HEALTH RISK ASSESSMENT AND BODY COMPOSITION PROFILE

A Graphic Look Within Your Body

Our team wants you to know that you are not alone in dealing with the emotional and physical challenges that being overweight brings to your life. We know the many health risks associated with this condition and the good news is those risks, medically treated, can be reduced, stopped or even reversed. Our goal is to get you living your life to the fullest. Our commitment is to help you achieve the success you deserve. Congratulations for taking the step that leads to a better life.

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Total Body Fat

The recommended body fat range for young to middle aged adult women is 16% - 26% and for older women 24%-28%. For young to middle aged adult males the recommended body fat range is 12%-18% and for older men 18%-22%.

Total Body Water

Water is essential to life. Every physical and chemical process in your body uses water. It delivers oxygen with other essentials into and out of every cell. It lubricates all the body's joints, tissues and organs and insures we do not overheat. To get the benefits from food, we must have water. A well hydrated female with 25% body fat has approximately 50% body water while a well hydrated male with 15% body fat has approximately 60% total body water.

BODY COMP SCALE ©

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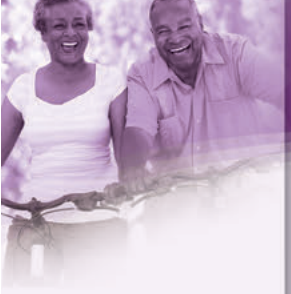
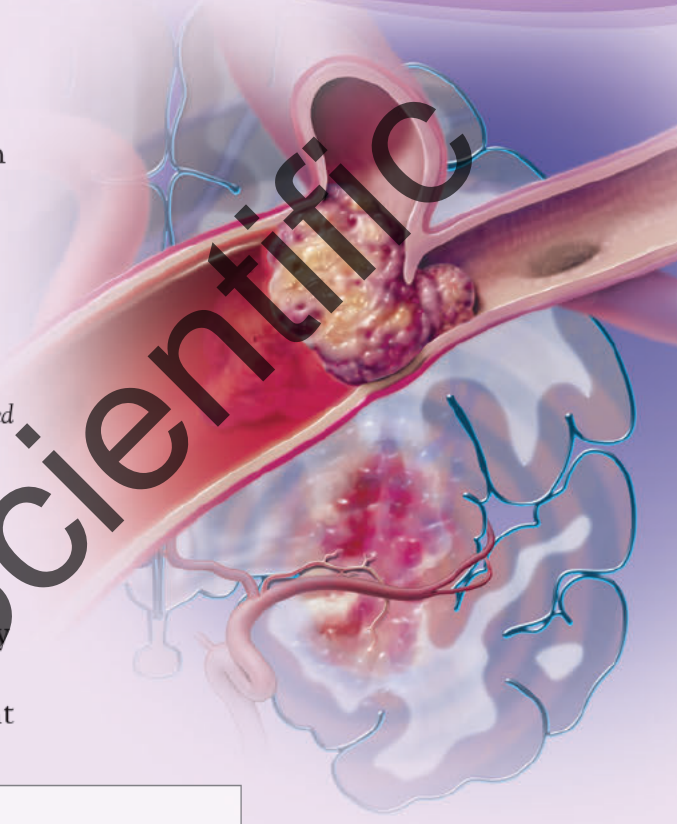


Stroke

Strikes fast as a lightening bolt

An ischemic stroke is a sudden loss of blood to the brain, usually the result of a partial or complete blockage of an artery. While high blood pressure and excess weight do increase this risk, proper medical treatment along with weight loss can reduce the risk.



Cerebral stroke caused by a lodged blood clot.

Fat Free Mass

Fat Free Mass refers to the portion of the body composed of muscle, bones, organs and fluids. Maintaining muscle mass is vitally important during weight loss.

