PP032-MON
ASSESSMENT OF NUTRIENT INTAKE AND STATUS IN SARCOPENIA – A PILOT STUDY

S. ter Borg[1], D.M. Mijnarends[2], S. Verlaan[1], J.H. de Vries[3], J.M. Meijers[2], J.M. Schols[4], L.C. de Groot[3], Y.C. Luiking[1]. [1]Nutricia Advanced Medical Nutrition, Danone Research, Utrecht, [2]School CAPHRI, Department of Health Services Research, Maastricht University, Maastricht, [3]Division of Human Nutrition, Wageningen University, Wageningen, [4]School CAPHRI, Department of General Practice, Maastricht University, Maastricht, Netherlands

Rationale: Observational and intervention studies suggest an association between certain nutrients, such as protein, and muscle parameters. Data on nutritional intake and status in sarcopenia are, however, lacking and will be collected in the cross-sectional Maastricht Sarcopenia Study (MaSS, NCT01820988). A pilot study was performed to assess the feasibility (comprehensibility and completion) of nutritional assessments and the correctness of generated data in community-dwelling older adults.

Methods: Eight participants (>65 y) were included in the pilot study. A food frequency questionnaire (FFQ) was developed via the Dutch FFQ-TOOL™ to assess intake of potentially relevant nutrients. Blood samples were taken during a home visit to assess nutrient status. Data are presented as mean±SD.

Results: Completion of the FFQ was feasible (n = 7), but required some additional clarifying instructions, e.g. on the frequency of consumption. Blood samples were available from all participants. Energy intake was 9.9±4.5 MJ; 44±17 En% from carbohydrates, 16±8 En% from protein, and 37±24 En% from fat. Six subjects had 25-(OH)D concentrations below 50 nmol/l (insufficiency), of which two subjects had concentrations below 25 nmol/l (deficiency). One subject was magnesium deficient (<0.75 mmol/L), and one was possibly vitamin B deficient (homocysteine >12 μmol/l).

Conclusion: FFQ and blood sampling were feasible in practice in older adults and realistic data were obtained. Therefore, these assessments will be included in the MaSS study to provide further insight into the relationship between nutrients and muscle parameters, and the specific nutritional needs of sarcopenic older adults.

Disclosure of Interest: S. ter Borg Other: Employee of Danone Research, D. Mijnarends: None Declared, S. Verlaan Other: Employee of Danone Research, J. de Vries: None Declared, J. Meijers: None Declared, J. Schols: None Declared, L. de Groot: None Declared, Y. Luiking Other: Employee of Danone Research

PP033-MON
NUTRITIONDAY WORLDWIDE IN NURSING HOMES – AN UPDATE 2012

R. Diekmann[1], C. Kolb[1], S. Kosak[2], M. Mouhieddine[3], K. Schindler[4], M. Hiesmayr[3], C. Sieber[1], D. Volkert[1]. [1]Institute for Biomedicine of Aging, Friedrich-Alexander-Universität Erlangen-Nürnberg, Nuremberg, Germany; [2]Nutrition Day Office, [3]Division of Cardiac-, Thoracic-, Vascular Anaesthesia and Intensive Care, [4]Medical Clinic III, Div. Endocrinology, Medizinische Universität Wien, Vienna, Austria

Rationale: Since 2007, the nutritionDay (nD) in nursing homes (NH), a single-day cross-sectional study with six-month follow-up, takes place yearly and increased to a worldwide day of action with the aim to call the attention of care givers to the nutritional situation of NH residents. Aim of the present analysis was firstly to characterize NH units with regard to age and secondly to compare residents' characteristics and nutritional situation in units with different mean age.

Methods: For the present analysis data on age, gender, cognitive impairment, immobility, nutritional status, lunch intake on nD were considered and units with low (mean age < 65 y.), medium (mean age 65–84 y.) and high age (mean age ⩾85 y.) were compared.

Results: 342 institutions with 798 units and 26,297 residents from 19 countries participated. Mean age was 79.1 ±12.1 y., in 11.7% of the units mean age was low, in 54.5% medium and in 33.7% high. Residents' characteristics and nutritional situation in the three age groups are presented in the table.

	Units with Ø <65 y mean±SD	Units with Ø ⩾65–85 y mean±SD	Units with Ø ⩾85 y mean±SD
Ø age [y]	49.5±10.6	80.4±3.8	87.3±1.9
Ø pr. ♀ [%]	43.8±30.0	70.3±20.0	80.3±10.0
Ø pr severe cogn. impairment [%]	30.1±36.4	28.0±23.1	30.0±20.0
Ø pr Immobile [%]	7.8±12.6	24.3±19.1	32.8±18.2
Ø BMI [kg/m²]	24.8±2.6	25.4±2.1	24.6±2.0
Ø pr MN according to BMI[&] [%]	14.8±15.8	14.7±11.1	19.5±13.4
Ø pr MN according to staff [%]	5.2±1.1	8.4±0.9	13.1±13.1
Ø pr of residents with WL last year [%]	24.9±13.0	33.5±18.1	36.1±16.5
Ø reduced intake at nD[§] [%]	19.0±13.1	36.3±18.0	38.5±17.5

pr portion, MN malnutrition, [&]BMI <20 at age ⩾65, <18.5 at age <65, NS nursing staff, [§]<half of lunch.

Conclusion: In more than 10% of the nursing home units, mean age was below 65 years. In units with mean age ⩾ 85 years, nutritional problems were most frequent.

Disclosure of Interest: None Declared

PP034-MON
IMPACT OF FAT MASS ON BONE DENSITY IN SENIORS

G. Sondergeld[1], K. Norman[1,2], J. Nikolov[1], I. Demuth[1,3], E. Steinhagen-Thiessen[1], R. Eckardt[1]. [1]Research Group on Geriatrics, [2]Dept of Gastroenterology, [3]Institute of Medical and Human Genetics, Charité-Universitätsmedizin, Berlin, Germany

Rationale: High body weight has been described as a predictor of high bone density. It is still unclear which compartment of body composition influences bone density more. We investigated the impact of fat mass and lean mass on bone density in a population based healthy sample of the Berlin Aging Study II.

Methods: Bone mineral density left hip (g/cm²), whole-body fat mass (g) and whole body lean mass without bone mineral content (g) were defined by dual-energy X-ray absorption.

Results: The sample of 1425 subjects was split in six age- and sex-stratified groups: Young group (144 men: mean age 28.5±3.0 years, 154 women: mean age 28.2±3.2 years), young seniors (235 men: mean age 65.7±2.0 years, 376 women: mean age 65.6±1.9 years) and old seniors (266 men: mean age 71.4±2.2 years, 250 women: mean age 71.3±2.7 years). The influence of fat mass and lean mass on bone density was calculated by multiple regressions for every group. For all men and young women, only lean mass showed significant