



BETTER POLICIES FOR BETTER LIVES

The Economics of CVD Prevention

Franco Sassi PhD

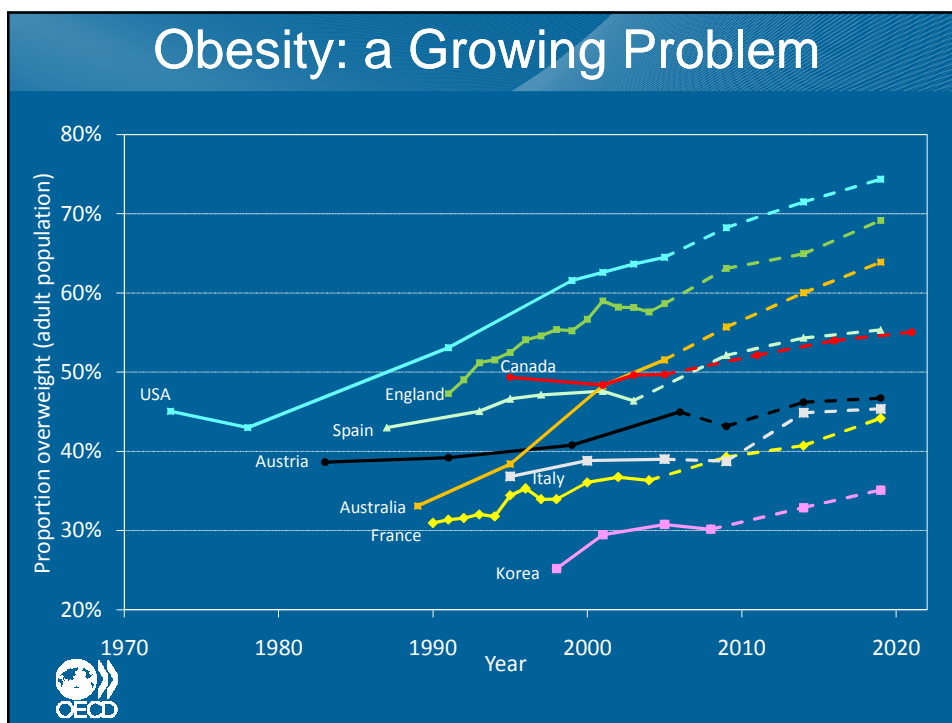
OECD – Health Division

Bruxelles, 23rd November 2011

Chronic Diseases and Prevention

- Increasing prevalence of chronic diseases in the OECD area
 - Incidence is increasing (ageing, lifestyles)
 - Mortality is decreasing (better healthcare)
- Some risk factors are declining (e.g. smoking)...
- ... but others are rising (e.g. unhealthy diet and physical inactivity)
- Prevention or treatment?





OECD Work on Prevention

Obesity and the Economics of Prevention
FIT NOT FAT
Franco Sassi

OECD

- OECD health working papers HWP 32, 45, 46, 48
- Paper in Lancet series on chronic diseases
- Lancet paper on priority interventions
- “Best buys” paper for the UN Summit on NCDs
- OECD/Euro Observatory book

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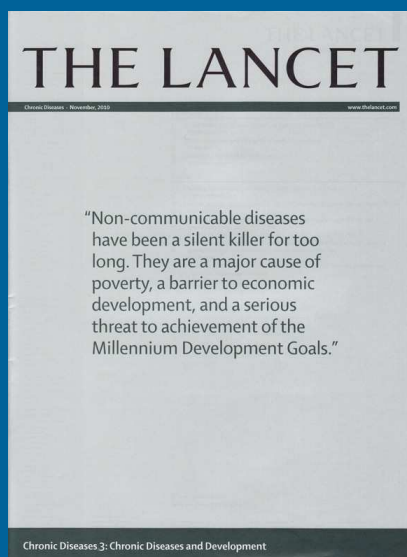
OECD Work on Prevention

Cecchini M, Sassi F, Lauer JA, Lee YY, Guajardo-Barron V, Chisholm D.

