

## THE RELATIONSHIP BETWEEN BODY COMPOSITION AND NEIGHBORHOOD WALKABILITY IN OBESE AND OVERWEIGHT WOMEN

Přidalová Miroslavá, Sofková Tereza

*Department of Natural Sciences in Kinanthropology, Faculty of Physical Culture, Palacký University Olomouc, Czech Republic*

A neighborhood environment allows defining typical features for physically active or inactive lifestyle. An accelerated pace of life and higher availability of an unhealthy lifestyle increase obesity rates. An analysis of body composition can be used as a predictor for assessment of current somatic conditions. The aim of the study was to determine the dependence of selected body composition parameters on neighborhood walkability in 167 women aged 20-60 years attending weight-loss program, so called STOB-courses. A multifrequency bioimpedance analysis InBody 720 was used to determine body composition of respondents. Further, ANEWS questionnaire was used to determine the level of neighborhood walkability. We divided the sample into two age groups (<40 years; ≥ 40 years) and into partial subgroups according to the neighborhood "level of walkability" (lower and higher level). Based on the assessment of body composition, it can be assumed that more walkable neighborhood opportunities positively affect body composition. Body composition in older women is positively influenced if they lived in high walkable areas. In younger women we found only one indicator of body composition (body fat mass) influenced by neighborhood walkability. The relationship between health indicators of body composition and residential infrastructure might be useful in the strategies aimed at maintaining and developing a healthy lifestyle within the community.

**Key words:** *questionnaire ANEWS, environmental conditions, bioimpedance analysis, InBody 720, weight-loss program*

Contact information: Přidalová Miroslava, e-mail: miroslava.pridalova@upol.cz, Sofková Tereza, e-mail: tereza.sofkova@email.cz.

## SENSATION SEEKING AND ANTHROPOMETRY OF SUCCESSFUL FEMALE WRESTLERS

Prosikova Ekaterina, Butovskaya Marina, Veselovskaya Elizaveta

*Institute of Ethnology and Anthropology, Russian Academy of Sciences, Moscow, Russia*

In this study a hypothesis was tested about increased level of masculinity in successful female wrestlers. We were looking for significant behavioral and morphological differences between female wrestlers of high achievements compared to the control group of females from the same population. This study is conducted in line with our main project of general evolutionary processes in different test samples from modern populations (Butovskaya et al., 2009, 2010, 2011; Prosikova et al., 2013). The goal of this research was to compare female wrestlers (100 individuals) with a control group (200 individuals) on risk-taking, and to analyze the association between risk-taking and morphological parameters. Zuckerman sensation seeking scale was applied (Zuckerman, 2007). It was found that successful female wrestles scored significantly lower on all four sensation seeking subscales. These differences were in the same direction as those earlier revealed for male wrestlers. At the same time, female wrestlers were more masculine by their face proportions, body circumferences, as well as 2D:4D ratios on both hands. Supported by RFBR, grant N. 13-06-00393.

**Key words:** *female wrestlers, risk-taking, masculinity, 2D:4D ratio, face proportions*

Contact information: Prosikova Ekaterina, e-mail: anirey@rambler.ru.