you stop smoking. These medicines are highly effective at helping people quit. Talk with your doctor about resources including medications to help you quit smoking.

Substance Abuse

The term substance abuse covers a variety of situations, including misuse of legal substances (such as alcoholic beverages, prescription medications, over-the-counter drugs, and glue) and the use of illegal substances (such as street drugs). Keep in mind that substance abuse can occur at any age. Almost 5% of American women are dependent on or abuse alcohol or illicit drugs.

Alcohol Abuse

It isn't as easy to make blanket statements about alcohol consumption as it is about smoking. You might think of alcohol use as light to moderate drinking—one or two drinks. Alcohol abuse, on the other hand, is drinking in large amounts or in binges. The following questions may help you decide whether you have a drinking problem:

1. Have you ever felt that you should cut down on your drinking?
2. Have people annoyed you by criticizing your drinking?
3. Have you ever felt bad or guilty about your drinking?
4. Have you ever had a drink first thing in the morning—an eye opener—to steady your nerves or get rid of a hangover?

If you answered “yes” to one or more of the first three questions, you may be developing a drinking problem. A “yes” answer to the fourth question indicates a more serious problem that should be treated. Additional signs of a drinking problem include—

- ✓ Missing work or being late to work because of a hangover.
- ✓ Not being able to perform housework or daily tasks.
- ✓ Having memory lapses or blackouts.
- ✓ Having sexual relations with someone to whom you wouldn’t ordinarily be attracted.
- ✓ Fighting with your spouse or friends or hitting your children.
- ✓ Being preoccupied with drinking and organizing activities and social functions around alcohol.
- ✓ Having marriage or family problems in which drinking could be a factor.
- ✓ Having an auto accident after leaving a party in an intoxicated state.

Your honest answers to these tough questions should help you decide whether or not you need help. Some people benefit from joining Alcoholics Anonymous, Al-Anon, Alateen, or the National Association of Children of Alcoholics. Psychiatrists, psychologists, and social workers also provide professional treatment for alcohol abuse.

Prescription Drugs

An alarming number of women take prescription drugs for non-medical reasons. Prescription drugs most likely to be misused are those that alter mental states, such as tranquilizers, sleeping pills, stimulants, and pain killers. These drugs are useful and appropriate under certain conditions.

The problem of abuse arises when you—

- ✓ Increase the dosage of the drug.
- ✓ Use the drug longer than was prescribed.
- ✓ Use the drug for a purpose other than what it was prescribed for, such as to become high or intoxicated.

Tranquilizers. Tranquilizers are prescribed for short-term treatment of stress and anxiety. Low doses of these drugs make a person feel cheerful and relaxed; higher doses cause a feeling of intoxication. People who use tranquilizers for longer than the prescribed time become dependent upon them. When they stop the drug, they may experience severe anxiety, nervousness, insomnia, or more serious symptoms.

Sleeping Pills. Benzodiazepines (a category of tranquilizers) and other sedatives are typically prescribed as a short-term treatment for long-term insomnia (sleeplessness). However, long-term use may lead to dependency and to taking increasingly larger doses to obtain the same effect. Increased use may cause a “hangover” the next day—feelings of mental dullness, lack of concentration, and problems with memory—in addition to mood swings, depression, anxiety, and irritability. Stopping these drugs may result in withdrawal symptoms similar to those associated with stopping tranquilizers, except more severe.

Amphetamines.

Stimulants, such as benzedrine and dexedrine, increase energy at the same time they decrease appetite. When used as diet pills, they lead to psychological and physical dependency—being hooked. These days, amphetamines are more often used illegally to increase the effects of other drugs.

Painkillers

Prescribed painkillers typically relax you and give you a sense of well-being in addition to decreasing your sensitivity to pain. Pain killers are given for moderate to severe pain, sometimes after surgery, injury or for cancer pain. Opioids include drugs like hydrocodone, codeine, oxycodone, and morphine.

Painkillers are highly addictive and can cause serious withdrawal symptoms when you stop taking them. Many people who misuse painkillers started out using them when they were having pain and then continued to use them for the other effects that it gives, to get high or to help them cope with stress. Risks include misuse, addiction, overdose, and death. People should be very careful when prescribed these medicines.



Illegal Drugs

Illegal drug use cuts across all boundaries of sex, age, race, and socioeconomic status. More than 70% of the AIDS cases among women are drug-related. Here are some frightening facts:

Female Drug Abusers—

- ✓ Have a higher incidence of sexually transmitted diseases.
- ✓ Have poor nutrition, putting them at higher risk of other diseases.
- ✓ Have an increased risk of getting infections such as HIV, hepatitis B, and other viruses from sharing needles.

In addition, illegal drugs taken during pregnancy may lead to premature birth or death of the fetus. If the baby survives, it may already be addicted to the drug.

Narcotics

Narcotics dull the senses, relieve pain, and produce sleep. The most common illegal narcotic is heroin. Those diagnosed with dependence or abuse of prescription opioids are more likely to switch to heroin. When people no longer have access to the painkillers, they make the switch. It's cheaper, more available, and provides a better high. The street price of heroin has been much lower in recent years than in past decades.

Withdrawal symptoms include anxiety, sweating, shaking, cramps, and an intense craving for heroin. Some individuals addicted to heroin are given methadone, a synthetic substitute for heroin, to help them function without the drug.

Cocaine

Powder cocaine, which is typically snorted, is still the most popular form of cocaine. Cocaine can come in powder form or can be mixed with other substances and sold in rock form called "crack." Both forms of cocaine are highly addictive.

After ingestion, cocaine quickly produces a short-term, but intense,

feeling of well being; an increase in self-confidence, energy, and sensuality; and a decrease in appetite. But because this high is followed by a low, the user soon wants more of the drug, which leads to addiction. The physical effects of cocaine put a strain on the body that can lead to chest pain, heart attack, stroke, seizures, or convulsions.

Hallucinogens

Hallucinogenic drugs, such as marijuana, LSD, and PCP (angel dust), affect the central nervous system, change a person's ability to understand, and alter body function. In addition to producing a relaxed and detached mood and an altered sense of time, marijuana also can impair memory, the ability to think logically, and coordination. Chronic heavy use results in a loss of energy and drive and may lead to psychological dependence. PCP and LSD, on the other hand, usually produce more vivid, unpredictable responses, which can lead to flashbacks, violence, and chronic mental disorders.

Addiction to prescription or illegal drugs can and should be treated. If you believe you need help with addiction, please contact a health professional.

SAMHSA national hotline 1-800-662-HELP (4357), offers information on addiction and free referral services in English and Spanish 24 hours a day.

Codependency

Codependency originally referred to a relationship between someone who is addicted (to alcohol, drugs, gambling, sex, etc.) and a codependent person who has an obsession with controlling the addict's behavior and/or curing his/her problems. The term has now been expanded to describe people who see themselves as rescuers of another person with any type of persistent destructive behavior. Codependents make excuses for and cover up another's destructive

activities, thereby enabling the person to continue these activities without having to face the consequences.

Codependent individuals live through another person's life. They are often angry, controlling, preachy, blaming, subtly manipulative—and generally miserable. It is good to be a caring person, but you must have boundaries that separate your life from that of another person. Here are a few questions to help you decide if you are in a codependent relationship. Some of these questions may make you feel uncomfortable—but try to answer them honestly.

1. Do you hope that your help will change the behavior of a loved one who is addicted or acts compulsively?
2. Do you do more than your share of the work, allowing that person to get by with doing less than his/her share?
3. Do you consistently give more than you receive in the relationship?
4. Do you try to “fix” others’ feelings that make you uncomfortable?
5. Do you make excuses for the other person’s behavior?
6. Do you try to protect him/her from the consequences of his/her behavior?

If you answered yes to one or more of these questions, you may need help from a counselor to learn how to detach yourself from the other person's life.

Eating *Smart*



“Overnutrition”—resulting in overweight and obesity—is the Number One nutritional problem in the United States. Almost 69% of American women over age 20 are overweight and one-third are obese. Many people believe that the national preoccupation with trying to lose these extra pounds contributes to the development of eating disorders, such as anorexia, bulimia, and binge eating disorder. The vast majority of people with eating disorders are women, many of whom may be trying to achieve an unrealistic ideal figure.

Obesity

Excess weight can lead to a slew of damaging effects on your health, and it significantly impacts how you feel about yourself. Obesity is associated with Type 2 diabetes (page 42), cardiovascular disease (page 22), and colon cancer (page 29). Being obese greatly increases your chances of developing high blood pressure (page 22) and gallstones.

What is obesity anyway?

