

Determining Metabolically Healthy Obese Subjects

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Abstract—Introduction: Obesity is a well-known risk factor for type 2 diabetes and cardiovascular diseases. However, the prevalence of these disorders varies greatly due to highly heterogeneous metabolic clinical situations. A subtype of obesity, termed "metabolically healthy obesity" (MHO), includes obese individuals with a significantly lower risk of cardiometabolic complications. This phenotype can be assessed by various definitions, which still lack consensus.

Objective: Our study aimed to identify metabolically healthy obese (MHO) subjects among obese adults consulting at the department of Clinical Physiology and Functional Explorations, Metabolic and Nutrition Unit (CHU Annaba, Algeria), and to determine their percentage of body fat mass.

Materials and Methods: The present study is a retrospective cross-sectional study. Inclusion Criteria were adults Aged 18–65 years, BMI $\geq 30 \text{ kg/m}^2$, and metabolic syndrome parameters.

The criteria used to define the phenotype MHO were Lavie and al.'s recent harmonization proposal: BMI $\geq 30 \text{ kg/m}^2$ and none of the components of metabolic syndrome.

Conclusion: This study showed that a non-negligible frequency of obese patients consulting at our department were metabolically healthy according to strict definition criteria. Special attention should be given to these patients to help them maintain their metabolic health and prevent conversion to an unhealthy metabolic profile.

Keywords— Obesity, Metabolic Syndrome, Insulin Resistance, Metabolically Healthy Obese.

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