

# HEART DISEASE & STROKE

Women's Heart Health Program - Leader's Guide

This program contains information condensed from the Canadian Heart

and Stroke Foundation's website. It contains a program, a quiz meant

to be copied for each participant and a quiz answer sheet for the

leader.

The program is designed to be read to a group. It is suggested the leader studies this in advance of the presentation since some areas may be more relevant to the age and needs of the group.

The quiz that goes with this program is meant to be completed before the information is read. There is only one copy of the answers to the quiz and this should be reviewed following the reading. The quiz itself can be taken home by each participant so they can review this and assess their own heart health status.

One of the questions involves a sensitive concern - body weight. A BMI (Body Mass Index) is calculated by dividing current weight in pounds by the total height in inches. Individuals can do this privately. As a leader your role is simply to interpret the numbers. This is only a rough guide and does not apply to some body shapes and ages. Nonetheless, it is useful because it helps to provide a concrete way of assessing risk.

This program compliments the Women's Institute program to address the importance of women's heart health. Hope you find it useful.

# **Definition of Heart Disease and Stroke?**

Heart disease and stroke are different diseases, but they have many of the same root causes and risk factors. Heart disease is the term we use to describe a number of conditions affecting the structure and function of the heart.

Coronary artery disease (CAD) is the most common of these conditions and occurs when blood vessels in your heart become blocked or narrowed, preventing oxygen-rich blood from reaching your heart. It can cause chest pain – called angina – or even a heart attack.

A stroke refers to damage to an area of the brain that occurs when blood vessels rupture or when blood supply is reduced or cut off. The effects of a stroke depend on what part of the brain was injured, and how badly it was injured. A stroke can impact any number of areas including your ability to move, see, remember, speak, reason, read and write.

In a small number of cases, stroke-like damage to the brain can occur when the heart stops (cardiac arrest). The longer the brain goes without the oxygen and nutrients supplied by the blood flow, the greater the risk of permanent brain damage.

# Women and Heart Health

The face of heart disease is changing. Many women think of cardiovascular disease as a "man's disease." But that's simply not true. In fact, women are more likely than men to die of a heart attack or stroke.

In Canada, stroke kills 45 per cent more women than men. And women are 16 per cent more likely than men to die after a heart attack.

There are a number of factors that may account for the increase in women's risks of heart attack and stroke: women are less likely to recognize the symptoms of these diseases and seek treatment quickly; men and women are often treated differently by the health system, with men receiving more prompt and proactive treatment; and women have a number of unique risks, such as pregnancy and menopause.

In fact, most Canadian women have at least one risk factor for heart disease and stroke. As they age, estrogen levels, which offer them a degree of protection against heart disease and stroke when they are younger, begin to decline. But there are many other factors that can affect your heart health, no matter what your age. It's important to understand and manage your unique risks to improve your health and reduce your risk of disease.

Often, your body will send out warning signs of a heart attack or stroke. By being aware of these warning signs and acting on them quickly, you can make sure you receive prompt treatment that could save your life or minimize the damage to your health.

There is good news for women and heart health. There are many things you can do to reduce your risk of heart disease and stroke, and in some cases—for instance in some of the new stroke treatments—female patients benefit even more than male patients do.

The bottom line is that awareness—of your risks, of the warning signs, and of prevention and treatment options—is your best defense against heart disease and stroke.

# **Warning Signs**

Being able to recognize the warning signs of heart attack and stroke could save your life. Every minute counts during the onset of a heart attack or stroke—the faster you receive medical treatment, more likely you are to survive and the better your chances of a more complete recovery.

# **HEART ATTACK**

Women often experience the same symptoms as men do, but women and men don't respond to a heart attack in the same ways. Women are less likely to believe they're having a heart attack, and they are more likely to put off seeking treatment.

