

## **The biological standard of living in Poland 1800-195: the evolution of human stature and body mass**

The stature of human body and its related body mass have long been considered by anthropologists as sensitive indicators of the biological wellbeing of population. Although body stature is genetically conditioned, its level is dependent on the interaction of the individual with his environment. In other words, quantitative and qualitative food shortages, disease incidence, or excessive energy-spending in relation to nutrition cause an incomplete use of genetic potential. Thus, body stature reflects the standard of living in the past. Stature is a measure showing the conditions of living during the whole period of growth of the organism (first 18-21 years of life). And body mass in relation to stature (body mass index: BMI) shows short-term changes.

The object of the project is to investigate the evolution of the stature and the body mass in Poland in the 19<sup>th</sup> century and the first half of the 20<sup>th</sup> century. The point of departure are the data from the interwar period (1918-1939), containing reliable measurements of soldiers of the Polish army and prisoners. For the 19<sup>th</sup> century we shall seek the data concerning conscripts and recruits enlisted in the armies, and convicts.

Thus, the reconstructed stature curve and, from the end of the 19th century also the body mass curve will allow us to draw conclusions about the chronology of changes in the standard of living of large masses of population and their environment conditions. Among the basic problems that the project members intend to broach is a question about the socio-economic balance of the Second Republic seen through anthropological variables and an influence of modernization on the prosperity of population. The answer is not obvious because studies in the US and Western Europe show that urbanization does not necessarily bring a rising in the standard of living of population and economic indicators (such as per capita GNP) does not automatically create a better quality of life.