## Influence of environmental factors on food intakes of nursing home residents: a survey combined to a video approach

- F. Buckinx<sup>1</sup>, A. Morelle<sup>2</sup>, S. Adam<sup>3</sup>, JY. Reginster<sup>1</sup>, N. Labeye<sup>2</sup>, M. Locquet<sup>1</sup>, O. Bruyère<sup>1</sup>
- 1. Department of Public Health, Epidemiology and Health Economics, University of Liège, Belgium
- 2. Nutrition and Dietetics, Haute Ecole de la Province de Liège, Belgium
- 3. Psychology of senescence, University of Liège, Belgium

**Introduction**: The aim of this study was to assess the influence of the environment on food intakes in nursing home.

**Methods:** Meals, in 9 distinct nursing homes, were filmed and the food intakes of a sample of randomly selected residents were measured by the precise weighing food method. Then, residents responded to a questionnaire related to their perception of the environment during meals. Finally, a panel of volunteer experts were asked to answer a questionnaire related to their own perception of the meal environment after having watched a video of the lunch in each nursing home. The relationship between food intakes and perception of the environment, by the residents and by the experts, was assessed.

**Results:** A total of 88 residents, aged  $79.9 \pm 15.7$  years (65.9% of women) from 9 different nursing homes were included in this study. The perception of the environment during meals in the institution by the residents was assessed by different indicators (i.e. noise, space, comfort, light, smelling, perceived satisfaction of meals, taste of meal, presentation of meals, service, setting). It was not associated with food intakes of the elderly. However, a pleasant setting, as judged by the experts through the video analysis, was associated with greater food consumption by the resident.

**Conclusion**: To the best of our knowledge, our results are the first highlighting the fact that a pleasant dining room setting is positively associated with food intake of nursing home residents.