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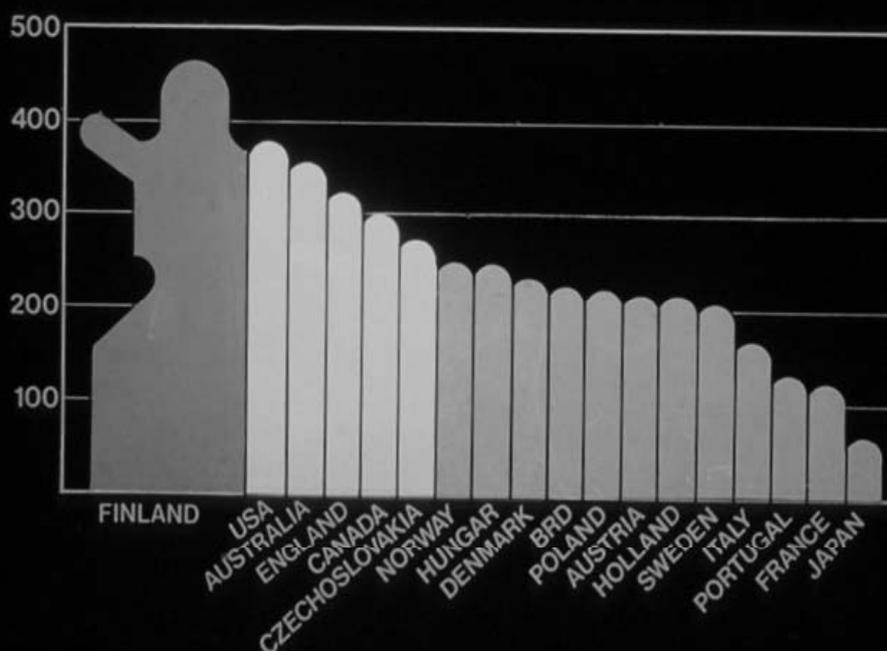
**MISSION POSSIBLE -
ELEMENTS OF A SUCCESSFUL PROGRAMME**

Professor Erkki Vartiainen, Assistant Director General

MORTALITY RATES OF ISCHAEMIC HEART DISEASE
AMONG MEN IN SELECTED COUNTRIES



CHD mortality
per 100.000 men in 1973



NORTH KARELIA PROJECT FINLAND

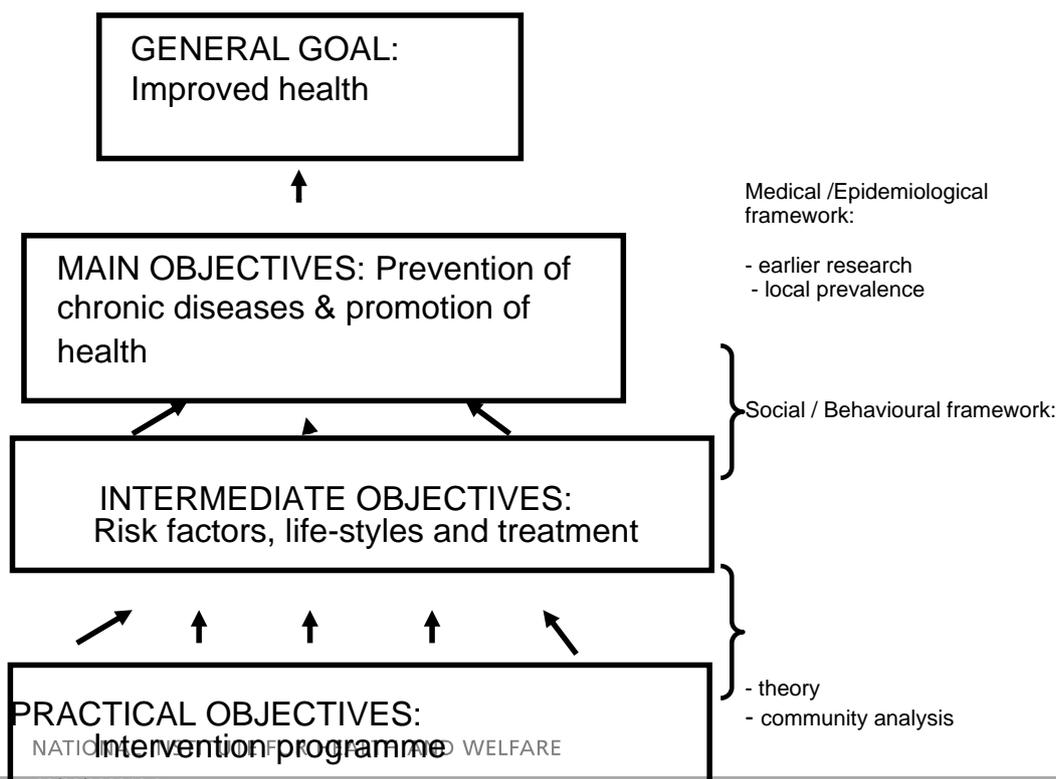


Two main questions in 1970's

- Can risk factors and behaviors be changed on population level ?
- If risk factors will reduce what will happen to the mortality?



