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The Prevalence of High-Normal Blood Pressure and Hypertension among 8 to 15-Year-Old Bulgarian Children and Adolescents with Various Nutritional Status (Smolyan Region, 2012-2014)

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ABSTRACT The aim of this paper is to investigate the prevalence of high-normal blood pressure and hypertension among 8 to 15-year-old Bulgarian children and adolescents with various nutritional status in the region of Smolyan, Bulgaria. The sample population of the study was 873 children between the ages of 8 to 15 years, examined by a cross-sectional study in the period 2012-2014. For each child was measured weight, height, waist circumference, blood pressure as well as body mass index and waist to height ratio. The results show that the high-normal blood pressure is found in average 20.3 percent of children and adolescents, while hypertension is found in 3.4 percent. The percentage of children with high-normal blood pressure and central obesity is 35.4 percent, and with hypertension and central obesity is 7.1 percent. Positive significant correlations between BMI, WHtR and blood pressure are observed in both sexes. The prevalence of children with high-normal blood pressure and with hypertension and with central obesity increases.