The five warning signs of a heart attack are one or more of:

Chest pain or discomfort
Pain in the arm, neck, jaw, shoulder or back
Nausea, indigestion or vomiting
Sweating and/or cool, clammy skin
Difficulty breathing
Fear or anxiety

Sudden discomfort or pain in these areas that does NOT go away with rest can indicate a heart attack. It may feel like burning, squeezing, heaviness, tightness or pressure. Although symptoms are generally the same for men and women, women can sometimes experience symptoms that are less definite, such as chest discomfort rather than pain.

For women, chest pain may not be the first sign of heart trouble. Women have reported experiencing unusual tiredness, trouble sleeping, problems breathing, indigestion, and anxiety up to a month or so before the heart attack.

# STROKE

The five warning signs of a stroke are SUDDEN:
Weakness or numbness
Loss of muscle strength in face, arm or leg
Trouble speaking
Vision problems
Severe headache
Dizziness

If you experience ANY of the warning signs of heart attack or stroke, seek medical attention immediately! Call 9-1-1 or the emergency response number in your area. The faster you act, the better your chances of survival and recovery.

# Prevention

Because heart attack and stroke share many of the same root causes, many of your prevention efforts will give you double the health benefits by protecting you against both heart disease and stroke. Making lifestyle changes and taking action to improve your health can reduce your risk of these diseases by as much as 80 per cent!

Don't smoke
Lower your cholesterol
Manage your weight
Keep physically active
Monitor your blood pressure
Reduce stress
Manage your diabetes
Limit alcohol consumption

### Don't smoke

Women, particularly young women, often feel pressured to smoke especially as a way to manage weight. For the first time, the rate of smoking among teenaged girls has exceeded that of teenaged boys. And almost one in four women aged 20 to 24 year's smokes.

Smoking contributes to atherosclerosis (hardening of the arteries) that can lead to heart disease and stroke. Smokers have nearly double the risk of certain types of stroke. And women over 35 who smoke and use oral contraception (birth control pills) are at even greater risk of heart disease as well as blood clots and stroke.

The good news is that just 24 hours after quitting, your chance of heart attack decreases, and after one year, your risk of heart attack is half that of a smoker. While smoking is an addiction and quitting may be difficult, your doctor can provide support and information about treatment options.

# Lower your cholesterol

Close to 50 per cent of Canadian women between the ages of 18 and 74 have cholesterol levels that are too high. Cholesterol and triglycerides are fats found in your body and your bloodstream. They are naturally produced by your body, and they also come from the food you eat—especially from foods high in saturated and trans fats. High triglyceride levels may be a more serious risk factor for women than for men.

As a woman, it's important for you to know your actual cholesterol and triglyceride levels and to discuss with your doctor where your levels should be, and what treatment options are available for people who have high cholesterol. You can lower your triglyceride and LDL (Low Density Lipoprotein)-cholesterol with a healthy eating plan, including substituting unsaturated for saturated and trans fats, and lowering your fat intake overall.

# Manage your weight

More than half of Canadian women aged 18 and over are overweight or obese. Women who are 30 per cent over their healthy body weight are two to three times more likely to develop heart disease. Being overweight can lead to other problems affecting your heart, such as high blood pressure, high blood cholesterol and triglyceride levels and diabetes.

Women who are "apple-shaped," or who carry the most weight around their middle could be at a greater risk than women who are "pear-shaped," or who have the most fat around their hips and thighs. Abdominal fat is especially dangerous because it releases high levels of hormones that disrupt metabolism, causes high concentrations of bad fats to travel to the liver faster and signals that fat is building up around other crucial organs. Measuring your waist and regularly checking your BMI (Body Mass Index) are good ways to monitor your risk of heart disease.

You can manage your weight with a combination of dietary changes and increased physical activity. The Heart and Stroke Foundation offers a number of health tools that can help you set your diet and fitness goals, such the <u>Healthy Weight Action Plan</u> and a food and <u>fitness calculator</u> that tells you how much physical activity is required to burn off the calories gained by eating certain foods. Seven to 10 servings of vegetables and fruit each day plus limited consumption of saturated and trans fat and sodium puts women on the right track.