North Karelia Project HIERARCHY OF OBJECTIVES



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FROM KARELIA TO NATIONAL ACTION



- First province of North Karelia as a pilot (5 years), then national action
- Good scientific evaluation to learn of the experience

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THEORETICAL PRINCIPLES OF THE INTERVENTIONS

MEDICAL FRAMEWORK:

- Primary prevention
- Main targets: smoking, diet, cholesterol, blood pressure
- population approach, general risk factor reduction emphasizing lifestyle changes

SOCIAL / BEHAVIOURAL FRAMEWORK

- Social marketing
- Behaviour modification
- Communication
- Innovation - diffusion
- Community organization



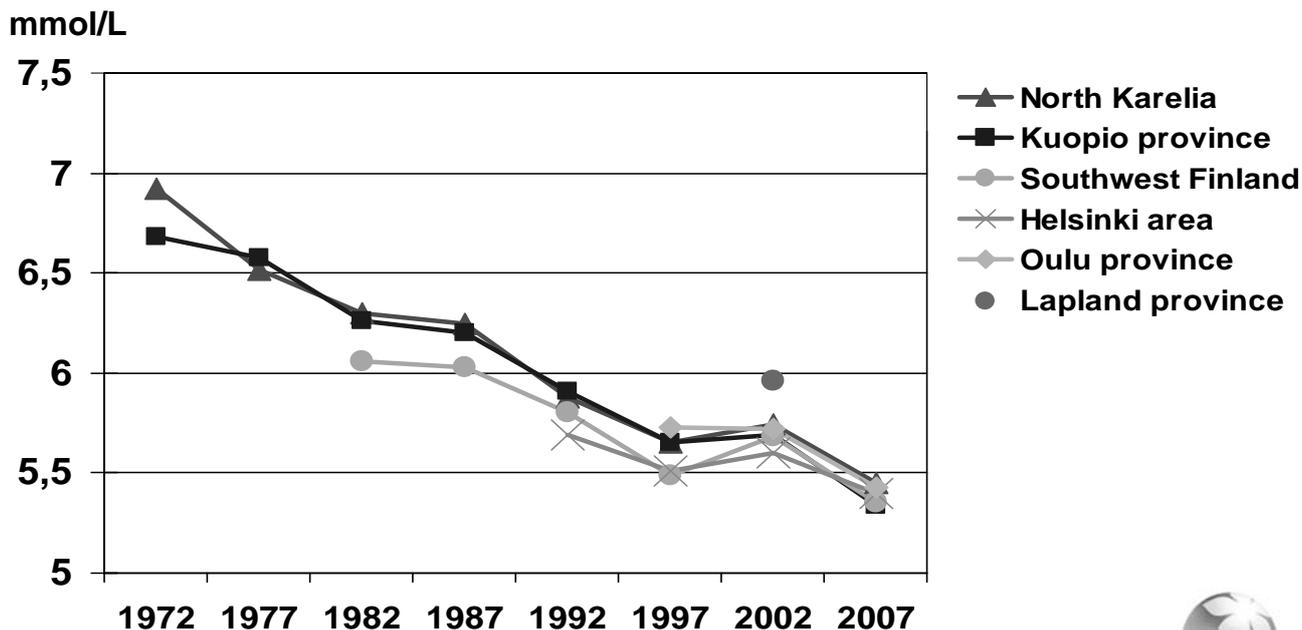
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Serum cholesterol in men aged 30-59 years



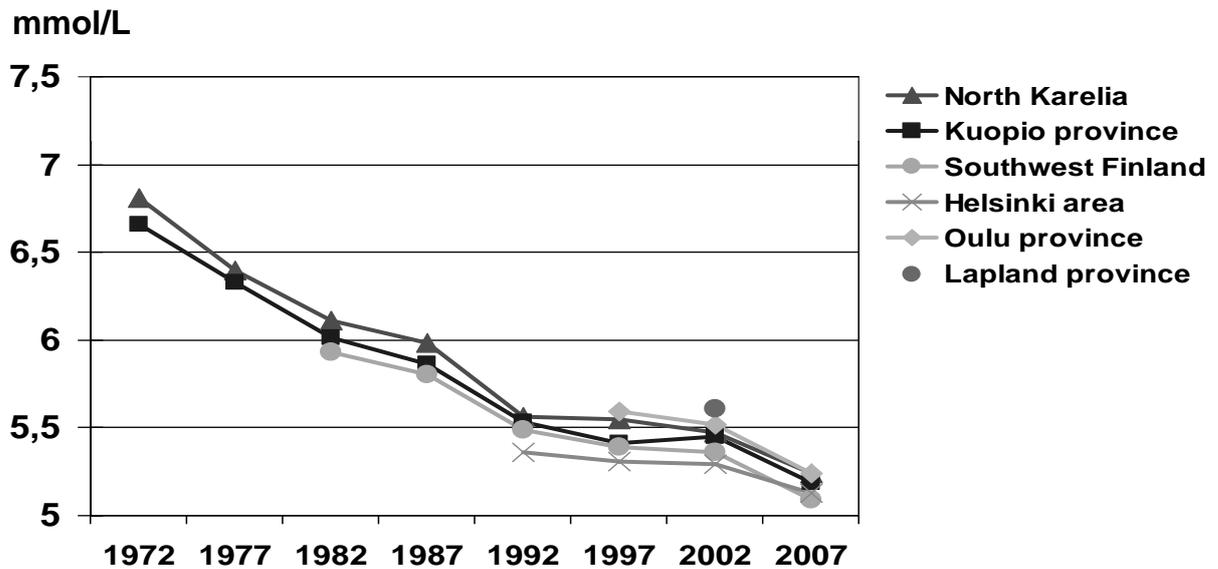
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Serum cholesterol in women aged 30-59 years



