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INTRODUCTION: Overweight is associated with functional disability, but the role of body fat (BF) distribution on gait speed remains scarcely explored.

OBJECTIVES: To investigate the association between the android/gynoid fat ratio estimated by DXA and gait speed.

METHODOLOGY: Data collection was carried out as part of the "NutriFunction" research project. A total of 665 individuals (67.2% women), aged between 18 and 85 years (mean: 41 ± 15.8 years) participated in this study. Body composition, gait speed and physical activity were measured using DXA, a 4.6m distance walk test, and the "International Physical Activity Questionnaire – Short Form", respectively. The variable android/gynoid fat ratio was calculated by dividing the android fat mass by the gynoid fat mass, measured by DXA. Linear regression analyses were performed.

RESULTS: An increase of 1 m/s in gait speed in women was associated with a mean decrease of -0.029 in android/gynoid fat ratio (B=-0.03, 95%CI= -0.5, -0.07). This association was not found in men (B=0.04, 95%CI= -0.08, 0.08). In women and men, respectively, age (B=0.003, 95%CI= 0.002, 0.003; B=0.01, 95%CI= 0.01, 0.01) and BMI (B=0.02, 95%CI= 0.02, 0.02; B=0.02, 95%CI= 0.02, 0.03) were associated with an increase in android/gynoid ratio. In men, physical activity was associated with a decrease in this ratio (B=-0.05, 95%CI: -0.08; -0.02).

CONCLUSIONS: A higher android/gynoid fat ratio is associated with lower gait speed in women but not in men, independently of BMI and age.

PO63. THE RELATIONSHIP BETWEEN ANTHROPOMETRIC MEASURES AND DXA-DERIVED APPENDICULAR LEAN MASS IN ADULTS: AN ANALYSIS FROM THE NUTRIFUNCTION STUDY

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INTRODUCTION: The estimation of muscle mass is crucial for the identification of undernutrition and sarcopenia. Dual-energy X-ray absorptiometry (DXA) is a

standard method for estimating appendicular lean mass (ALM). However, simpler and more cost-effective alternatives are needed for broader clinical applications. Anthropometric indicators are widely used to estimate total muscle mass, but evidence on their accuracy in predicting regional muscle distribution across sexes is limited.

OBJECTIVES: To evaluate the association between anthropometric indicators and DXA-derived total and regional ALM in adults.

METHODOLOGY: Weight, height, right side mid-upper arm (MUAG), leg (LG) girths, and skinfolds were measured. Jelliffe equations were used to calculate mid-upper arm (MUAMC) and leg (LMC) muscle circumferences. DXA was used to determine ALM, right arm (RALM) and leg (RLLM) lean mass. Linear regression models, adjusted for age and height, examined associations between DXA estimates and anthropometric indicators, stratified by sex. Results include adjusted R², standardized coefficients and 95% confidence intervals (R²; β; 95%CI).

RESULTS: 668 adults (18-85 years, mean age 41.0±16.1, 67.2% women,) were included. All anthropometric indicators were directly associated with ALM. Among men, MUAMC (0.64; 0.64; 0.58-0.71), MUAG (0.55; 0.63; 0.56-0.71), LMC (0.47; 0.53; 0.45-0.61), and LG (0.49; 0.59; 0.51-0.68) showed strong associations with ALM. For women, MUAMC (0.43; 0.41; 0.36-0.45), MUAG (0.35; 0.41; 0.36-0.46), LMC (0.31; 0.35; 0.30-0.40) and LG (0.38; 0.40; 0.35-0.44) were significantly associated with ALM. Regional analysis indicated that LG was the best predictor of RLLM in men (0.70; 0.48; 0.42-0.54) and women (0.55; 0.34; 0.29-0.38). MUAMC demonstrated the highest association with RALM in men (0.81; 0.58; 0.53-0.63) and in women (0.45; 0.20; 0.17-0.23).

CONCLUSIONS: MUAMC, MUAG, LMC, and LG were directly associated with ALM in both sexes, with stronger associations in men, particularly for MUAMC. These results highlight the importance of considering regional anthropometrics and sex when estimating muscle mass.

PO64. AVALIAÇÃO DA INGESTÃO ALIMENTAR E DO DESPERDÍCIO ALIMENTAR EM DOENTES HOSPITALIZADOS ATRAVÉS DO REGISTO FOTOGRÁFICO

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INTRODUÇÃO: A desnutrição hospitalar afeta entre 20% a 60% dos doentes internados, contribuindo para o aumento da morbilidade, mortalidade e tempo de hospitalização. A avaliação da ingestão alimentar individual é essencial para a identificação precoce de riscos e a implementação de intervenções nutricionais adequadas, contudo, a ausência de ferramentas de precisão constitui um desafio. Paralelamente, o desperdício alimentar nos hospitais compromete a qualidade dos cuidados prestados, acarretando consequências adversas a nível social e ambiental. Assim, uma gestão alimentar eficiente é indispensável para assegurar uma nutrição adequada, promover a recuperação clínica dos doentes e otimizar os recursos hospitalares.

OBJETIVOS: Validar a técnica de registo fotográfico tendo como método de comparação a pesagem real dos alimentos ingeridos e não ingeridos nas refeições principais.

METODOLOGIA: O estudo ocorreu no Centro Hospitalar de Vila Nova de Gaia/ Espinho (CHVNG/E) durante 3 dias no ano de 2023. O estudo incluiu 27 doentes tendo sido avaliadas 164 refeições principais. Todas as componentes dos pratos servidos foram pesadas tanto no momento do empratamento como após as refeições. Simultaneamente, foram tiradas fotografias das refeições nos dois