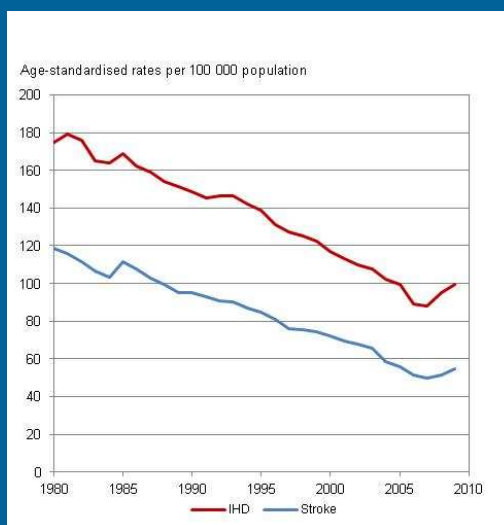
Tackling of unhealthy diets, physical inactivity, and obesity: health effects and cost-effectiveness

Lancet. 2010 Nov 20;376(9754):1775-84

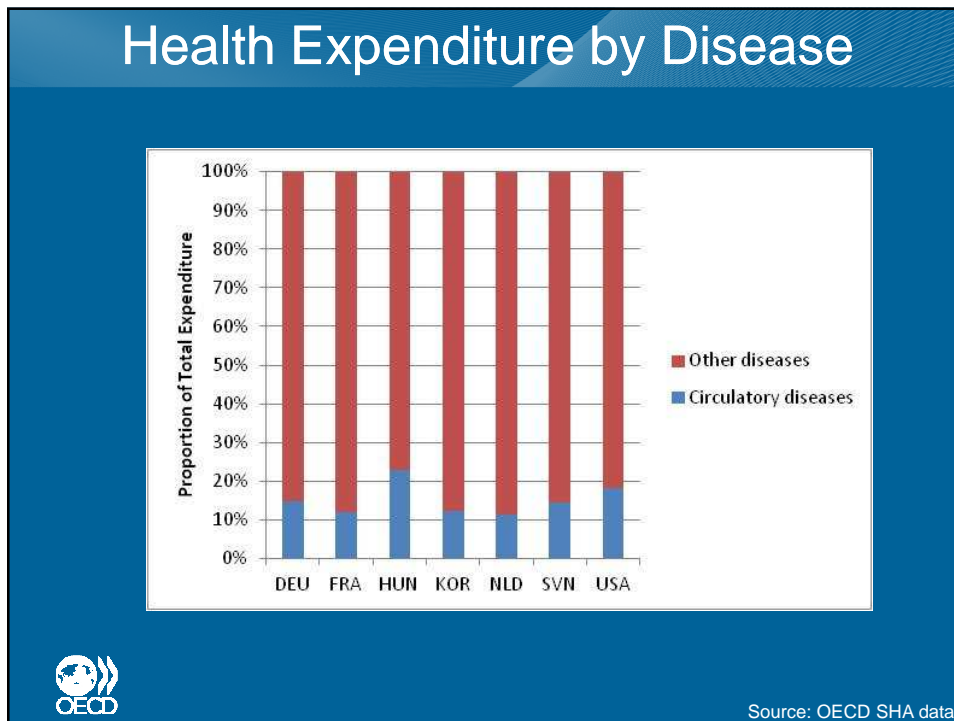
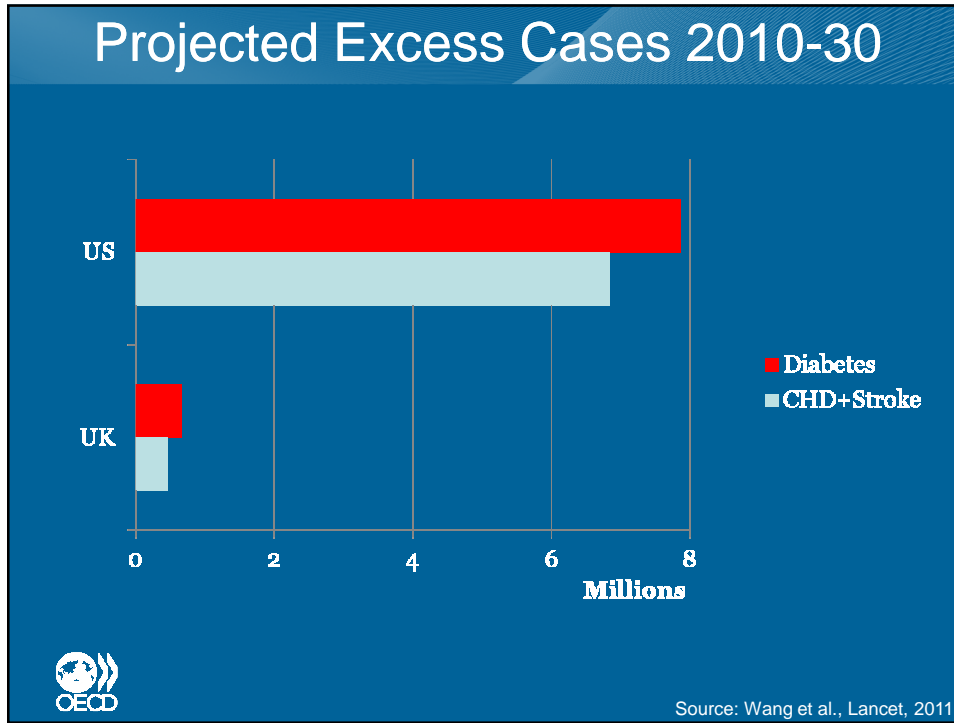
www.oecd.org/health/chronicdiseases



