

BLOOD PRESSURE and 15 weeks of WALKING STUDY:

What exactly will be done to me, and what kinds of treatments or procedures will I receive, if I agree to be a research subject in this study?

This study will involve a walking program at different walking speeds for a period of 15 weeks. We will first ask several general questions about your health, and ask for your doctor's approval to participate in the study. If you have no health conditions that would preclude your participation in the study, we will arrange for a blood draw for determination of plasma lipids and clotting factors. We will also provide you with a container in which you should collect urine over 24 hours for measurement of adrenalin. After emptying your bladder, you should record the time and the date on the container. You should collect all urine up to the same time the next day at which time you should attempt to empty the bladder for the last collection. We will determine your body fat and aerobic fitness. Body fat will be assessed by measuring skinfold thickness and circumference of different parts of your body. This will be done in the CCRB and each measurement will take approximately 10 minutes. We will also measure total body fat by bioimpedance in the General Clinical Research Center (GCRC). This is done by measuring your body water by undetectable, low-level electric current. These procedures will allow us to accurately determine how much fat there is in your body, where it is distributed, and how it changes with exercise training. Your aerobic fitness will be assessed by having you breathe through a mouth piece as you walk on a treadmill at different speeds. We will be measuring your aerobic capacity from the breathing rate and the amount of oxygen you consume as the effort increases.

On the basis of the body fat and aerobic fitness, we will match you with another women of similar body composition and aerobic capacity and assign you to a slow or fast-walking group. Walking will be carried out five days a week (at either 6:45 am or 8 am). You will start with one mile per day, and increase distance by one half mile each week until you attain 3/miles per day. You will keep walking 3 miles/day five days a week until the end of week 30. The same measurements (aerobic capacity and body composition) will be repeated after 15 and 30 weeks of training.

Heart-rate (HR) and blood-pressure (BP) variability will be measured before training and after 15 weeks of walking. This will consist of your wearing an automated HR and BP arm cuff continuously for 7 days except for the times when you are taking a bath or a shower. During those times the monitor will be taken off and its battery will need to be recharged. During the seven days of HR and BP monitoring you will be expected to keep a diary in which you should record times and durations of sleep and major physical activities. This will take about 10 to 15 minutes each time.

The function of your blood vessels will be measured during a test at the GCRC. You will be asked to arrive to GCRC (floor 7B of the University of Michigan Hospital) without having anything to eat for 8 hours. The test will consist of your lying quietly for 30 minutes before a blood-pressure cuff is inflated for 5 minutes over your dominant arm. Immediately upon cuff deflation, an ultrasound image will be taken of the blood flow in this arm.

We will share with you all the health information we obtain through measurements. All of your records will be kept confidential.

COMPENSATION: Health information and health benefits, but no payment.