Obesity is a real disease that results from an imbalance between the calories you consume and the calories you burn each day. Many factors are involved in obesity, including genetics, your environment, and psychological influences. Obesity is rarely caused by an illness, such as an underactive thyroid, or from taking medications, such as steroids.

How can you tell if you are overweight? Many nutrition professionals now prefer to use a measurement called the body mass index, or BMI. Here is how to figure your BMI—

First, multiply your weight (in pounds) by 703. Next, divide the answer by your height (in inches) twice. Here's an example. Teresa is 5 feet 9 inches (69 inches) tall and her weight is 174 pounds.

$175 \times 703 = 123,025 \div 69 \div 69 = 25.8$. So, Teresa's BMI is 26.

- ✓ A BMI from 18.5–24.9 indicates a desirable weight.
- ✓ A BMI from 25–29.9 is considered overweight.
- ✓ Obesity has three levels
 - o Class 1 is a BMI of 30-34.9
 - o Class 2 is a BMI of 35-39.9
 - o Class 3 is a (extreme obesity) BMI of 40 or above

Losing Excess Weight

No magic food, pill, or activity can solve the problem of excess weight. Most nutrition professionals recommend eating fewer calories and increasing the level of physical activity. The healthiest, most successful weight management program is likely to be one that helps you make a number of lifestyle changes—what and how much you eat, how you deal with food, and how much and how often you exercise.

Choosing wisely...

Establishing a good weight-reduction diet is similar to creating a healthful diet (discussed on page 8). Keep a close eye on portion size and greatly reduce your snacking on foods that are high in calories with little or no nutritional benefit.

Eating “smart”...

For many people, how they eat influences what and how much they eat. Here are a few tips to help you control your food intake.

- ✓ Many people who are overweight eat quickly. Slow down— and be aware of every bite you eat.
- ✓ Keep food records. Write down everything you eat each day.
- ✓ Eat in only one location, preferably at the dining table.
- ✓ When it is time to eat, do only that. Don’t combine eating with other activities that distract you.
- ✓ Don’t overfill your plate.
- ✓ When you eat out, before you start your meal, ask for a “take-home” container for part of your food.
- ✓ Many people who overeat often crave a particular food that has nothing to do with actually being hungry.
- ✓ Cravings often fade in less than 30 minutes—try to delay eating, and the craving may pass.

Moving well...

The other essential part of any successful weight control plan has to be increased activity. Exercising not only helps you lose weight, it helps tone your body so that you look better as your body loses fat. One of the most discouraging things about losing weight is that most people regain the weight they lost (and usually gain a few extra pounds). Research has shown that taking part in a regular exercise program is the most important thing you can do to keep off the weight you lose. (Exercise is discussed in more detail, starting on page 15).

Getting help...

Many people find it difficult to lose weight on their own. You may find it helpful to join a weight-loss program. Look for a program with an established record, based on a combination of balanced diet and increased activity. Your weight loss should be gradual, and it may take months to achieve a realistic weight goal. Don't be fooled by so-called "miracle cures" and promises of "effortless weight loss."

If you have a considerable amount of weight to lose, make sure your doctor is aware of the approach you are taking to your weight problem. Your doctor may refer you to a dietitian for help with a healthy eating program and/or an exercise professional to help you design a safe and effective program of regular physical activity.

Eating Disorders

The most common eating disorders are anorexia, bulimia, and binge-eating disorder.

Anorexia—

- ✓ Is intentional self-starvation, leading to a weight loss of at least 15% below normal body weight.

- ✓ May occur in up to 3.7% of women at some time in their lives.
- ✓ Often includes compulsive exercise to help keep weight off.

Even when anorexic individuals are exceedingly thin, they continue to be convinced that they are overweight.

Bulimia—

- ✓ May occur in up to 4.2% of women at some time in their lives.
- ✓ Consists of bingeing (consuming large amounts of food) followed by purging (getting rid of the food by vomiting and/or by misusing laxatives, diuretics [water pills], or enemas).
- ✓ May be difficult to identify because the bingeing and purging are done in secret, and bulimic individuals usually maintain a normal body weight.
- ✓ May also include excessive exercise.

Binge-Eating Disorder—

- ✓ Affects about 2–5% of Americans, about 65% of whom are women.
- ✓ Consists of episodes of uncontrolled eating— bingeing— until the individual is uncomfortably full.

Many factors contribute to the development of an eating disorder.

- ✓ Eating disorders tend to run in families, with females most often affected.
- ✓ Women in professions or activities that emphasize thinness (such as modeling, dancing, gymnastics, and long-distance running) are more susceptible to eating disorders.
- ✓

- ✓ Most people with eating disorders share certain characteristics—low self-esteem, feelings of helplessness, and fear of becoming fat.

Common Symptoms of Eating Disorders

Symptoms	BE		
	Anorexia	Bulimia	Disorder
Excessive weight loss in brief period of time	•		
Continued dieting although excessively thin	•		
Belief that body is fat even when very underweight	•		
Loss of monthly menstrual periods	•	•	
Unusual interest in food and development of strange eating rituals	•	•	
Eating in secret	•	•	•
Obsession with exercise	•	•	
Serious depression	•	•	•
Bingeing (consuming large amounts of food)		•	•
Vomiting or use of drugs to stimulate vomiting, bowel movements, and urination		•	
Bingeing but with no noticeable weight gain		•	
Abuse of drugs or alcohol		•	•

Note: Some people suffer from both anorexia and bulimia and have symptoms of both.

Health Complications Associated with Eating Disorders

Individuals with an eating disorder may develop serious health problems. Anorexia, for example, can damage the heart, brain, and other vital organs. Important body functions are affected, including breathing, pulse, blood pressure, and thyroid function. A woman with anorexia undergoes a number of physical changes—her menstrual periods stop, her bones become thin and can break easily, she feels cold, and she may feel lightheaded.

Women with bulimia who use drugs to promote vomiting, bowel movements, or urination are at increased risk of heart failure. Also, the stomach acid that is vomited up can damage teeth and scar the hands or fingers when they are pushed down the throat to cause vomiting. Some people with bulimia also have addictions, including alcohol or other substance abuse issues and compulsive stealing. Many women with bulimia or anorexia also have psychiatric illnesses and are at increased risk for suicidal behavior.

Binge eaters typically are overweight, placing them at higher risk of developing medical problems associated with obesity. Some research indicates that people with binge-eating disorder have a high incidence of psychiatric illnesses, especially depression.

What To Do...

As with most diseases, treating eating disorders early offers a greater chance of success. However, many people with eating disorders deny that they have a problem. Some people can be treated as outpatients, whereas others are in immediate danger and must be hospitalized. Treatment may consist of individual therapy with various health professionals and/or group therapy. Family support is essential in achieving recovery, and psychiatric medications may also be helpful.

Women *Victims*



A national survey found that more than 19 out of every 1,000 women had been assaulted and almost 2 women out of 1,000 had been raped.

The following advice emphasizes that the best defense is prevention.

➤ **Defense in your home**

- ✓ Be sure to lock your doors when you are at home—even during the day.
- ✓ If a stranger comes to your door asking to use your phone, don't let him inside.
- ✓ Never hide your door key in an obvious place, such as over the door frame, in a flower pot, or under a doormat.
- ✓ Keep emergency phone numbers in a handy place. Use 911.

➤ Defense while you are driving and walking

- ✓ Keep your car windows and doors locked at all times.
- ✓ Don't leave valuables where they can be seen.
- ✓ If a car follows you into your driveway at night, stay in your car with the doors locked until you identify the occupants of the other car.
- ✓ When parking your car, choose a place that will be well-lighted if you return after dark.
- ✓ Check for people who seem to be standing around and doing nothing before you leave or enter your car. If you feel you are in danger, sound your horn to get the attention of anyone passing by.
- ✓ Don't offer to help a stranded motorist. Use your cell phone to call the police or highway patrol.

A Few Words about Rape

Each year an estimated 683,000 American women are raped. One out of every six women has either been raped or has been the victim of an attempted rape. Always remember that rape is not a crime of sex, it is a crime of violence. Did you know that—

- ✓ Statistics have shown that 68% of women who reported being raped knew the rapist.
- ✓ One study found that only 39% of rapes and sexual assaults were reported to the police, primarily because the woman thought that nothing could be done, it was a private matter, it was not important enough, or she was afraid of the police response.

Some FALSE beliefs or statements about rape include:

- ✓ “It could never happen to me.”
- ✓ “Women who are raped must have ‘asked for it’, as in wearing sexy clothes.”
- ✓ “Any woman who really wanted to prevent being raped could do so.”

