

Supplementary Materials

Validation of EASO criteria and development of a new diagnostic tool for visceral obesity in Chinese adults

**Bingying Yang^{1,#}, Yingying Luo^{1,#}, Xianghai Zhou¹, Fang Zhang¹, Yufeng Li²,
Linong Ji¹**

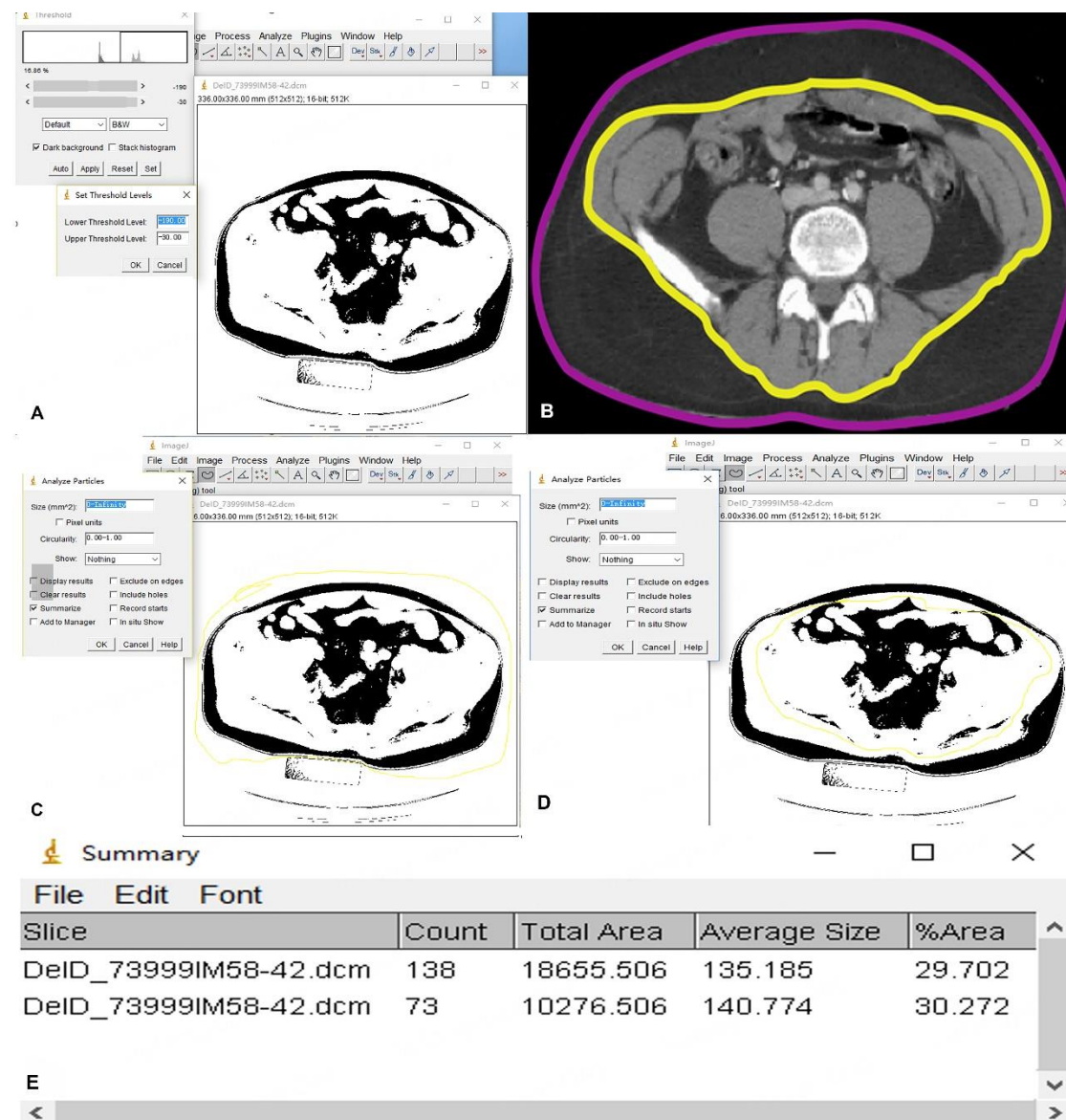
¹Department of Endocrinology and Metabolism, Peking University People's Hospital, Peking University Diabetes Centre, Beijing 100044, China.

²Department of Endocrinology and Metabolism, Beijing Pinggu Hospital, Beijing 101200, China.

