

# Nutrition & Aging

## Professor Alan Sinclair

### WEBCAST SUMMARY

This program was brought to you by The International Academy of Nutrition and Aging and Abbott Nutrition

### NUTRITION AND AGING—IDENTIFYING SOME KEY CONCERNS

#### Introduction

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People today live longer than ever before; such longevity is both rewarding and challenging. In the UK, 28% of men and 44% of women survive to age 85. But two-thirds of National Health Service beds are occupied by patients over 65 years, more than 70% of those over 75 years have at least one disability, and 20% of those over 80 need assistance with at least one important task each day.

#### Aging And Under-nutrition Are Linked

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All too often, aging and under-nutrition are linked, which worsens outcomes. On hospital admission, patients over 80 years are 5-times more likely to be under-nourished than are those under 50. About 30% of nursing home residents have evidence of under-nutrition. Patients who are poorly nourished have longer stays when hospitalized, require more medications, and are more likely to suffer from infections and other complications. In the UK, the toll of malnutrition on health and health care costs is estimated to exceed £7.3 billion per year; over half of this cost is expended on people aged 65 years and older.

Under-nutrition in older people is not a single-issue problem but rather a condition with many possible contributing factors or syndromes, i.e. anorexia of aging, cachexia of illness, failure-to-thrive, depression or dementia with appetite loss, and de-conditioning due to inactivity. Other direct causes include taking medications with gastrointestinal side effects; physical problems with eating, swallowing, and digesting food; and lack of access to food due to financial or transportation problems.

#### Anorexia of Aging

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Of the syndromes contributing to under-nutrition, anorexia of aging occurs commonly. Older people eat less than younger people because of an early and sustained satiety response. Older people fill up with food more quickly than younger people and are less hungry after an overnight fast. Some researchers claim that older people may have greater gastric antral stretch than young people, which leads to earlier satiety. Certain hormonal hunger signals may be altered too, as older people are less likely to return to normal weight after an interval of under-feeding.

Weight loss in older people is difficult to treat and has adverse consequences. Appetite-stimulating drugs have been used (megestrol acetate, corticosteroids, and anabolic steroids), but there is little evidence that such treatment can add weight as lean body mass (muscle).



## Weight Loss in Nursing Home Residents

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Weight loss and its attendant risks have been studied in nursing home residents. A study in the UK found that 1 in 10 nursing home residents lost up to 5% of body weight within a month of being admitted to the home and lost 10% of body weight within six months. A Danish study reported 33% of residents had a BMI of <20, while 38% had weight loss greater than 5%. Factors that predicted likelihood of malnutrition among Finnish nursing home residents included impaired functioning (Odds ratio=3.71); swallowing problems (OR=3.03); eating less than half of meal (OR=3.03); and dementia (OR=2.06)

In the UK, many factors contribute to food intake problems and weight loss in nursing home residents:

- Failure to use a comprehensive tool to assess for regular nutritional assessment
- Lack of engagement of specialist services (e.g. geriatric, diabetes)
- National standard of care appear to be inadequate
- Drug prescribing patterns are potentially dangerous—demonstrating both excessive (e.g. neuroleptics) and underuse (beta-blockers after acute MI) of medications
- Failure to recognize and treat pain, which blunts appetite

## Oral Nutrition Supplementation

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A Cochrane review evaluated outcomes from use of oral nutritional supplements in older people at risk for malnutrition.<sup>1</sup> Supplementation produced a small but consistent weight gain. There was a statistically significant beneficial effect on mortality and a shorter length of hospital stay, although the authors advised further well-designed, large-scale studies to confirm and extend these findings.

## Conclusion

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**As the population ages, the problem of poor nutrition among the elderly becomes bigger. Improved care for this vulnerable population calls for increased awareness of the problem, updated and enhanced treatment standards, and implementation of care strategies that prevent or delay consequences of poor nutrition in older people.**

1. Milne AC, Potter J, Avenell A. Protein and energy supplementation in elderly people at risk from malnutrition. Cochrane Database Syst Rev. 2002(3):CD003288.

