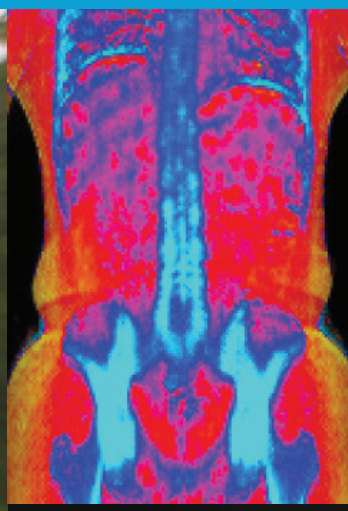
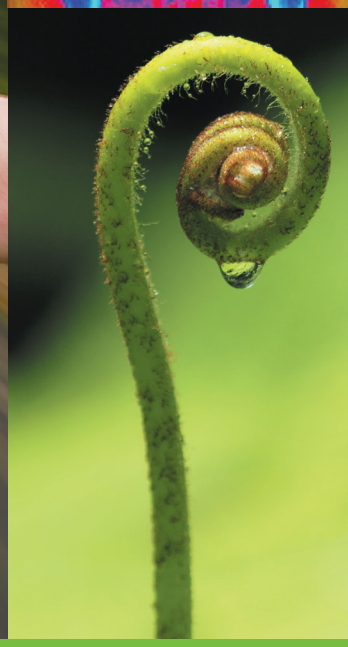
Introducing Horizon™ DXA System

Advanced Body Composition™ Assessment





The power to see what's inside.

HOLOGIC®

Every Life is Extraordinary

Higher quality images. Improved quality of life.

Worldwide obesity has increased at an alarming rate in the last two decades, making the demand for accurate body composition analysis higher than it's ever been. There is no better way to evaluate metabolic and obesity related health risks than with a Hologic DXA system. Hologic invented that technology and now we're taking it to the next level – with a system that raises the bar on image quality and operational efficiency to deliver accurate diagnostic and clinical information.

500 million people worldwide, or 1 out of every 10, is obese[1]

82% increase in obesity globally in the past 20 years[2]

2.8 million people die each year from complications and diseases related to obesity[3]

Measurement of visceral adipose tissue.

InnerCore™ Visceral Adipose Tissue (VAT) Assessment:

Deep visceral fat is metabolically active and is often associated with diabetes mellitus, dyslipidemia, hypertension, impaired fasting glucose, impaired glucose tolerance and metabolic syndrome. With Hologic's **InnerCore™ Visceral Fat Assessment**, you now have a convenient way to estimate a patient's visceral fat in the abdominal region, allowing clinicians and researchers a unique understanding of these potential disease processes that may place certain patients within a higher risk category.

DXA accurately and precisely measures whole body, regional fat and lean tissue within the body. Producing consistent results with regard to clinical concerns relevant to obesity related diseases.

- Distinguishes between visceral fat and subcutaneous fat
- Quantifies total body and regional fat mass with resulting indices
- Visceral fat area results from DXA correlate with visceral fat area in CT at L4/L5.[4]
- VAT Assessment and body composition in one quick whole body scan
- Results are just a few clicks away

References: 1. Finucane MM, Stevens GA, Cowan MJ, et al. *National*, regional, and global trends in body-mass index since 1980: systematic analysis of health examination surveys and epidemiological studies with 960 country-years and 9.1 million participants. Lancet. 2011;377:557-67. **2.** *The Lancet,* Volume 380, Issue 9859, Pages 2053 - 2054, 15 December 2012 Next Article>doi:10.1016/S0140-6736(12)62133-3 **3.** World Health Organization (WHO). http://www.who.int/features/factfiles/obesity/facts/en/index1.html **4.** Micklesfield L., Goedecke J., Punyanitya T., Wilson K., Kelly T., Dual-Energy X-Ray Performs as Well as Clinical Computed Tomography for the Measurement of Visceral Fat, Retrieved from: http://www.nature.com/oby/journal/vaop/ncurrent/full/oby2011367a.html

Take a deeper look.

Exceptional Precision

A whole body composition scan takes as little as three minutes — efficiency without sacrificing accuracy:

- Reflection feature — designed to eliminate the need for multiple scans, even if portions of the body lie outside of the scan field
- Hologic's X-ray penetration produces superb image quality for all patients, regardless of their shape or size

Enhanced Measurements

Fat Mass Index (FMI) is an obesity classification which measures the ratio of fat mass to height squared.[5] FMI may be better than Body Mass Index (BMI), because it is a non-specific measure of excess weight that may misclassify muscular subjects as overweight or obese, interfering with diagnosis' and management of clinical obesity[6]. FMI is exclusive to Hologic.

