## The Reasons for Vegetarianism in Estonia and its Effects to Body Composition

Authors: Ülle Parm, Kata Pedamäe, Jaak Jürimäe, Evelin Lätt, Aivar Orav, Anna-Liisa Tamm

Abstract: Vegetarianism has gained popularity across the world. It's being chosen for multiple reasons, but among Estonians, these have remained unknown. Previously, attention to bone health and probable nutrient deficiency of vegetarians has been paid and in vegetarians lower body mass index (BMI) and blood cholesterol level has been found but the results are inconclusive. The goal was to explain reasons for choosing vegetarian diet in Estonia and impact of vegetarianism to body composition - BMI, fat percentage (fat%), fat mass (FM), and fat free mass (FFM). The study group comprised of 68 vegetarians and 103 omnivorous. The determining body composition with DXA (Hologic) was concluded in 2013. Body mass (medical electronic scale, A&D Instruments, Abingdon, UK) and height (Martin metal anthropometer to the nearest 0.1 cm) were measured and BMI calculated (kg/m2). General data (physical activity level included) was collected with questionnaires. The main reasons why vegetarianism was chosen were the healthiness of the vegetarian diet (59%) and the wish to fight for animal rights (72%) Food additives were consumed by less than half of vegetarians, more often by men. Vegetarians had lower BMI than omnivores, especially amongst men. Based on BMI classification, vegetarians were less obese than omnivores. However, there were no differences in the FM, FFM and fat percentage figures of the two groups. Higher BMI might be the cause of higher physical activity level among omnivores compared with vegetarians. For classifying people as underweight, normal weight, overweight and obese both BMI and fat% criteria were used. By BMI classification in comparison with fat%, more people in the normal weight group were considered; by using fat% in comparison with BMI classification, however, more people categorized as overweight. It can be concluded that the main reasons for vegetarianism chosen in Estonia are healthiness of the vegetarian diet and the wish to fight for animal rights and vegetarian diet has no effect on body fat percentage, FM and FFM.

**Keywords:** body composition, body fat percentage, body mass index, vegetarianism

Conference Title: ICHNFS 2015: International Conference on Human Nutrition and Food Sciences

**Conference Location :** Rome, Italy

Conference Dates: September 17-18, 2015