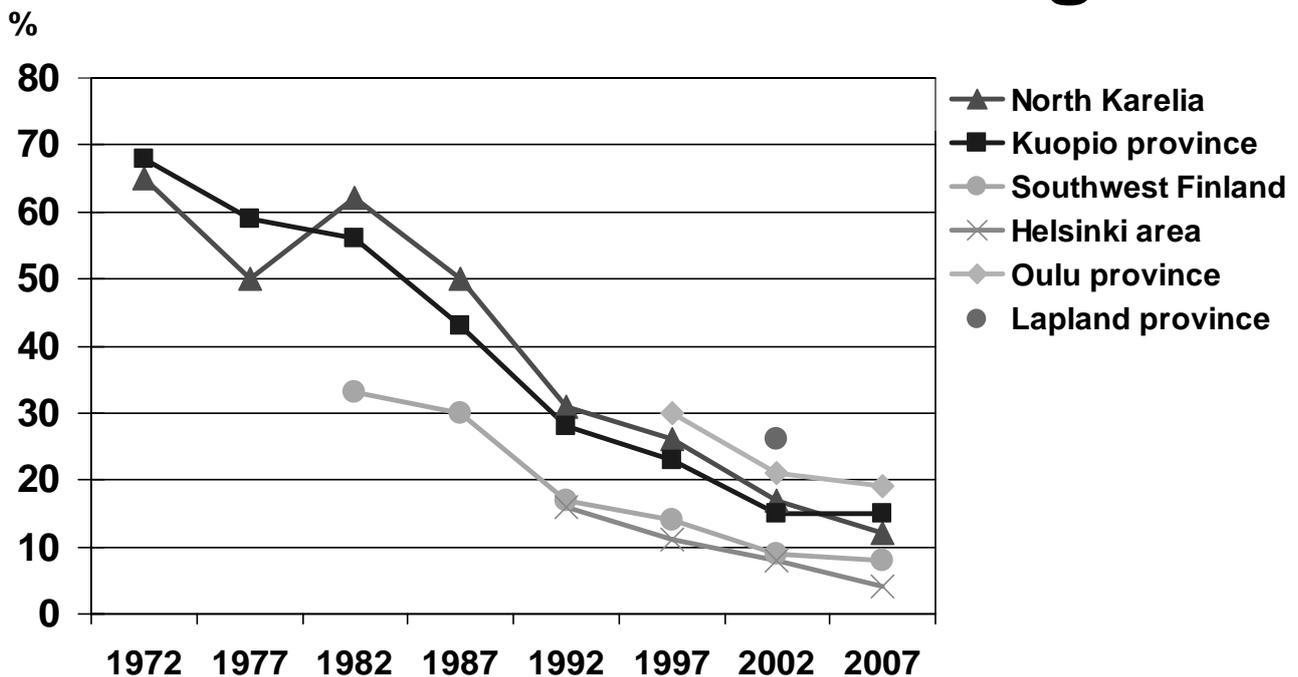
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Use of butter for cooking

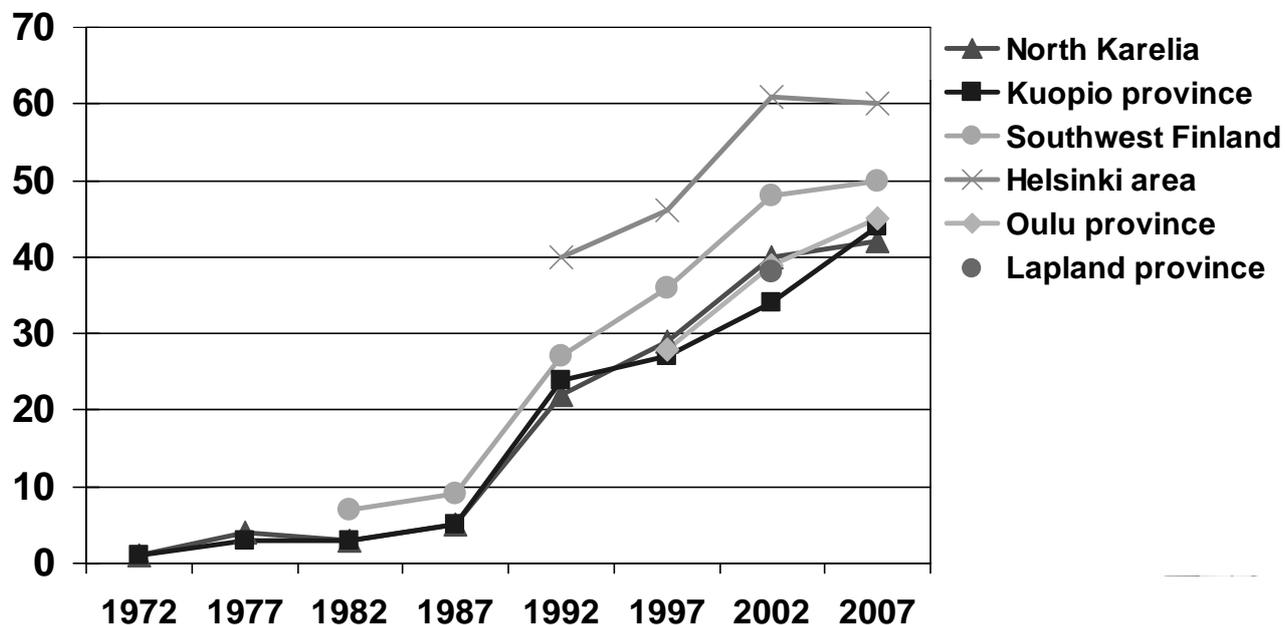


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Use of vegetable oil for cooking (men age 30-59)

