## EATING HABITS OF TEACHER CANDIDATES

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Apart from parents, teachers have a determining role in forming students' attitude to health. Consequently, creating and forming a health attitude that meet modern principles has to have a great emphasis in teacher training. The research includes measuring body composition, evaluating results and consultation of first-year students of primary, pre-school and nursery education. Our aim is to screen students belonging to a risk group because of their nourishment. After investigating the students' family relationships, we had a questionnaire about their family anamnesis, health status, eating habits and free time activities. Their physical status was examined by the In Body 720 body composition analyzer. The survey sample is 820 female students. With the semi-longitudinal survey we tried to find out whether students belonging to the risk group accepted our advice and changed their lifestyle. Their different physical status would prove that during their second examination, two years after the first one. The health status of the students is estimated, including their self-evaluation about their body shape, their nutritional habits, fitness index, obesity diagnosis, the relationship between parents' education level and students' nutritional status, and correlation between parents' and students' BMI. The practical relevance of our survey is that the possible positive change in students' health comportment attitude will have a good effect on the lifestyle of the future generations.

Key words: BMI, healthy lifestyle, obesity, In Body 720 body composition analyzer

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## A CASE STUDY OF HOMO SAPIENS MANDIBLE VARIABILITY IN CONNECTION WITH HABITAT

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Intraspecific variability of a modern human mandible was determined using a principal component analysis following by a varimax rotation. Individual standardized data for the following series were included in the analysis: Eskimo from Ekven, 4-7 centuries AD, – 61 jaws; Eskimo from Naukan, 19-20 centuries AD, – 23 jaws; Anglo-Saxon from Dunstable, 5-6 centiries AD, – 40 jaws (Dingwall, Yaung, 1933); Ancient Egyptian series, IX dynasty, - 37 jaws (Woo, 1930); series of Badari culture, Egypt, 5-3 centuries BC, - 32 jaws (Stossiger, 1927); Hokiens, southeast China, early 20 century, - 38 jaws (Harrower, 1928); Hylams, island Hainan, China, - 39 jaws (Harrower, 1928); Tamils, India and Ceylon, - 33 jaws (Harrower, 1928). During the analysis three principle components (PC-1, 2, 3) were determined. The first PC describes the overall size of a bone and is not associated with angular dimensions. PC-2 characterizes the variability of a mandibular angle (M-79) and a height of branches (M-70). PC-3 strongly correlates with a height of a symphysis (M-69) and an angle of a chin protrusion (<C'). We found that the Eskimo series have the largest jaws, while the bones from the ancient Egypt and the Tamils series are the smallest. By this we show that PC-1 reveals the presence of ecological gradient on the mandible dimension. We discovered that a mandibular angle and a height of branches are related negatively, therefore jaws with a vertically oriented high branch occupy the maximum values pole and jaws with short inclined branch are in the minimum values region. The first group of the jaws pertains to Anglo-Saxons; the other one is typical to Eskimo from Ekven. Hylams' jaws show the maximum variability along the PC-1 and PC-2. From the PC-3 we obtain that the greater the angle of a chin, the higher the symphysis is, and vice versa. Jaws of Eskimo and Hokiens have the highest chin, the jaws of Tamils, Anglo-Saxons and Hylams are low and protrusive. On the plot below we show an individual value of PC for each of the mandible. Jaws of the Eskimo take up a marginal position in all PC. This is related, probably, to extreme conditions of their habitat. Hokiens' jaws are the most morphologically similar to the Eskimos series. Opposite poles of the PC are occupied by different Caucasoid series.

Key words: craniology, mandible, Homo sapiens, environment, principal components method

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