# Family Medicine Clerkship
Plain Language Summary Template

Title: Low dose aspirin therapy, can it help prevent heart attacks and stroke in you?

Name: Phillip Radke, MS4

Plain Language Summary:

Heart disease is a name often given to describe a class of diseases that involve the heart and the blood vessels (the piping of the body). While heart disease can relate to most anything involved in the heart and blood vessels, it is most typically recognized as the blockage of the vessels (arteries or veins) of the body causing decreased blood flow to important body structures and organs causing damage by lack of oxygen flow. This can lead to a heart attack, which is lack of blood flow to the heart itself, a stroke, which is lack of blood flow to the brain, and many other diseases caused by decreased blood flow.
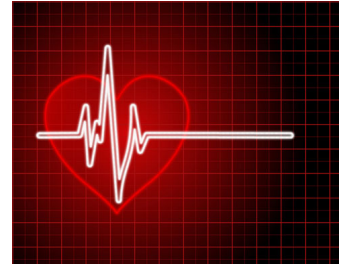
What causes this blockage of the heart? A number of diseases have been shown to cause wear and tear injury on our blood vessels that over time contribute to the build-up of plaque that can block the important blood flow that carries oxygen. Many of these diseases (high blood pressure, high cholesterol, diabetes, smoking, obesity, and others) can be prevented through diet, exercise, and developing a good relationship with your primary care doctor.

While diet, exercise, and guided medical care by your primary care doctor has the potential to prevent heart disease over time, there are a number of opinions in regards to other means of preventing risk, one in particular being aspirin therapy. It is generally thought that a daily aspirin in adults has the potential to decrease the risk of life-threatening heart disease, whether the adult is healthy or not. It has been shown in studies that for men over the age of 45 there is a decreased risk of heart attacks with the use of daily aspirin therapy, it does not effect however the risk of stroke. It has been shown that aspirin therapy does not decrease the risk of heart attacks in women over the age of 45, however it does decrease the risk of stroke. In regards to patients with ages less than 45, there has not been good studies performed that recommends the use of daily aspirin in healthy individuals.

What does aspirin do? Aspirin has multiple uses, but one in particular is that it inhibits a molecule in the blood that normally glues together platelets that creates the patchwork for fixing damaged vessels and bleeding. These platelets can be activated in unhealthy circumstances, when the blood vessels are damaged by diseases, and can lead to the build up of sticky plaque, and theoretically that is why aspirin use can help limit this process.

Is there any risk to aspirin use? The risk with the use of aspirin is bleeding. There is a potential for increased bruising, nosebleeds, bleeding in the stomach, and prolonged bleeding from cuts on the body. For this reason it is important to talk with your primary care doctor prior to starting aspirin therapy to determine the benefits and risks for you and your personal health.

Additional Resources:
You can find more information about heart health at…

American Heart Association: http://www.heart.org/HEARTORG/

CDC (Center for Disease Control): http://www.cdc.gov/heartdisease/

Mayo Clinic "Daily aspirin therapy): http://www.mayoclinic.com/health/daily-aspirin-therapy/HB00073

Key Words:

Heart Disease
Aspirin
Heart Attack
Stroke
Disease Prevention