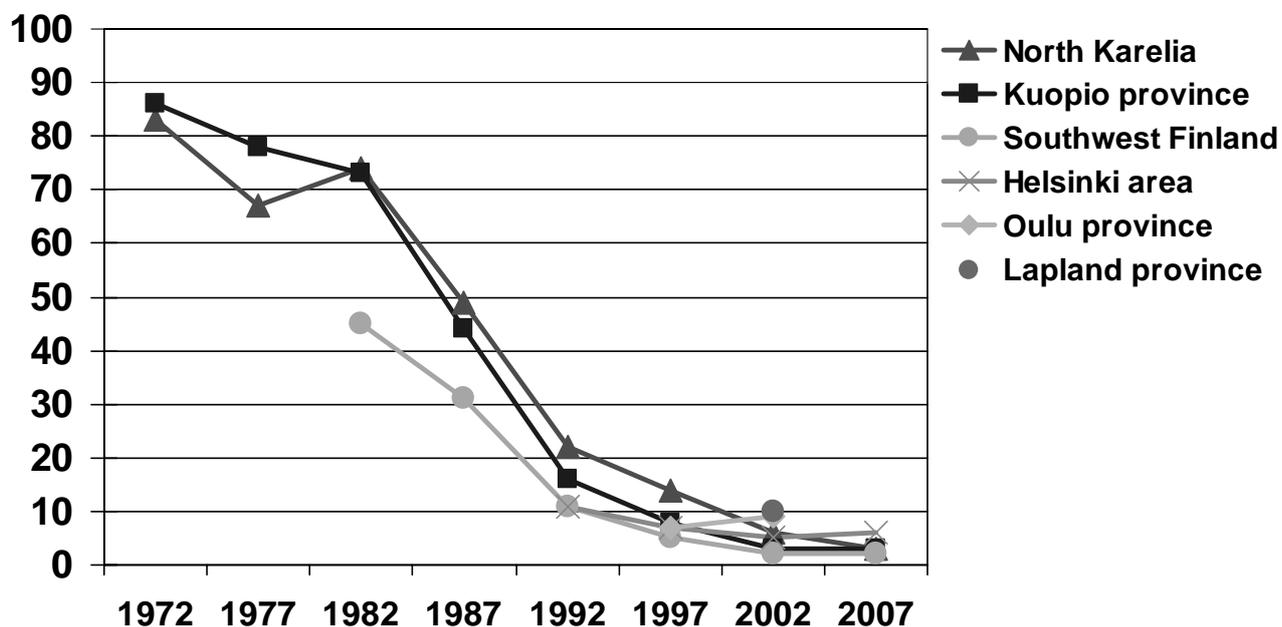


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Use of butter on bread %(men age 30-59)

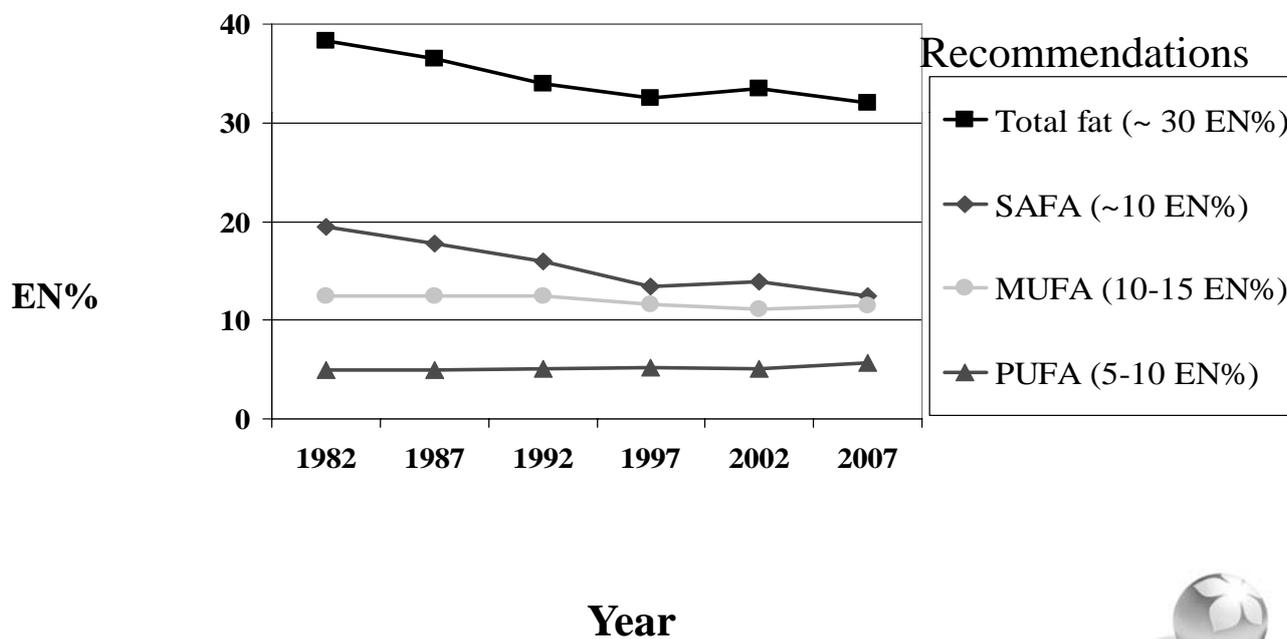


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Fat intake



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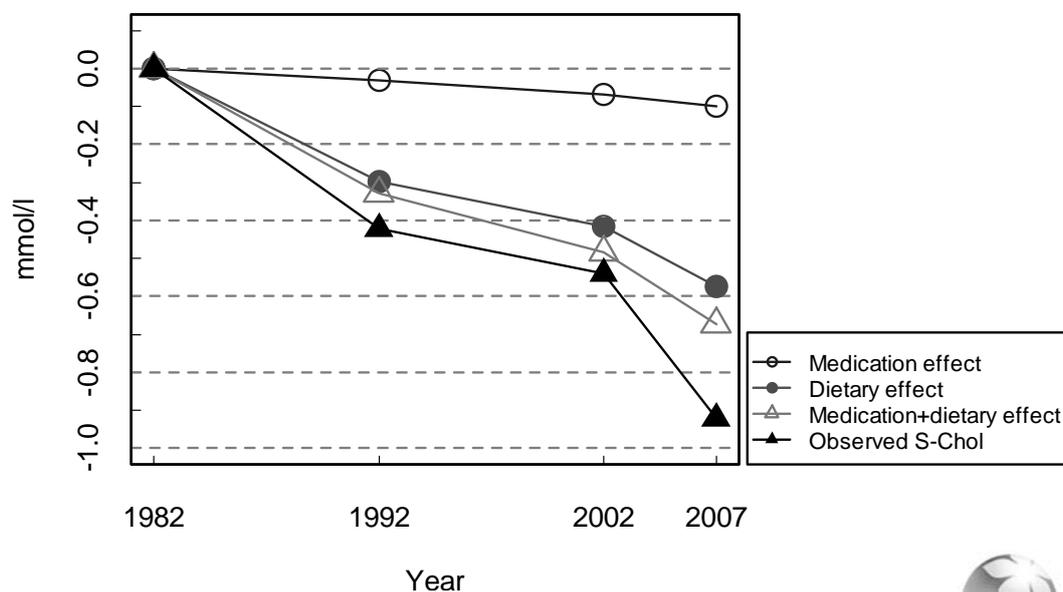