Blood Pressure

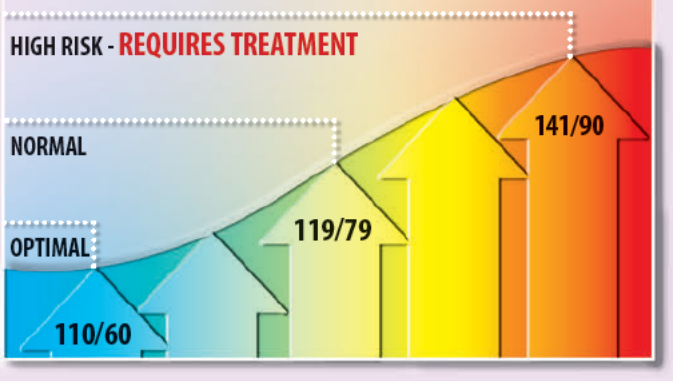
The Silent Disease

An adult with a blood pressure value of 141/90 or higher falls into a significantly higher risk for heart disease and stroke. One third of all adults in the United States have high blood pressure and 30% of them don't even know they have hypertension. Weight loss, increased physical activity, proper nutrition and reduced stress are just a few things that can lower your blood pressure.

Blood pressure measurement cuff.

Your Blood Pressure:
_____ / _____
SYSTOLIC DIASTOLIC

Blood Pressure Readings



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Resting Energy Expenditure* (REE)
REE is the caloric burn rate required to maintain vital body functions when at rest.

Degenerative Arthritis
Less weight can mean less pain

Excessive pressure on knee joints can cause more than wear, tear, and pain. Those extra pounds encourage cellular activity that will destroy joint cartilage. However, weight loss can slow cartilage loss by reducing the concentration of cytokines released by the adipose tissue. While arthritic destruction is permanent, the associated pain will generally diminish with less body weight.

Arthritic knee, showing cartilage loss due to cytokines released by fatty deposits.

Sleep Apnea
Much more than a rough night's sleep

Sleep apnea refers to many episodes of suspended breathing lasting ten seconds during sleep. During these episodes, blood-oxygen levels can drop dangerously low resulting in irregular heartbeats. Almost 100% of those diagnosed with sleep apnea are markedly overweight. The good news is with a reduction in body weight this sleeping disorder can substantially improve or disappear all together.

Type II Diabetes
Prevent it or treat it

Type II diabetes symptoms can go unnoticed until the disease has progressed to debilitating levels. A few common symptoms of Type II diabetes include chronic fatigue, weight gain, slow-healing sores, or frequent urination. One of the larger risk factors is obesity. The sooner Type II diabetes is diagnosed, the better your treatment options.

*Daily Caloric Burn Rates

The greater your caloric expenditure compared to your intake the faster weight loss occurs. Your caloric burn rates listed are determined by adding the REE calories to various levels of physical activity. For your own calculations, remember 3500 calories make one pound of fat!

