Summary

The health of the new-born is largely a function of the mother's nutritional, general and reproductive health status. Therefore, pregnancy is considered as a critical window in child’s growth and development. Several characteristics of a woman prior or in early pregnancy, as well as external, environmental factors affect pregnancy outcomes. External factors account for 30% of the pregnancy outcome and infant's birth weight, and mother’s diet during pregnancy is one of the most important ones. General opinion is that pregnant women tend to change their dietary and lifestyle habits for better during pregnancy, and that they have diet of better quality which is more in relation with the recommendations, but the result from Croatia do not support these statements. Besides nutrition, advanced maternal age (35 years and older), pre-pregnancy body mass index (BMI), and excessive weight gain during pregnancy are all considered as important risk factors for pregnancy complications and adverse outcomes. Today pre-pregnancy overweight/obesity is considered as one of the most common high-risk obstetric situations, and Croatia is not an exception. Also, year after year the average age of pregnant woman in Croatia increases, as well as the number of pregnant women older than 35 years. Diet during pregnancy should complement pregnancy, especially since studies found that for example, a diet with <30% fat and >50% carbohydrate, together with the increase in energy intake during pregnancy will reduce their risk of both impaired glucose tolerance and gestational diabetes mellitus. More intensive educations of women of reproductive age are needed to reverse the current negative trends in demographic indicators, reproductive health, and in order to prevent the second generation obesity cases and obesity-related complications later in life.

Key words: pregnancy, epigenetics, nutrition, pregnancy complications, obesity