# Keep physically active

The shocking fact is that close to half of all women over the age of 12 are physically inactive. Yet physical activity is one of the most effective ways to reduce your risk of heart disease and stroke.

Many women find it challenging to make time for physical activity in their busy lives, but your risk of heart disease increases twofold if you lead a sedentary lifestyle. Exercise helps prevent and control a range of risk factors such as high blood pressure, high cholesterol, obesity and atherosclerosis (narrowing and blockage of the arteries).

You don't need to make a big lifestyle change to get the benefits of exercise. For instance, recent studies show that as little as 72 minutes per week of exercise can improve the heart health of post-menopausal women who are overweight or obese.

The Heart and Stroke Foundation recognizes the importance of physical activity and recommends that Canadians incorporate 30 to 60 minutes of exercise into each day.

You can build up to this goal slowly. Start by incorporating a 10-minute walk into your routine every other day. Try taking the stairs instead of the elevator wherever possible. The Heart and Stroke Foundation's <u>Heart Walk Workout</u> offers a simple beginner's walking plan.

Consult a physician before beginning any new activity if you have a heart condition, are 45 or older, or are between 35 and 45 and have risk factors such as smoking, high blood pressure, elevated cholesterol, obesity, diabetes, or a family history of heart disease.

# Monitor your blood pressure

High blood pressure affects one in five Canadians. Monitoring and controlling your blood pressure can reduce your risk of stroke by up to 40 per cent, your risk of heart disease by 50 per cent and your risk of heart failure by up to 25 per cent.

Blood pressure is the measure of the pressure or force of blood against the walls of the blood vessels, called arteries. High blood pressure can damage blood vessel walls; causing weakening or scarring that promotes the build-up of plaque and the blocking of arteries.

It's important to have your blood pressure tested by your doctor or pharmacist, and to discuss with them what your test numbers mean. If your healthcare provider feels you need to lower your blood pressure, they may recommend that you:

- Lower your salt intake
- Take blood pressure medication
- · Achieve a healthier weight
- Increase physical activity
- · Follow a low-fat diet

### Reduce stress

Women can lead stressful lives as they juggle the responsibilities of work and family life. Because they often take on the role of caregiver for other people, they sometimes feel they don't have the time to take care of themselves. But taking the time to relax, unwind and enjoy life is actually an important way to reduce your risk of heart disease and stroke.

People who experience high stress levels, anxiety and depression may make lifestyle choices, such as avoiding exercise or eating poorly that increases their risk of high blood cholesterol, increased blood pressure or atherosclerosis (narrowing of the arteries).

You can try lowering your stress levels by:

- Identifying the causes of stress in your life
- Being physically active—physical activity can be a great stress-buster
- · Sharing your feelings with friends, family or coworkers
- Taking time for yourself—get out and do something you enjoy!
- Asking for help if you feel you can't cope—talk to your doctor about treatment for anxiety or depression

# Manage your diabetes

Diabetes plays a big role in determining a woman's risk for heart disease and stroke. Women with diabetes are three times more likely to get heart disease than women who don't—in fact, almost four out of five of people with diabetes will die of a heart attack or stroke. Additionally, women with diabetes are at greater risk of developing heart disease and stroke than men who have diabetes.

Women are also at risk for developing gestational diabetes. Gestational diabetes occurs in pregnant women when increasing levels of pregnancy hormones interfere with the body's ability to use insulin efficiently. Blood sugar levels may rise as a result. About three to eight per cent of pregnant women develop gestational diabetes.

Gestational diabetes usually disappears after the baby is born, but it can increase the risk that both mother and baby will develop diabetes later in life. Approximately 3.5 per cent of non-Aboriginal women, and up to 18 per cent of Aboriginal women will develop gestational diabetes.