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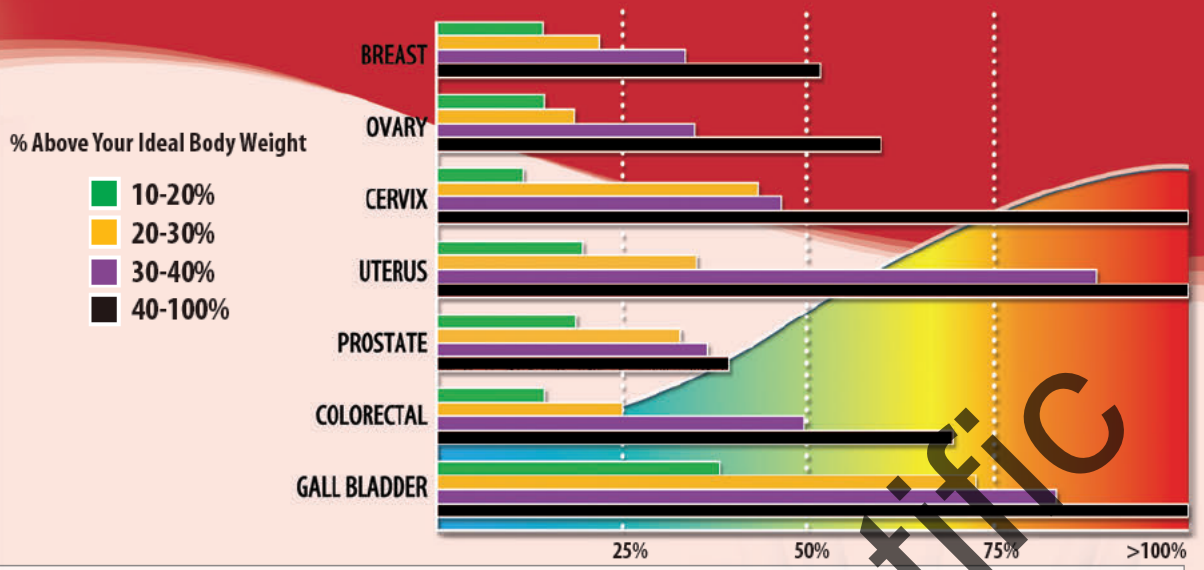
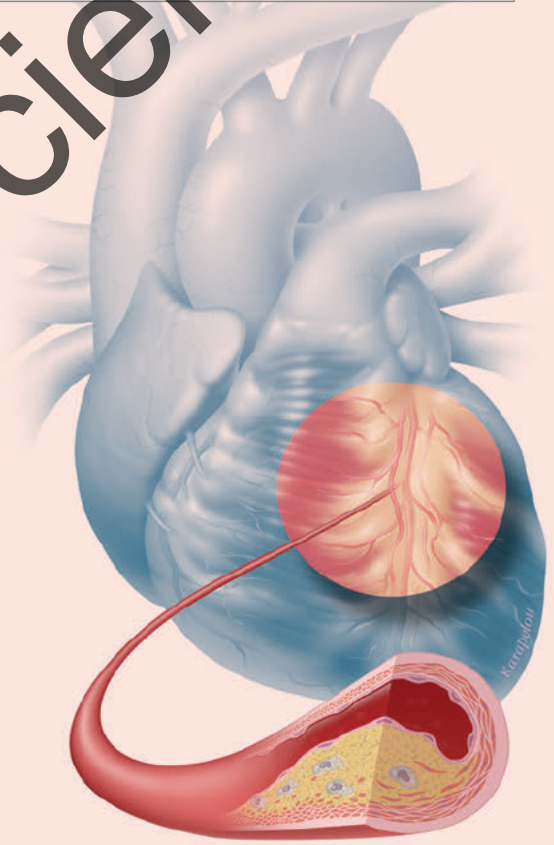
Increase in Cancer Risk



Coronary Heart Disease

Testing could save a life

Coronary heart disease is typically caused by blockage and narrowing of arteries. Inflammation of the blood vessels generated by too much abdominal fat can raise the likelihood of developing this disease. People who are excessively overweight have a dramatically increased risk of developing coronary heart disease. Getting all the appropriate medical tests can save your life.



Coronary artery with atherosclerotic plaque buildup, diminishing blood flow to the heart.

We are your team of professionals committed to helping you achieve your best life. Now is the time to make your commitment and join the team.

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HEALTH RISK ASSESSMENT & BODY COMPOSITION PROFILE

A GRAPHIC LOOK WITHIN YOUR BODY

The World Health Organization's definition of Health: "Health is physical, mental and social well-being, not merely the absence of disease and infirmity." *Health-related fitness* is needed by everyone to have a low risk of preventable diseases. Scientific research has substantiated the importance of physical activity in the achievement of dynamic health and in the prevention of a variety of diseases such as high blood pressure, adult on-set diabetes, obesity, coronary heart disease, low back pain and osteoporosis. Therefore, health-related goals should include achieving appropriate levels of cardiorespiratory function, body fat, muscular strength and endurance, and low back flexibility.

Assessment prepared by _____ Date _____

Assessment prepared for _____ ID No. _____

Current Body Weight 216.9 Lbs
98.3 Kg

Body Mass Index 25.8

Gender: M Hgt: 5' 5.0" Age: 23
165 cm Ohms: 493

TOTAL BODY FAT

ASSESSMENT RESULTS

29.5 %
63.2 Lbs
28.6 Kg

Body Fat, layered under the skin and packed around organs, cushions the body against injury, insulates it from cold and supplies calories to meet energy needs. The body has a self-protective tendency to store fat if continually supplied with more food than required for daily energy consumption. To lose part of this fat reserve and stay inside the recommended range, more calories must be burned than consumed to force the body to derive the needed energy from the fat reserves.

