What does aspirin have to do with heart health?
Your health care practitioner may have you taking a daily dose of aspirin to reduce your risk of heart attack and stroke. There are many factors that are needed in order for a blood clot to form and aspirin blocks one of them. Different types of blood cells have different jobs in our body. One type, called platelets, are able to stick together to form a blood clot. This is important if you get cut or injured so that your body doesn’t lose too much blood. However, clots can also form in dangerous places, such as inside your arteries. There, clots can block the flow of blood, possibly causing a heart attack or stroke.1,2

In most people, aspirin blocks the formation of an enzyme called thromboxane. Without a lot of thromboxane, platelets are less likely to clump together and form a blood clot.

Is there a way to tell if the aspirin I’m taking is working to reduce my risks?
Different people respond differently to aspirin and a low dose of aspirin that works well for one person may not provide the same benefit to someone else. Researchers have found that up to 25% of people who take aspirin still have heart attacks or strokes. In some people, aspirin may not effectively shut off the production of thromboxane by platelets, leaving them at a greater risk of having a heart attack or stroke.

Because there is no obvious way to tell whether the aspirin you take is working to reduce clotting, researchers have developed the AspirinWorks® test which measures the level of a thromboxane product in your urine. If you take aspirin, but still have high levels of this thromboxane product, you may not be receiving the protective effects of this medication.

When should I have an AspirinWorks® test?
Your medical provider may order the AspirinWorks® test to see if you are responding well to your aspirin therapy.

Is there anything I can do to improve my AspirinWorks® result?
There are a number of reasons why you may not be responding to aspirin in the way your medical provider expected.

- Other medications you are taking, including nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen or some antidepressants, can affect how you respond to aspirin.
- Dietary supplements may also change the way your body responds to aspirin. It is important to tell your medical provider any dietary or herbal supplements you are taking while on aspirin therapy.
- Certain diseases, including kidney disease or liver disease, or genetic factors may affect how you respond to aspirin. Work with your medical provider to identify the safest aspirin dose for you.
- After reviewing these and other factors, your medical provider may want to change your dose of aspirin or change to another treatment plan that will work better for you.
- Do NOT change your dose of aspirin without talking to your doctor.

REFERENCE RANGE
Status of Aspirin Effect
11-dhTXB₂ (pg/mg creatinine)

≤1500 Low  >1500 High