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Estimated effects on serum cholesterol



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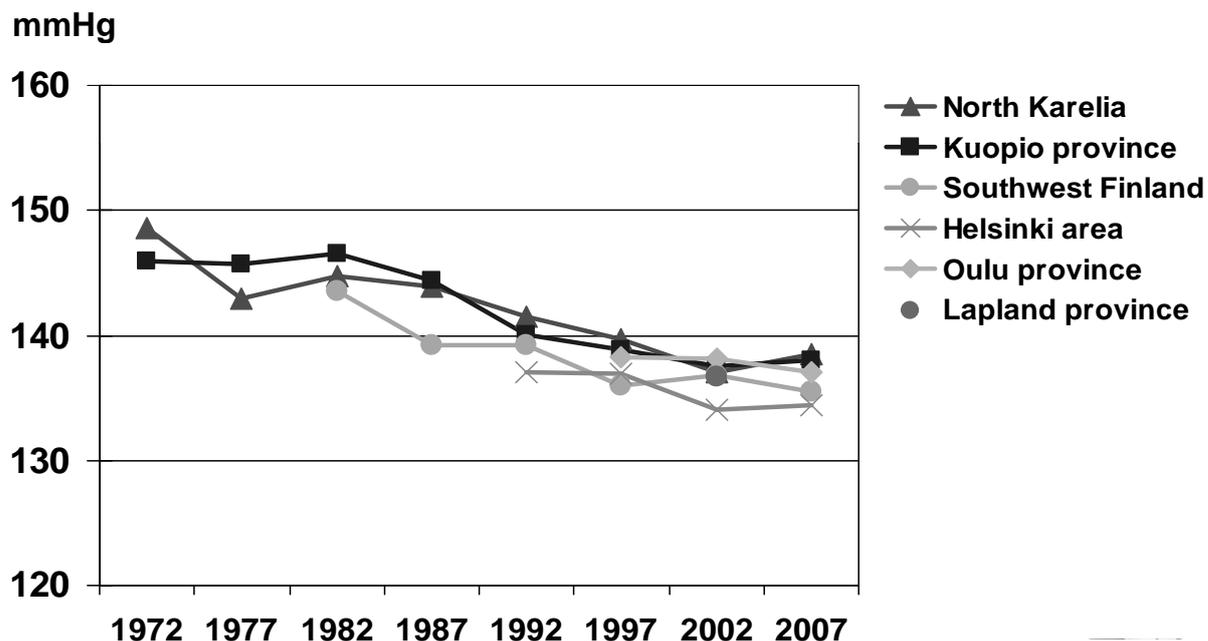


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Systolic blood pressure in men aged 30-59



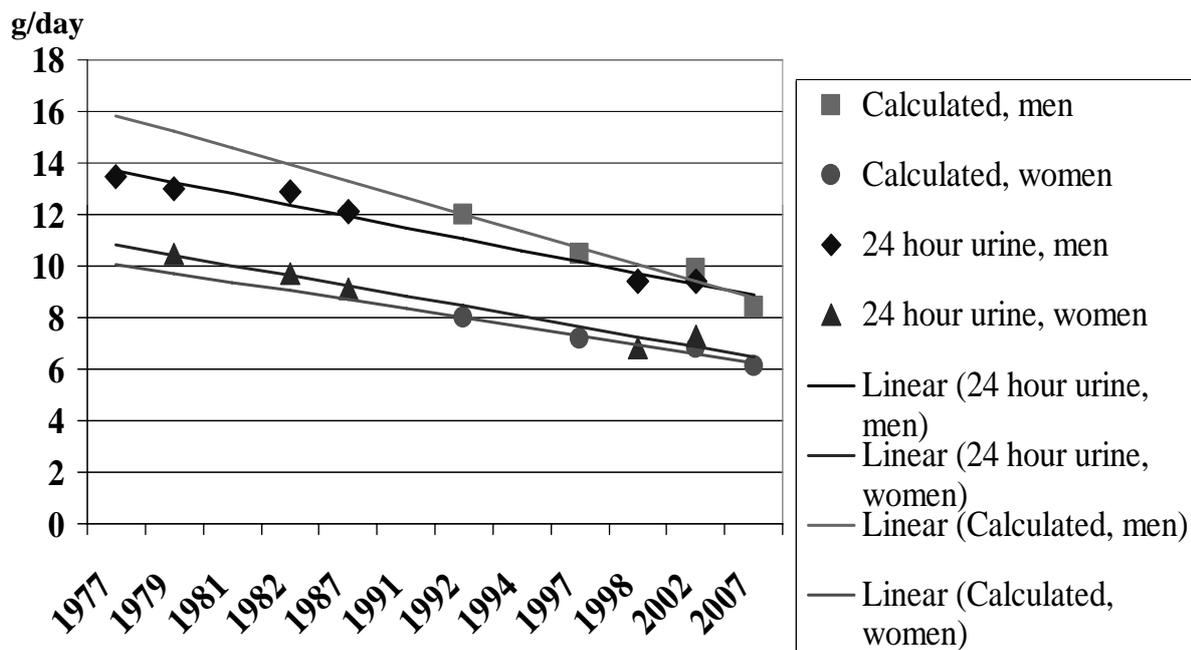
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FINRISKI²⁰⁰⁷

