

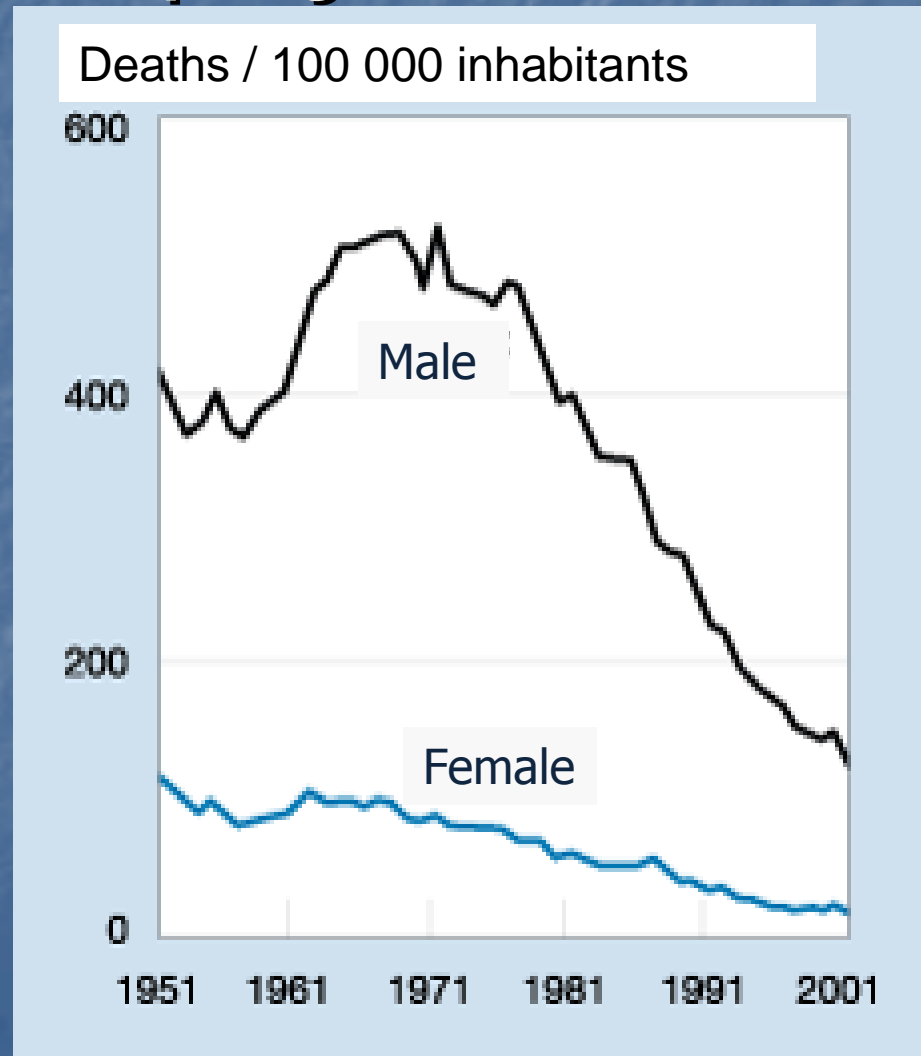
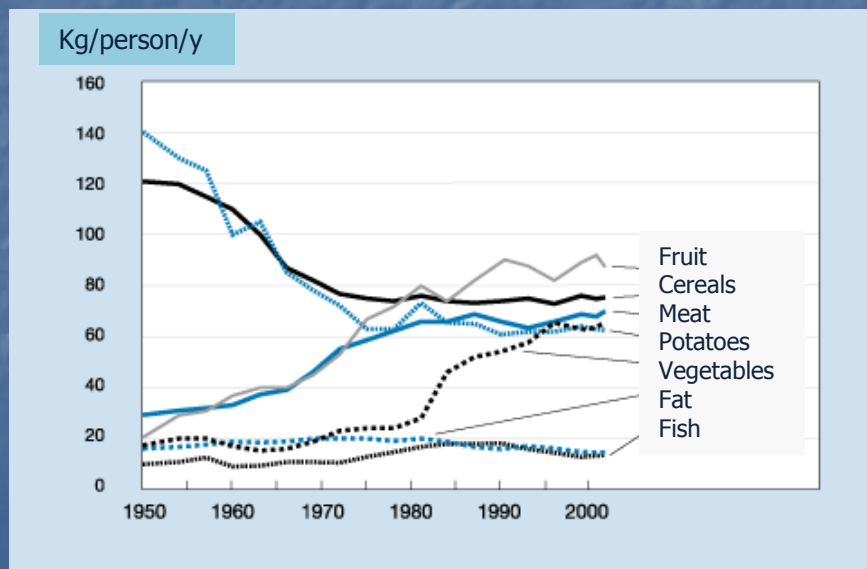
# Overview of Finnish research on ageing, nutrition and health

