

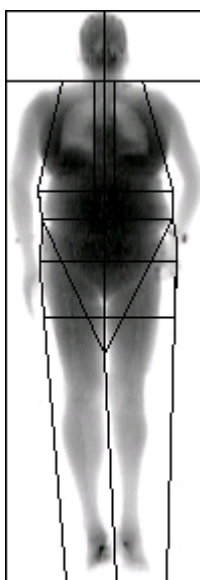
## Personalized Body Composition Report

**Name:** Test Patient  
**Gender:** Female  
**Birthdate:** 9/3/1956

**Height:** 65.0 in.  
**Weight:** 162.0 lbs.  
**Exam Date:** 12/5/2017

### BODY COMPOSITION SUMMARY

|                             |                         |
|-----------------------------|-------------------------|
| <b>Bone Mineral Density</b> | 1.234 g/cm <sup>2</sup> |
| <b>Lean Weight</b>          | 42,140 g                |
| <b>Fat Weight</b>           | 29,478 g                |
| <b>Total Weight</b>         | 74.4 kg                 |
| <b>Tissue %Fat</b>          | 41.2%                   |



### BODY COMPOSITION SUMMARY

|                         | <b>Total Mass</b> | <b>Bone Mineral Content</b> | <b>Lean Mass</b> | <b>Fat Mass</b> |
|-------------------------|-------------------|-----------------------------|------------------|-----------------|
| <b>Arms Total</b>       | 7.0 kg            | 1.000 g/cm <sup>2</sup>     | 4,050 g          | 2,661 g         |
| <b>Right</b>            | 4.0 kg            | 1.003 g/cm <sup>2</sup>     | 2,276 g          | 1,493 g         |
| <b>Left</b>             | 3.1 kg            | 0.995 g/cm <sup>2</sup>     | 1,774 g          | 1,168 g         |
| <b>Legs Total</b>       | 19.8 kg           | 1.266 g/cm <sup>2</sup>     | 12,510 g         | 6,276 g         |
| <b>Right</b>            | 10.7 kg           | 1.293 g/cm <sup>2</sup>     | 6,787 g          | 3,403 g         |
| <b>Left</b>             | 9.1 kg            | 1.238 g/cm <sup>2</sup>     | 5,722 g          | 2,873 g         |
| <b>Trunk</b>            | 43.0 kg           | 0.970 g/cm <sup>2</sup>     | 22,444 g         | 19,703 g        |
| <b>Right</b>            | 21.0 kg           | 0.955 g/cm <sup>2</sup>     | 10,953 g         | 9,607 g         |
| <b>Left</b>             | 22.0 kg           | 0.986 g/cm <sup>2</sup>     | 11,491 g         | 10,096 g        |
| <b>Total Body</b>       | 74.4 kg           | 1.234 g/cm <sup>2</sup>     | 42,140 g         | 29,478 g        |
| <b>Total Body Right</b> | 38.1 kg           | 1.234 g/cm <sup>2</sup>     | 21,677 g         | 14,946 g        |
| <b>Total Body Left</b>  | 36.3 kg           | 1.235 g/cm <sup>2</sup>     | 20,463 g         | 14,532 g        |

## LEAN BODY MASS



Lean body mass includes all parts of the body (organs, muscle and fluids) but excludes body fat. The higher the lean mass percentage, the more muscular the body.

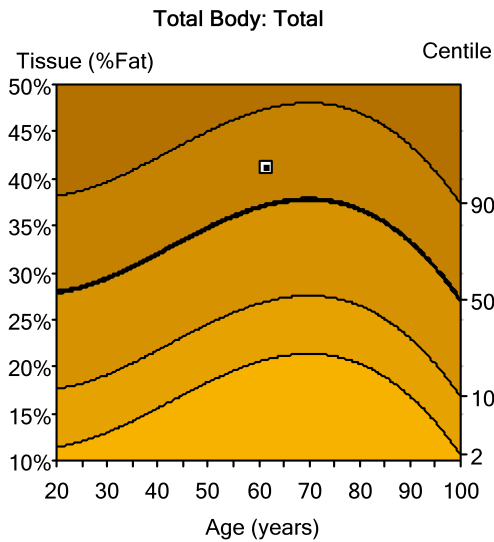
|                     |          |
|---------------------|----------|
| <b>Total Weight</b> | 74.4 kg  |
| <b>Lean Weight</b>  | 42,140 g |
| <b>Tissue %Lean</b> | 56.6%    |

## LEAN MASS BALANCE

Lean Mass balance is a comparison of your body's right to left lean mass symmetry. A lean mass difference close to zero indicates a balance of muscle. An injury, non-symmetrical training or a health condition may cause disproportionate lean mass differences, but only your physician can determine if a health condition is the related cause.

