Dear Friend,

As February is American Heart Health Month, it is the perfect time to examine your own heart health and make healthier adjustments in your life! Every year 715,000 Americans have a heart attack, costing the United States $108.9 billion a year in health care services, medications, and loss of productivity. The most common heart disease, Coronary Heart Disease, is the number one killer of both men and women in the United States.

Heart disease is particularly potent in women, and has killed more women than men each year since 1984, but knowing the warning signs and taking early, preventative action is the key to living longer and healthier lives. Take control of your heart health and familiarize yourself with the risks and warning signs.

Sincerely,

The Institute Staff

Heart Disease: What It Is and What It Means To You

Heart disease is an over-arching term used to describe problems related to plaque buildup in the walls of the arteries. When plaque builds, the arteries narrow, and it
becomes more difficult for blood to flow. Since blood carries oxygen to the heart muscle, a heart attack can occur if the blood flow to the heart is severely reduced or cut off entirely, which causes damage or death to part of the heart muscle.

**Heart Disease and Women**

Roughly 1 in every 4 women dies from heart disease in the United States, yet most women don't recognize heart disease as a major threat. This may be due to several misconceptions surrounding heart disease. For instance, many assume that men are at a greater risk for heart disease than women. This misconception has been perpetuated because women typically develop heart disease later in their lives than men. It's true that women do develop heart disease less frequently than men before they reach menopause, but with the onset of menopause, there is a marked increase of a woman's heart disease risk, and by the time women are 75, their risk is level with men's.

Women are more likely than men to ignore or deny the warning signs of heart disease, prolonging or neglecting early treatment. Furthermore, women's narrower coronary vessels may mean increased susceptibility to blockages and spasms that cut off the heart's blood supply. While heart disease research and treatment has historically been male-centric, these newer findings have spurned an increased attention to women within the context of this disease.

**Symptoms and Warning Signs**

While heart disease affects both men and women, the warning signs for women aren't the same as in men. Men are more likely to suffer from a heart attack without any prior symptoms, whereas women are likely to experience symptoms first, before the onset of an attack. Women often do not experience any type of chest pain prior to a heart attack, but here are common symptoms that may accompany or precede a heart attack in women:

- Indigestion/Heart Burn
- Nausea
- Shortness of Breath
- Profuse Sweating
- Dizziness or Lightheadedness
- Extreme fatigue

If these symptoms occur and persist for more than 15 minutes, you should seek emergency medical attention immediately.
Preventative Measures

Medical Knowledge: Most people assume that you can't find out if you have heart disease until it's too late to prevent it, but that is simply not true. There are several medical steps you can take to clue yourself into your personal risk for heart disease. With your physician, give a detailed medical history, undergo a physical exam with a blood test, and schedule an electrocardiogram (EKG). This initial evaluation will help your physician determine if he/she should run further diagnostic tests, such as a treadmill test or cardiac catheterization.

Lifestyle Changes: Some risks, such as family history and age, are impossible to avoid, but there are some preventative measures you can take to live a healthier life and reduce your risk of heart disease. People who follow these six preventative measures have been found to have an 85% reduction in their risk of heart disease compared to people who do not.

1. Quit Smoking. Smokers have twice the risk of suffering from a heart attack than non-smokers, and smokers are more likely to die from a heart attack if they suffer one. If you are currently a smoker (or were a smoker in your past), you'll be glad to hear that it's not too late to alter this risk! A smoker's risk for heart disease and stroke returns to normal just two to three years after quitting.

2. Check Your Cholesterol Regularly. Asking for a simple lipid panel, which shows your high-density lipoprotein (HDL), low-density lipoprotein (LDL), and triglyceride levels will help you monitor your cholesterol. Having too many LDL's may contribute to blockages in your arteries. HDL's, on the other hand, are known as "good" cholesterol and can help carry cholesterol away from your arteries. It's important to keep your HDL's high, so avoid smoking, physical inactivity, and obesity, because these all can lower your HDL levels. Having a consistently high level of triglycerides can mean an increased risk of heart disease. Typically, a healthy cholesterol range may entail an LDL under 130, an HDL over 50, and triglycerides under 200, however new research at Northwestern University suggests a more personalized approach to cholesterol levels. Please consult your doctor to determine what levels are healthy for you.
3. Check Your Blood Pressure Regularly. High blood pressure, a reading of 135 over 85 (or greater), makes your heart work harder and ultimately weakens your heart muscle and accelerates the buildup of fat and cholesterol in your arteries. High blood pressure often does not produce symptoms, so it is important to monitor this if you are in a borderline range of 130-135 over 80-85.

4. If Recommended by Your Doctor, Lose Weight. If you are overweight or obese, it can exacerbate other heart disease risk factors, such as high blood pressure and high cholesterol. Therefore, it is important to lose weight if your doctor recommends it. An easy calculation can help you determine if you are overweight or obese. Multiply your weight in pounds by 705, then divide by your height in inches, and then divide again by your height in inches. This is your body mass index (BMI), and a range of 25-29 can mean you're overweight, and over 30 is considered obese.

