

FITT4Life offers **Aerobic Fitness Testing, Body Composition Testing and Nutrition Log Analysis**. Aerobic Fitness Testing and Body Composition Testing are conducted on-site in Brentwood and Beverly Hills, while Nutrition Log Analysis can be conducted both on-site and long-distance via the web. Contact **Carolyn Moos** and **FITT4Life** to set up your consultation today! **(310) 923-0492**.

WHY are your lifestyle choices (diet and exercise) so important!

Weight Related Health Conditions

Being overweight greatly increases the likelihood of having high blood pressure, diabetes, high cholesterol levels, heart attacks, strokes, sleep apnea, gall bladder trouble and certain types of cancers. The incidence of hypertension is approximately 3 times greater in overweight individuals than lean individuals. Relatively young overweight persons (20 to 44 years old) have a 5.6 times greater risk of hypertension than persons 45 to 74 years old. In the western world, 60% of hypertension cases in men younger than 45 years are believed to be due to overweight. Excess weight causes increased risk for heart attacks, strokes and diabetes. This is due in part because excess weight increases LDL (the bad cholesterol), decreases HDL (the good cholesterol), increases triglycerides, and increases the incidence of hypertension and diabetes. For men under 40 years, excess weight is a major cause of high cholesterol. Results from research showed that for every 10% increase in weight, there was a 12 point increase in total cholesterol level. Risk of diabetes increases twofold in persons slightly overweight and fivefold in moderately overweight and tenfold in very overweight persons. A weight loss of only 10 percent body weight is associated with significant improvement in the above medical conditions. Obesity-related diseases is now costing the U.S. 90 Billion dollars in health-care expenses (this includes loss of productivity in the workplace, doctors visits and other expenses!).

Type II diabetes is asymptomatic; hence an individuals may not necessarily make the correlation between their current lifestyle choices and the impact it will have on their long-term health. Once pre-diabetes symptoms arise, reliance upon prescription medications can be costly. Proper nutrition and exercise can aid in lowering one's risk of many diseases- consider your training sessions and nutrition log analysis as an investment in your long-term health, the return being longevity and vitality! You deserve optimal health as well as the people that love you the most! We make the most of ourselves so we can give to others!

AEROBIC FITNESS TESTING

Submaximal Aerobic Fitness Testing:

- * A submaximal aerobic test involves exercising to a certain end point.
- * May be a heart rate or it may involve a heart rate check after a specific amount of time at a specific workload.
- * Done on a treadmill or a bicycle ergometer.
- * You are not taken to the point of fatigue.
- * Your heart rate and workload are used to predict your maximum oxygen uptake (Max VO₂). This prediction can tell you how efficiently your heart and lungs can work to deliver oxygen to your muscles.
- * Great test to figure out what kind of shape your heart is in.
- * Takes approximately 10 minutes.

Maximal Aerobic Fitness Testing:

- * Maximal aerobic test involves exercising until exhaustion.
- * A trained professional will take you through an exercise regimen that is designed to bring your body to its maximum.
- * Done on a treadmill or a bicycle.
- * Your heart rate is monitored via electrodes and your oxygen uptake is physically measured with a metabolic cart.
- * A clip will be placed on your nose in order to capture the gases inhaled and exhaled in a mouthpiece. The maximum amount of oxygen you can take in at the end of the test is your Max VO₂.
- * Your true maximum heart rate will be recorded. The point at which your body begins to rely primarily upon its anaerobic energy system (Ventilatory Threshold) is also calculated.
- * Knowing what workload or heart rate was obtained at this threshold can tell you the intensity you need to train at to sustain a greater speed for longer periods of time. This is very important for athletes who compete in various races.
- * Generally takes about 1 hour.

Please answer the following questions prior to calling for an appointment:

- 1. Are you a male over 45 or a female over 55?**
- 2. Do you have 2 or more of the following risk factors?**

- * **Family history of heart attack, coronary revascularization, or sudden death before 55 years of age in father or other first degree relative (i.e. brother or son), or before 65 years of age in mother or first degree relative (i.e. sister or daughter).**
- * **Cigarette smoking (current smoker or have quit within the last 6 months).**
- * **Hypertension - Systolic blood pressure of >140mmHg or diastolic >90mmHg confirmed by measurements on 2 consecutive occasions or on hypertensive medications).**
- * **Hypercholesterolemia - total serum cholesterol of >200 mg/dl, LDL of > 130mg/dl, or HDL <35mg/dl or on lipid lowering medication.**
- * **Impaired Fasting Glucose - Fasting blood glucose >110 mg/dl confirmed by measurements on 2 consecutive occasions.**
- * **Obesity - BMI >30 kg/m² or waist girth of >100 cm.**
- * **Sedentary lifestyle**

If you answered YES to either of the previous questions, FITT4Life can run your maximal aerobic fitness AFTER approved medical clearance from your Physician. If you need a recommendation for a physician please contact Carolyn Moos for assistance. If you are interested in having the testing done, please call Carolyn Moos and FITT4Life at (818) 693-1054 to set up an appointment today. Testing is held in Brentwood, California and medical clearance is conducted in Beverly Hills, CA.