Salt intake in Finland 1977-2007



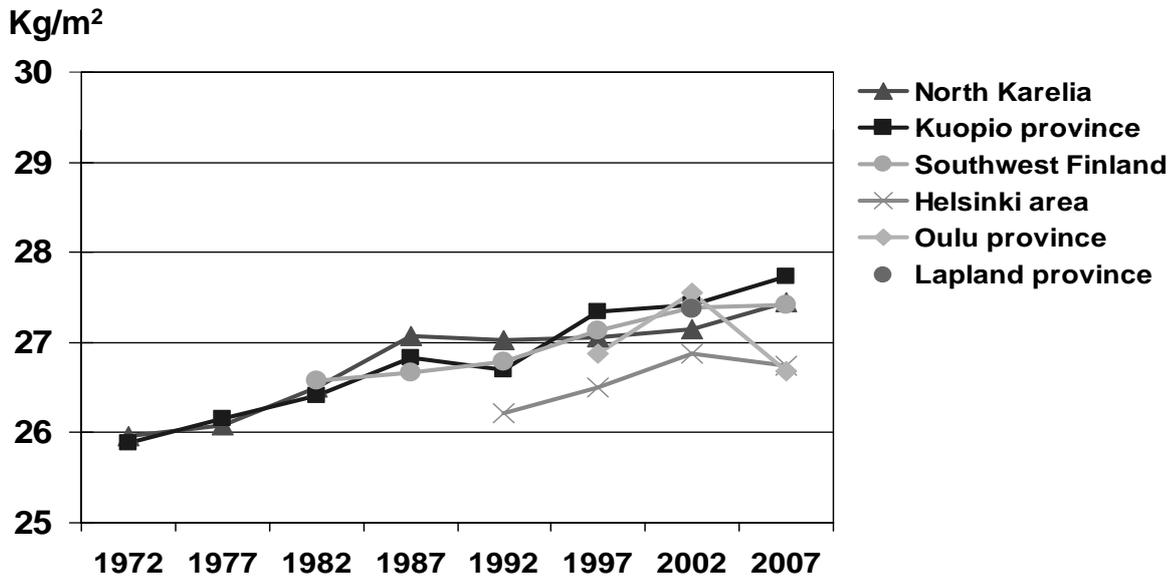
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Body mass index in men aged 30-59



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FINRISKI 2002

Why did diet change?

- North Karelia Project (community based CVD prevention program)
- Consensus in the medical community
- Political consensus
- Recommendations
- Cholesterol screening
- Fat debates
- Educational programs
- Business got interested

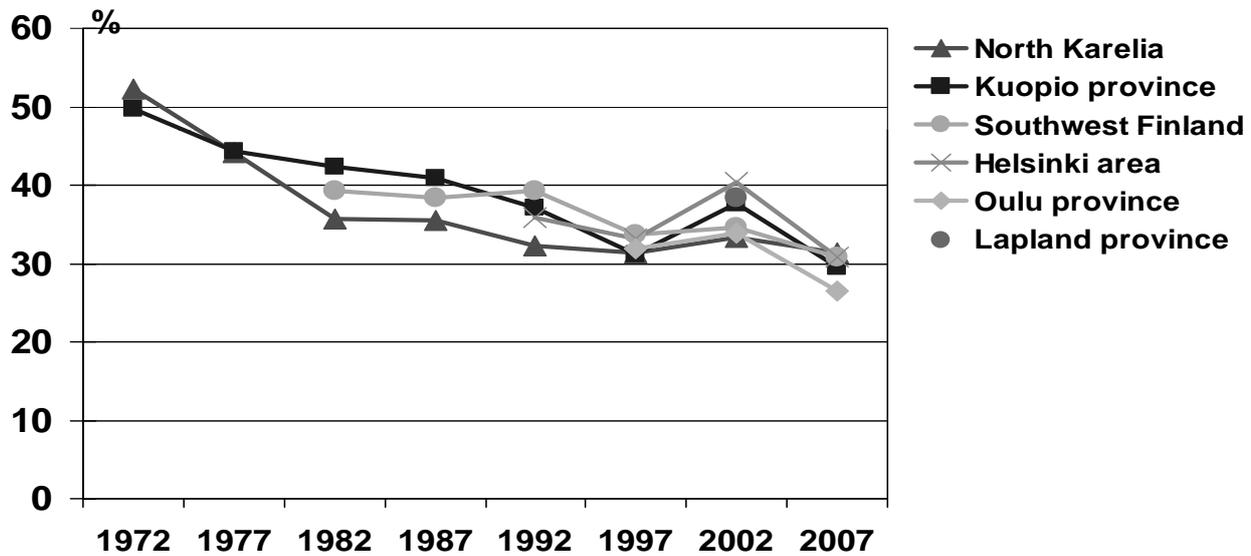
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Smoking in men aged 30-59 years



