

The present study had an excellent reproducibility. The TEM was 0.005 cm and relative TEM was 0.0057%. However, our investigation was mainly on young adults with moderate body mass index (BMI) and the minimal part of waist region was easily identified by 3D scanning. However, finding the minimal part of waist region on the obese whose waist regions are characterized by horizontal folds and furrows can pose difficulty for 3D scanning and may lead to inaccurate measurements. The obese also requires higher mechanical energy to enhance breathing.

5. Conclusion

Given the magnitude of these changes with breathing cycle, it may be surprising that protocols for 3D scanning have not previously specified breathing among their criteria. Therefore, to ensure best practice and accuracy, 3D scanning should be standardized for different postures and breathing phases.

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