If you have diabetes, you can manage your risk for heart disease and stroke by:

- Controlling your blood sugar and following the advice of your doctor
- Eating a balanced diet with less fat and more high-fibre foods and complex carbohydrates
- Achieving and maintaining a healthy weight
- · Being more physically active

If you have had gestational diabetes in the past, be aware that you are at elevated risk for developing Type 2 diabetes during your lifetime. Talk to your doctor about your risks.

# Limit alcohol consumption

Drinking too much of any type of alcohol can increase your blood pressure and contribute to the development of heart disease and stroke. You may have heard that alcohol – particularly red wine – is good for your heart. There is some evidence that people who drink moderately have a somewhat lower risk of heart disease and stroke than those who do not drink or who drink excessively. However, if you really want to have an impact on your heart health, you're better off eating a healthy diet, being physically active most days of the week and becoming smoke-free.

If you drink alcohol, limit yourself to one or two standard drinks a day; women should limit themselves to a weekly maximum of nine drinks.

# One drink equals:

- 341 ml / 12 oz (1 bottle) of regular strength beer (5% alcohol)
- 142 ml / 5 oz wine (12% alcohol)
- 43 ml / 1 1/2 oz spirits (40% alcohol)

# Strategies:

- Moderate your alcohol intake
- Talk to your doctor about the risks of drinking alcohol
- Limit your alcohol use and/or speak to your doctor about alcohol if you have high blood pressure
- Wait at least one hour between drinks, and alternating alcoholic drinks with water or juice
- Avoid binge drinking or becoming drunk.

For more information on any of these topics, consult the website of the Heart and Stroke Association.

# THE HEART TRUTH QUIZ

Take The Heart Truth quiz to learn more about your risk profile. You can click on the "risk snapshot" to get the answer to each question instantly. You can also choose to answer all 15 questions first and then click the submit button at the bottom of the page to get your complete quiz results.

FAMILY HISTORY		
Do you have a relative who had a heart attack	or stroke before age 65, or a m	ale relative who had
a heart attack or stroke before age 55?		
☐ Yes		
□ No		
AGE		
How old are you?		
Under 40		
☐ Between 40 and 60		
Over 60		
□ Ovel 60		
ETHNICITY		
ETHNICITY		
What ethnicity are you?		
☐ South Asian		
☐ First Nations, Inuit or Métis		
☐ African or Caribbean Canadian		
☐ Caucasian		
☐ Asian		
□ Other		
ACTIVITY LEVELS		
How often do you exercise?  ☐ Less than 30 minutes per day		
☐ More than 30 minutes per day		
SMOKING		
Do you smoke?		
☐ Yes		
□ No		
110		
BODY MASS INDEX		
What is your body mass index (BMI)? Type y	our weight and height into the	spaces below to
calculate your BMI.	3	•
Weight lbs.		
Height ft. Inches		

How often do you drink alc  Less than two drinks pe			
☐ More than two drinks pe			
DIET How often do you eat high- Less than once a week	fat foods such as fast fo	oods, fried foods, cook	ties, chips or cake?
☐ More than once a week			
STRESS LEVELS			
How often do you feel stres	sed or anxious?		
<ul><li>☐ Seldom</li><li>☐ Occasionally</li></ul>			
☐ Most of the time			
DIABETES			
Do you have diabetes?			
□ Yes			
□ No			
☐ Don't Know			
CHOLESTEROL LI			
Do you have high cholester	ol?		
☐ Yes			
□ No □ Don't Know			
□ Don't Know			
<b>BLOOD PRESSURI</b>	E LEVELS		
Do you have high blood pre	essure?		
□ Yes			
□ No			
☐ Don't Know			
HORMONE REPLA			
Are you taking hormone rep	placement therapy (HR)	I')?	
□ Yes			
□ No			
<b>PREGNANCY</b>			
Are you, or have you ever b	een pregnant?		
☐ Yes			
□ No			
ORAL CONTRACE			
Do you use oral contracepti	on (birth control pills)?		
☐ Yes			
□ No			

# **HEART TRUTH QUIZ ANSWERS**

# 1. FAMILY HISTORY

**A.** Yes If you have relatives who have experienced heart disease and stroke before age 65 or a male relative who had a heart attack or stroke before age 55 you may be at higher risk for these diseases. Your increased risk may be due to genetic or lifestyle similarities. Make sure your doctor knows your family history of heart disease and stroke.

