

Body composition by DXA

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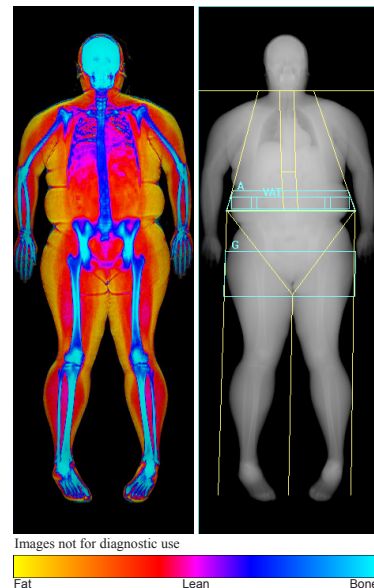
Introduction

Dual X-Ray absorptiometry has undergone significant developments to become a device with significant ability to assess body composition. A few examples are the analysis and publication of representative data for the United State, the official usage guidance from the International Society for Clinical Densitometry, and the clinical utility of regional body composition measures are a testament of DXA's widespread usage and innovation since its creation 30 years ago. Additionally DXA yields the potential to obtain accurate readings over a wide range of body sizes and body type

One full body DXA scan has the equivalent amount of radiation as received over one day at sea level

Key Facts about DXA

- The radiation exposure from one whole body DXA scan is equivalent to the amount of radiation received over one day at sea level.
- The official position for the International Society for Clinical Densitometry (ISCD) states Z-scores for body composition are to be calibrated with DXA data from the United States National Health and Nutrition Examination Survey.
- One single DXA system can accurately measure a 0.5% change in body composition over decades of operational use.
- DXA has the ability to accurately evaluate anatomical differences between individual limbs. As such DXA has the potential to monitor recovery from injury and performance by looking at differences in limbs.
- DXA can produce a Fat Mass Index, which normalizes fat mass by height and takes into account lean muscle mass.
- DXA has the ability to evaluate bone, lean, and fat mass status which may be used to assess success of sports diet and fitness interventions.
- DXA yields the potential to obtain accurate readings over a wide range of body sizes and body types.



Conclusion

DXA technology has made significant advancements in the past 30 years and has the potential to assess body composition. Future innovations and novel approaches to interpretations of body composition measurements allow DXA to be at the forefront of body composition applications.