If you believe that any of these statements is true, you are accepting false ideas that may increase your likelihood of being raped. There is no foolproof way to identify a potential rapist!

Unfortunately, sometimes a rapist is someone you know. Several ominous signs should warn you that a person with whom you have a relationship might harm you.

- ✓ Does he try to control you? Does he tell you how to dress or whom you can have as a friend?
- ✓ Has he used physical violence with you or others? This includes grabbing and pushing.
- ✓ Does he get jealous for no reason?
- ✓ Does he ignore your opinion or insult you?
- ✓ Does he talk negatively about women in general?

A “yes” answer to any of these questions is a signal that you need to get out of the relationship as soon as you can. In any attempted rape, a man who sexually assaults a woman counts on being able to control her.

Scream! Yell ‘Call the police!’ or ‘Fire’ as loudly as you can. Run! Make a scene! Act quickly to draw attention to your attacker. Carry pepper defense spray, but only if you know how to use it and are willing to do so without hesitation. You don’t want him to grab it and use it on you. It is a good idea to have some self-defense training.

If a potential rapist is armed with a weapon, try to avoid going anywhere with him. He is less likely to use the weapon in a public place than when you are alone in a car with him. If you fear for your life, you may have to stop resisting. Notice everything you can about your attacker—height, weight, coloring, scars, tattoos, or birthmarks, accent, clothing—to help the police identify the man later.

If the unthinkable happens, and you are raped, it is important to remember the following points:

- ✓ Don't destroy the evidence by bathing or showering, douching, washing your hands, brushing your teeth, or by changing the sheets or your clothes.
- ✓ Call the police immediately so that they can collect evidence and take a description of the attacker while it is fresh in your mind.
- ✓ Get medical attention.

This is important so that you can—

- ✓ Be tested for sexually transmitted diseases.
- ✓ Be examined for physical injuries and emotional injury.
- ✓ Allow prompt, careful collection of specimens and physical evidence that will help the police catch your attacker.
- ✓ Seek counseling—you are not alone. Discuss your feelings with your family, friends, or a counselor. You may be referred to a counseling program for rape victims.

Family Violence

If there is a history of family violence in your home, you must take steps to protect yourself.

- ✓ Be prepared to leave on a moment's notice. Plan ahead by:
- ✓ Collecting originals or copies of your important papers—birth certificate, Social Security card, driver's license, and immigration documents.
- ✓ Making copies of your house keys and car keys.
- ✓ Packing important papers, clothes, and medications for yourself and your children and leaving the documents with a friend or in a safe place.

Get out when you sense that you are in danger! If you change your mind later, you can always go back. Find a safe shelter with family or friends, or at a facility that cares for abused women. If you need medical treatment, see your doctor or go to an emergency room. Seek counseling to discuss your choices. Remember that you have the right to file charges, to get a protective order, and to seek other legal help.

Reproductive Coercion

Reproductive coercion is related to actions that interferes with contraception use and pregnancy by someone who is, was, or wishes to be involved in an intimate or dating relationship. The most common forms of reproductive coercion include sabotage of contraceptive methods, pregnancy coercion, and pregnancy pressure.

I. Sabotage of contraceptive methods –

a. Examples:

- i. hiding, withholding, or destroying a partner's oral contraceptives
- ii. breaking, poking holes in a condom on purpose or removing a condom during sex
- iii. not withholding when that was the agreed upon method
- iv. removing vaginal rings, patches, or IUDs

2. Pregnancy Coercion

Behavior intended to pressure a partner to become pregnant when she does not wish to.

3. Pregnancy Pressure

Behavior such as threats or acts of violence if a partner does not comply with the persons' wishes regarding the decision to terminate or continue a pregnancy.

Bouncing *Back*



What is resiliency?

Resiliency means being able to adapt to life's setbacks. When something goes wrong, resilient people tend to bounce back instead of fall apart.

- ✓ Resilience won't make your problems go away. But it will increase your ability to see past the problems and find enjoyment in life. In difficult times, you may feel emotional pain, but you will still be able to function.
- ✓ Resilience is not something out of the ordinary. Anyone can learn the behaviors, skills, thoughts, and attitudes of resilience. What and when you decide to learn about your resilience varies.
- ✓ Resiliency is a personal journey, and the journey may change course at various times in your life or with different types of challenges or problems.

- ✓ Factors that nurture resiliency may be different for men and women and can vary across cultures. For example, girls become more resilient by building strong, caring relationships. Boys tend to rely more on problem solving.
- ✓ Research about aging shows that people with psychological resiliency age more slowly, live longer, and enjoy better health.

How might your resiliency be strengthened? Have a friend and be a friend.

Make connections.

Good relationships with trustworthy people are important. Accept help and support from those who care about you and who will listen to you. Good relationships strengthen resilience. Be a good friend to others.

Take care of yourself.

Tend to your needs, feelings, and physical health. Participate in activities you enjoy. Work toward a healthy routine of sleep, diet, and exercise. Use techniques such as relaxation, guided imagery, deep breathing, journaling, or prayer to restore inner peace.

Take Charge of Yourself:

Make every day meaningful. Do something each day that gives you a sense of accomplishment. Be of service to people and groups that you value. Connect with your faith and cultural history.

Remain hopeful. The past cannot be changed, but you can look to the future with optimism. Hold on to the belief that things can change for the better and that you can influence that change.

Look at the bright side. Find joy in both small and big experiences and accomplishments. Concentrate on positive thoughts instead of listening to your negative internal talk.

Learn from experience. Look back at your life and remember how you have succeeded in the past. Remember the skills and strategies that helped you in rough times and apply them to your next challenge.

Act with Purpose (Positive Expectations)

Know that change is part of living and that problems can be overcome. You can control how you respond to stressful events. Try to look beyond the present to how the future may be better.

Set goals and follow through. Your goals should be realistic and ones that you personally value: plan, act, and check your progress for each one. Use your goals to establish meaning and purpose now and in your future.

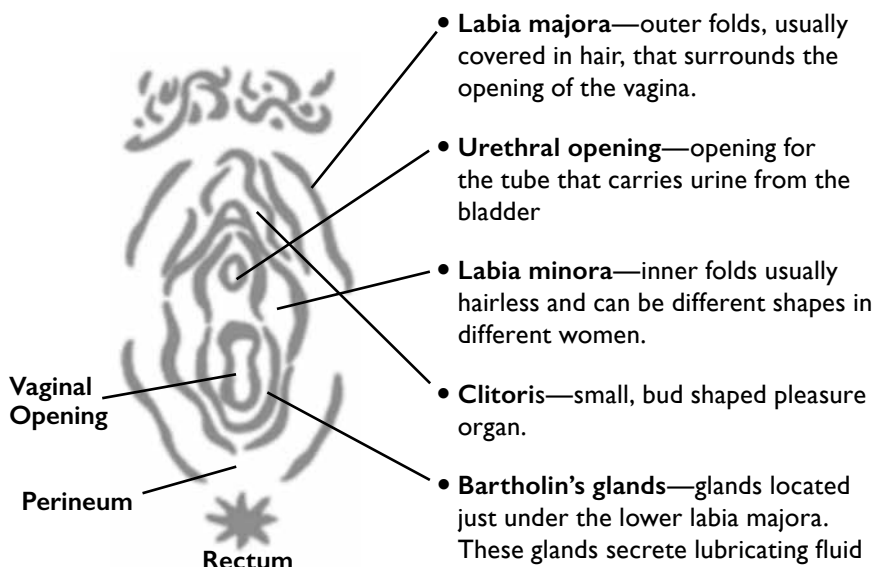
Nurture a positive view of yourself. Recognize what you and others have accomplished. Believe in yourself.

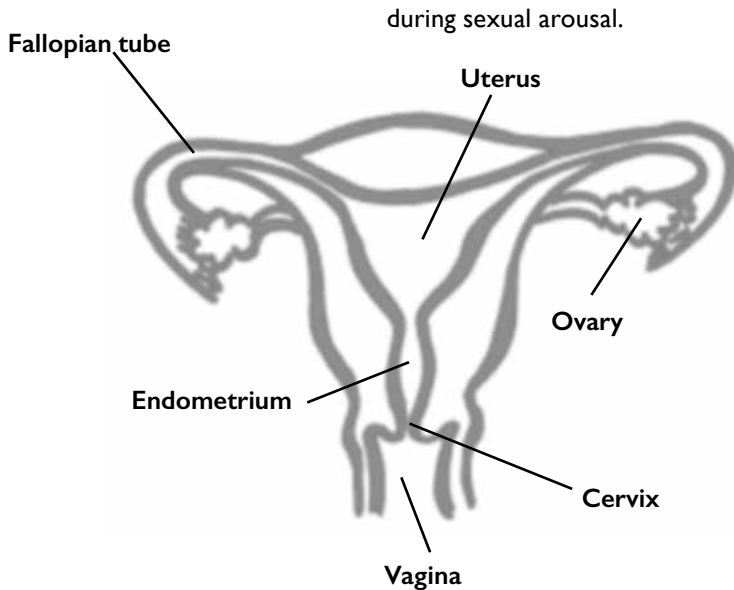
Female Sex Organs and the Menstrual Cycle

Reproductive *System*

The female reproductive system is a wonderful combination of external and internal organs and several interacting hormones.