IHD and Stroke Mortality (OECD)



Source: OECD Health Data, 2011



Making an Economic Case

PREVENTION IS KEY: MAIN MESSAGES

- **A preventive approach is cost effective**—from national policy changes to local interventions. Calculations from the UK alone, for example, estimate that ill health related to poor diet and physical inactivity cost the country's health system 7.7 billion euros in 2006-7.¹¹

Source: EHN, 2011

The Right Approach?



Limitations of Cost-of-Illness Studies

- Do not measure outcomes of health care
- Global cost of illness would not be eliminated by any intervention; changes take place at the margin
- Interventions to reduce the cost of illness may not be available
- The human capital approach does not reflect the real cost of morbidity and mortality



What Policy Options?

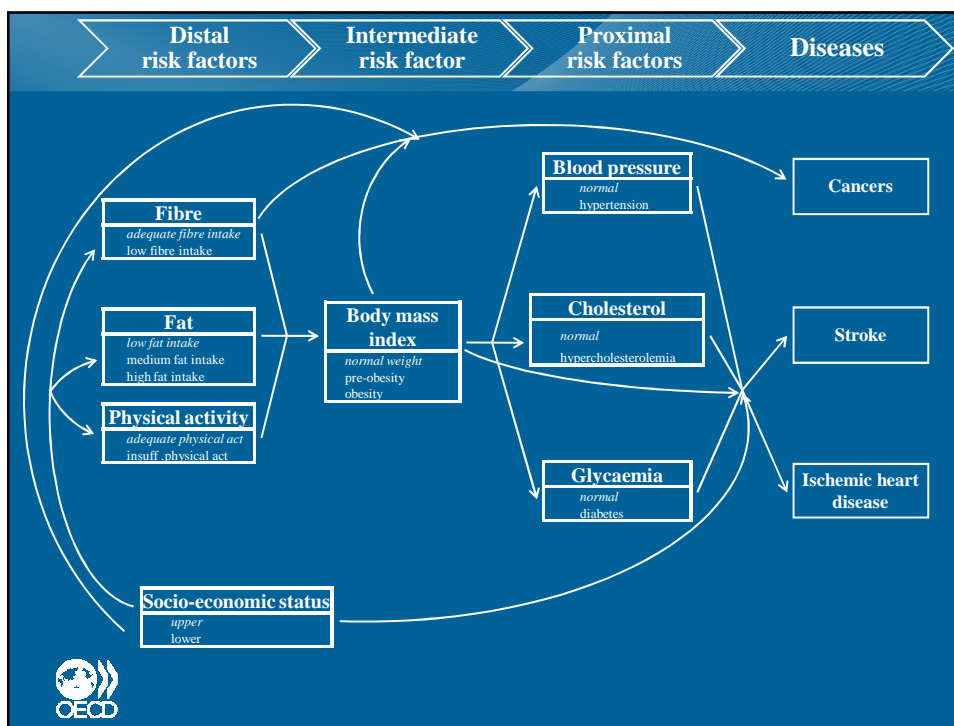
- Increase choice
- Information, education, change established preferences (nudging)
- Raise the price of unhealthy choices
- Ban unhealthy behaviours



WHO “Best Buys”