ANAEROBIC POWER TESTING

Bicycle Test:

- * A bicycle test is great for measuring leg power.
- * 2 or 3 sprints with a submaximal load, followed by 2 minutes of submaximal pedaling.
- * The subject will then stop pedaling and a load that is 5%-8.5% of the subject's body weight will be loaded onto the bike.
- * The tester performs a countdown, the subject begins pedaling as fast as possible at the same moment the load is dropped.
- * The subject then tries to keep the maximum speed for 30 seconds.
- * Takes approximately 15 minutes to complete.

Vertical Jump Test:

- * A vertical jump test is also good for measuring lower body power.
- * The subject's standing reach height is measured first.

- * Then they are asked to jump as high as possible after a quick counter-movement.
- * Five jumps are recorded and the average is used to determine the leg power.
- * This test is generally performed on elite athletes or those individuals interested in building their explosiveness and fast-twitch muscle groups.

Body Composition Testing- Your key to physical health and fitness is understanding the importance of muscle to fat ratios for disease prevention and overall wellness. Muscle is more dense and weighs more than fat tissue, hence your body composition measurements are more important than your overall weight. You must understand how your weight is made up. The more muscle you have, the higher your metabolism and the more efficient your body is in movement. In our appointment, we will discuss more information on muscle preservation through proper exercise, nutrition and recovery.

Skinfold Measurements

- * The skinfold method of body composition analysis is fairly quick and is moderately invasive.
- * The accuracy of skinfold measurements are within +/- 3.5-5%.
- * A trained professional will measure the thickness of a skinfold at three different sites on the body with a skinfold caliper (arm, waist and thigh).
- * Three measurements are recorded at each location and the average of the three measurements is used in calculating the body composition.
- * It is best not to have a measurement done immediately after you exercise since the shift in body fluid to the skin increases the skinfold thickness.
- * Takes approximately 15 minutes.
- * In preparation, please bring or wear shorts to a skinfold measurement.

Mifflin St Jeor Equation

Male equation: $10 * wt \text{ (kg)} + 6.25 * Ht \text{ (cm)} - 5 * Age \text{ (yrs)} + 5 = REE$
(resting energy expenditure)

Female equation: $10 * wt \text{ (kg)} + 6.25 * ht \text{ (cm)} - 5 * Age \text{ (yrs)} - 161 = REE$

Activity factors: 1.3 = sedentary 1.4 = walking/standing no exercise
1.5 = exercise 1.6 = walking & exercise 1.8 = heavy lifting & exercise

Male:

Current weight _____ divide by 2.2 = _____ kilograms (kg)

Current height _____ inches x 2.54 = _____ centimeters (cm)

(10 x _____ wt in kg) + (6.25 x _____ ht in cm) - (5 x _____ yrs) +5 =
_____ + _____ - _____ + 5 =
_____ wt result ht result age result

REE

_____ x _____ =

REE Activity factor Calories to maintain weight

Subtract 500 to 1,000 calories = _____
Calories to lose 1 to 2 pounds per week

Female:

Current weight _____ divide by 2.2 = _____ kilograms (kg)

Current height _____ inches x 2.54 = _____ centimeters (cm)

(10 x _____ wt in kg) + (6.25 x _____ ht in cm) - (5 x _____ yrs) -161 =
_____ + _____ - _____ -161 =
_____ wt result ht result age result

REE

_____ x _____ =

REE Activity factor Calories to maintain weight

Subtract 500 to 1,000 calories = _____
Calories to lose 1 to 2 pounds per week

NUTRITION- *How Many Servings Do You Need Each Day?* Website for additional info <http://www.mypyramid.gov>

Women >25 Women < 25, Active women, Men < 25 Active & active < 25 & men >25 & active, men < 25, women >25, men >25

Calorie Level*	1200	1500	1800	2000	2200
Grams of fat	< 40 g fat	< 50 g fat	< 60 g fat	< 65 g fat	< 70 g fat

Grain Group	4 oz-eq	5 oz-eq	6 oz-eq	6 oz-eq	7 oz-eq
Vegetable Group	1.5 cups	2 cups	2.5 cups	2.5 cups	3 cups
Fruit Group	1 cup	1.5 cups	1.5 cups	2 cups	2 cups
Milk Group	2 cups	2.5 cups	3 cups	3 cups	3 cups
Meat Group	3 oz-eq	5 oz-eq	5 oz-eq	5.5 oz-eq	6 oz-eq
Oils/Fats	4 tsp	5 tsp	5 tsp	6 tsp	6 tsp

Limit extras to 170 calories, 170 calories, 195 calories, 265 calories, 290 calories

*These are the calorie levels if you choose low fat, lean foods from all the food groups and extras (foods from the fats and sweets) in moderation. Recommend a daily multi-vitamin supplement, especially for the lower calorie levels. The supplement should not exceed 50-100% of the recommended daily value for any of the nutrients.

