SUMMARY

The present thesis contains a set of three related articles dealing with the influence of one of the most important risk factors namely overweight ($BMI \geq 25 kg/m^2$) and obesity ($BMI \geq 30 kg/m^2$) on mortality intensity of selected types of malignant neoplasms and prevalence of diabetes and prediabetes. (I) The first published article analyzed the attributable risk of population death for selected malignant neoplasms in 2016, which could be attributed to excessive BMI in the Czech population from 2008 according to sex. (II) In the second submission, the analysis was expanded, estimating and comparing mortality in the Czech and Slovak populations and between different age categories. The present studies were analyzed using the population attribute fraction (PAF). (III) The aim of the last analysis was to determine the prevalence of diabetes (DM) and pre-diabetes in the Czech population and to assess their risk factors.

In their studies, the authors point to the continuing and growing problem of obesity and its consequences across Europe. They thus contribute to a deeper understanding of the long-term risk factor involved and the design of measures for the planning and subsequent implementation of prevention.

The present analyzes were also published in "Demography" (I), "Epidemiology, Microbiology, Immunology" (II) and the last third article was submitted for review to "Diabetes Research and Clinical Practice" (III).

Key words: overweight, obesity, body mass index, mortality, malignant neoplasms, Czech Republic, Slovakia, EHES, diabetes, prediabetes, risk factor