

## Physical Analysis Ratings

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ShapeUp Fitness  
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A N Other	Weight: 76.0 kg
Age: 34	Height: 175 cm
Sex: MALE	Oct 12, 1999

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"Over ninety-nine percent of us are born healthy and suffer premature death and disability only as a result of personal misbehavior and environmental conditions... The individual has the power - - indeed, the moral responsibility - - to maintain his own health by observance of simple, prudent rules of behavior relative to sleep, exercise, diet, weight, alcohol and smoking."

Dr. John H. Nowles  
Former Medical Director  
Massachusetts General Hospital

### Personal Best

Achieving your **Personal Best** means that you have reached your full potential. When individuals achieve their Personal Best, they possess the necessary skills to meet demands of the world today and to cope with tomorrow.

One of the keys in achieving **Personal Best** is to have meaningful scientific knowledge of your current status. Only with such meaningful information can an individual develop all aspects of the total well being (i.e. spiritual, physical, intellectual, emotional and social) to an optimum level.

The following is your current comprehensive Physical Analysis Status. It indicates areas where you are strong, and areas where you are weak. This information, coupled with professional guidance, will allow you to improve your physical status, thereby improving your quality of life - - - i.e. achieving your **Personal Best**.

It is strongly recommended that you periodically reassess your physical status. Thus, you are urged to save this analysis for comparison with your future progress.

### Physical Analysis and Ratings Program ("PAR")

This PAR program has been specifically developed to provide a meaningful health risk appraisal and fitness assessment. This program addresses each of the following components:

- \* Height/Weight Analysis
- \* Cardiovascular and respiratory status
- \* Body composition
- \* Aerobic capacity
- \* Flexibility and muscular strength/endurance

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### **CURRENT HEIGHT/WEIGHT**

Body weight is of concern if a person is excessively fat or thin. Both indicate abnormal nutrition. However, "overweight" and "obesity" are not synonymous. Obesity means that the body has an excessive amount of body fat. Overweight means body weight is greater than that allowed by some established norm (e.g. the Metropolitan Life Insurance Height/Weight Tables).

It is possible to be overweight and not be obese; e.g. a large, well-conditioned male athlete. Conversely, it is possible for a person to have "normal" weight but still be obese; i.e. the person has an excessive amount of stored fat.

There are two commonly used norms for determining a person's weight status - - - The Metropolitan Life Insurance Tables ("MET-LIFE") and the more recent U.S. Department of Agriculture ("USDA") Weight Table. Both of these norms provide recommended weight as a function of height. Your weight compared to both of these norms is:

- \* The Met-Life normal range is **67.3 kg to 72.7 kg**  
Your weight is **ABOVE** this norm
- \* The USDA normal range is **58.6 kg - 76.8 kg**  
Your weight is **WITHIN** this norm

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### **CARDIOVASCULAR AND RESPIRATORY STATUS**

Resting Blood Pressure - Your resting blood pressure is:

- \* Systolic = **138** mmHg
  - When the heart beats (contracts), it squeezes blood into the arteries and creates pressure in them. This pressure (blood pressure) causes your blood to flow to all parts of your body.
- \* Diastolic = **87** mmHg
  - This is the pressure in your arteries when your heart is resting between beats.

The National Institutes of Health has developed the following guidelines on understanding blood pressure measurement:

	Normal	Borderline	High
Systolic	139 or less	140 - 159	160 or higher
Diastolic	89 or less	90 - 94	95 or higher

Based upon these definitions, you are: **NORMAL**

However, blood pressure fluctuates significantly - - - as much as 30 points in a day. Therefore, experts recommend averaging several readings taken on different days at different times to obtain your accurate typical pressure.

**CAUTION:** Only a physician is qualified to interpret blood pressure measurements.

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### **Resting Heart Rate**

The normal range of resting heart rate ("RHR") can vary greatly between normal people - - - anywhere from 40 to 90 beats per minute. In general, RHR is lower in fit people; however, it is not a reliable method when used alone to determine fitness. Although extremely fit athletes (e.g. runners and swimmers) have slow heart rates that indicate cardiac efficiency, slow heart rate can also be associated with physiological abnormality such as carotid sinus syndrome (associated with arteriosclerosis). However, among healthy people monitoring your resting heart rate can help certify the benefits derived from regular exercise.

YOUR RESTING HEART RATE: **75** beats per minute

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### **Vital Capacity**

Vital Capacity (VC) is the maximum amount of air that can be forced out of the lungs after taking as deep a breath as possible. It is measured using a spirometer. There is no direct relationship between VC and physical fitness. However, obviously, it takes a certain lung volume to provide an adequate amount of oxygen during exercising. Although some studies have shown an increase in VC with training, other studies have not. However, the effects of aging and living in a polluted air environment can be observed through periodic VC assessment.

YOUR SPIROMETER TEST RESULTS: **35** cc  
YOUR RATING: **Average**

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## **BODY COMPOSITION**

A minimum amount of body fat is necessary to cushion and protect body organs from injury. These "adipose tissues," or "essential fats," serve the important function of storing and releasing energy (i.e., fatty acids) in response to metabolic demands. If your body's energy intake from eating exceeds your normal energy use for daily activities including exercise, the excess energy is stored as body fat. Storage of excess fat enlarges cell size and can increase the number of fat cells in the body. The safest method of reducing these fat reserves is through proper nutrition and regular exercise.