Self-Assessment:

Family History Questionnaire

1. Have any of the following members of your family experienced problems with obesity (defined as Body Mass Index (BMI) ≥ 30)? If you do not remember what BMI means or what your BMI is, ask your nutrition counselor.

Mother _____ Yes _____ No
Father _____ Yes _____ No
Brother _____ Yes _____ No
Sister _____ Yes _____ No
Children _____ Yes _____ No
Unknown _____

If one parent is obese, you have a 40% chance of becoming an obese adult. If both parents are obese, your chance increases to 80%.

Obesity is family-related, but not necessarily genetic. Lifestyle factors play a larger role and eating right with regular exercise can greatly reduce your risk of becoming overweight/obese.

2. Do any of the following members of your family have adult onset (Type II) diabetes?

Mother _____ Yes _____ No
Father _____ Yes _____ No
Brother _____ Yes _____ No
Sister _____ Yes _____ No
Children _____ Yes _____ No
Unknown _____

If either of your parents or a sibling has diabetes, there is up to a 40% risk that you will also develop diabetes.

Diabetes risk is also associated with lifestyle habits. Maintaining a healthy weight along with regular exercise and a healthy diet can *significantly* reduce your risk of developing diabetes.

3. Have any of the following members of your family experienced problems with premature death (before age 55) due to a heart attack or stroke?

Mother _____ Yes _____ No
Father _____ Yes _____ No

Risk for heart disease increases if you are a male ≥ 45 years of age, a female ≥ 55 years of age, or if one or more "first degree" relatives gets heart disease at an early age. For example, a father or brother with heart disease before age 55, or a mother or sister with heart disease before age 65.

Brother _____ Yes _____ No
Sister _____ Yes _____ No
Children _____ Yes _____ No
Unknown _____

Even though you can't control some risk factors for heart disease, there are many others you can control such as: cigarette smoking, being overweight, physical inactivity, high blood pressure, high low density lipoprotein (LDL) or "bad" cholesterol level, and low high density lipoprotein (HDL) or "good" cholesterol level.

One of the biggest mistakes individuals make is they only focus on weight loss, when in fact being fit is best measured by your overall body composition. Building and maintaining lean muscle tissue is the best means to increase metabolic rate and be more physically fit. Muscle weighs MORE than fat and is more dense, hence you may be smaller in size, however potentially weigh a little more if you make substantial changes in your body fat percentage. Keeping track of your progress in muscle building and lowered fat tissue is the best means to measure improved health. Women need to maintain a minimum body fat to maintain good health. For your goal body fat percentage visit page 4 as well as my consulting link." Don't focus on "Losing weight, but DO focus on obtaining a preferable body composition and increase your cardiac health.

Weight and Diet History Questionnaire

Please complete the following questions to evaluate your past dieting habits:

At what age did you first experience wanting to make lifestyle changes?
_____ years old

Has your body composition changed over the past year? _____ Yes
_____ No. If yes, please describe how:

What has been your lowest body composition range as an adult?
_____ pounds.

How many serious attempts have you made to change your lifestyle (nutrition and exercise combined): the last 12 months? _____ Over the last 10 years? _____

What methods have you used in that past to lose body composition? (ex: self-help program (i.e., book, magazine, tape); commercial program, hospital-based program, personal trainer and nutrition consultant.

What were the top contributing factors do you believe were important in helping you attain your fitness goals?

What were the contributing factors that triggered lack of adherence to a program or lack of continued progression in your fitness and health goals?

You may have been successful in the past in makes some changes in your body composition, however need to embrace making lifestyle changes that are reasonable for you. It takes a lot of emotional and physical effort (but realistic) and commitment to lose 20-30 pounds. Many of individuals regain the weight lost if they do not have an experienced coach along the way that will help them with both nutrition and exercise. The length of time you have lead a given lifestyle may indicate how long it will take to change long-term habits. This self-assessment provides an opportunity for you to examine past successes and failures and identify what has worked in the past and what has not; which in turn helps me shape a program that is just right for you. When I address the mental aspect of lifestyle change we will make notes to identify high-risk situations that have triggered lapse in the past and we will then develop rebound strategies to prevent a lapse in the future. Nothing we will implement will be drastic or unreasonable for you- small, incremental changes lead to long-term adherence and lasting lifetime results! I look forward to working with you and join me in the effort to be

FITT4Life! YOU CAN achieve all of your goals and I will help you every step of the way! ~Carolyn Moos (310) 923-0492.