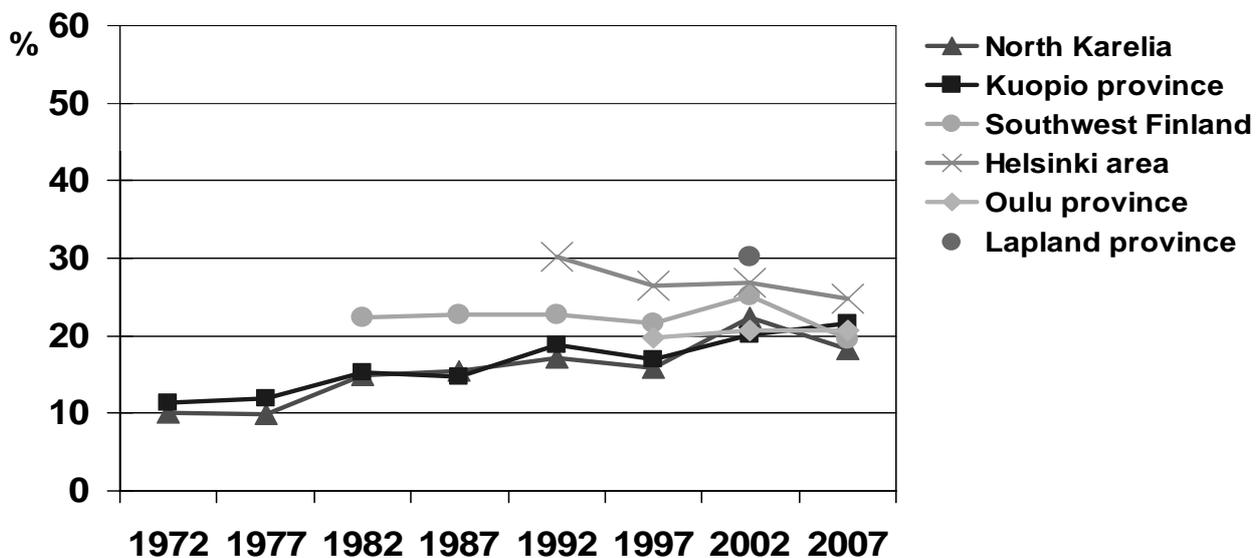
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Smoking in women aged 30-59 years



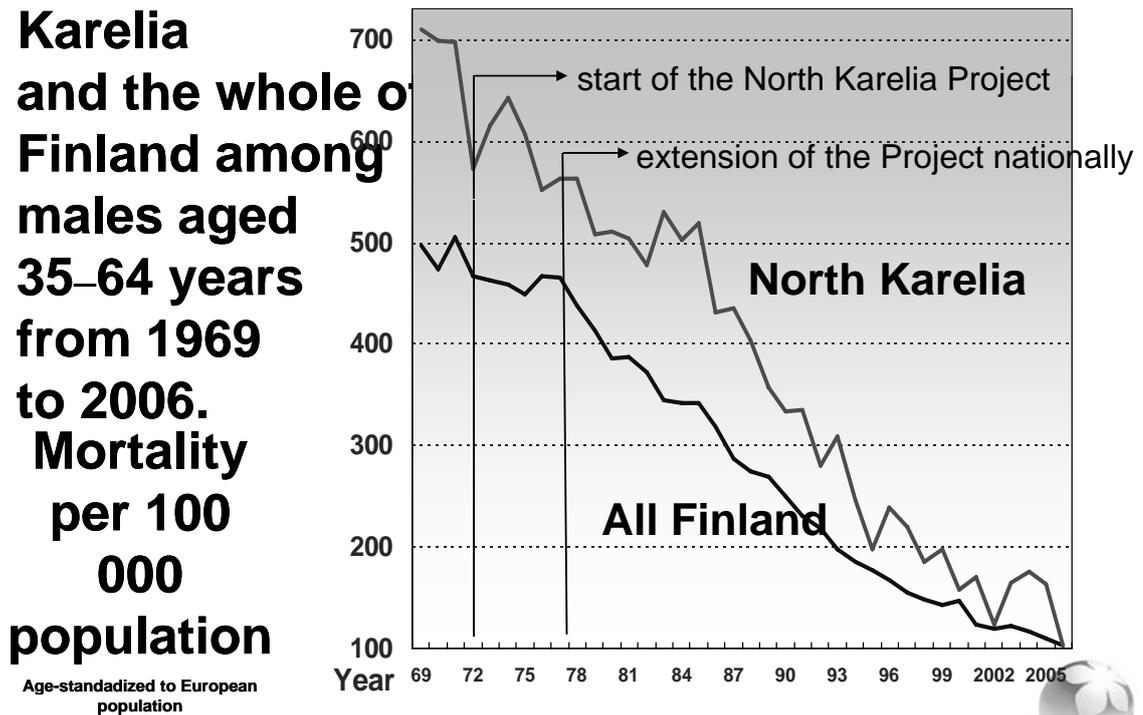
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Age-adjusted mortality rates of coronary heart disease in North Karelia and the whole of Finland among males aged 35–64 years from 1969 to 2006. Mortality per 100 000 population



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North Karelia Project



PREVENTION OF CVD

Do the risk factor changes explain the CVD mortality changes?