Unhealthy diet (15-30m DALYs; 1-2% global burden) ^a	Reduce salt intake * Replace trans fat with polyunsaturated fat * Promote public awareness about diet * Restrict marketing of food and beverages to children Replace saturated fat with unsaturated fat Manage food taxes and subsidies Offer counselling in primary care Provide health education in worksites Promote healthy eating in schools	Effect of salt reduction: 5 m DALYs averted Other interventions: Not yet assessed globally	Very cost-effective	Very low cost	Highly feasible
			Very cost-effective? (more studies needed)	Very low cost	Highly feasible
			Quite cost-effective	Higher cost	Feasible (primary care)
			Less cost-effective		Highly feasible
Physical inactivity (> 30m DALYs; 2.1% global burden)	Promote physical activity (mass media) * Promote physical activity (communities) Support active transport strategies Offer counselling in primary care Promote physical activity in worksites Promote physical activity in schools	Not yet assessed globally	Very cost-effective	Very low cost	Highly feasible
			Not assessed globally	Not assessed globally	Intersectional action
			Quite cost-effective	Higher cost	Feasible (primary care)
			Less cost-effective		Highly feasible
Cardiovascular disease (CVD) & diabetes (170m DALYs; 11.3% global burden)	Counselling & multi-drug therapy (including glycaemic control for diabetes mellitus) for people (≥30 years), with 10-year risk of fatal or nonfatal cardiovascular events ≥ 30% ^a * Aspirin therapy for acute myocardial infarction* Counselling & multi-drug therapy (including glycaemic control for diabetes mellitus) for people (≥ 30 years), with a 10-year risk of fatal and nonfatal cardiovascular events ≥ 20%	60 m DALYs averted (33% CVD burden) 4 m DALYs averted (2% CVD burden) 70 m DALYs averted (40% CVD burden)	Very cost-effective	Quite low cost	Feasible (primary care)
			Very cost-effective	Quite low cost	
			Quite cost-effective	Higher cost	





Interventions

Health education and health promotion	Regulation and fiscal measures	Primary-care based interventions
Mass media campaigns	Fiscal measures (fruit and vegetables and foods high in fat)	Physician counselling of individuals at risk
School-based interventions	Government regulation or industry self-regulation of food advertising to children	Intensive physician and dietician counselling of individuals at risk
Worksite interventions	Compulsory food labelling	

The OECD logo is in the bottom left corner.

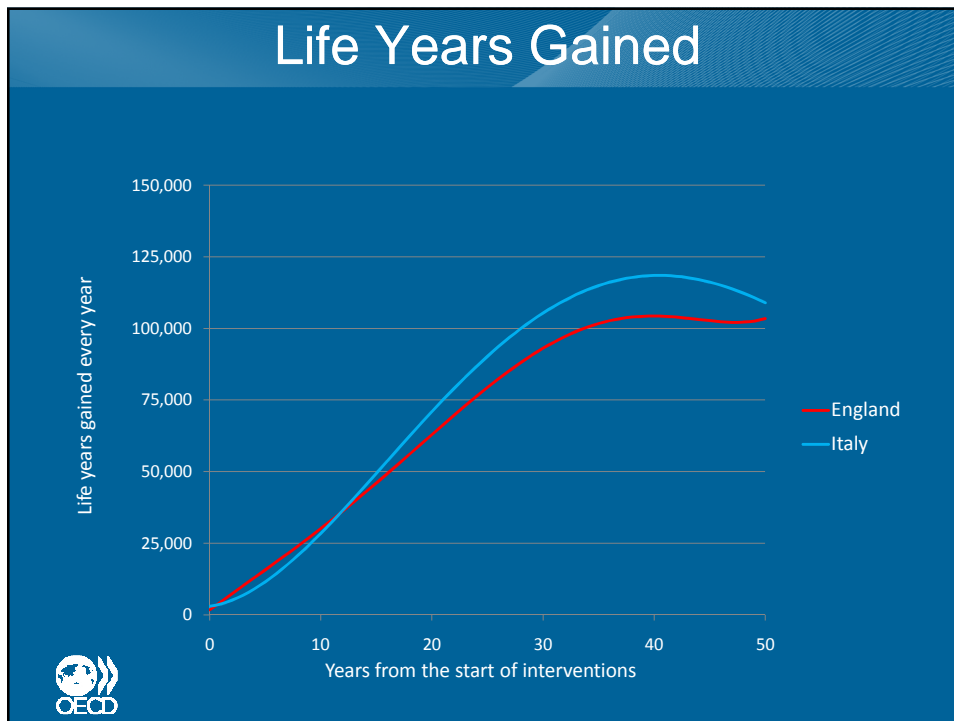
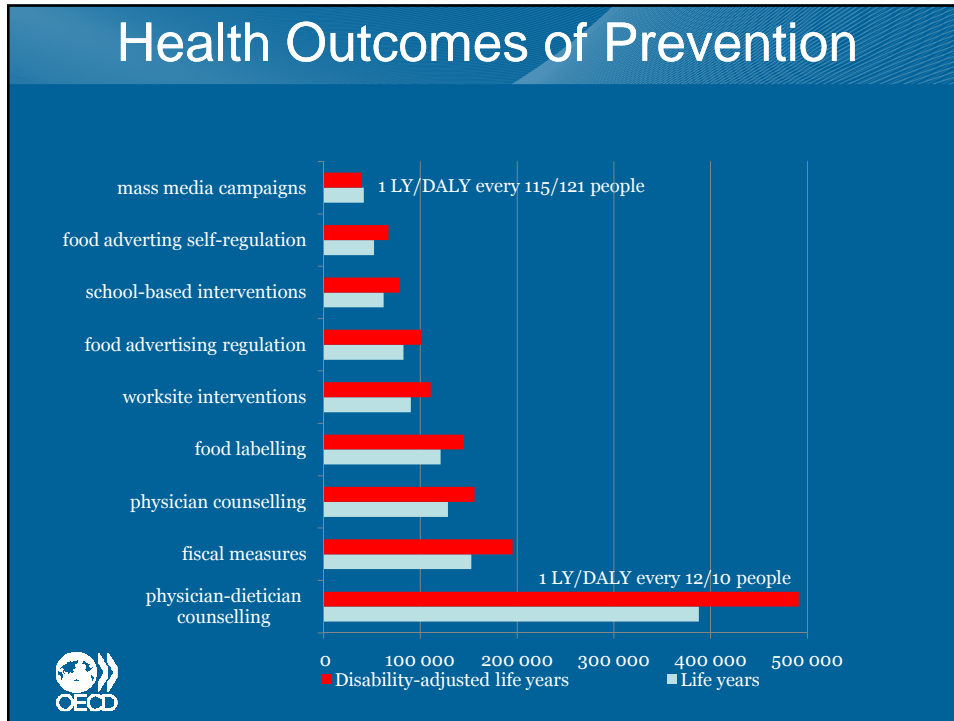
Expectations Must Be Realistic

