



## **Exercise and Vascular Health Study**

It is well-accepted that physical activity is beneficial for optimal heart health. However, there are still many unanswered questions regarding *how* physical activity works to maintain a healthy cardiovascular system.

We believe one of the most important factors in keeping cardiovascular disease rates low is keeping the blood vessels healthy. Scientists know that damage to the blood vessels can start the process of atherosclerosis, which is the accumulation of cholesterol, fatty substances, and waste products in the blood vessel walls. Physical activity can both prevent this damage from happening and help to lessen its progression once it begins.

**The main purpose of our study is to investigate the effect of physical activity on factors in the blood that help to keep the blood vessels healthy.** To achieve this purpose, we are looking for people who are:

- **male, age 55-80**
- **healthy - no evidence of cardiovascular disease, diabetes, or cancer**
- **non-smoking**
- **do not currently participate in 2 or more days/week in moderate to intense endurance exercise.**

We will have you fill out a medical history and physical activity questionnaire and ask you questions about your health and training history. If you qualify for our study, there will be 3 visits to our lab:

**Visit 1** Physical examination by a physician (EKG, blood pressure, etc)  
Cardiac stress test on a treadmill  
Blood draw for blood chemistry profile (includes cholesterol and glucose)

**Visit 2** Blood draw for markers of vessel health  
Non-invasive testing of blood vessel function  
30 minute sub-maximal treadmill testing (~70% of your maximum) with blood draws after 5 and 30 minutes of exercise

**Visit 3** DEXA scan for body composition (% fat and lean mass) and bone density



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