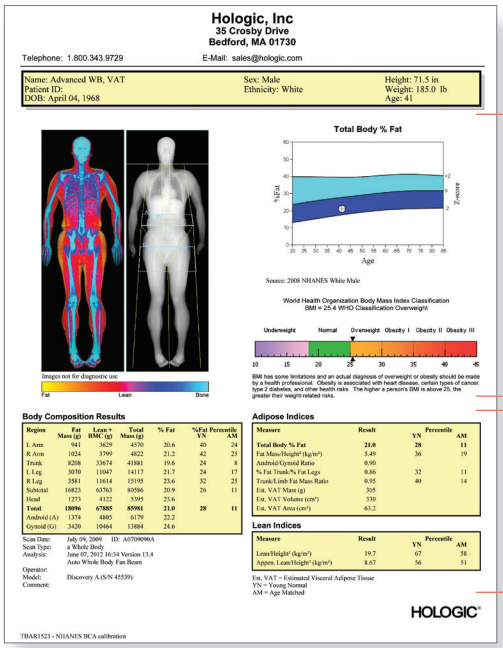
Fat Mass Index

- Fat mass ratio not based upon weight (Fat/Height^2)
- FMI is expressed in units of kg/m^2
- NHANES reference — acquired exclusively on Hologic fan beam systems
- Gender specific
- Not affected by lean mass like BMI or %fat

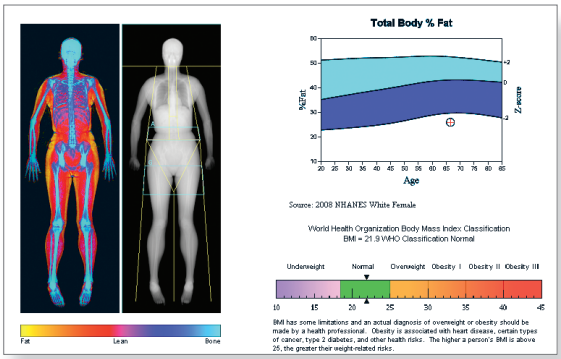
Improved Patient Management and Care

Proper analysis is essential for accurate diagnostic scores making it easier to determine the appropriate course of action for your patients' management.

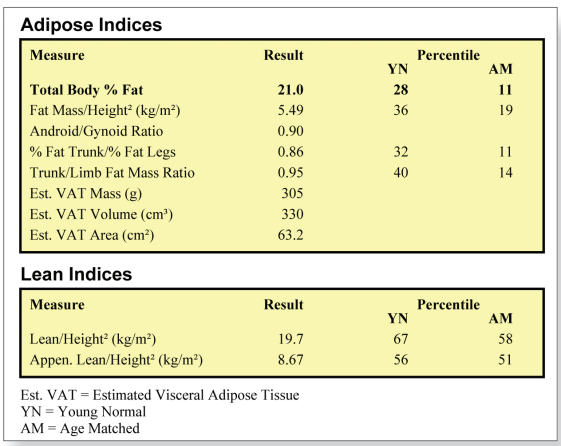
The Rate of Change report simplifies patient follow-up by providing comprehensive trending as well as serial tissue mapping. Only Hologic provides an illustration of a patient's progress using color coded images from previous scans, making it easy for patients and their physicians to track long-term changes.



Clinical Body Composition report



Color tissue mapping displays patient's progress



Adipose Indices

Measure	Result	Percentile YN	Percentile AM
Total Body % Fat	**21.0**	**28**	**11**
Fat Mass/Height^2 (kg/m^2)	5.49	36	19
Android/Gynoid Ratio	0.90		
% Fat Trunk/% Fat Legs	0.86	32	11
Trunk/Limb Fat Mass Ratio	0.95	40	14
Est. VAT Mass (g)	305		
Est. VAT Volume (cm^3)	330		
Est. VAT Area (cm^2)	63.2		

Lean Indices

Measure	Result	Percentile YN	Percentile AM
Lean/Height^2 (kg/m^2)	19.7	67	58
Appen. Lean/Height^2 (kg/m^2)	8.67	56	51

Est. VAT = Estimated Visceral Adipose Tissue
YN = Young Normal
AM = Age Matched

Adipose Indices access abnormalities in fat distribution, with Fat Mass Index (FMI) developed exclusively by Hologic

5. Kelly TL, Wilson KE, Heymsfield SB (2009) Dual energy X-Ray absorptiometry body composition reference values from NHANES. PLoS One 4: e7038. **6.** Rothman KJ (2008) BMI-related errors in the measurement of obesity. *Int J Obes* (Lond) 32 Suppl 3: S56-59.

Life in Motion

At Hologic, we define the standard of care in skeletal health.

Our long history of innovation and expertise lets us bring you clinically meaningful and reliable technologies that move care forward. You can rely on us to deliver a versatile set of powerful tools that provides the comprehensive data you need to help keep life in motion for your patients.

BREAST IMAGING SOLUTIONS • INTERVENTIONAL BREAST SOLUTIONS • SKELETAL HEALTH
PRENATAL HEALTH • GYNECOLOGIC HEALTH • MOLECULAR DIAGNOSTICS

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