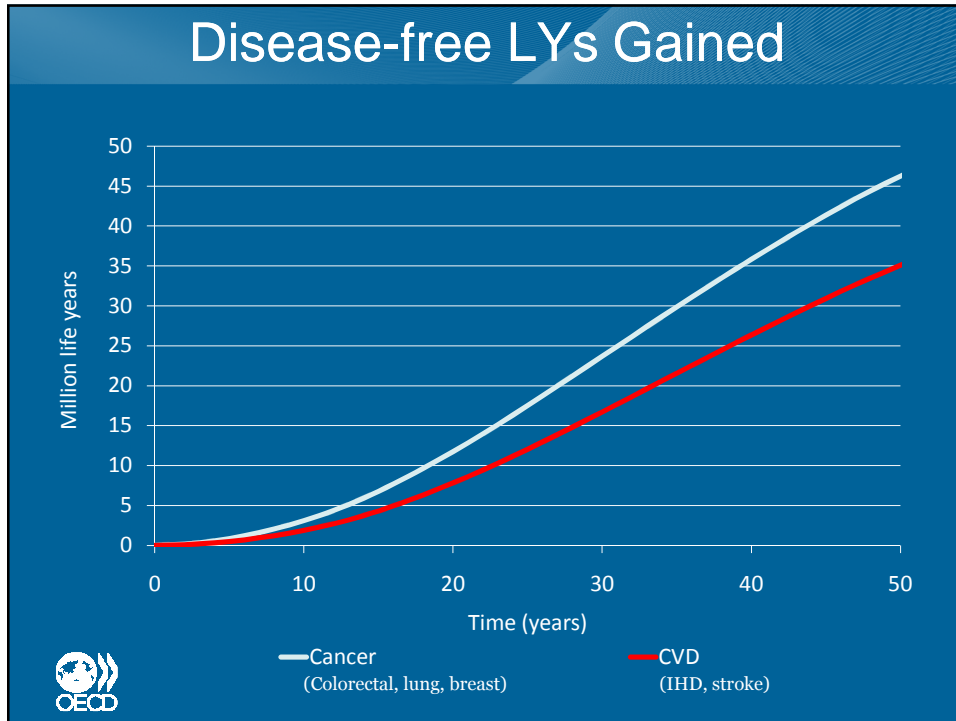
- Does prevention improve health?
- Does it reduce health expenditure?
- Is it cost-effective?
- Does it improve health inequalities?