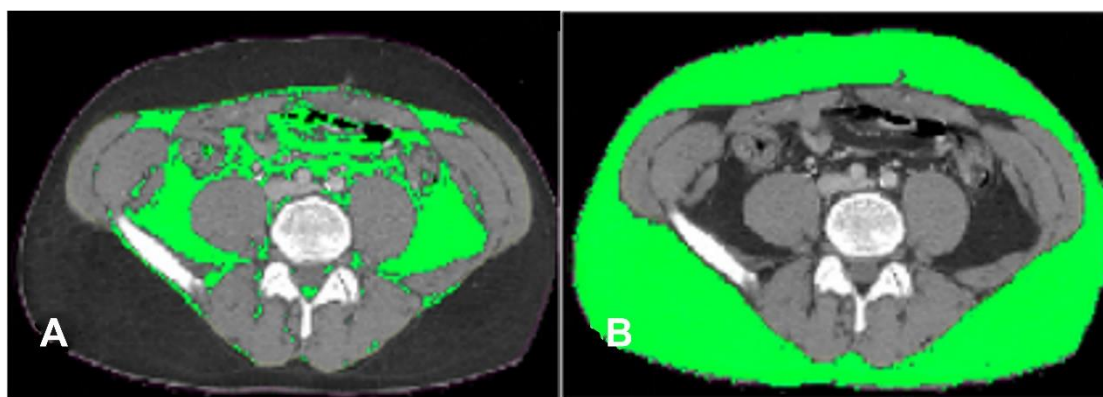
[#]Authors contributed equally.

Correspondence to: Dr. Linong Ji, Department of Endocrinology and Metabolism, Peking University People's Hospital, Peking University Diabetes Centre, No. 11 Xizhimen South Street, Xicheng District, Beijing 100044, China. E-mail: jljn@bjmu.edu.cn

Supplementary Material 1



Supplementary Figure 1. Shows a schematic representation of the CT image analysis process performed with Image J software. The computed tomography image at the L4–L5 intervertebral disc level was selected, and the standard Hounsfield unit (HU) range for adipose tissue (–190 to –30) was applied to display the total fat area, resulting in a binary image with non-adipose tissues excluded (A). The visceral fat region was selected based on the schematic illustration. Subcutaneous fat is indicated in purple, and visceral fat is indicated in yellow (B). Using the Freehand Selections tool, the entire abdominal region was manually traced while carefully excluding any phantom structures. The measured Total Area corresponded to the total fat area (TFA) (C). The visceral fat region was outlined using the same method, and the corresponding visceral fat area (VFA) was then measured (D). The TFA and VFA were calculated separately. The subcutaneous fat area (SFA) was then derived by subtracting the VFA from the TFA (E).



Supplementary Figure 2. Figure shows the computed tomography image at the L3-L4 intervertebral disc level, with the visceral (A) and subcutaneous (B) fat areas highlighted in green.

Supplementary Material 2

Table 1. Comparison of liver attenuation (in Hounsfield units) values between NAFLD and Non-NAFLD group

	NAFLD	non-NAFLD
<i>N</i> (%)	716 (21.24%)	2,655 (78.76%)
Hounsfield units (HU)	48.51 (40.37, 55.41)	61.06 (56.95, 64.38)

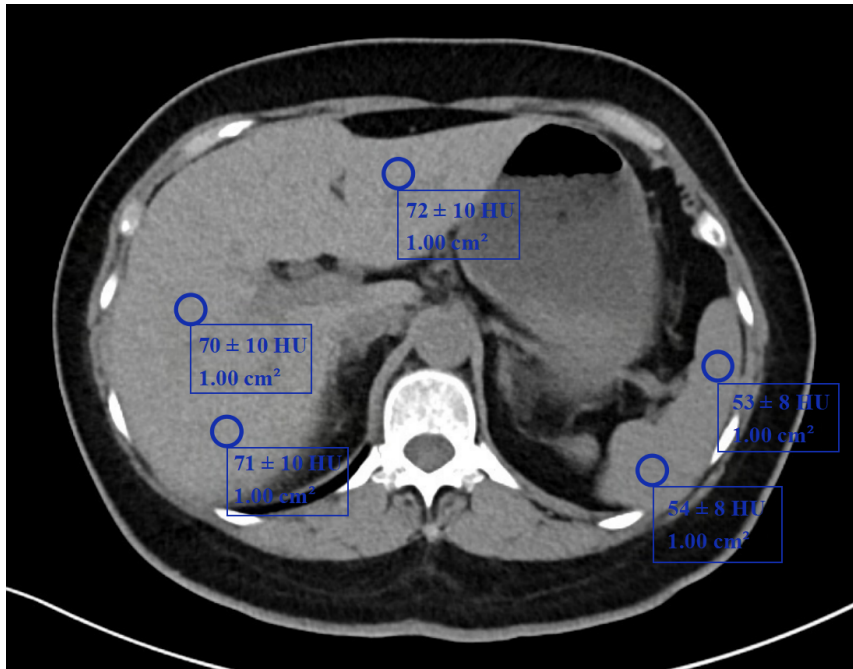


Figure 1. Measurement of liver and spleen attenuation on non-contrast CT. Hounsfield units (HU) were measured in three regions of interest (ROIs) within the liver and two within the spleen, with each ROI sized 1 cm². The liver-to-spleen (L/S) ratio was calculated by averaging the HU values of the liver and spleen, respectively. All measurements were performed at the level of the T12 vertebra. A representative non-contrast abdominal CT image is shown.