Scientific literature shows that higher percent body fat significantly increases the risk of coronary heart disease, strokes, diabetes, certain types of cancer, and other chronic, disabling diseases. Research also shows that the location of body fat is a contributing factor to greater health risk in adults. For example, excessive fat in the body's trunk (e.g. stomach area) represents a greater health risk than excess fat in the limbs. Both moderate exercise and reduced fat intake can help reduce the amount of body fat and decrease the risk of these diseases.

Your Body Fat is: **19.2 %**  
Your Rating: **Average**

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## **AEROBIC CAPACITY**

Aerobic capacity is a measure of the maximum amount of oxygen an individual consumes. This is the maximum amount of oxygen that can be transported to the body tissues from the lungs during prolonged physical work.

Thus, aerobic capacity tells us the maximum rate at which we can utilize metabolic reactions requiring oxygen to produce energy. The three minute step test is an excellent cardiorespiratory test.

The amount of oxygen that can be delivered to the tissues depends upon a chain of physiological events: (1) Movement of air in and out of the lungs; (2) the movement of oxygen from the lungs to the blood; (3) blood picking up the oxygen, which is a function of the amount of hemoglobin in the blood content; (4) the heart pumping of the blood; (5) the delivery of blood to the muscles; and (6) the ability of the cells to use oxygen in the blood. This oxygen delivery system is like any chain in that it is only as strong as its weakest link. Consequently, if there is any deficiency (for example, low blood hemoglobin) the aerobic capacity will be reduced. Training does improve many of these functions.

Your current aerobic capacity is: **70**  
Your rating is: **Excellent**

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## **FLEXIBILITY AND MUSCULAR STRENGTH/ENDURANCE**

### **Flexibility: Sit and Reach Test**

Flexibility is defined as the ability of muscles and connective tissue surrounding the joint to have a full range of motion. Although no general flexibility test exists that is representative of total body flexibility, trunk forward flexion has been used for the past forty years as a general test of flexibility.

The reason that the forward flexibility test is widely used is because it involves a major joint area associated with lower back pain and disability. Many middle aged people have lower back pain and disability. Often, this is related to reduced flexibility of the hip and back along with reduced elasticity of the hamstring. Most of these cases can be improved by a well

designed program of stretching exercises that increase flexibility. Such a program could include daily stretch exercises that increase hip, back and hamstring flexibility and reduces the risk of injury and chronic lower back pain. However, if you experience low back pain you should consult your physician before participating in exercise testing or training programs.

Your measured flexibility distance is: **42 cm**  
Your rating is: **Average**

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**Abdominal Endurance: Modified Sit ups**

The purpose of this test is to evaluate abdominal muscle strength and endurance by performing repeated curl ups. A timed sit up test is fairly representative of general muscular endurance; it measures the fitness of one of the most important muscle groups of middle aged individuals. It has been standardized with respect to technique and in a one minute duration period reduces the influence of motivation.

Your number of sit ups during the one minute: **33**  
Your rating is: **Below Average**

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**Upper Body Strength/Endurance: Push-up**

The purpose of this test is to measure arm and shoulder girdle strength/endurance.

You were able to perform: **24 push-ups**  
Your rating is: **Average**

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**Upper Body Strength: Hand Grip**

The purpose of this test is to measure the hand grip strength of the individual. The hand grip test measures static hand strength and is a good indicator of total body strength. The test is performed by you holding a hand dynamometer in your "dominant hand" (the hand that you write with). Keeping the hand free from contact with the body, squeeze the dynamometer with one short maximum effort. This differs from muscle endurance where the latter is the ability to use dynamic strength repeatedly over a period of time.

Muscular strength can best be increased when the muscles perform work against workloads above those normally encountered. Experience has found that programs with higher workloads with fewer repetitions yield the best strength gains. When working with weights (free standing or machines) optimum increases occur for routines with fewer than 10 repetitions in multiple sets.

Your hand dynamometer grip test results: **43 kg**  
Your rating is: **Average**

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## SUMMARY

### UNIVERSITY OF MARYLAND / YMCA RATING SCALE

#### For Males Age 30 to 39

Rating	Vital Capacity (cc/100)	Body Fat %	Aerobic Capacity (VO2max)	Flex. (cm)	Sit Ups (number)	Push Ups (number)	Hand Grip (kg)
Excellent	46 or >	12 or <	52 or >	52 or >	47 or >	38 or >	51 or >
Good	45 - 41	13 - 15	51 - 48	51 - 47	46 - 42	37 - 32	50 - 47
Above Average	40 - 38	16 - 18	47 - 43	46 - 44	41 - 38	31 - 28	46 - 46
Average	37 - 35	19 - 21	42 - 39	43 - 39	37 - 35	27 - 24	45 - 43
Below Average	34 - 30	22 - 23	38 - 35	38 - 34	34 - 31	23 - 20	42 - 41
Poor	29 - 23	24 - 27	34 - 31	33 - 26	30 - 26	19 - 14	40 - 37
Very Poor	22 or <	28 or >	30 or <	25 or <	25 or <	13 or <	36 or <

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The data contained in this document is for information purposes only. The assessment indicates how you compare with persons your own age and sex. This is not a medical examination. You should consult your physician before starting any diet or entering an exercise program.