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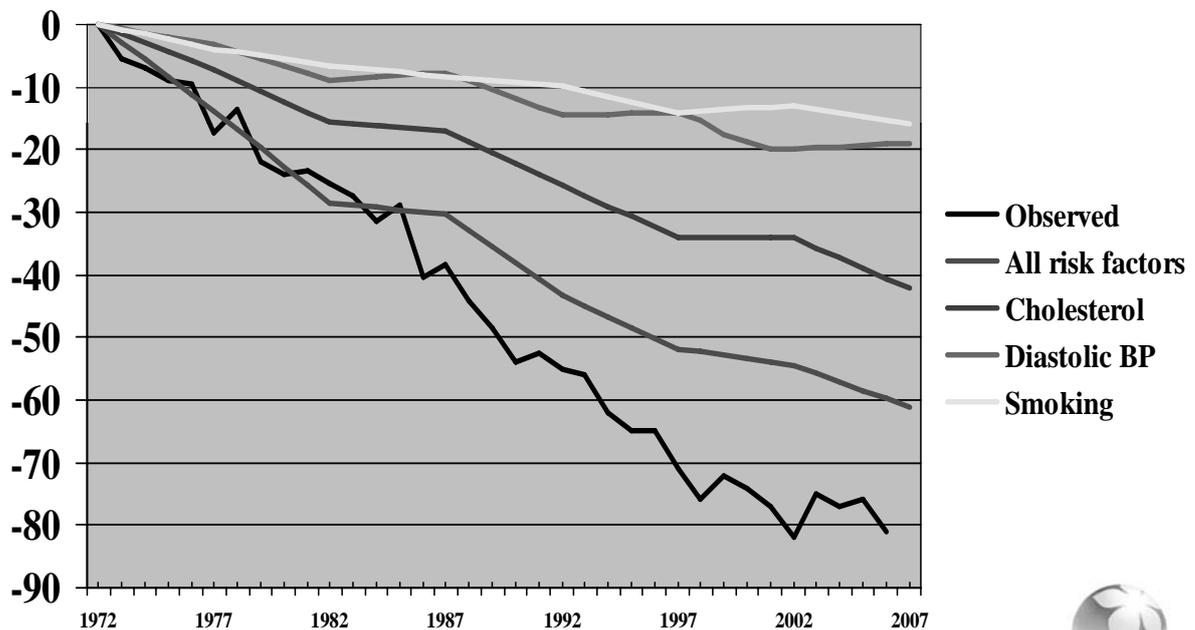
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Observed and predicted decline in CHD mortality in men



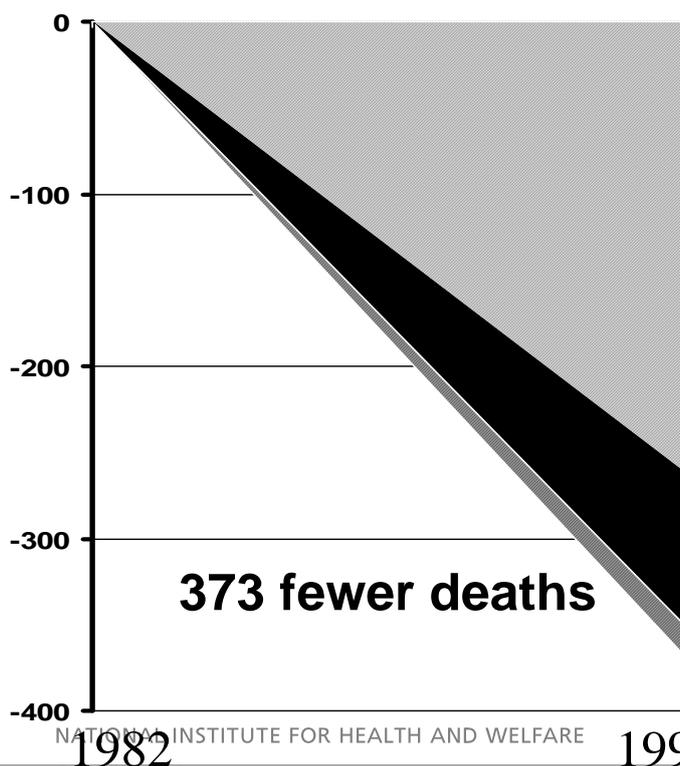
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CHD mortality fall in Finland 1982 – 1997



Risk Factors -71%

Cholesterol - 53%

Smoking - 11%

Blood pressure - 7%

Treatments -24%

AMI treatments - 4%

Secondary prevention - 8%

Heart failure - 2%

Angina: CABG & PTCA - 8%

Angina: Aspirin etc - 2%

Other Factors -5%

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1997

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MAJOR ELEMENTS OF SUCCESSFUL NATIONAL PREVENTIVE PROGRAM 1

- RESEARCH
- HEALTH SERVICES (ESPECIALLY PRIMARY HEALTH CARE)
- HEALTH EDUCATION PROGRAMMES (COALITIONS, NGO'S, COLLABORATION WITH MEDIA ETC.)
- SCHOOLS, EDUCATIONAL INSTITUTIONS
- INDUSTRY, BUSINESS



MAJOR ELEMENTS OF SUCCESSFUL NATIONAL PREVENTIVE PROGRAM 2

- NATIONAL DEMONSTRATION PROGRAMME(S), FOCAL POINT(S)
- POLICY DECISIONS, INTERSECTORAL COLLABORATION, LEGISLATION
- MONITORING SYSTEM
- INTERNATIONAL COLLABORATION



FINNISH HEART PLAN

How to reduce the number of cardiovascular disease morbidity and mortality by half

PROMOTING CARDIOVASCULAR HEALTH AND PREVENTING CARDIOVASCULAR DISEASES

Health Promotion

- Health in all decision making in the society
- Differences in health between population groups
- Resources on national and regional level – local units/networks in health promotion

Prevention

Population strategy

- Cardiovascular diseases and life style
- Physical activity
- Nutrition
 - Heart Symbol
 - Canteen catering
- Weight control
- Non-Smoking

Risk group strategy

- Prevention programme of type 2 diabetes
- Current Care Guidelines for Hypertension
- Current Care Guidelines for Smoking, Nicotine Dependency and Interventions for Cessation
- Guidelines of European Society of Cardiology on cardiovascular disease prevention in clinical practice

STRATEGIES OF EARLY DIAGNOSTICS AND TREATMENT

- Developing cooperation between special health care and primary health care
- Local treatment plans
- Diminishing differences in treatment between social groups
- Increasing the number of coronary angiographies
- Increasing the number of coronary angioplasties
- On call cardiology service
- Increasing the number of cardiologists
- Adequate medical treatment
- Woman's heart

REHABILITATION AND SECONDARY PREVENTION

- Developing cooperation between special health care and primary health care
- Rehabilitation resources
- "Out patient rehabilitation model" in health centres for heart patients
- Heart patient working and returning to work

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Thank you!