The vulva, or a woman's external genital area (see illustration), includes the—





A woman's internal sex organs (see illustration) include the:

- Vagina—a muscular tube, three- to- five inches long, leading from the external genitals to the uterus.
- Uterus—a hollow, muscular organ, about the size of a pear, that holds the growing fetus during pregnancy.
- Cervix—the lower part of the uterus that projects into the upper end of the vagina.
- Endometrium—the lining of the uterus, which changes in thickness during different stages of the menstrual cycle.
- Fallopian tubes—two structures, each about four or five inches long, that extend from either side of the upper end of the uterus toward the ovaries.
- Ovaries—two female sex organs, each located next to the opening of a fallopian tube, that produce eggs and female hormones.

The primary female hormones are:

- ✓ Estrogen—produced primarily by your ovaries and responsible for endometrial growth and maintenance of vaginal thickness.
- ✓ Progesterone—produced by your ovaries after ovulation. This hormone prepares the endometrium for the fertilized egg and triggers the menstrual period when fertilization does not occur.
- ✓ Follicle-stimulating hormone (FSH) and luteinizing hormone (LH)—hormones (produced by your pituitary gland) that regulate the menstrual cycle by stimulating the ovaries to produce and release a mature egg during ovulation.

Although testosterone is primarily a male hormone, women produce small amounts of it. Testosterone is involved in bone and muscle growth, sexual development, and sex drive (libido).

The Menstrual Cycle

In the United States, girls normally reach menarche (begin menstruating) after age 9 and before age 16—typically between the ages of 11 and 14. Each woman is born with about 2 million undeveloped eggs in her ovaries. Between 3 and 12 months after she reaches menarche, a girl will begin to ovulate each month—producing and releasing mature eggs from her ovaries. At this point, she can become pregnant.

Although the average menstrual cycle is 28 days, length can vary from 24 to 35 days, depending on the individual woman. In a textbook menstrual cycle, a woman might start to menstruate on day 1, blood flow stopping about day 5, ovulation occurring on about day 14, and, if the egg is not fertilized, menstrual flow beginning again on about day 28. Although the most likely time to become pregnant is around the time of ovulation, sexual intercourse a few days before ovulation can also result in pregnancy.

Complications of the Menstrual Cycle

Several conditions are associated with the menstrual cycle:

Menstrual Pain. Although some women have no pain directly before and during their periods, most women do experience mild to moderate pain. Women who experience severe pain may have another cause for pain, such as endometriosis. Other women may experience pain around the time of ovulation. Menstrual pain often consists of pain or cramps in the lower abdomen or lower back or a pulling sensation in the inner thighs. Pain may be accompanied by headache, nausea, vomiting, constipation, diarrhea, dizziness, or fainting.

In some cases, pain during menstruation may be due to another cause, such as endometriosis (see page 63), fibroids, or pelvic inflammatory disease. Endometriosis occurs when part of the endometrium grows outside the uterus, typically on or near the ovaries or fallopian tubes or in other areas of the abdomen. Fibroids are noncancerous tumors located in or on the uterus. Pelvic inflammatory disease (PID) is an inflammation of the upper reproductive tract, usually the uterus, fallopian tubes, or ovaries. PID usually is a result of a sexually transmitted infection and can lead to scarring of the fallopian tubes and possibly infertility.

Premenstrual Syndrome. Premenstrual syndrome (PMS) is a catch-all phrase used to describe a wide range of physical and emotional symptoms that typically occur 7 to 10 days before the start of a woman's period. An estimated 40% of women experience premenstrual symptoms that affect their daily lives, and 5% of these women have severe symptoms. The nature and causes of PMS remain unclear, and treatment consists of treating the most bothersome symptoms. Several medications have been successful in treating PMS. Although the symptoms of PMS differ from one woman to another, they often include:

- ✓ Breast swelling and tenderness.

- ✓ Weight gain and bloating.
- ✓ Emotional changes, such as depression, crying, anxiety, nervousness, mood swings and irritability.
- ✓ Insomnia.
- ✓ Headaches.
- ✓ Food cravings, especially for sweets.
- ✓ Increased appetite.
- ✓ Fatigue.

Irregular Periods. Some women have menstrual cycles that are longer than the usual 28 days. A cycle that is longer than 35 days or is erratic may be due to a hormonal problem. This does not usually present a problem unless a woman is trying to become pregnant.

The most common cause of amenorrhea—stopping menstrual periods—is pregnancy. However, excessive exercise, extreme dieting, eating disorders, severe stress, or hormone disorders, such as hypothyroidism (low thyroid activity), hormone imbalance (as in polycystic ovarian disease), or an estrogen level that is too low, also can cause periods to stop. If you have missed three periods and aren't pregnant, see your doctor for an evaluation.

Heavy periods often occur in young girls who are not yet ovulating regularly and in women approaching menopause.

Heavy and painful periods also can result from fibroids, pelvic infection, or, in rare cases, endometriosis.

Toxic Shock Syndrome. Toxic shock syndrome is a bacterial infection typically caused by using certain types of highly absorbent tampons. However, the most absorbent of these tampons have been removed from the market, and toxic shock syndrome is now rare. But to avoid possible problems, doctors recommend that any tampon be left in place for no more than four to eight hours.

Conception

Delivery



Pregnancy begins at conception—the point at which the sperm fertilizes the mature egg.

Pregnancy Checklist

A normal, healthy pregnancy lasts an average of 40 weeks and can be divided into three stages—trimesters—each about 13 weeks long. It is very important to get off to a good start. If you haven't already adopted the following healthy behaviors, be sure to start immediately once you know you are pregnant!

- ✓ Follow a well-balanced and nutritious diet.
- ✓ Take the prenatal vitamin/mineral product recommended by your doctor. It should contain folic acid, the B vitamin that has been shown to prevent certain types of birth defects, and it must be taken every day. Pregnant women need 400 micrograms (0.4 milligrams) of folic acid per day. Folic acid is found in most enriched grain products, such as bread, flour, cornmeal, macaroni, and noodles.

- ✓ Don't use tobacco, alcohol, or any illegal drug.
- ✓ Check with your doctor before you take any medication, including over-the-counter drugs like aspirin and prescription drugs.
- ✓ Avoid harmful toxins in the environment. These include lead and mercury that might be present in the workplace; large doses of ionizing radiation, as might occur during medical x-rays and in medical research, manufacturing, and energy production; and pesticides and solvents that might be present on the job or in your home.
- ✓ Follow your doctor's recommendations about exercise during your pregnancy.

Prenatal Care

It is wise to begin counseling prior to becoming pregnant to discuss any high-risk factors before conception and to start taking folic acid daily. Prenatal care should start as soon as you know you are pregnant, and you should be counseled about a healthy weight gain during pregnancy. Pregnant women should avoid drinking alcohol because it can damage the unborn baby. Fetal alcohol syndrome is a major cause of mental retardation.

Prenatal visits. During the first visit, your doctor will take a medical history and do a physical examination. Routine measurements (height, weight, and blood pressure) and a urine test will be taken at every visit. Blood tests typically are done only at the first visit. These tests are performed to establish blood type and Rh factor, to determine whether you have anemia and/or any sexually transmitted diseases, and to establish whether you are immune to German measles and hepatitis B. Urine tests can reveal whether you have diabetes or a kidney infection, as well as identify a life-threatening condition in pregnancy called preeclampsia.

The remaining prenatal visits are typically scheduled once a month up to the 28th week of pregnancy, every two to three weeks up to the 36th week, and then weekly until delivery.

