

Although the Hologic DXA body composition report contains a vast array of information for use in various settings, some of the most notable results used in standard screening practice are shown below.

Adipose (Fat) Results



Body Fat %

A useful indicator of whole body adiposity. Care must be taken to use device specific population averages (percentiles) indicating one's *distance from an average* rather than absolute 'BF%' results which can be misleading due to varying classification charts holding questionable validity.



Fat Mass Height (FMI)

Based on the 'body mass index' (BMI) equation although substitutes total mass with fat mass. This ensures that higher lean tissue does not contribute to higher risk ranges which remains the case for the BMI method. Our device specific classification chart is shown on the reverse side.



Android Gynoid (A/G) Ratio

Identifies whether your abdominal fat mass is held moreso in the upper region ($A/G > 1$) or the lower region ($A/G < 1$). An A/G ration of 1 indicates an even spread.



Visceral Adipose Tissue (VAT)

Gathered from a sample of your intra-abdominal region visceral adipose tissue, results give a snapshot of your fat related metabolic risk as per the classification table shown on the reverse side.

Lean (Muscle) Results



Lean Mass Height (LMI)

Offers another substitute to the BMI equation, replacing total mass with lean mass. This can indicate one's overall muscularity compared to averages sharing the same height range and gender as per the classification chart on the reverse side.



Appendicular Lean Height (ALM)

An indicator of risk towards a condition called 'sarcopenia' – essentially the muscular equivalent of osteoporosis whereby loss of muscular structure and function contributes to the condition. An ALM of < 7 for males and < 5.25 for females indicates being within the structural risk category for sarcopenia although functional testing is also required for valid diagnosis.



Lean Symmetry

Comparing lean mass between left and right arms and legs can offer clues as to whether muscle imbalances are present or if they are being addressed resulting from associated physical therapy. Tracking such asymmetries will add clinically utilizable value to the already abundant screening results shown above.

Understanding Body Composition Results

Standard Screening Results

Shown Below are device specific classification charts covering Fat Mass Index, Visceral Fat and Lean Mass Index.

| Fat Mass Index (Fat Mass/Height) ¹ | | | | | |
|---|--------|------------|---------------|----------------|-----------------|
| | Normal | Excess Fat | Obese Class I | Obese Class II | Obese Class III |
| Men | 3 – 6 | 6 – 9 | 9 – 12 | 12 – 15 | >15 |
| Women | 5 – 9 | 9 – 13 | 13 – 17 | 17 – 21 | >21 |

| Visceral Fat Area ² | | |
|--------------------------------|--------------------------|---------------------|
| Normal | Increased Risk | High Risk |
| <100cm ² | 100 – 160cm ² | >160cm ² |

| Lean Mass Index (Lean/Height) ³ | | | |
|--|--------|-------------|-------|
| | Normal | Medium | High |
| Men | <18.7 | 18.7 – 21.0 | >21.0 |
| Women | <14.9 | 14.9 – 17.2 | >17.2 |

References: **1.** Kelly *et al.* Dual energy x-ray absorptiometry body composition reference values from NHANES. *PLoS One* 4 (9) (2009): e7038. **2.** Nicklas *et al.* Visceral adipose tissue cutoffs associated with metabolic risk factors for coronary heart disease in women. *Diabetes Care* 26:1414–1420, 2003. **3.** Coin *et al.* Fat-free mass and fat mass reference values by dual-energy x-ray absorptiometry (DEXA) in a 20-80 year-old Italian population. *Clin Nutr.* 2008 Feb;27(1):87–94.

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