TOTAL BODY WATER

ASSESSMENT RESULTS

51.5 %
110.4 Lbs
50.1 Ltr

Because water is contained primarily in the fat-free tissues, the percentage of total body water can vary widely between individuals. Those with a high percent body fat can be as low as 40% total body water, while very lean individuals and athletes can attain 70%. Water is the essential component of all vital fluids and the medium of transport in every biological exchange. During a weight management program, it is essential to prevent an excessive decrease in lean mass and keep a normal level of hydration through proper exercise and diet. Women with 19% to 26% body fat are approximately 50% total body water, while men with 12% to 18% body fat are approximately 60% total body water.

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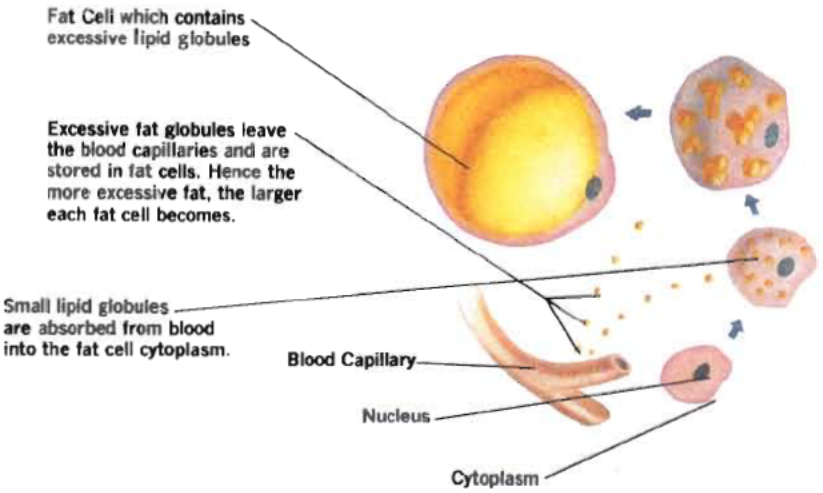
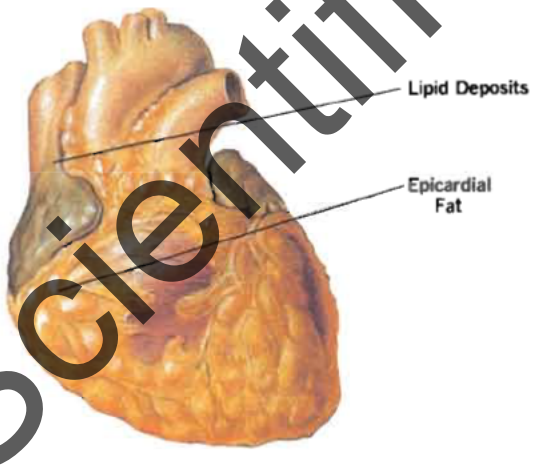
THE GROWING FAT CELL



The quantity of fat cells, once formed, remain with you throughout your natural life. Reducing your caloric intake will reduce or burn excessive fat, which means the fat cells become smaller. The control you have, through diet and exercise, is on the size of the fat cell, not the quantity. Doctors recommend you be concerned with your percentage of body fat, rather than the total body weight. The recommended ranges are 19%-26% of body fat for women and 12%-18% of body fat for men.

FATTY INFILTRATION OF THE HEART

When fatty infiltration invades deeply into the heart muscle (myocardium), it could interfere with normal contraction of the ventricles. Fatty deposits on the surface of the heart (epicardium) are common in obese people. To reduce the risks of fatty myocardium occurring, a reduction of body fat is recommended for persons excessively overweight.



FAT FREE MASS

Fat Free Mass or Lean Mass is the portion of the body consisting mainly of bones, organs and fluids. The lean to fat ratio is the indicator of the proportion between lean and fat in the body and is a convenient index to monitor body composition.