Prenatal Testing

Here are some prenatal tests your doctor may recommend:

- ✓ Fetal heart rate monitoring allows you to listen to the baby's heartbeat. In high-risk pregnancies, more extensive heart rate monitoring may be done.
- ✓ Ultrasound is a painless and safe imaging procedure that creates a picture of the baby on a video screen. It is used to determine the age, and perhaps the gender, of the baby, its rate of growth, its position in the uterus, the presence of more than one baby, and any visible birth defects.
- ✓ The alpha-fetoprotein test is a blood test that can indicate whether the baby has a type of birth defect called a neural tube defect (an opening in the spinal cord or brain).
- ✓ A first-trimester ultrasound and specific blood tests in the first and second trimesters can detect chromosomal abnormalities and other potential problems. Women with abnormal results are referred for *amniocentesis* (withdrawal of a sample of the amniotic fluid that surrounds the baby) to detect conditions such as Down syndrome, cystic fibrosis, sickle cell anemia, Tay-Sachs disease, and hemophilia. *Chorionic villus sampling* analyzes placental tissue to detect genetic abnormalities in the fetus.
- ✓ *Percutaneous umbilical cord sampling* is another test used to detect genetic abnormalities. This test is used only after other procedures have failed to provide a definite diagnosis.
- ✓ Vaginal culture for group B streptococcus is performed in late

pregnancy to determine whether treatment for a streptococcal infection will be necessary during labor.

Ectopic Pregnancy

In a normal pregnancy, the fertilized egg travels through the fallopian tube and into the uterus, where it implants in the endometrium. An ectopic pregnancy occurs when the fertilized egg implants somewhere along the route to the uterus—within the lining of the fallopian tube, on the surface of the ovary, or in the abdominal or pelvic cavity. This abnormal implantation can occur when the passage to the uterus is blocked, as can occur when the fallopian tube is twisted or narrowed.

If you have a history of infections of your fallopian tubes or ectopic pregnancies, you must be carefully monitored by your doctor. Once pregnancy is confirmed by blood tests, an ultrasound can be performed to be sure that the pregnancy is within the uterus. An ectopic pregnancy in the fallopian tube can cause the tube to rupture, resulting in excessive bleeding, which can cause severe abdominal pain, shock, and collapse.

Caesarean Delivery

In a Caesarean delivery the baby is delivered through an incision in the mother's abdomen and uterus. A Caesarean delivery may be performed if:

- ✓ The baby is too large to pass safely through the mother's pelvis.
- ✓ The baby is having difficulty withstanding labor or pressure on the umbilical cord (fetal distress).
- ✓ If problems arise with the placenta.
- ✓ The baby is not positioned properly for normal delivery and instead has its buttocks or feet first in the birth canal (known as a breech presentation).

Benefits of Breast-Feeding

The advantages of breast-feeding are:

- ✓ Mother's milk provides ideal nutrition for a growing infant.
- ✓ Mother's milk contains active enzymes to help the infant digest the milk and absorb its nutrients.
- ✓ Infants fed mother's milk have fewer allergies and infections.
- ✓ Breast-feeding establishes a special bond between mother and child.
- ✓ Women who breast-feed appear to have a lower incidence of breast and ovarian cancers and are less likely to become obese.

What About Infertility?

An estimated 6 million American women have an impaired ability to bear children, and more than 2 million couples seeking to have a child are infertile. Infertility may affect the male partner, the female partner, or both.

Common causes of infertility in women include:

- ✓ Blocked, scarred, or closed fallopian tubes, usually due to a sexually transmitted disease, such as gonorrhea or *Chlamydia*, that results in pelvic inflammatory disease.
- ✓ Absence of ovulation.
- ✓ Endometriosis.
- ✓ A defect or abnormality in the uterus or other parts of the reproductive system.
- ✓ Infertility may also be due to a defect in the partner's sperm or an inability to produce sperm.

- ✓ Polycystic ovarian syndrome (PCOS) - A common hormonal disorder that affects ovaries in women during childbearing years.

Fertility treatments, including treatment of ovarian disorders, surgery for scarring and endometriosis, and assisted reproduction, help some couples achieve a successful pregnancy. Assisted reproduction (such as in vitro fertilization) is used in women who have tubal disease and in men who are infertile due to a low sperm count. Couples considering fertility treatments should fully understand the expense, the likelihood of achieving a viable pregnancy, the side effects of various infertility treatments, and the emotional toll that months or years of treatment can take on a couple.

Additional resources include—

What to Expect When You're Expecting by Heidi Murkoff and Sharon Mazel. Workman Publishing, 5th edition, 2016.

Mayo Clinic Guide to a Healthy Pregnancy

Birth Control

Options



If you are sexually active but don't want to become pregnant, you should use some form of contraception. Birth control options include hormonal methods, barrier methods, intrauterine devices, the rhythm method, and sterilization. To choose the best method of birth control for you, ask your doctor the following questions:

- ✓ How reliable is this method? (Keep in mind that “failure rates” are higher when a method is used inconsistently or incorrectly).
- ✓ Does this method also protect me from sexually transmitted disease?
- ✓ Is it convenient and easy to use?
- ✓ How does the cost of this method compare to that of other approaches?
- ✓ Is there any reason that someone with my health history shouldn't use this method?
- ✓ Is this form of contraception readily reversible? Will I be able to become pregnant when I stop using it?

Hormonal Methods

Hormonal methods include oral contraceptives (the “Pill”), morning-after pills, and hormone implants and injections. Use of estrogen, progesterone, or a combination of the two hormones creates an environment in the uterus that makes pregnancy unlikely. Hormonal methods alone provide no protection from sexually transmitted diseases.

The Pill

Combination birth control pills contain both estrogen and a progestin (a synthetic form of progesterone). Mini-pills contain only progestin. Both are considered to be more than 99% effective when used perfectly; however, in real-world use, 7.6% of women on the combination pill and 3% of women on the mini-pill become pregnant during the first year of use. Birth control pills must be taken regularly to be effective. Missing even one pill can increase the possibility of becoming pregnant. One advantage of the pill is that you don’t have to stop and think about birth control at the time of sexual activity.

When taking birth control pills, you have to weigh the benefits against the potential health risks. Birth control pills protect against cancer of the ovary and endometrium, noncancerous breast disease, and ectopic pregnancies. They also appear to increase your bone density, which will help offset bone loss during menopause. Birth control pills may also improve acne, PMS, and possibly menstrual migraines and heavy bleeding due to fibroid tumors.

Don’t use oral contraceptives if you—

- ✓ Are over age 35 and smoke.
- ✓ Have a history of vascular disease, including stroke and blood clots.
- ✓ Have uncontrolled high blood pressure, diabetes with vascular disease, and/or high cholesterol.

- ✓ Have active liver disease.
- ✓ Have cancer of the breast or endometrium.

Morning- After Pill

Morning- after pills are a series of pills taken as soon as possible after unprotected sex. They contain estrogen and progestin or progestin alone and are considered highly effective (75%)—but only if started within 72 hours of the unprotected intercourse. Morning-after pills should never be used as a primary form of contraception.

Hormone Implants

With a hormone implant, a small plastic tube containing levonorgestrel or another type of progestin is implanted just under the skin of the arm. This allows a slow, gradual release of the hormone during a three-year period. The hormonal implant method is considered to be more than 99% effective. Implants sometimes cause irregular bleeding and spotting, weight gain, headaches, acne, depression, anxiety, abnormal hair growth, and ovarian cysts. After three years, the implant needs to be removed by a healthcare professional.

Hormone injections

In this technique, a long-acting type of progesterone is injected every three months. This approach is considered to be more than 99% effective when used consistently; in typical experience, the effectiveness is closer to 97%. Possible side effects include abdominal discomfort, nervousness, dizziness, decreased sex drive, depression, acne, weight gain, disturbed menstrual cycles, and episodes of bleeding and spotting. Hormone injections may temporarily decrease bone density. In addition, it may take 10 months or more for regular periods to return after the hormone injections are discontinued and for conception to occur.

Hormone patches

The hormone patch is 91% effective when used as directed. However, it may be less effective in women who weigh more than 198 lbs. The patch is applied on the same day each week for three weeks, followed by a patch-free week. Common side effects include breast symptoms (such as tenderness), headache, nausea, upper respiratory infections, menstrual cramps, abdominal pain, and a skin reaction at the application site. Recent studies suggest that the hormone patch may pose a higher risk of blood clots and stroke than do the comparable combination birth control pills.

Vaginal ring

The vaginal ring is between 98% and 99% effective when used as directed. A woman inserts the vaginal ring into the vagina, where it remains in place for three weeks. It is then removed for a ring-free week before another ring is inserted. The most common side effects of the vaginal ring include vaginal irritation, vaginal discharge, headache, weight gain, and nausea.

Chemical and Barrier Methods

Chemical methods rely on sperm-killing substances, called spermicides. Barrier methods physically block sperm from entering the uterus.

