### Body of abstract

**Purpose:** The WAAG-Study aims to prevent accumulation of abdominal fat mass and weight gain in apparently healthy, recently retired subjects, aged 55-65 years. **Design:** A cluster randomized controlled trial. **Methods:** Participants were recruited from pre-retirement workshops, were able to change dietary and/or physical activity behaviors and not suffering from diseases or using drugs that might influence body composition. The intervention group firstly received a toolkit to increase awareness on energy balance. Subsequently two computer tailored programs were distributed, one focusing on energy balance related behaviors. The second part offered four options to personally evaluate current status of physical activity, fat intake, fiber intake or portion size. The control group received newsletters and had limited access to the study website. **Outcomes:** Body weight, waist circumference, energy and fat intake (food frequency questionnaire) and physical activity (Physical Activity Scale for the Elderly (PASE)).

**Results:** Waist circumference changed -2.3 +/- 3.2 cm (mean ± SD) and -1.9 +/- 3.1 cm in the intervention and control group, respectively. The difference was not statistically significant (p=0.19). Body weight showed the same pattern: -2.1 +/- 3.4 kg and -1.4 +/- 3.6 kg, respectively (p for difference = 0.09). Changes in body composition parameters were accompanied by changes in energy intake (estimated differences -1.32 and -0.72 MJ/day, respectively; p = 0.02) and fat intake (estimated differences -1.92 and -0.36 en%, respectively; p=0.01), but not in physical activity (PASE increased in both groups by 32 points, p=0.96). **Conclusion:** The observed effects on body composition and related energy balance factors in a group of recently retired persons might be due to the Hawthorne effect or to transition to occupational retirement per se (more time available, leading to more physical activity).