ASSESSMENT RESULTS

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70.5 %
151.1 Lbs
68.5 Kg
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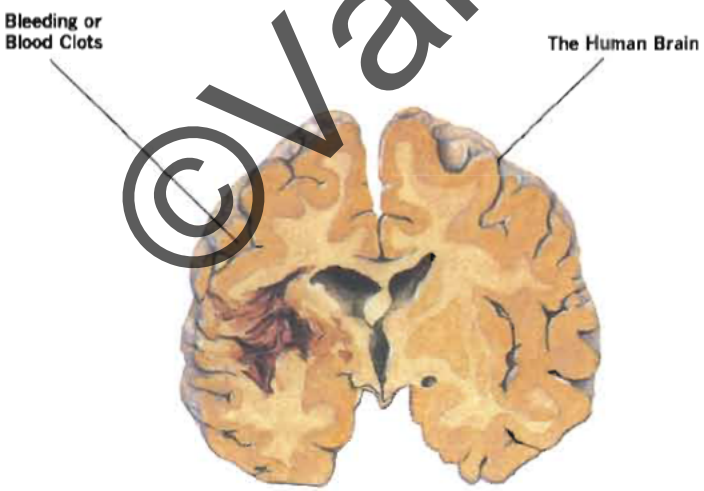

STROKES

Strokes are usually a result of an excessively overweight condition. Paralysis, speech impairment and death can be the result of having had a stroke. Chances of a stroke occurring are reduced exponentially when your percent of body fat is within the recommended ranges (19%-26% body fat for females and 12%-18% body fat for males).

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RESTING ENERGY EXPENDITURE

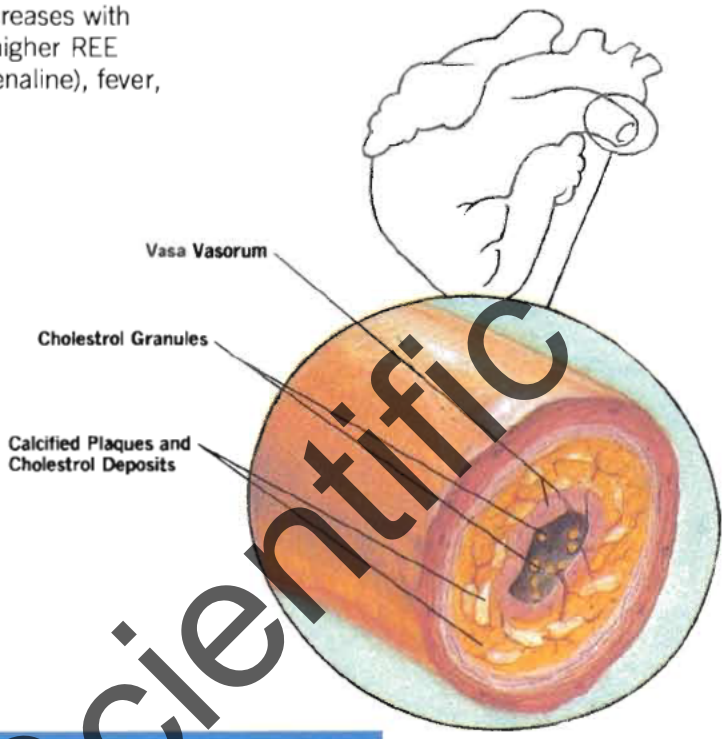
ASSESSMENT RESULTS

2051 Calories/Day Required to maintain Vital Body Functions

The Resting Energy Expenditure or REE is the energy needed to maintain vital body processes such as breathing, food digestion, blood circulation, and sufficient energy for sedentary activities. REE increases with weight and height and decreases with age. Men usually have a higher REE than women (except during pregnancy). Stress (secretion of adrenaline), fever, drugs, (such as caffeine and amphetamines) increase REE.

ATHEROSCLEROSIS

Atherosclerosis is characterized by the thickening of the inner lining of arteries due to the accumulation of lipid granules (fatty deposits). The granules are deposited between the lining layers via the vasa vasorum. A continuing buildup of fat globules, first appearing as fatty streaks, then as calcified plaques, leads to hardening of the arteries. The complications which result from this condition are among the leading causes of death.



THE FATTY KIDNEYS

Kidney failure may result when degenerative changes associated with obesity, atherosclerosis and hypertension occur. Excess lipid deposits around the kidneys are usually a result of an overweight condition.