Does Prevention Improve
Population Health?



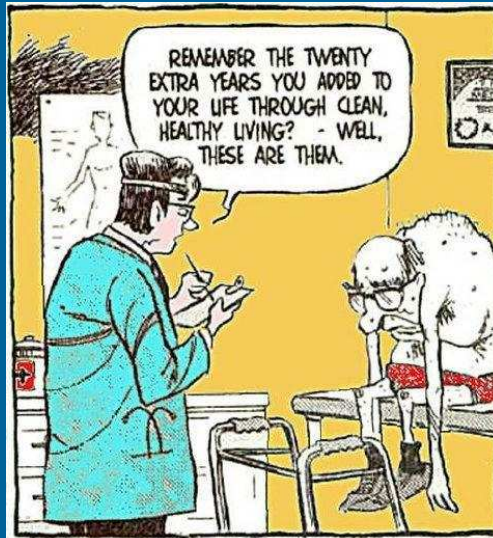
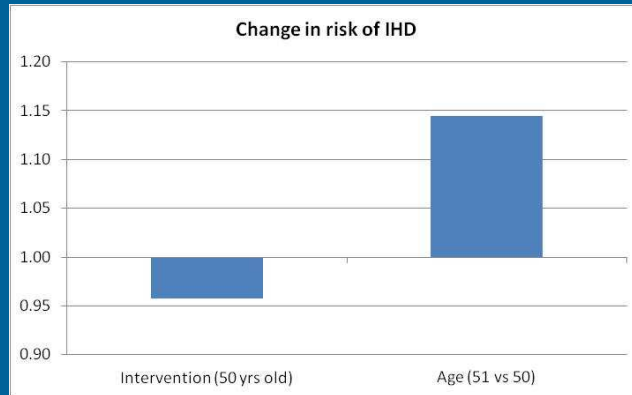


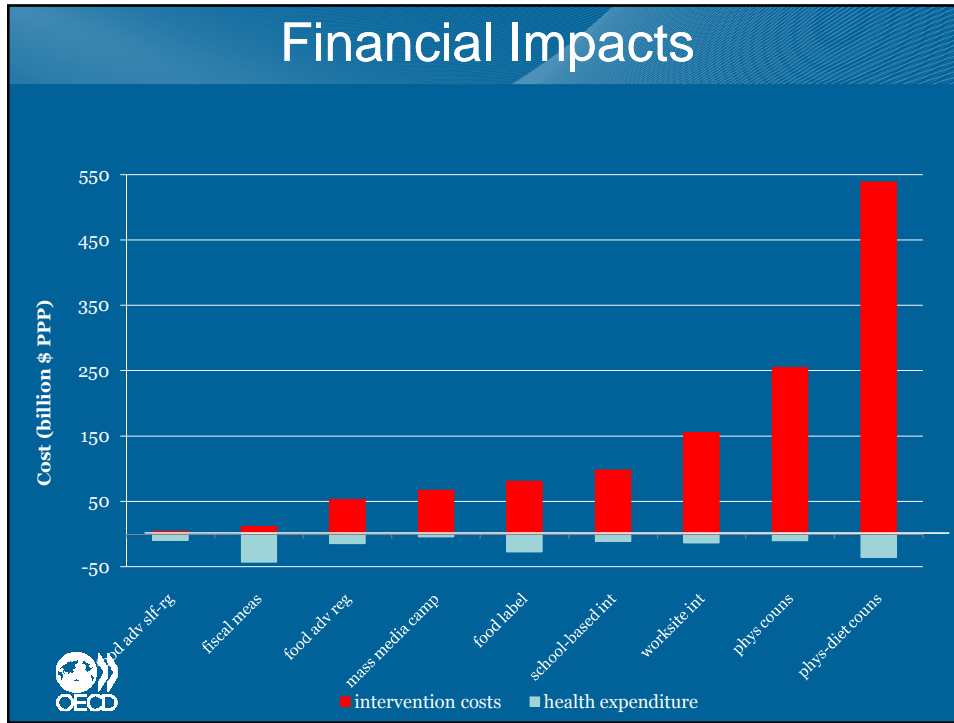


Does Prevention Reduce Expenditure on Health Care?

