

# Body Composition Assessment

| Anthropometric Measurements |                  |           |
|-----------------------------|------------------|-----------|
| Lab Results                 | Normative Values |           |
| <b>Weight (kg)</b>          | 66.3             | Varies    |
| <b>Height (cm)</b>          | 171.2            | Varies    |
| <b>Body Mass Index</b>      | 22.62            | 18.5-24.9 |

|                                 |           |     |
|---------------------------------|-----------|-----|
| <b>Waist Circumference (cm)</b> | <b>76</b> | <80 |
|---------------------------------|-----------|-----|

| Skinfolds (mm)<br>[average of 2 measurements] |              |               |
|---|--------------|---------------|
| <b>Triceps</b>                                | 17.2         |               |
| <b>Biceps</b>                                 | 5.2          |               |
| <b>Subscapular</b>                            | 9.1          |               |
| <b>Iliac Crest</b>                            | 11.6         |               |
| <b>Medial Calf</b>                            | 8.45         |               |
| <b>Sum of 5</b>                               | <b>51.55</b> | <b>&lt;83</b> |

**Interpretation of Results:** This individual receives a “4” (excellent) in body composition assessment, meaning that she is a healthy client. It is important for athletes to have an optimal body composition to be able to excel in their sport. For example, being underweight could be detrimental to an athlete’s “game” because he or she may get pushed around or may be fragile on the playing field. On the other hand, being over weight can lead to being slow on the field and using energy inefficiently.

Body mass index (BMI) can be a good base-line tool to determine if someone is over- or under-weight for their height. However, it is not an accurate measure for athletes since this population normally has a higher mass due to muscle – this skews the results. Results also get skewed very tall or very short people, along with pregnant women.

Waist circumference is an important measurement as a high waist circumference indicates high fat surround vital organs – a determinant to many chronic and possibly fatal diseases.

Skinfolds measure subcutaneous (surface) level fat. It can be a good measure if client goals are to decrease subcutaneous fat (i.e. look more “cut”). However, skinfolds do not measure internal fat and fat that may surround internal organs, thus it is not a very good predictor of health status.