ACTIVITY LEVEL

Activity Level classification:

Very light —Limited activity. No structured exercise.
Light —Normal daily routine with recreational activities.
Moderate —Participation in exercise program 3 days a week for 20 to 30 minutes.
Heavy —Participation in exercise program more than 3 days/week for 1 hour.
Very heavy—Athletic participation in training program for more than 2 hours every day or heavy manual labor (i.e. construction laborer).

Very Light	2461 Calories/Day
Light	2871 Calories/Day
Moderate	3076 Calories/Day
Heavy	3486 Calories/Day
Very Heavy	3896 Calories/Day

DAILY CALORIC NEEDS

The Daily Caloric Needs is the amount of calories required daily to maintain **current** body weight and is calculated by adding the Resting Energy Expenditure calories (above) to the calories needed for daily activities.

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OBESITY AND MORTALITY

Does an excessively overweight condition exert an adverse effect on expected life span? The answer is unequivocally YES! The Framingham Study revealed that mortality rates for nonsmoking men that were 9% over their ideal weight was 3.9 times that of nonsmoking men at desirable weight. The findings for overweight women were similar with clear indications of adverse long-term mortality. There is no indication that there is a "safe" level of being overweight. Nor is there an indication that weight gain in middle age is "healthful" or that "desirable" weight increases with age. Mortality rate increases severely as the degree of obesity increases.

CANCER AND OBESITY

The American Cancer Society has conducted the largest epidemiological study of obesity and site-specific malignancies. Through the last follow-up year, the study was successful in tracing 93 percent of the 1 million individuals in the long-term prospective study. Men who were 40% or more overweight had to 73% higher incidence of cancer. For women as high as a 400% incidence of cancer occurring. Site-specific ratios are shown in the table below:

You Are 43 % over your ideal weight.

MORTALITY RELATIVE TO WEIGHT

Percentage Above Your Ideal Weight	Likelihood of NOT Reaching Your Normal Life Expectancy
5-15%	10%
15-25%	27%
25-35%	34%
35-45%	41%
45-55%	111%
55-65%	127%
100% or more	1,100%

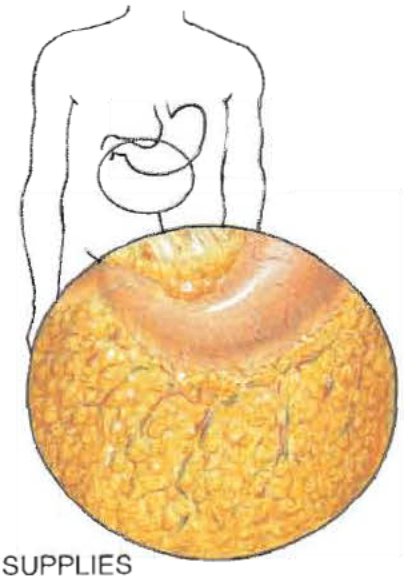
Actuarial data compiled through 2003
Data based on 15 to 39 years of age male and female.

CANCER RELATIVE TO WEIGHT

Site of Cancer	% Overweight: 10-20%	20-30%	30-40%	40%+
	Increased Incidence of Cancer			
MALE				
colon, rectum	....	....	50%	71%
prostate	....	27%	31%	35%
FEMALE				
endometrium	37%	83%	173%	435%
uterus, unspecified	....	38%	79%	360%
cervix	....	44%	48%	130%
ovary	....	15%	35%	60%
gall Bladder	61%	76%	83%	249%
breast	5%	11%	22%	51%

THE "POT BELLY" OR OMENTUM

The "pot belly", commonly perceived as a protruding stomach, is mostly a result of fat accumulated within the abdominal cavity (omentum), not due to a protruding stomach. A reduction in weight, and your body fat, will significantly help in the fight over "the battle of the bulge".



CAUSES OF OBESITY

Obesity is the pathophysiological result of chronic accumulation of excess calories stored in the form of fat. Less than 3% of obesity can be attributed to glandular dysfunction. Almost without exception, the basic reason for an overweight condition is excessive food intake combined with inadequate physical activity.