5. Exercise Regularly. Studies indicate that exercise reduces the risk of heart disease by improving circulation and lowering blood pressure and cholesterol readings. A routine of at least 30-40 minutes of exercise at least 3-4 times a week can greatly reduce your risk of heart disease.

6. Reduce Your Stress Levels. Typical stress responses include heightened blood pressure and higher heart rates--making your heart work harder. Over time, stress can greatly harm your heart health, and it is therefore important to try relaxation techniques or exercise as healthy ways to reduce stress.

Living With Heart Disease
A diagnosis of heart disease does not mean your life has to stop. Women are given a diagnosis of heart disease if doctors have noticed plaque buildup in the artery walls or if an irregular heartbeat or heart valve problems are detected. This diagnosis is undeniably upsetting and discouraging for many women, but that doesn't mean it cannot be managed. It can often be helpful to join a support group for women who are feeling the same emotions as you. Connecting with other women through the Go Red For Women heart match program will help you
share your story and sort through your emotions in a healthy way.

Having faith and confidence in yourself to get better is just as important as your doctor’s health recommendations. Your diagnosis may spark feelings of depression and helplessness, but these feelings are not healthy. Facilitating an open conversation with your doctor about your physical and mental health will more likely put you on the path towards recovery. Lastly, it can be therapeutic to spread the word on heart disease to other women. Knowledge is our greatest weapon for heart disease, and helping others on the path towards awareness and preventative strategies will give your diagnosis new purpose.

Sources
1. The National Institutes of Health
2. The Centers for Disease Control and Prevention
3. Duke Health
4. American Heart Association: Go Red For Women

Author:
Megan Castle, Program Coordinator, Women’s Health Research Institute

Health Tip: Heart Healthy Foods

Olive oil or butter? Chicken or salmon? Rice or beans? Making the right choices for your heart is not always easy, but keeping track of what you eat can help you manage your heart health. Here is a list of some heart-healthy options for your diet.

- **Oatmeal**
  - Steel-cut oats contain soluble fibre, which has been found to decrease LDL (“bad cholesterol”)

- **Salmon**
  - Oily fish contain omega-3’s which are great for your heart

- **Nuts**
  - Nuts such as almonds, walnuts, and macadamia nuts contain mono- and polyunsaturated fats, which are good for you

- **Extra Virgin Olive Oil**
  - This contains monounsaturated fats, which have been found to decrease LDL cholesterol and reduce the risk of heart disease
Berries
- These fruits lower inflammation and have significant perks for your heart

Beans
- One study found that those who ate beans at least four times a week had a 22% lower risk of heart disease than those who ate beans less than once a week

Green Vegetables
- Veggies such as broccoli, kale, and spinach have anti-inflammatory and detoxifying effects--both of which are good for your heart

Eating smart for your heart can be a challenge, but there are simple ways to incorporate heart-healthy recipes into your breakfast, lunch, and dinner! The American Heart Association compiled an extensive list of heart healthy recipes for you and your loved ones to try. Browse these recipes to find some healthy options for your heart; bon appetit!

Source: Health

INSTITUTE HAPPENINGS

Join us on February 27 for a performance of *The How and the Why*, to benefit the Women's Health Research Institute

From the writer/producer of television hits like *House of Cards* and *In Treatment* comes this smart and compelling new play about science, family, and survival of the fittest. The benefit performance of *The How and the Why* is underwritten by The Joseph & Bessie Feinberg Foundation. 100% of funds raised go directly to support the programs and services of the Women's Health Research Institute. This benefit includes a brief discussion with the actors following the production, along with a reception of refreshments and light appetizers. Please RSVP by Tuesday, February 25th. All guest names and tickets will be at will call the evening of the event. Your contribution is 100% tax deductible to the full extent of the law.

Click HERE for ticket and performance information.

The Women's Health Research Institute's January Forum was a Great Success

On January 21st our institute welcomed Todd Kuiken, MD, PhD, Director of the Center for Bionic Medicine at the Rehabilitation Institute of Chicago. He presented "Building Bionics," a comprehensive presentation on the status and advancement of artificial limbs.

Click HERE to read the lecture notes.

The Women's Health Science Program was Honored at Northwestern University's Meeting on STEM Education

The City of Chicago's Citywide STEM Strategy has turned to Northwestern University to highlight programs that support the improvement of STEM education in Chicago. The Women's Health Research Institute's Women's Health Science Program (WHSP) was
among the few programs invited to the table to begin collaborating with the city on these important initiatives. Dr. Teresa Woodruff's WHSP initiatives were celebrated nationally in 2010 as a recipient of The Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring. WHSP will now be an integral piece in citywide planning on STEM, as Northwestern University enters this exciting phase of educational outreach.

Click [HERE](#) to read more about WHSP.

**UPCOMING EVENTS**

**Survival Skills for Graduate Students and Junior Faculty: STEM Edition, Wednesday, February 5, 2014**

**Monthly Forum: Tuesday, February 18, 2014 Featuring Rosalind Ramsey-Goldman, MD, DrPH Discussion on Rheumatologic Diseases in Women**

**Benefit Performance of The How and the Why at TimeLine Theatre, February 27, 2014**

[Forward email](#)