**B.** No If you do not have a family history of heart disease or stroke. If none of your relatives has experienced heart disease or stroke before the specified ages, you are unlikely to have an increased genetic risk for these diseases. However, your age and lifestyle factors, such as whether you are overweight or a smoker, can still put you in a high-risk category. A low genetic risk and a healthy lifestyle are winning combinations.

# 2. AGE

A. If you are under age 40 you are at a relatively low risk for heart disease, but lifestyle choices made early in life can dramatically increase their risk in later years. Work towards a healthier lifestyle. Even small changes, like adding a Ziploc bag of veggies in your lunch bag every day, can add up to a major reduction in your future risks.

**B.** If you are between the ages of 40 and 60 you are experiencing the effects of premenopause or menopause, which increases their risk of heart disease and stroke. This is because women's natural estrogen levels offer them some protection against these diseases, and during and after menopause, a woman's estrogen levels decrease. Getting 30 minutes of exercise each day and eating five servings of fruits and vegetables can significantly offset the effects of menopause on your risk profile.

C. If you are over age 60 your risk for heart disease and stroke increase. You no longer have the added protection of high estrogen levels, and you may develop other conditions that increase your risk, such as high blood pressure or weight gain. Even a small amount of exercise can reduce your risk of heart disease. Research shows that as little as 72 minutes per week can improve heart fitness and reduce waist measurements.

# 3. ETHNICITY

**A.** If you belong to a higher-risk ethnicity such as African Canadians, First Nations, Inuit and Métis people, and South Asians from India, Pakistan and Sri Lanka, there's a greater chance of developing high blood pressure, heart disease and stroke. This increased risk may be a combination of lifestyle factors and genetics. **B.** If you don't belong to a higher-risk ethnicity. If you are of Caucasian or Asian descent, your ethnicity does not pose an additional risk; however, lifestyle and other factors can put you in a higher-risk category.

# 4. ACTIVITY LEVELS

A. You exercise less than 30 minutes per day. Many find it challenging to make time for physical activity in their busy lives, but being inactive means your risk of heart disease and stroke is twice as high. Try a gentle exercise like a beginner's yoga class or a brisk, 30-minute walk. Exercise helps prevent and control a range of risk factors such as high blood pressure, high cholesterol and obesity.

**B.** You exercise more than 30 minutes per day. Good for you! If you're getting 30 minutes of exercise a day, you're experiencing many benefits of an active lifestyle-higher energy, lower stress levels, sleeping better and looking and feeling great. Keep it up!

# 5. SMOKING

A. Yes, you are a smoker. Smoking is one of the biggest risk factors for heart disease and stroke. Smokers have nearly double the risk of certain types of stroke. If you choose just one lifestyle change to reduce your risk of heart disease and stroke, it should be to quit smoking. Avoiding cigarettes offers instant rewards; in just 24 hours, your chance of heart attack decreases. After one year, the risk of heart attack is half that of a smoker.

B. No, you do not smoke. Good for you! If you don't smoke, feel good about cutting your risk of heart disease and stroke in half. If you quit smoking recently, here's an encouraging fact: after one year of quitting, your risk of heart attack is half that of a smoker!

# 6. BODY MASS INDEX

A. If your Body Mass Index is less than 24, you are at a healthy body weight. But abdominal fat is more of a health risk than other types of fat. Even slimmer women who are apple-shaped rather than pear-shaped (carry most of their weight around their middle rather than their hips and thighs) can have a higher risk for heart disease and stroke.