Spermicides

Spermicides prevent conception by killing sperm before they reach the egg to fertilize it. Because spermicides are only about 74% effective when used alone, they are often used with a condom or diaphragm. Spermicides come in several forms—creams, gels, foams, suppositories, and contraceptive films. The use of spermicides may alter the vaginal tissue, increasing the user's risk of contracting HIV. Individuals at high risk of transmitting HIV need to be aware of this. Condoms

Actual success rates for condoms are 82% for the male condom and 79% for the female condom. When condoms fail, it is oftentimes because they are being used incorrectly. When used properly—and the condom is not defective—condoms not only prevent pregnancy but also offer considerable (but not total) protection against sexually transmitted diseases, including the HIV infection that causes AIDS (see page 130).

The male condom is a sheath that fits over the erect penis and collects the sperm when a man ejaculates. The latex rubber condom also protects against disease. Some condoms contain a spermicide, which increases the condom's effectiveness. In contrast, use of oil-based lubricants like baby oil, petroleum jelly, or body lotion can weaken condoms. Therefore, only water-based lubricants should be used.

The female condom consists of two flexible rings connected by a loose-fitting sheath. One of the rings is used to insert the condom and hold it inside the vagina; the other ring remains outside over the labia. The condom lines the vagina and fits over the cervix.

Sponge

Contraceptive sponges are made of polyurethane and contain a spermicide. When inserted and positioned over the cervix, the sponge provides both a physical barrier and chemical protection against sperm. The sponge has a success rate of about 80% in women who haven't had a baby and 60% in women who have had a baby.

Diaphragm

The diaphragm is a reusable round rubber disk with a flexible ring in the rim; it fits inside the vagina to cover the cervix. It is designed to be used with a spermicide, must be fitted by a doctor or nurse, and is available by prescription only. The typical success rate of a diaphragm used with spermicide is almost 88%. Most failures occur when diaphragms are

incorrectly inserted, poorly fitted, or may have been used too long and have holes in them.

Cervical Cap

The cervical cap is like a mini-diaphragm that fits snugly over the cervix and is held in place by suction. Its success rate is also about 80% in women who haven't had a baby and 60% in women who have had a baby. It can be difficult to insert and may not fit all women.

Intrauterine Devices

An intrauterine device (IUD) is placed into your uterus by a doctor to prevent fertilization. The copper-covered IUD can be left in place for up to 10 years; the levonorgestrel IUD can be left in place for three to five years. Both have a success rate of over 99%. IUDs are often chosen by women who do not plan on having children in the near future or who want to prevent pregnancy for the next few years. The levonorgestrel IUD has the added benefit of decreasing menstrual flow and in some cases eliminating periods entirely while it is in place. Removing an IUD can immediately restore fertility potential.

Rhythm Method

The rhythm method, or natural family planning, consists of avoiding sexual intercourse during the days of a woman's cycle when she is most likely to conceive—typically seven days before and three days after ovulation. The success rate is only 91%, primarily due to the difficulty in calculating exactly when ovulation will occur.

Sterilization

Sterilization may be the birth control method of choice for individuals who are certain that they don't want to have children. Women can have surgery, called tubal ligation, to seal their fallopian tubes with an electric current, a ring, or a clip. This is usually accomplished through an incision near or through the navel. In some cases, it may be necessary to have a more extensive surgery, requiring a larger incision in the abdomen, in which a portion of the fallopian tubes are surgically removed. Tubal ligation has a success rate of almost 100%.

A vasectomy is the sterilization procedure for men. It is a much simpler and less costly procedure than a tubal ligation. It consists of either cutting or clamping the vas deferens—the two tubes that transport sperm from the testicles to the penis—so that sperm are prevented from mixing with the fluid (semen) produced at ejaculation. A vasectomy can be performed in a doctor's office using only local anesthesia. It also has a success rate of almost 100%.

Additional resources include—

Contraception: Taking Charge of Your Fertility, 20th Edition by Toni Weschler, MPH. Harper Collins. Revised 2015.

Inflammation

Infection



Some conditions of the vagina are caused by inflammations and/or infections. Vaginitis is a general term for inflammation of the vagina, and it may be accompanied by a discharge, odor, burning, or itching. Vaginitis is very common and is responsible for more than half of all doctor visits by women.

Bacterial Vaginosis

Bacterial vaginosis (BV) is the most common type of vaginal infection. It is caused by an increased amount of certain bacteria in the vagina. It is not considered a sexually transmitted infection; however, it is more common among women who are sexually active.

Symptoms of BV include—

- ✓ Unpleasant or fishy odor.
- ✓ Increased amount of watery vaginal discharge.

Treatment may include applying an antibiotic gel or cream to the vagina, taking oral antibiotics, or both.

Yeast Infection

The second most common cause of vaginal irritation is a yeast infection. The primary symptoms of yeast infection include—

- ✓ Itching, burning, and redness in the vaginal area.
- ✓ White discharge that looks somewhat like cottage cheese.
- ✓ Pain during intercourse.

The most common yeast infection is caused by a fungus called *Candida* that is normally present in the vagina. Factors that contribute to *Candida* infection include pregnancy, diabetes, obesity, or taking certain medications, such as antibiotics.

Once a yeast infection has been diagnosed, it can usually be treated with a gel, cream, suppository, or oral medication developed specifically for yeast infections. Unfortunately, yeast infections often recur after treatment.

Trichomoniasis

Trichomoniasis is the third most common vaginal irritation. This infection is caused by a one-celled organism and is usually transmitted during sexual intercourse. Both sexual partners must be treated with an oral medication.

Symptoms of trichomoniasis may include—

- ✓ Irritating, frothy, yellow-green discharge with an unpleasant odor.
- ✓ Burning, itching, and redness in the vaginal area.
- ✓ Irritation during urination.

Atrophic Vaginitis

Atrophic vaginitis is not caused by an organism. Instead, it results from low levels of estrogen. The tissues of the vagina become thin and dry, which can cause irritation, burning, itching, or a feeling of uncomfortable pressure. This discomfort can decrease a woman's enjoyment of sex. Treatment typically consists of oral hormone therapy, estrogen vaginal cream, lubricants, or moisturizers.

Chapter 22— Sexually Transmitted Infections

Serious *Consequences*



More than 1 in 5 adults in the United States—or 45 million people—carry the herpes virus. Herpes is an incurable sexually transmitted infection (STI). Some STIs can lead to long-term, serious consequences for women. The only way to prevent STIs is to avoid sexual activities that can transmit the infection, including vaginal, anal, and oral sex. The next best preventive measure is the use of a latex or polyurethane male condom or female condom with the appropriate amount of lubricant every time you have sex. Using a dental dam for oral sex will also decrease the chances of transmission.

Bacterial infections can usually be treated with antibiotics. But it is important that you take all of the medication prescribed, even if your symptoms have disappeared. If you stop too soon, the infection may recur. Viral infections, such as genital herpes, typically can't be cured but can often be controlled.

Here are some tips to help you prevent reinfection.

- ✓ Know your sexual partner.
- ✓ Both partners must be treated often.
- ✓ Avoid intercourse until all the antibiotic has been taken and the symptoms have disappeared.
- ✓ Use condoms and lubricants.
- ✓ Pay attention to your and your partner's bodies, and look for any unusual bumps, sores, discharge, or rashes.

If you have been diagnosed with one type of STI, it is a good idea to be tested for others. Chlamydia and gonorrhea, for example, often occur together. Ask your doctor to run tests for gonorrhea and chlamydia when you get your pap smear because some doctors do not routinely include these tests in a checkup.

See your doctor immediately if you have any possible warning signs of an STI, including—

- ✓ Any open sores, red or white bumps or rashes, or liquid-filled blisters—no matter how small—in your genital area.
- ✓ Redness or swelling in your genital area.
- ✓ Any unusual change in the amount, color, smell, or consistency of your vaginal discharge.
- ✓ Pain in your pelvis or abdomen, with or without nausea and/or vomiting.
- ✓ Pain, soreness, irritation, or other discomfort during intercourse or bleeding after intercourse.

- ✓ Fever, loss of appetite, fatigue, or swollen lymph nodes in your groin or neck.
- ✓ Unusually severe menstrual cramps.
- ✓ Recurring yeast infections or other infections.

HIV and hepatitis B and C infections can be transmitted sexually or spread by other means. Sexually transmitted diseases may cause miscarriage, preterm births, and newborn infections.

Chlamydia

Chlamydia is one of the most common STIs in the United States. It is a bacterial infection that is commonly transmitted through vaginal, anal, and sometimes oral sex. More than three-fourths of infected women have no symptoms. When symptoms occur, they can include an abnormal vaginal discharge, a burning sensation during urination, pain or pressure in the pelvic area, and/or pain during intercourse or bleeding afterward. Chlamydia is the primary cause of pelvic inflammatory disease, which can lead to infertility, tubal pregnancy, and chronic pelvic pain.

