

Invited Speaker Abstract

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Title of Presentation

Healthy ageing - What could we learn from cohort studies

1. Abstract

Introduction: A growing population of older adults worldwide is a challenge for society. Malnutrition is a prevalent problem related to disease and disability in ageing. We have previously shown a time trend in dietary intake in cohorts of 70-yr olds (1971, 1918, 1991 and 2000) towards better quality in later born cohorts. In-depth knowledge of how the relationship between nutrition and physical function could prolong healthy ageing and prevent disability and disease is needed.

Objective: Study and compare the relation between dietary intake, physical performance (PP) and body composition (BC) at age 70 in one birth cohort born 1944 and at age 85 in one born 1930.

Methods: In both cohorts, dietary intake was estimated by a diet history, PP by gait speed and hand grip strength and BC by DXA.

Results: In both cohorts, 43% were obese. Several significant differences between cohorts were shown. Low muscle mass was 18% and 68% and low handgrip strength 11% and 76% in 70- and 85-yr olds, respectively. 3% had slow self-selected walking speed in the 70-yr olds compared to 58% in the 85-yr olds. Sarcopenia was present in 3% of the 70-yr olds compared to 55% in the 85-yr olds. Energy intake was lower in the 85-yr olds but still good compared to recommendation. In both cohorts vitamin D was the nutrient with highest proportion with low intakes. Among 70-yr olds alcohol intake has increased significantly.

Conclusion: In both cohorts, dietary intake was good in relation to recommendations. However, significant differences were shown according to BC and PP. In future analyses we will investigate predictors of healthy ageing according to dietary intake, PP and BC. Of special interest is to study physical frailty in relation to cognitive frailty.

2. Key references

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- Tognon G, Rothenberg E, Eiben G, Sundh V, Winkvist A, Lissner L. Does the Mediterranean diet predict longevity in the elderly? A Swedish perspective. *Age (Dordrecht, Netherlands)*. 2011;33(3):439-50.

3. Key messages

- As long as older adults stay healthy they have good dietary intake up to high ages.

- Despite adequate energy intake, levels of vitamin D must be considered.
- Body composition and physical performance change by age, increasing the risk of frailty and sarcopenia.