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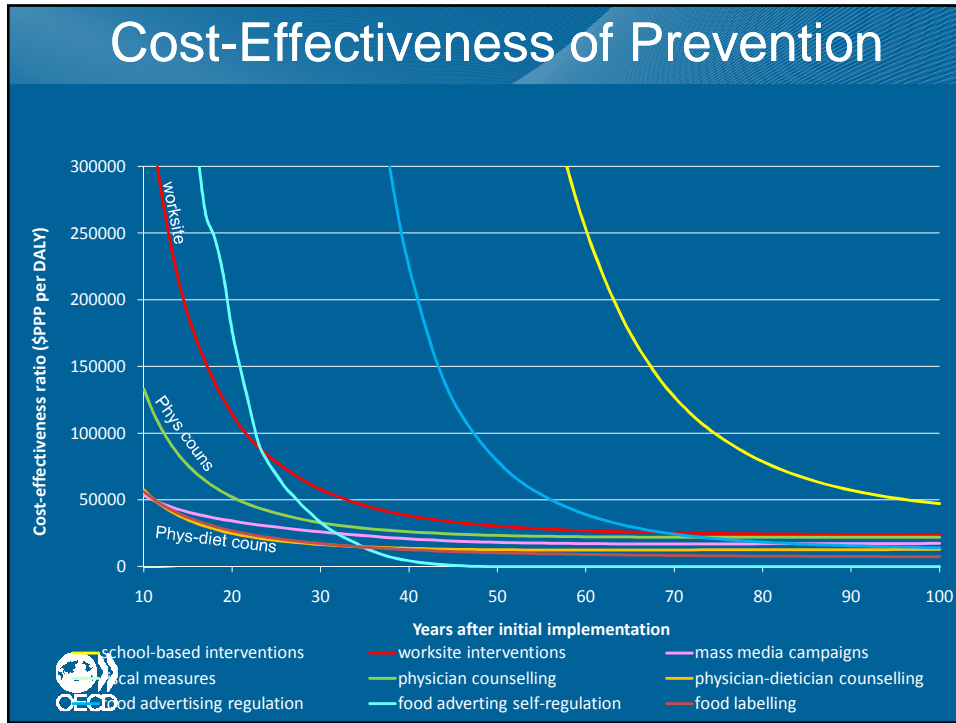
Interventions vs. Age





Is Prevention Cost-Effective?

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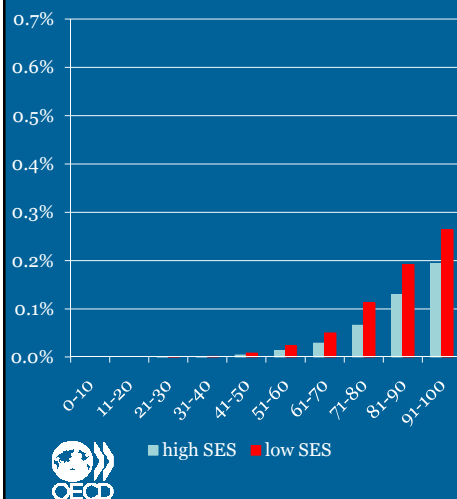


Does Prevention Improve Health Inequalities?

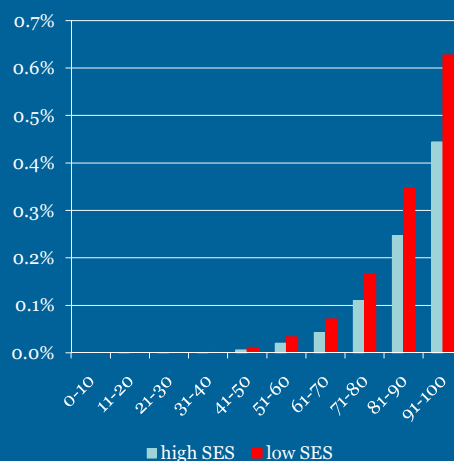
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Impact on Inequalities

Worksite interventions



Fiscal measures



■ high SES ■ low SES

■ high SES ■ low SES

Policy Implications

- Prevention is an effective and cost-effective way to improve population health
- Prevention can decrease health expenditure and improve inequalities, but not to a major degree
- Comprehensive strategies combining population and individual approaches provide best results
- Involvement of relevant stakeholders is key to the success of prevention