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# Finnish nutritional research tradition 1: North Karelia project

- North Karelia project has educated Finnish people in health promotion and healthy eating habits



# Finnish nutritional research tradition 2: Functional foods research

- Xylitol in caries prevention and in preventing infections (otitis media, sepsis in children) (Uhari)
- Plant stanol ester, Benecol<sup>®</sup> in lowering cholesterol
- Probiotics in promoting gut health, natural immunity, preventing atopic excema and infections

# Finnish nutritional research tradition 3: Life course research

- Diabetes prevention research (Tuomilehto, Virtanen, Ykijärvinen)
- Risk factors in middle age of Alzheimer's disease (Kivipelto)
- Obesity, high cholesterol in middle age → QoL in old age (Strandberg)
- Barker's hypothesis tested in Finnish maternity/child health clinics' records (Eriksson J.)

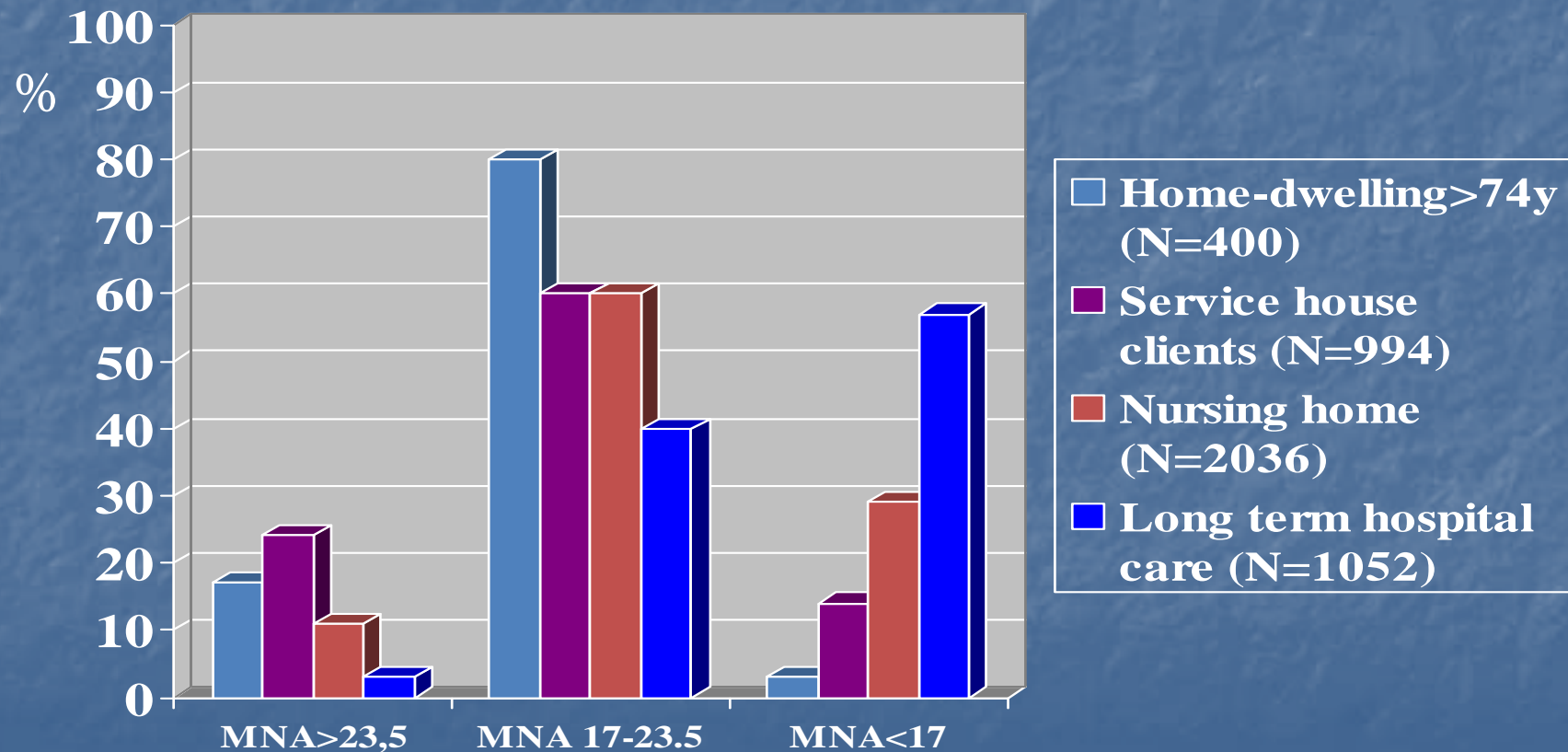
# Finnish people are well-educated in eating healthy food ...

