

Variety of food intake measured with Food Intake Variety Questionnaire (FIVEQ) and nutritional status of Polish adolescents aged 13-15 years

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ABSTRACT

Purpose: To demonstrate the relationship between variety of food intake described with Food Intake Variety Index and nutritional status of Polish adolescents aged 13-15 years.

Materials and methods: Pattern of food consumption for 131 adolescents (52% boys, 48% girls, mean age 14.4 ± 0.9) was evaluated by using FIVEQ (Food Intake Variety Questionnaire), whose interpretation allowed to determine FIVEI (Food Intake Variety Index). According to FIVEI four levels of variety of food consumption were defined: inadequate, sufficient, good and very good. Nutritional status was examined with selected anthropometric parameters, i.e.: weight, height, thickness of the skinfolds, body circuits, BMI (Body Mass Index), AMC (Arm Muscle Circumference), WHtR (Waist-to-Height Ratio), WHR (Waist-Hip Ratio) indexes and FM (Fat Mass), %FM (Fat Mass Percentage), FFM (Fat-free Mass), taken with the FUTREX device. In addition,

measurements of BP (Blood pressure) were used for assessing nutritional status.

Results: Variety of food intake for majority of examined adolescents was defined as sufficient (FIVEI = 28.4 products/week). The average BMI value for both sexes was 20.4 kg/m^2 , and fat mass percentage was 22.4%. Analysis of percentile ranges of given anthropometric parameters and BP according to gender and level of FIVEI showed that generally their values were within the normal range (10-90 percentile), although overweight and obesity was found in 11% of the adolescents. 38% of the examined group had values of blood pressure indicating prehypertension.

Conclusions: Overall nutritional status was defined as good, however variety of food consumption was inadequate and needs improvement. Alarming blood pressure values require further investigation.

Key words: Adolescents, diet quality, questionnaires, nutrition assessment, anthropometry