| Region       | Lean Mass Right (lbs) | Lean Mass Left (lbs) | Lean Mass Difference |
|--------------|-----------------------|----------------------|----------------------|
| <b>Arms</b>  | 2,276 g               | 1,774 g              | 503 g                |
| <b>Legs</b>  | 6,787 g               | 5,722 g              | 1,065 g              |
| <b>Trunk</b> | 10,953 g              | 11,491 g             | -538 g               |
| <b>Total</b> | 21,677 g              | 20,463 g             | 1,214 g              |

## FAT

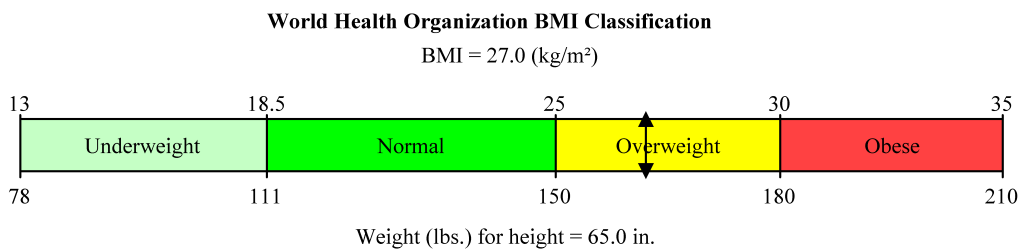


|                           |
|---------------------------|
| <b>Fat Mass:</b> 29,478 g |
| <b>Tissue %Fat:</b> 41.2% |

Composition Reference Centile Graph shows your Total Body Tissue %Fat result compared to a reference population. This comparison is very similar to how babies are measured and compared to reference data for height and weight. The **bold** black line on the graph represents the 50th percentile (median) result for the reference population. The square on the graph represents your result. There are currently no standard definitions of normal or obesity based on Tissue %Fat results, but you can see how you compare to this reference population.

## BODY MASS INDEX

A frequently used index to assess a person's body composition (or amount of body fat) is called the Body Mass Index (BMI.) This value indicates whether you are underweight, normal weight, overweight or obese. There are no definitive standard definitions of normal or obese, but you can see how you compare to the World Health Organization Classification.



**BMI Classification:**            Overweight

For most people, BMI is a quick and easy way to assess body composition, which is why it is commonly used. However, since body weight (and not percent body fat) is used in determining BMI, there may be problems when using BMI to assess people who are heavily muscled (such as body builders) or who have an athletic body type. Because muscle weighs more than fat, those who have well-developed muscles typically appear overweight or obese according to BMI reference chart. If you are a person with an athletic or muscular build, do not use BMI as the only method to assess your body composition.

## TOTAL BODY FAT PERCENTAGE

|                    |       |
|--------------------|-------|
| <b>Tissue %Fat</b> | 41.2% |
| <b>Region %Fat</b> | 39.6% |

A more accurate metric of weight is that of body fat percentage-the ratio of the total weight of a person's fat to his or her body weight. Often a skinfold estimation of body fat is done but the scan you just completed is a much more accurate measure.

### General Body-fat Percentage Categories

| Classification | Women (% fat)  | Men (% fat)    |
|----------------|----------------|----------------|
| Essential fat  | 10-13%         | 2-5%           |
| Athletes       | 14-20%         | 6-13%          |
| Fitness        | 21-24%         | 14-17%         |
| Average        | 25-31%         | 18-24%         |
| Obese          | 32% and higher | 25% and higher |

[www.acefitness.org](http://www.acefitness.org)

Experts differ in their opinions about what is a healthy percentage of body fat. The American Council on Exercise advises that in general, 10% to 25% body fat is considered healthy in an adult male, and 18% to 32% body fat is considered healthy in an adult female.

## ANDROID/GYNOID RATIO



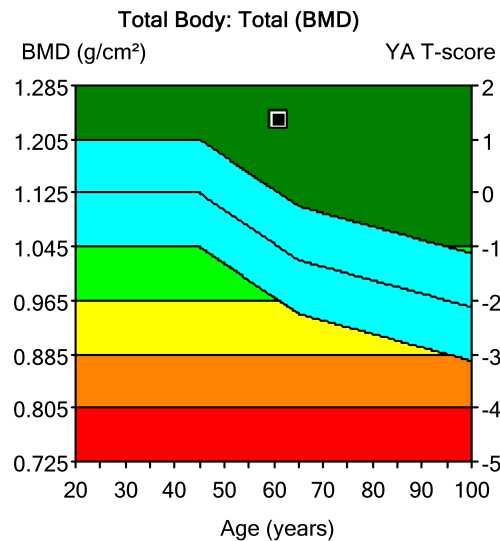
While Total Body %Fat will tell you more about your overall fitness than your weight alone, regional fat distribution tells you **where** the fat is located.