B. If your Body Mass Index is 25 or more, you are 30 per cent over your healthy body weight and are two to three times more likely to develop heart disease. Being overweight can lead to other problems affecting your heart, such as high blood pressure, high blood cholesterol, high triglyceride levels and diabetes. Abdominal fat is more of a health risk than other types. Women who are apple-shaped verses pear-shaped (carry most of their weight around the middle rather than the hips and thighs) have a higher risk for many diseases, including heart disease and stroke. Try a healthier diet and more exercise.

## 7. ALCOHOL USE

A. If you drink less than two drinks per day, you're within healthy guidelines for alcohol consumption.

**B.** If you drink more than two alcoholic drinks per day of any type of alcohol, it can increase your blood pressure and contribute to the development of heart disease and stroke. Talk to your doctor about the risks of drinking alcohol, especially if you have high blood pressure. Try drinking wine spritzers made with equal parts wine and seltzer water, or alternating alcoholic beverages with fruit juice or mineral water.

### 8. DIET

A. If you eat high-fat foods less than once a week, good for you! You are probably eating a sensible diet low in saturated and trans fats, and that keeps your cholesterol levels low. And triglyceride levels (a fat connected to high cholesterol levels) may be a more serious risk factor for women than for men, a healthy diet goes a long way to reduce risk.

**B.** If you eat high-fat foods more than once a week, these foods, high in saturated and trans fats, can elevate your cholesterol and triglycerides levels, a risk factor for heart disease and stroke. Women must be extra-careful, as research shows high triglyceride

levels are a more serious risk factor for women than for men. There are lower-fat, hearthealthy versions of your favourite foods, including blueberry pancakes, and cheesecake.

# 9. STRESS LEVELS

- **A. You seldom feel stressed or anxious.** That's great! If you feel calm and relaxed most of the time, you are helping to protect your heart. Long-term, unmanaged stress can raise your blood pressure-the number-one risk factor for heart disease and stroke.
- **B.** You feel stressed or anxious occasionally. Your stress levels can affect your heart health. Women who experience high stress levels, anxiety and depression may have higher blood cholesterol, increased blood pressure or be more prone to developing atherosclerosis (narrowing of the arteries). Even if you're juggling family and work commitments, take time for yourself at least once a week. Take an exercise class, go for a long walk or get out and do something you enjoy.
- C. You feel stressed or anxious most of the time. High stress levels can take their toll on your heart health. High stress levels, anxiety and depression can lead to higher blood cholesterol, increased blood pressure and increased risk of atherosclerosis (narrowing of the arteries). Women can lead stressful lives as they juggle the responsibilities of work and family life. If you are having trouble coping with the stress in your life, talk to your doctor about stress management options.

# 10. DIABETES

- **A. You have diabetes.** Women with diabetes are three to seven times more likely to get heart disease than women who don't. Almost 4 out of 5 of people with diabetes die of a heart attack or stroke. Women with diabetes are at greater risk of developing heart disease and stroke than men with the disease. Keeping your diabetes under control is very important to your heart health. Exercise regularly, follow a low-fat, high-fibre diet and talk to your doctor about the best way to manage your diabetes.
- **B.** You do not have diabetes. If you have been tested for diabetes and the test came back negative, you can feel good about avoiding one of the major risk factors for heart disease and stroke. Avoid your risk of developing Type 2 diabetes in the future by exercising and eating a low-fat diet rich in fruits and vegetables. Be sure to get tested regularly.
- C. You do not know if you have diabetes. One in three people who have diabetes don't even know it. Women with diabetes are three to seven times more likely to get heart disease than those who don't. If you are over 40 and haven't been tested for diabetes, do.