In 2017 62.6% of chlamydial infections in women in the United States occurred in 15-24-years old. As a result, it is recommended that asymptomatic sexually active teens and young adults (until age 26) be screened for chlamydia and gonorrhea every year.

Gonorrhea

Gonorrhea is a highly contagious bacterial infection, which can be transmitted through vaginal, anal, or oral sex. The majority of early gonorrhea infections in women produce no symptoms, allowing the infection to spread and often produce pelvic inflammatory disease. If symptoms do appear, early signs may include a green or yellow-green discharge from the vagina or rectum, burning or itching during

urination, abdominal pain, and abnormal menstrual bleeding. Left untreated, gonorrhea can spread throughout the body, causing arthritis, heart disease, and/or brain damage. Gonorrhea also increases the transmission of HIV (see page 130).

Syphilis

Syphilis is a bacterial STI that is potentially life threatening. In addition to being transmitted by vaginal, anal, or oral sex, syphilis is also transmitted through contact with syphilis sores on the body of an infected person. The number of new cases of syphilis dropped sharply when antibiotics were developed in the 1950s. However, there has been a dramatic nationwide increase in the numbers of reported cases in recent years. This has led doctors to return to regular screening of pregnant women to prevent transmission of the disease to the fetus.

In the initial stage of syphilis, small, raised, smooth, painless sores typically appear. Although they most often appear on the genitals, sores may also arise on the tongue, lips, breast, or rectum. There may also be swelling in nearby lymph nodes. The sores usually heal without treatment. The second stage begins 2 – 6 weeks after the sores heal. Signs may include fever, headache and aching joints, and a skin rash. The infected person may then go through another period during which signs or symptoms are absent. If syphilis isn't treated, it can spread throughout the body and into the bloodstream and brain. The third stage of syphilis occurs later and may involve nerve and brain damage, blindness, heart abnormalities, and death.

Genital Warts

Genital warts are a very common, highly contagious STI caused by strains of the human papillomavirus (HPV), which are transmitted through vaginal, anal, or oral sex. HPV can be spread without intercourse through skin-to-skin contact. The warts are flat or raised, pink, white, or brown areas on the genitals or anus. These painless

warts may appear as a few tiny bumps or in clusters (described as resembling cauliflower).

The strains of HPV that cause genital warts (6,11) are not as likely to be associated with cervical cancer (and, possibly, other types of cancer) as are other high-risk types of HPV (16,18). Genital warts cannot be cured with oral antibiotics because they are caused by a virus.

Freezing, surgical removal, injection of medication into the wart, or the application of various topical prescription medications are used to destroy or remove genital warts. As with many viral infections, genital warts can recur. Both partners should be treated, and a condom should be used during intercourse to reduce the risk of recurrence. Smoking decreases the ability of the immune system to clear the virus.

A vaccine can now provide immunity to the 4 most common types of HPV that are responsible for genital warts, precancerous changes to the cervix, and cervical cancer. The vaccine is most effective before exposure to the virus; therefore, it should be given to young women and men between the ages of 9 and 26. The vaccination involves a series of two shots 6 to 12 months apart if started at age 14 or younger. It is a series of 3 shots over 6 months if the HPV vaccination series is started at age 15 or older. It does not afford complete immunity to HPV. These viruses have reached epidemic numbers in the non-monogamous sexually active population.

Genital Herpes

The term herpes simply means an infection by the herpes simplex virus (HSV). Although HSV-1 usually causes cold sores and fever blisters around the mouth and HSV-2 usually causes genital herpes, both viruses can cause infections on the genitals or in the mouth. Genital herpes typically appears as painful sores that resemble blisters on the genitals; however, infection is often not associated with any signs or symptoms. Herpes is highly contagious and can be transmitted

by direct (skin-to-skin) contact with the affected area, even when there are no visible signs of the infection. The disease is even more contagious when sores are visible. Active genital herpes may increase your risk of cervical cancer and of becoming infected with HIV, the virus that causes AIDS.

Don't kiss or share towels, eating utensils, or drinking glasses with anyone who has cold sores or fever blisters—and don't share towels with someone who has genital herpes. Avoid vaginal, anal, and oral sex if you or your partner has symptoms of herpes. Because the infection can still be transmitted even in the absence of symptoms, always be sure to use a latex or polyurethane condom and/or a dental dam during sex. However, condom use may not always protect you because the condom may not cover the area where sores are present. Genital herpes is never cured, but outbreaks can be controlled with oral medication.

Hepatitis B and C

Hepatitis B. Hepatitis B is a potentially deadly infection caused by the hepatitis B virus, which attacks the liver. Some people are carriers of the virus; that is, they have no symptoms but can transmit the virus to others. Hepatitis B can be spread through:

- ✓ Sexual contact.
- ✓ Contaminated needles used to inject drugs.
- ✓ Contaminated medical or dental instruments that pierce the skin (rarely).
- ✓ Blood-to-blood contact with an infected person.

About one-third of people with hepatitis B have no symptoms. People who do have symptoms may experience mild or severe—

- ✓ Headaches and muscle aches.
- ✓ Fever.
- ✓ Fatigue.
- ✓ Loss of appetite.
- ✓ Vomiting.
- ✓ Diarrhea.

In the advanced stages of hepatitis B infection, symptoms may include abdominal pain, dark urine, and jaundice (yellowing of the skin and whites of the eyes).

Most hepatitis B infections clear up on their own within one to two months. Infections that persist may cause permanent liver damage. Although there is no cure or effective treatment for the infection, medication can ease some of the symptoms. A vaccine can prevent hepatitis B infection and should be given to newborn infants and to any person who has not been immunized.

Hepatitis C. Hepatitis C is caused by the hepatitis C virus. It is not usually considered to be an STI because it is rarely spread through sexual contact. Hepatitis C can be transmitted by a contaminated needle or through exposure to contaminated blood. Screening of blood and blood products has greatly reduced the spread of hepatitis C through transfusions. As with hepatitis B, hepatitis C has no effective treatment or cure. Unlike hepatitis B, no vaccine is yet available to prevent hepatitis C infection. However, a hepatitis C vaccine may be available in the future.

It is possible to be infected with the hepatitis C virus for many years without having any symptoms, but the virus can be detected in a blood test. An estimated 80% of people with hepatitis C have no symptoms. When symptoms do occur, they typically include—

- ✓ Jaundice.
- ✓ Fatigue.
- ✓ Loss of appetite.
- ✓ Nausea.
- ✓ Abdominal pain.
- ✓ Dark urine.

HIV/AIDS

The human immunodeficiency virus (HIV) causes acquired immune deficiency syndrome (AIDS), which is now a treatable disease. In the United States, AIDS first appeared in homosexual men; however, women now represent one of the fastest growing groups of people with HIV.

HIV can be transmitted through—

- ✓ Vaginal and/or anal sexual contact (primary method of transmission).
- ✓ Sharing needles with an infected person, usually to inject drugs.
- ✓ Pregnancy and breast-feeding.
- ✓ Oral sex has a small risk of transmission.

Donated blood is screened for HIV, making it almost impossible to become infected through a blood transfusion.

HIV is not transmitted through—

- ✓ Nonsexual contact, such as hugging or shaking hands.
- ✓ Kissing.
- ✓ Sharing water fountains, toilets, or swimming pools with infected persons.
- ✓ Being bitten by an insect or animal.
- ✓ Donating blood or having a blood test.

HIV attacks the immune system, weakening your ability to fight infections and some cancers. An infected person may have no symptoms for many years, even though the virus is at work weakening the immune system. Someone with HIV may have a variety of symptoms as well as recurring infections long before actually developing AIDS. Symptoms of HIV infection may include—

- ✓ Enlarged lymph nodes in the neck, armpits, or groin that last three months or longer.
- ✓ Weight loss.
- ✓ Fatigue.
- ✓ Frequent fever or sweats, especially at night.
- ✓ Ongoing yeast infections in the vagina, mouth, and throat.
- ✓ Frequent, severe recurrences of genital herpes.
- ✓ Series of infections or diseases that take advantage of the weakened immune system.

HIV is detected by a blood test for the antibodies the body produces to fight the infection. Testing is widely available; however, there is a lag time between the time of infection and the appearance of antibodies in

the blood. Because of this lag time, it is a good idea to be retested in three months.

