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## ABDOMINAL IMAGING AND ENDOSCOPY

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### Cut-off value of waist circumference and body mass index for obesity in men and women of Uzbek nationality

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**Statement of the Problem:** Waist circumference (WC) and body mass index (BMI) are the easiest and cheap but still very effective tools for diagnosis of obesity and early prediction of metabolic syndrome and type 2 diabetes risks. WHO recommends using of these criteria specific for every nation.

Aim: Aim of our study was to find out the cut-off values of WC and BMI for obesity in men and women of Uzbek nationality.

**Methodology & Theoretical Orientation:** We performed national-wide study among Uzbek people aged 35 or older living in rural and urban areas of three regions of Uzbekistan. Of 2600 subjects chosen by randomization, subjects with components of metabolic syndrome - obesity, diabetes and prediabetes, arterial hypertension and cardiovascular events in anamnesis, and smoking, and pregnant women were excluded. Six hundred and ninety-five men and 1413 women were included into the study. Diabetes risk questionnaire based on the FINDRISK was filled in, WC, weight and height were measured, BMI was calculated. Blood pressure was measured twice on both arms. OTTG with 75 g glucose was performed to exclude prediabetes and diabetes. Cut-off value was calculated as 90th percentile.

**Findings:** The cut-off value for WC for Uzbek men is 96 cm (93.6 cm for aged <45; 98 cm for aged 45-59; 105 cm for aged  $\geq$ 60). The cut-off value for WC for Uzbek women is 87.7 cm (85 cm for aged <45; 90.8 cm for aged 45-59; 90.6 cm for aged  $\geq$ 60), which exceeds one accepted for European men and women. The cut-off value for BMI for Uzbek men (24.7 kg/m<sup>2</sup>) and women (24.6 kg/m<sup>2</sup>) corresponds to European values.

**Conclusion & Significance:** Waist circumference cut-off for Uzbek men and women exceeds those accepted for European population. We recommend using of national reference values of WC and BMI in assessment of metabolic syndrome and diabetes risk among Uzbek men and women.

#### Biography

Anna N Alieva is a Scientific Researcher in the field of Diabetology and also a Clinical Doctor at the intensive care unit of the Republican Specialized Scientific-Practical Medical Centre of Endocrinology. Her scientific interests are diabetes epidemiology and prevention of insulin resistance: its pathophysiology and methods of treatment, insulin pumps therapy, and diabetic ketoacidosis. She is one of the authors of national standards of care for patients with acute endocrine complications.

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