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B O D Y C O M P O S I T I O N R E P O R T

Date:

Name: _____

Gender: M Hgt: 5' 5.0" Age: 23
165 cm Ohms: 493

Prepared By: _____

Current Body Weight	216.9	Lbs
	98.3	Kg
Total Body Fat	29.5	%
	63.2	Lbs
	28.6	Kg
Fat-Free Mass	70.5	%
	151.1	Lbs
	68.5	Kg
Total Body Water	51.5	%
	110.4	Lbs
	50.1	Ltr
Muscle-Mass	19.0	%
	40.7	Lbs
	18.4	Kg
Body Mass Index	35.8	

Your target weight range is 172.3 to 184.4 Lbs.

The target weight is determined by adding the recommended percentage of body fat to your current lean body mass. Therefore, your target weight is not necessarily your ideal weight.

%Body Fat	Total Body Water Norms
5-12	72-68%
13-19	67-60%
20-29	59-54%
30-45	53-45%

Body Fat ranges	
Athletic	6-13%
Normal	14-19%
Sedentary	20%+

Resting Energy Expenditure: 2051 Calories/Day

Activity Level	Daily Caloric Needs
Very Light	2461 Calories/Day
Light	2871 Calories/Day
Moderate	3076 Calories/Day
Heavy	3486 Calories/Day
Very Heavy	3896 Calories/Day

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Body Composition & Wellness Assessment

The World Health Organization defines health as "physical, mental, and social well-being, not merely the absence of disease." Our team is committed to the achievement and maintenance of your health & fitness goals.

Name & ID #		
Technician Name & Date		

Your Personalized Analysis

Weight	Body Fat	Muscle Mass	Total Body Water	BMR	1347
205.4 LBS	35.5 % 70.4 LBS	65.5 % 125.3 LBS	41.5 %	BMI	36.5

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Body Fat and Muscle Mass
What is the Right Amount?

Body fat and muscle tissue levels are key indicators of overall health and fitness. A high body fat percentage is associated with a variety of medical ailments, including heart disease, cancer, and stroke. Muscle tissue burns calories much faster than lipids/fat. As a result, when losing weight, it is imperative to focus on fat loss while maintaining muscle tissue.

Essential Fat	2-5%	10-13%
Athletes	6-13%	14-20%
Recommended	14-17%	21-29%
Over Fat	18-24%	30-35%
Obese	>25%	>35%

YOUR BODY FAT	YOUR MUSCLE MASS
35.5 % 70.4 LBS	65.5 % 106.3 LBS

The Importance of Normal Hydration

Are You Getting Enough?

41.5 %
83.8 LBS

YOUR BODY WATER

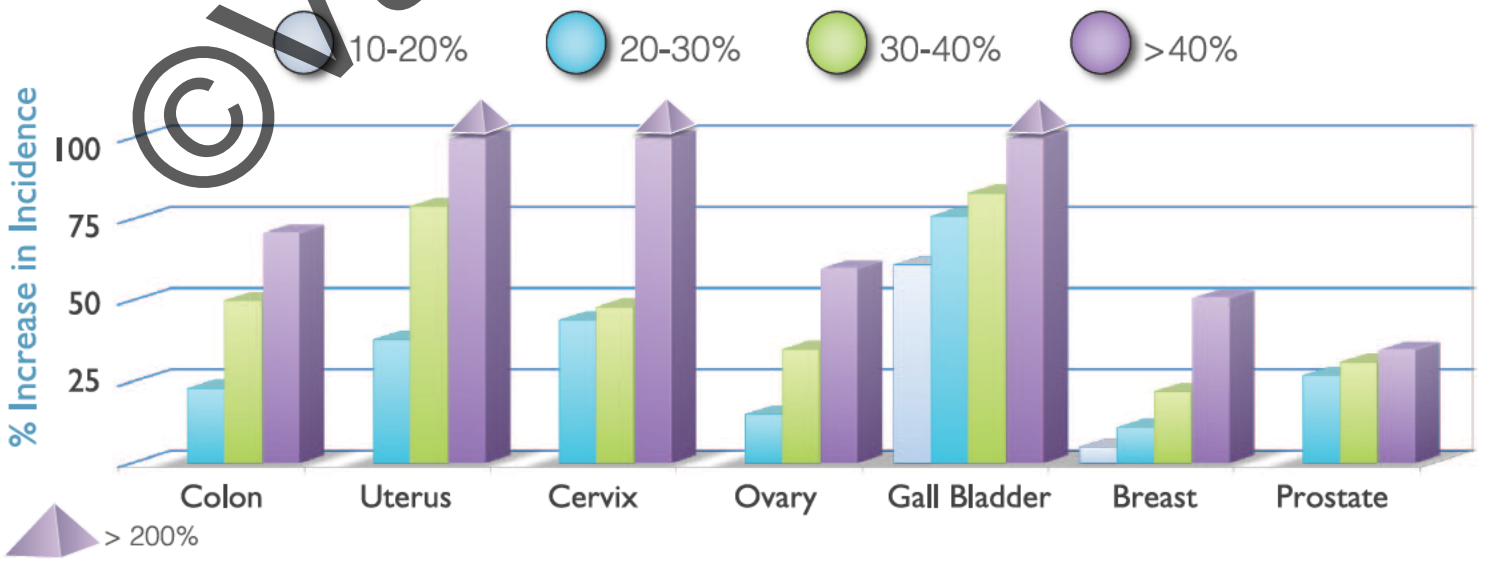
Maintaining proper hydration is essential for good health and is vital to every biological process. By comparing your body water measurement with the chart below, you can better determine whether or not you are adequately hydrated.