- Only past 10 years Finnish research has focused on problems related to older people's nutrition
  - Malnutrition, low energy, protein and nutrient intake
  - Sarcopenia and frailty related to undernutrition
- Population – as well as professionals working with older people – have learnt to avoid high energy, fat and also protein content foods
- → attitudes have made older people's nutrition in education of nurses and care complicated

# Finnish research in older people's nutrition has focused on...

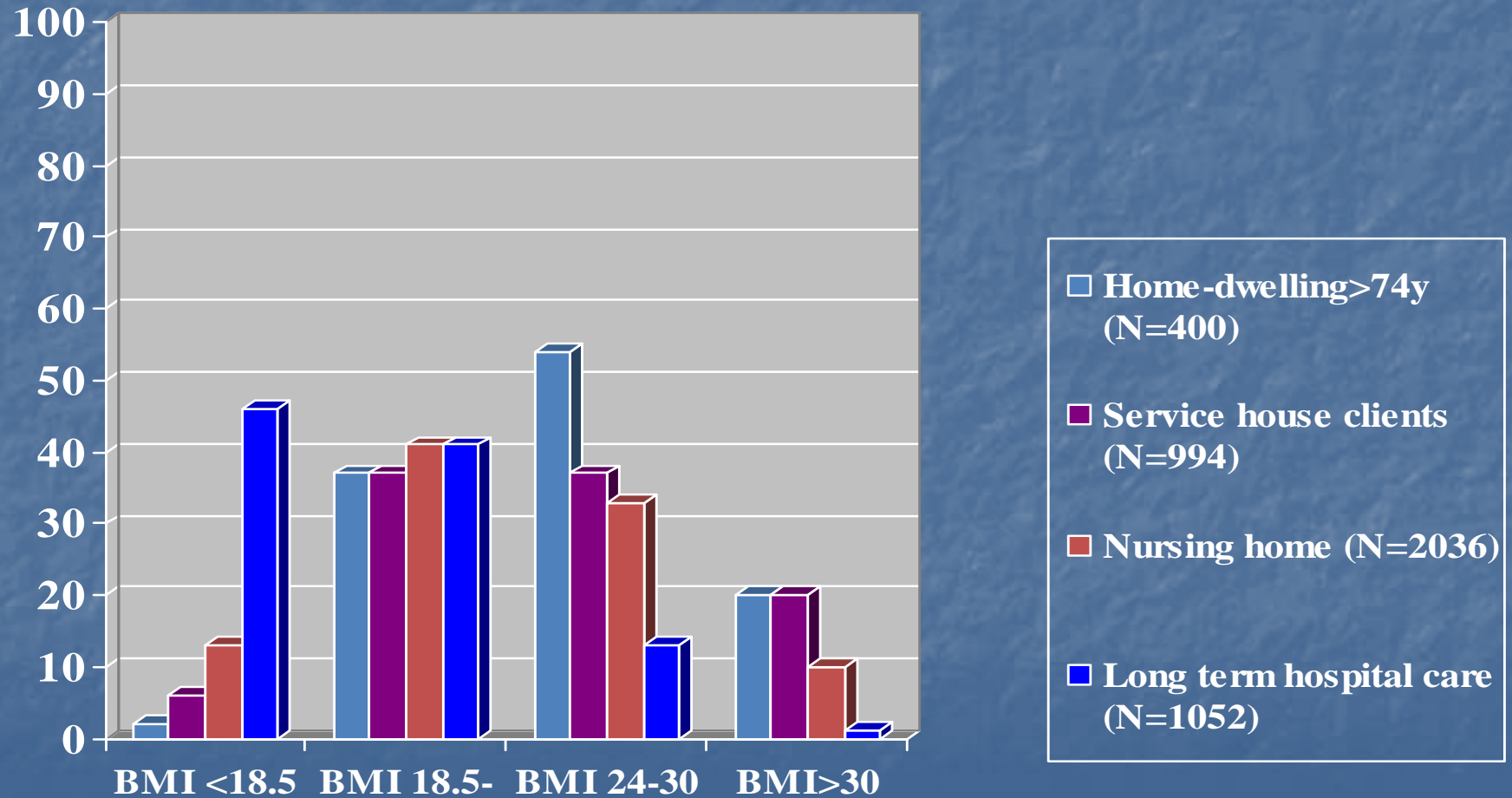
- Epidemiological studies:
  - Examining problems related to nutritional status of various older populations
  - Investigating vitamin D status in older population (Lamberg-Allardt et al)
- Intervention studies
  - Effects of probiotics in frail elderly population (Pitkala et al. 2007)
  - Effects of nutritional education in older population (Sallinen et al. 2007) or among professionals (Suominen et al. 2007)