Any time you participate in high-risk sexual behavior, you may contract HIV. Always use a male or female condom when you have sexual contact, even if you are intimate with only one person. Your sex partner may have had other sexual partners or be an intravenous drug user. Don't take chances! For women who have been exposed to HIV during a sexual contact or as the result of rape, the chance of getting an HIV infection is greatly decreased if your doctor starts you on medication within twenty-four hours of the exposure.

Although no cure is available for HIV infection, medications can suppress the virus and slow the disease allowing many people to live long healthy lives with HIV infection.

Some of the same medications that are used to treat HIV can also prevent HIV in high risk populations. Consider speaking with your doctor to determine if you are at high risk for contracting HIV and whether PrEP (pre-exposure prophylaxis or medication for HIV prevention is right for you.

End...

Beginning



Menopause occurs when a woman's body no longer produces estrogen and menstrual periods stop. Natural menopause occurs gradually, usually between the ages of 40 and 55—the average age of menopause is 51. A menopausal state can also result from removal of both ovaries.

Menopausal Symptoms

Some women don't develop bothersome symptoms at menopause. Most of the following symptoms associated with menopause are linked to a lack of estrogen.

- ✓ Hot flashes, or hot flushes, are sudden feelings of heat that spread over the body and are often accompanied by a flushed face and sweating. Hot flashes occur without warning and may interfere with sleep and cause insomnia.
- ✓ Emotional changes, such as mood swings, irritability, and depression, may be related to insomnia.
- ✓ Vaginal tissues become dryer and thinner around menopause.

- ✓ Osteoporosis becomes a greater risk at menopause because estrogen is no longer protecting you against bone loss. As a result, bones may become thinner and brittle.
- ✓ Cardiovascular disease is a greater risk after menopause, and estrogen-replacement therapy (ERT) does not appear to reduce this risk.

Hormone Therapy

Doctors and health professionals may recommend ERT or hormone- replacement therapy (HRT) estrogen plus progestin [synthetic progesterone]). In addition to reducing the menopausal symptoms listed above, ERT or HRT can reduce your risk of developing osteoporosis.

But recent research has changed some earlier beliefs about the benefits of HRT. HRT increases bone density, reduces fractures, and lessens your risk of developing colon or rectal cancer.

Your decision to use ERT or HRT will depend on your individual health history and risk factors. Because research studies don't always agree, it is difficult to weigh the benefits against the risks and to decide what is best for you. Some experts now believe that menopausal symptoms may be the only good reason for using HRT, but others disagree. You will need to talk to your doctor about whether ERT or HRT is a good choice for you.

A number of substances, including foods, vitamins, minerals, and herbs, have been promoted as cures for menopausal symptoms. At this time, however, research has not supported the validity of these claims.

For women who are afraid to take ERT or HRT because of a fear of developing breast cancer, a new group of modified estrogens is available. They are known as selective estrogen receptor modulators, or SERMs. These products have the same beneficial effects as estrogen

on bone health but have no negative effects on tissues in the breast or uterus. It is currently not known whether SERMs protect against heart disease. Other agents for bone health include bisphosphonates, calcitonin, and parathyroid hormone (PTH).

Menopause: The End...or The Beginning?

Menopause used to be the stage of life when many women considered their life to be over. But today up to a third of a woman's lifespan may be lived after menopause, and many women are recognizing that this can be an especially rewarding time of life. Some women meet their menopausal years head on—going back to school, getting their first job, changing jobs, pursuing new endeavors... the list is endless.

And yes, there is definitely sex after menopause. For many women, the fact that they can no longer become pregnant makes sex even more relaxed and enjoyable. Some women who have experienced a reduction in sex drive at menopause may request that a small amount of testosterone be added to their HRT to increase their libido. Estrogen vaginal cream may be prescribed for menopausal women who experience vaginal dryness with intercourse that is not improved with the use of an over-the-counter lubricant.

Whatever you decide to do, remember that your life can be as full and enjoyable as ever. It's all in your attitude. Many women, to their surprise, find that this is the most fulfilling and enjoyable time of their lives.

Additional resources include—

The Wisdom of Menopause: Creating Physical and Mental Health During the Change by Christiane Northrup, MD. Revised and updated edition. Bantam Books, Inc. 2012.

Information and Hotline Numbers

For additional books on women's health topics:

Amazon Books
www.amazon.com

Barnes and Nobles
www.barnesandnoble.com

Mayo Clinic
<https://marketplace.mayoclinic.com/shop/bookstore>

John Hopkins University
<https://hupbooks.press.jhu.edu>

Websites and helplines that provide additional information on health and nutrition:

Centers for Disease Control and Prevention
www.cdc.gov

CDC National STD Hotline
800-232-4636

Office on Women's Health
Resource line: 1-800-994-9662
www.womenshealth.gov

National Institutes of Health
www.nih.gov

U.S. Department of Agriculture
www.usda.gov

Alcohol and Drugs

Alcoholics Anonymous Houston
713-686-6300
Al Anon meeting line: 888-425-2666

SAMHSA
Substance Abuse and Mental Health Services Administration
800-662-4357

Texas Area Service Gulf Coast
Cocaine Anonymous
713-668-6822

The Council on Recovery
713-942-4100

Alzheimer's Disease
Alzheimer's Association
800-272-3900

Arthritis Foundation
Arthritis Foundation
Help line: 1-844-571-4357

Cancer

American Cancer Society
Help line: 800-227-2345
www.cancer.org

Cancer Institute – NIH
800-422-6237

National Breast Cancer Coalition
800-622-2838

Susan G. Coleman Helpline:
877-465-6636

Diabetes

American Diabetes Association
800-342-2383

American Diabetes Association of
Houston
713-977-7706

Academy of Nutrition and Dietetic
Association
www.eatright.org

Domestic Violence and Referral

Houston Area Women's Center:
Domestic Violence Hotline:
713-528-2121
Sexual Assault Hotline:
713-528-7273

Eating Disorders

National Eating Disorders
Association
800-931-2237

Endometriosis Association
800-992-3636

Epilepsy

Epilepsy Foundation
800-332-1000

Houston Epilepsy Foundation
713-789-6295

Heart

American Heart Association
www.americanheart.org
800-242-8721

American Heart Association
Houston
832-918-4000

Texas Heart Institute
832-355-4011

Houston Department of Health
832-393-5010

Houston Health Department Clinics:

LaNueva Casa De Amigos Health
Center
1809 Main Street
Houston, TX 77009
Appointments: 832-393-5428

Northside Health Clinic
8504 Shuller Rd.
Houston, TX 77093
Appointments: 832-393-5427
Dental: 832-395-9100
Tuberculosis: 832-395-9116

Sharpstown Health Services
6201 Bonhomme Road
South Tower, 3rd Floor
Houston, TX 77036
Appointments: 832-395-9800

Sunnyside Health Center
4605 Wilmington Street
Houston, TX 77051
Appointments: 832-395-0206

Kidney

National Kidney Foundation Houston
713-964-2644

Lung

American Lung Association
1-800-LungUSA (586-4872)

Lupus

Lupus Foundation
713-529-0126
www.lupus.org/texasgulfcoast.org

Mental Health

Mental Health America of Greater
Houston
www.mhahouston.org
713-523-8963

Mental Health Mental Retardation
713-970-7070
United Way Crisis Hotline
713-468-5463

The Montrose Center (LGBT)
401 Branard Street
Houston, TX 77006
713-529-0037

Osteoporosis

NIH-National Resource Center
800-624-2663

Suicide

Crisis Intervention of Houston, Inc.
713-468-5463

Thyroid

The Thyroid Society
800-849-7643

United Way Helpline
211

Notes

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What does The Women's Fund for Health Education and Resiliency do?

The Women's Fund is a non-profit organization that has been active in women's health since 1979, and we provide health education to the community free of charge. Our services include curriculum-based health classes, publications, health education events and one time educational sessions. We want all the Greater Houston area women and girls to have the tools they need to be advocates for their health, so we can be a community of healthy and resilient women.

WHAT ABOUT ME? The What about me? book is intended for girls 10 to 16. It is a resource with accurate information that girls can use to answer specific questions and refer to as needed about issues they may be going through. We hope that mothers and daughters will sit down and talk about the issues addressed in this book.

Which Weigh? A roadmap to a healthy lifestyle for you and your family. This guide is written in a simple easy-to-follow, step-by-step manner. It is designed to be an accurate and helpful resource for understanding why adults and children gain weight and for making good choices that will allow you and your family members to achieve and maintain a healthy weight.

HOW'S BY HEALTH? This booklet is designed to be a simple, effective way to take charge of your health history and the history of your family members. You will have the information you need readily available and so will your family.

For more information about our programs or publications, or if you are interested in becoming a member, please contact:



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