BODY FAT %	NORMAL HYDRATION	
	♀	♂
10 - 15	60 %	70 %
16 - 23	55 %	65 %
24 - 28	50 %	60 %
29 - 34	45 %	55 %
35 - 40	40 %	50 %

Body Weight and Cancer Risk

How Being Overweight Changes Your Odds

YOU ARE 37 % ABOVE YOUR IDEAL WEIGHT



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Basal Metabolic Rate

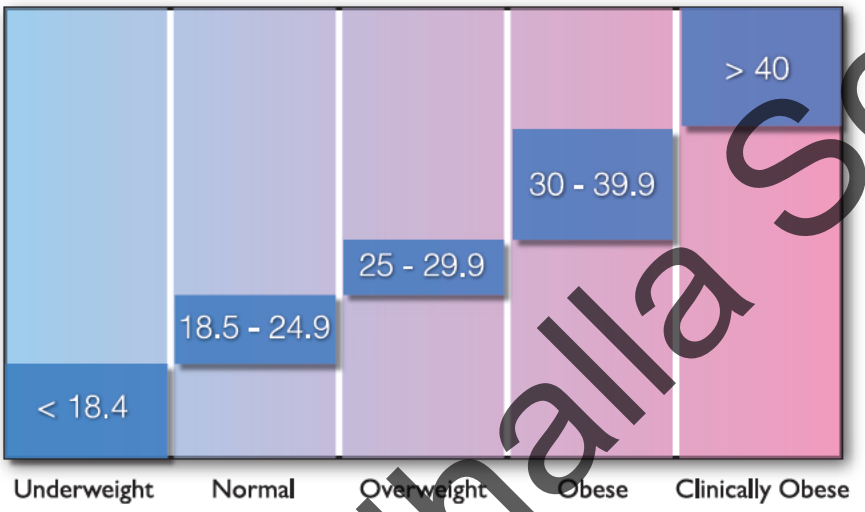
How Much Are You Burning?

Your basal metabolic rate (BMR) is the calories your body burns at rest in a 24-hour period. Muscle burns calories faster than fat, so increasing or maintaining your muscle tissue while losing weight will increase your BMR.

1347
CALORIES PER DAY

Body Mass Index

What It Means For You



36.5

YOUR BMI

Body Mass Index (BMI) is a common indicator of health status for most people and is a simple method of screening for weight categories.

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Patient File Copy

Name & ID #		
Technician Name & Date		

Weight	Body Fat	Muscle Mass	TBW	Hgt.	5' 8.5"	BMR	1347
	35.5 %	65.5 %					
205.4 LBS	70.4 LBS	106.3 LBS	41.5 %	Age	52	BMI	36
				Gender	F		

Body Fat Displacement

Torso	18.9 Lbs / 19.3 %	Left Arm	1.8 Lbs / 19.0 %
Left Leg	3.7 Lbs / 12.7 %	Right Arm	1.8 Lbs / 18.5 %
Right Leg	3.7 Lbs / 11.9 %		