# Epidemiological studies on nutritional status in various elderly populations



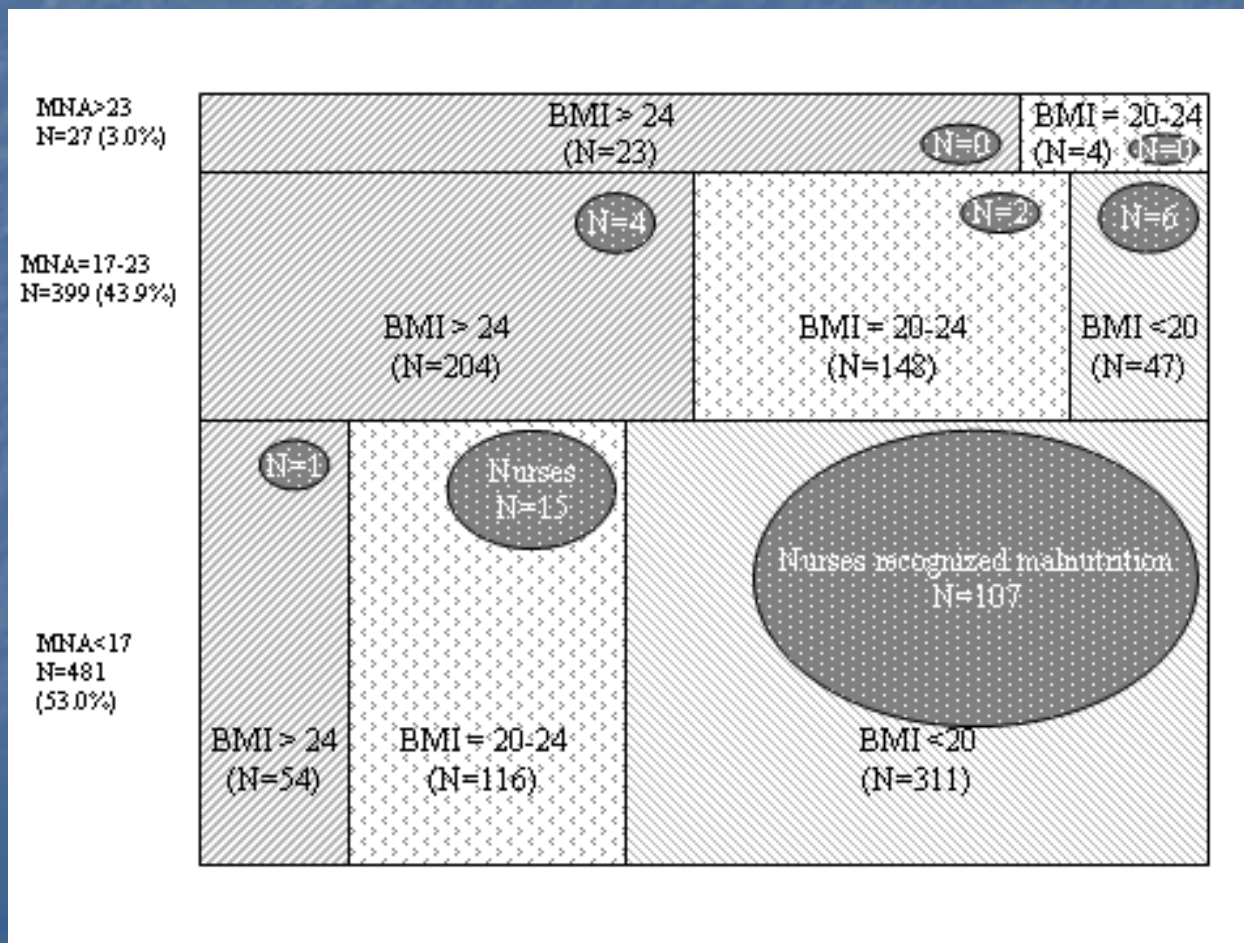
# BMI in various elderly populations in Finland

%



# Recognition of older people's malnutrition in hospitals

- Nurses recognized only 25.6% of the true cases (MNA<17) (Suominen et al. 2009)



# Educational intervention in institutions

- Educational program in institutions aimed
  - to recognize malnutrition
  - to improve professionals' skills to assess the nutrition of aged residents
  - to respond to the problems in residents' nutrition
- One year educational programme included six sessions
- Mean energy intake of residents increased in average 21% from 1230 kcal to 1534 kcal
- BMI ↑ and MNA ↑
- Suominen MH et al. Eur J Clin Nutr, 2007.

# Further plans ...

- Nutritional intervention of home care clients by offering nutritional supplements for those at risk of malnutrition (RCT)
- Nutritional intervention of dementia patients in order to prevent behavioral and psychological symptoms of dementia (RCT)
- Tailored nutritional care of dementia patients and their caregivers at home (RCT)
- Deepening understanding of food and nutrient intakes of service housing clients (food diaries)

Thank you !

