Supplementary Table S1. Practical screening protocol for hypertriglyceridemia in older adults using anthropometric indicators of obesity.

STEPS	ACTION	DETAILS
1	Identify the target population.	Community-dwelling older adults (≥ 60 years) during routine care.
2	Perform required measurements.	•Height (Ht, m); • Body Mass (BM, kg); • Abdominal Circumference (AC, cm); • Waist Circumference (WC, cm); • Hip Circumference (HC, cm).
3	Calculate indicators by sex.	**OLDER MEN** •**AC** (Abdominal Circumference, measured directly in cm); •**CI** (Conicity Index = WC/[0.109 × √(BM (kg) / Ht (m))]); •**WHR** (Waist-to-Hip Ratio = WC (cm)/HC (cm)); •**BMI** (Body Mass Index = BM(kg)/Ht $(m)^2$). **OLDER WOMEN** •**AC** (Abdominal Circumference, measured directly in cm); •**BMI** (Body Mass Index = BM (kg)/ Ht$(m)^2$); •**CI** (Conicity Index = WC/[0.109 × √(BM(kg) / Ht (m))]); •**WHtR** (Waist-to-Height Ratio = WC/Ht (m)).

4	Apply sex-specific cutoff points.	**OLDER MEN** Highest sensitivity (for screening for hypertriglyceridemia): • **AC:** 88.87% sensitivity (cutoff point: ≥ 91 cm); • **CI:** 77.42% sensitivity (cutoff point: ≥ 1.33). Highest specificity (for identifying absence of hypertriglyceridemia): • **WHR:** 83.08% specificity (cutoff point: < 1.04); • **BMI:** 76.92% specificity (cutoff point: < 26.98 kg/m^2). **OLDER WOMEN** Highest sensitivity (for screening for hypertriglyceridemia): • **AC:** 95.74% sensitivity (cutoff point: ≥ 89 cm); • **BMI:** 87.23% sensitivity (cutoff point: ≥ 23.48 kg/m^2). •Highest specificity (for identifying absence of hypertriglyceridemia): • **CI:** 72.50% specificity (cutoff point: < 1.38); • **WHtR:** 68.75% specificity (cutoff point: < 0.64).

5	Interpretation	Use the best-performing anthropometric indicators for initial risk stratification. Refer for laboratory testing for hypertriglyceridemia (e.g., fasting triglycerides) according to screening results from these indicators.
6	Follow-up actions	Confirm hypertriglyceridemia through laboratory testing. Guide physical activity, nutrition, and cardiovascular risk management, along with specific interventions for hypertriglyceridemia.

Note: For optimized screening, it is recommended to combine the indicators identified in Step 4. Utilizing highly sensitive indicators initially helps maximize positive detections, while subsequently employing highly specific indicators aids in confirming true negatives and minimizing false positives. This approach ensures that laboratory testing is efficiently directed only to those individuals who genuinely require further diagnostic confirmation.