# 11. CHOLESTEROL LEVELS

- **A. You have high cholesterol.** High cholesterol is one of the biggest risk factors for heart disease and stroke, and the risks for women with high triglyceride levels (which are associated with high cholesterol levels) are higher than for men. You can lower your triglyceride and cholesterol levels with a healthy eating plan.
- **B.** You do not have high cholesterol. If your cholesterol levels are healthy, you are avoiding one of the biggest risk factors for heart disease and stroke. But be sure to get tested to confirm your cholesterol levels are within a healthy range.

C. You don't know if you have high cholesterol. You may have high cholesterol without even knowing it, since there are no visible symptoms. It's important to know your cholesterol and triglyceride levels. If you haven't had your cholesterol levels checked, talk to your doctor. You can lower your triglyceride and cholesterol levels with healthy eating.

# 12. BLOOD PRESSURE LEVELS

**A. You have high blood pressure.** High blood pressure is the leading cause of stroke and increases the risk of heart disease up to four times. Talk to your doctor about the best ways to manage your blood pressure, and have it checked frequently. You can lower your blood pressure by exercising and eating a heart-healthy diet.

**B.** You do not have high blood pressure. That's great! If you have had your blood pressure tested and you know it is normal, you are avoiding the most significant risk factor for heart disease. But remember, high blood pressure can have no symptoms. If you haven't been tested by a health professional, you can't know for sure. Even without health issues, make sure you have your blood pressure tested annually, especially after age 40.

C. You don't know if you have high blood pressure. If you don't know whether you have high blood pressure, you need to check it out. High blood pressure is a significant risk factor for heart disease. Make sure you check your blood pressure every six months.

# 13. HORMONE REPLACEMENT THERAPY

A. You are taking hormone replacement therapy. Hormone replacement therapy (HRT) is no longer considered to help prevent heart disease and stroke, and The Heart and Stroke Foundation does not recommend taking HRT as a way to reduce your risk. If you are taking HRT as part of treatment for another health issue, be aware that it provides no additional protection against heart disease and stroke. Quitting smoking, becoming more active and eating a heart-healthy diet are still the best ways to reduce your risk.

B. You are not taking hormone replacement therapy. Hormone replacement therapy (HRT), once thought to reduce the risk of heart disease and stroke in post-menopausal women, is no longer considered to help prevent heart disease and stroke. If you are considering taking HRT as part of treatment for another health issue, talk to your doctor about how it might affect your heart health.

# 14. PREGNANCY

A. You are, or have been pregnant. Pregnancy increases your risk of heart disease and stroke. Complications such as pre-eclampsia (pregnancy-related high blood pressure), gestational diabetes (pregnancy-related diabetes) lead to increased risk both during the pregnancy and long term. Although the risk of stroke is low among women of child-bearing years, pregnancy and childbirth increases the risk as much as 13 times. If you are, or plan to be pregnant, be assessed for heart disease by your doctor. If you experienced placental complications pre-eclampsia or gestational diabetes during your pregnancy, talk to your doctor about your increased risk.

**B.** You have never been pregnant. Women of childbearing years are generally at a low risk for heart disease or stroke, but the risk is elevated during pregnancy and childbirth, and long-term risk is increased if complications were experienced during pregnancy. If you plan on becoming pregnant, assess your risk profile for heart disease and stroke.

# 15. ORAL CONTRACEPTION

- A. You use oral contraception. Although modern oral contraceptives are safer than they were a few decades ago, research has already proven that, in a small proportion of women, they increase the risk of high blood pressure and blood clots. Women over 35 who smoke and use oral contraception are at even greater risk of heart disease as well as blood clots and stroke. Talk to your doctor about your overall risk profile for heart disease and stroke. If you have other risk factors, like smoking, try another birth control method.
- **B.** You do not use oral contraception. Oral contraceptives can increase the risk of high blood pressure and blood clots in a small proportion of women, and women over 35 who smoke and use oral contraception are at a high risk of heart disease. Talk to your doctor about taking oral contraceptives.