Android (waist) fat is the fat stored in the midsection of the body, primarily in the abdomen. It is more common among men, and creates the "apple" shape. Gynoid (hip) fat is stored primarily in the hips and thighs and is more common among women. This creates the "pear" shape.

Gynoid fat is considered a healthier fat because the fat is not stored in the belly and around organs. Determining the ratio of android to gynoid fat (the A/G ratio) is critical because it is directly correlated to the prevalence of visceral fat, which is a result of organs insulating themselves from toxins by encapsulating the organs in fat. This survival strategy may impede organ function and increase the risk for disease. Ideally, your android fat will always be lower than your gynoid fat and your A/G ratio will be below 1.0.

|                              |       |
|------------------------------|-------|
| <b>Android Tissue %Fat</b>   | 53.3% |
| <b>Gynoid Tissue %Fat</b>    | 40.6% |
| <b>A/G ratio Tissue %Fat</b> | 1.31  |

## BONE



| Age  | BMD                     | T-score | Z-score |
|------|-------------------------|---------|---------|
| 61.2 | 1.234 g/cm <sup>2</sup> | 1.4     | 2.4     |

A bone densitometry test helps your physician to diagnose osteoporosis. The test compares your Bone Mineral Density (BMD) to that of a "young adult" at peak bone strength, displayed as your T-score. It also compares your results to people of your same age, called "age-matched" displayed as your Z-score. This information, along with other factors, helps physicians assess your risk of osteoporosis fracture. The difference between your result and that of a "young adult" is given as a T-score. A panel of experts at the World Health Organization (WHO) has developed categories that define the amount of bone loss:

**Normal:** T-score that is above -1

**Osteopenic:** T-score between -1 and -2.5 (low bone density)

**Osteoporosis:** T-score below -2.5

## RESTING METABOLIC RATE



Resting Metabolic Rate (RMR) is synonymous with Resting Energy Expenditure (REE) and is an estimate of how many calories you would burn if you were to do nothing but rest. It represents the minimum amount of energy needed to maintain body temperature, heartbeat and respiratory rate.

**RMR:** 1,377 cal/day calories/day

Your RMR is based in the Harris-Benedict equation, calculated as follows:

For men:  $66.473 - (6.755 \times \text{age [years]}) + 13.7516 \times \text{weight [kg]} + 5.0033 \times \text{height [cm]}$

For women:  $655.0955 - (4.6756 \times \text{age [years]}) + (9.5634 \times \text{weight [kg]}) + (1.8496 \times \text{height [cm]})$

The following table enables calculation of an individual's recommended daily kilocalorie intake to maintain current weight.

|   |                                    |
|---|------------------------------------|
| Little to no exercise                                     | Daily calories needed= BMR x 1.2   |
| Light exercise (1-3 days per week)                        | Daily calories needed= BMR x 1.375 |
| Moderate exercise (3-5 days per week)                     | Daily calories needed= BMR x 1.55  |
| Heavy exercise (6-7 days per week)                        | Daily calories needed= BMR x 1.725 |
| Very heavy exercise (twice per day, extra heavy workouts) | Daily calories needed= BMR x 1.9   |

## RELATIVE SKELETAL MUSCLE INDEX (RSMI)



RSMI represents the relative amount of muscle in the arms and legs.

**RSMI:** 6.08 kg/m<sup>2</sup>

## TREND ANALYSIS

*This page is only included in subsequent visits by the patient.*

|               | Original Scan | Second Visit | Third Visit |
|---------------|---------------|--------------|-------------|
| Date Measured | 12/5/2017     | baseline     | baseline    |
| Age (years)   | 61.2          |              |             |
| Weight        | 162.0 lbs.    |              |             |
| Fat Weight    | 29,478 g      |              |             |
| Lean Weight   | 42,140 g      |              |             |
| RMR           | 1,377 cal/day |              |             |
| T-Score       | 1.4           |              |             |
| Z-Score       | 2.4           |              |             |
| Tissue %Lean  | 56.6%         |              |             |
| Tissue %Fat   | 41.2%         |              |             |

## ASSESSMENT



### Nutritional Evaluation

- Protein:  Normal  Deficient
- Mineral:  Normal  Deficient
- Fat:  Normal  Deficient

### Weight Management

- Weight:  Normal  Under  Over
- Lean:  Normal  Under  Strong
- Fat:  Normal  Under  Over
- Tissue %Fat:  Normal  Under  Over  Very Obese
- A/G Rati:  Normal  Under  Over  Very Obese
- BMI:  Normal  Underweig  Overweight  Obese

*Thank you for your visit to Accurate Imaging Diagnostics. If you would like to book an appointment in the future to measure progress against your fitness/health goals, please call (905) 763-0009*

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