



Energy intake of geriatric patients is inadequate and correlates with care dependency: Evaluations at home and in hospital

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Objectives:

The cross-sectional study was performed to determine energy and protein intake in geriatric patients at home and on a geriatric ward. Information on this the housing situation, grade of care dependency, appetite and the eating habits were additionally collected.

Methods:

Fifteen geriatric patients were included. Body height, weight, the care level and malnutrition score (NRS 2002) were measured by the nursing staff. The energy and protein intake at home was collected via 24-hour-recall and in the hospital via 3-day-food-record. BMI, diet quality (Healthy-Eating-Index, HEI), energy and protein requirements were determined using standard methods. Housing situation, appetite and eating habits were inquired for the last three months by a self-developed questionnaire.

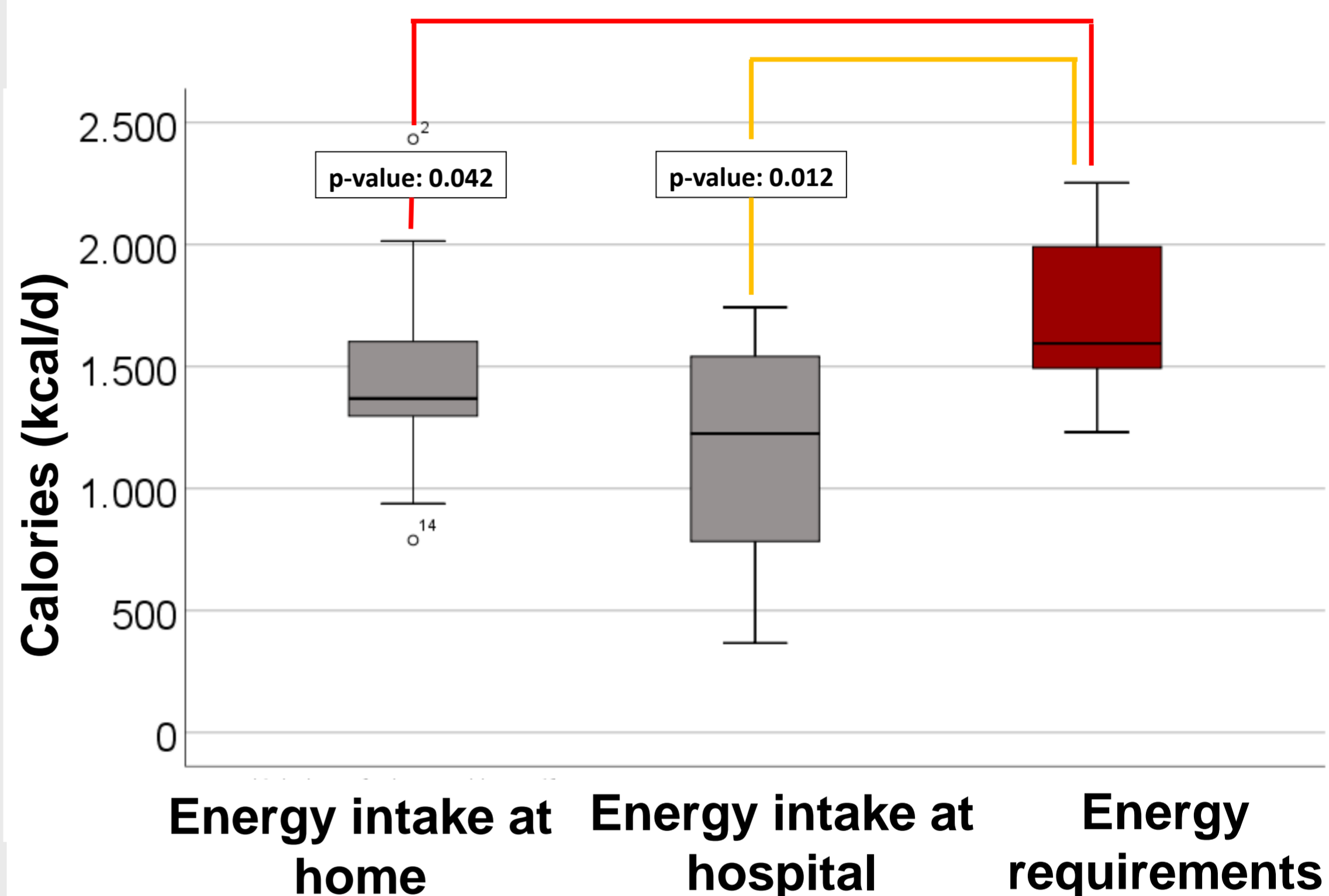
Subject characteristics	M ± SD	min. – max.
Age (yrs)	84 ± 4.6	75 – 90
Body mass index (kg/m ²)	30.5 ± 7.5	21 – 49
Energy intake at, hospital (kcal/d)	1123 ± 474	367 - 1743
Energy intake at, home (kcal/d)	1412 ± 479	776 – 2432
Protein intake, at hospital g/kg/bw/d	0.77 ± 0.49	0.17 – 1.80
Protein intake, at home g/d	0.88 ± 0.37	0.30 - 1.73
NRS – 2002 (points)	1.14 ± 0.36	1 – 2

Conclusion:

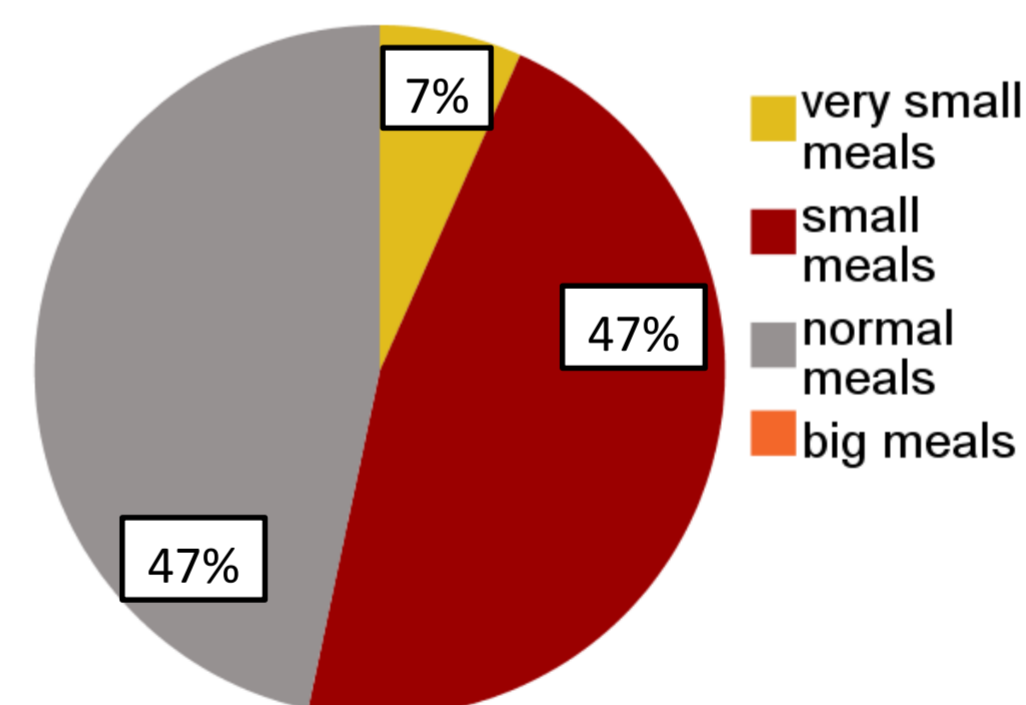
The results show that even non malnourished geriatric patients have energy and protein deficits that might predispose them at higher risk of malnutrition on long term. Consequently, standard provision of high energy and high protein hospital diets can be useful for these subjects. Secondly, dietitians need to pay more attention to the association between care level and energy intake. Possibly the care level could be considered as an own risk factor for malnutrition in future.

Results:

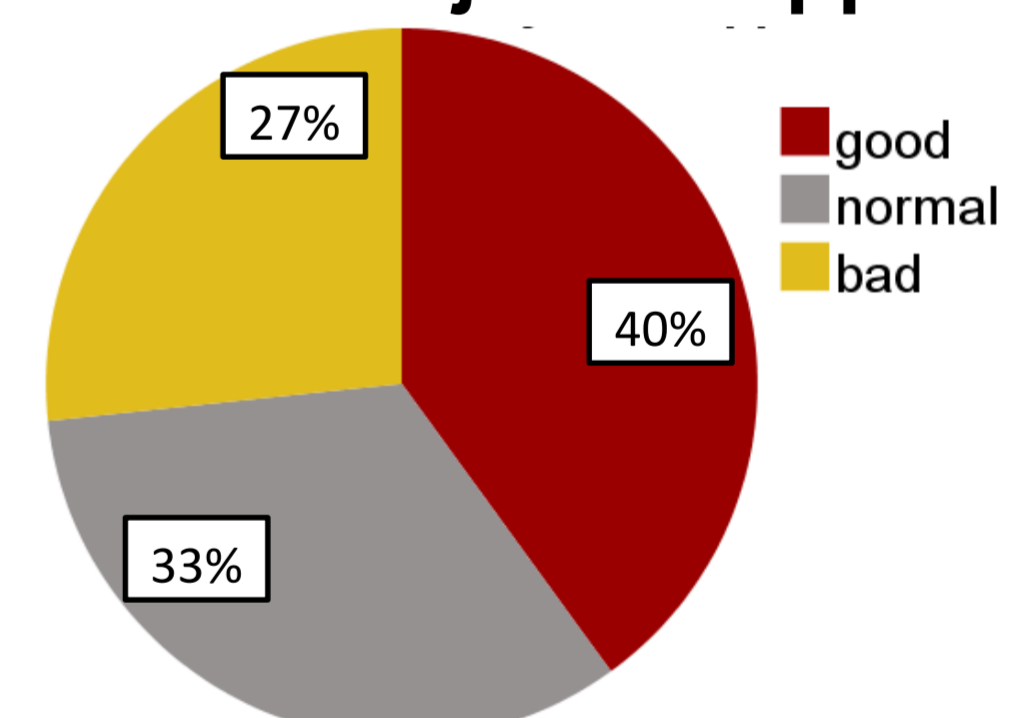
Actual energy intake versus energy requirements based on Basarot-Factors + PAL 1.4



Subjective meal size in the last three month



Current subjective appetite



Correlation between energy intake at home and Care-level

