

Kate O'Hanlan, M. D.
Gynecologic Oncology, Surgery and Endoscopy
4370 Alpine Road, Suite 104
Portola Valley, CA 94028-7927

Phone: (650)-851-6669

FAX: (650) 851-9747

Measuring and Understanding Cardiac Health

Name _____

Date of assay _____

Over 45% of all women will die of heart disease. 39% of women die after their very first heart attack. Prevention of heart disease is possible for most women by having a healthy body weight, getting moderate exercise, eating a low-fat-fresh-mostly-vegetable-fruit diet, maintaining a favorable cholesterol, blood pressure, and blood sugar (if diabetic) and by not smoking. Supplementation of vitamin B (niacin, folic acid) and E, and a baby aspirin may also help reduce cardiac mortality.

The HDL is the most important risk factor for women, worrisome when < 55 , and ideal when > 80 mg/dl. It is improved (raised) by regular exercise, weight loss if you are overweight, quitting smoking, and by having one alcoholic beverage daily.

Your HDL is _____.

The Total Cholesterol/HDL ratio is important in women. The average is 4.4 or higher; you want protective: 3.3 or lower, with ideal near 2.0.

Your Ratio is _____.

The LDL ideal is < 100 , definitely < 130 , and is reduced by exercise and low-fat diet. LDL increases with age, and may need medication to improve.

Your LDL is _____.

Body Mass Index should be < 25 to minimize risk of heart disease, stroke or cancer. Calculate your **BMI** = weight in pounds x 704.5 / (height in inches²)

Your BMI is _____.

Additional testing if above values are normal but you have a high risk family:

The Lp(a) can predict heart disease even when the rest of the cholesterol is normal. Ideal is < 30 . Niacin and HRT can reduce.

Your Lp(a) is _____.

The C-Reactive protein reflects vascular inflammation. HRT increases CRP by 84%. Desirable is $< .50$. Aspirin, Statins can lower.

Your CRP is _____.

Homocysteine levels should be < 9 . B₆, B₁₂, folate, Raloxifene and HRT can reduce levels of homocysteine. Ideal is 4.5-12.4.

Your homocysteine is _____.

Apo-lipoprotein B is predictor in high-risk families. Desire 49-103.

Your Apo B is _____.

____ You're in great shape! Keep up the lifestyle, and repeat in ____ years!

____ Please discuss these results with your internist or a preventive cardiologist.

____ Read Dean Ornish's book (Eat more, Weigh less. Harper-Collins, 1993) or any book about The Zone. Do not plan a diet. Plan concrete gradual steps you will take to make the rest of your life work in a healthy way. There is no controversy that combining 5 or more 6-oz servings of fruits, 5 or more 6-oz servings of vegetables, and 1-3 servings of legumes provide **all the dietary essentials daily**. Fruits, vegetables and calcium can lower your blood pressure and stroke risk. Fruits and vegetables seven times a day lowers your cholesterol and colon cancer risk, and makes you regular. Low fat dairy foods such as 2% milk, cottage cheese, and low fat cheeses are delicious sources of calcium without the unhealthy fats. Eat meat, fish, and chicken or eggs once or twice a day and enjoy them! Remember, you don't need a "protein" at every meal as most of us were taught long ago. Eat nuts, seeds or legumes four to five times weekly.

When the cholesterol profile cannot be reduced by modification in lifestyle and diet after 3 months, drug therapy should be started. This is especially important if you have two of the following: **hypertension, diabetes, smoking** or have a **family history** of mother or sister died of heart disease under age 55, or father or brother died under age 45.

What is exercise? You gotta know!

To make a muscle fit, we work it slightly harder than usual use for a sustained period of time on a regular basis. Because the most important muscle in your body is the heart muscle, which is always pumping, you must exert your heart muscle by *raising the heart rate* for thirty minutes four times weekly, over its normal workload. This is exercise! This does not mean gardening or walking, Tai Chi or Yoga, which are great activities, and good for the soul but little or no impact on the heartbeat. It means we have to *do something relatively vigorously* to get our heart rate up, such as walking vigorously for 15 minutes away from our home and then 15 minutes back to your home. Or you could stand still and lift weights, or ride a bicycle, or do push-ups and sit-ups on the floor...anything that is weight bearing, slightly exertive, and done consistently for 30 minutes, regularly for 4 times weekly. No matter what your ability, you can always creatively exercise your heart muscle. If you are above your ideal body weight, you can expend 300 calories by doing one hour of exercise activity. If you calorie-restrict by only 300 calories daily, you will lose one pound/week and achieve or maintain a great cholesterol, reduce risk of breast and colon cancer, avoid osteoporosis, improve blood pressure, reduce heart attack and stroke risk, reduce depression and feel like a million. Participation in sports activities promotes balance, joy and longevity! (Anderson, Arch Int Medicine, 2000).

As long as you are alive, you need to exercise! Why: energy, weight control, health, endurance, strength, longevity, anti-depressant, libido. Just 2500 calories of exercise/week halves heart disease and cancer risk! Do it!

Start at the lower HR for 15 minutes and work up to 30-60 minutes, longer if weight loss is goal, four times a week, up to the higher heart rate.

Age	Target Exercise HR	Activity	Calorie expenditure/hour
20-40	110-150	Bed-rest	100
40-60	100-140	Walking, gardening	200
60+	90-130	Brisk walking	300
		Jogging, Stairs	400
		Dancing, Cycling	600