Advisory

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# Bewegen loont!

NISB: 2 November, 2010

Frank van Kommer

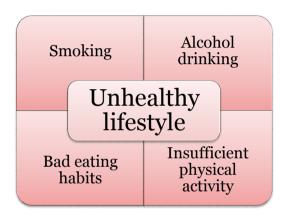


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### Agenda

- Project "Prevention pays for everyone"
- > Set up
- Physical inactivity and eating habits
  - Current situation
  - Our findings
- > PwC HealthCast
- ➤ Governments can play a huge role!
- Closing remarks

### **Primary Prevention Pays**



#### Investments in healthier lifestyle:

• €1 spent on reducing PHYSICAL INACTIVITY and OBESITY results into €0.30 – €1.30\* net benefits.

Dutch health care costs, attributable to physical inactivity and overweight\*

3.4%

\* source: Volksgezondheid toekomst verkenning 2006

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<sup>\*</sup>Lower boundary is a pessimistic scenario, upper boundary – an optimistic one

## Set up of the PwC project

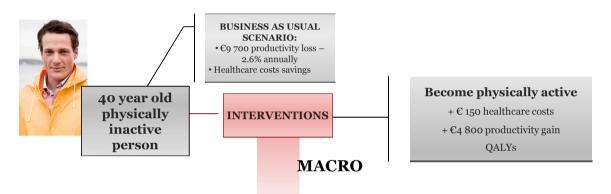
We took a **MACRO** approach.

A set of interventions into the lifestyle has an effect on different parameters.

We discounted all effects, and all numbers express **present value**.

	Prevention costs for society		Prevention benefits for society
Fir	ancial		
1	Intervention costs	1	Higher productivity of the workforce
2	Healthcare costs due to longer life and unrelated diseases		Less sick leave
		2	Reduction of healthcare costs for related diseases
No	n-financial		
		1	Better quality of life (QALYs gained)

### How does it work? – The LOGIC



	Intervention (5 yrs implementation)	Reach (% of population)	Total costs	Effectiveness	Benefits	ROI
Moderate	•Community	• 40%		o ==0/+ 1 ··		
reach	intervention (incl.		<b>0.57% pt</b> obesity reduction <b>120</b>		1200 mln	
scenario	mass media)	EU	EUR	+	EHD	83%
	•Intensive lifestyle	• 10%		<b>0.9% pt</b> physical inactivity reduction		
	programme			mactivity reduction		

## Main assumptions

**Discount rate** of costs – 4.0%

**Costs and benefits** remain fixed over time

**Productivity** – average annual labour costs in the Netherlands

**Productivity loss** – sick leave days due to physical inactivity and overweight

**Effectiveness ratios** of interventions are kept constant throughout different reach scenarios



### Physical inactivity

Deaths in high income countries, caused by physical inactivity, overweight, and low fruit and vegetable intake together\*

16%

\*source: Global Health Risks, WHO 2009

Physical inactivity in the Netherlands, 2007 – 2008\*

	4-17 yrs old	Adults
2007	13.3%	5.2%
2008	16.6%	6.1%

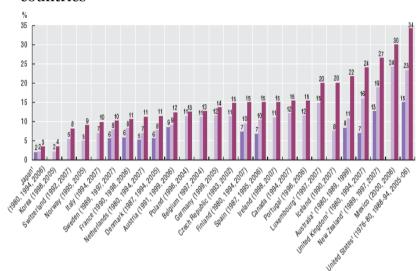
\*source: Bewegen in Nederland 2000-2008, TNO

Adults NNGB	<ul><li>&gt;30 minutes</li><li>5 days/wk</li></ul>
Youth NNGB	<ul><li>&gt;60 minutes</li><li>7 days/wk</li></ul>
Fitnorm	<ul><li>&gt;20 minutes</li><li>3 days/wk</li><li>vigorous exercise</li></ul>
Combinorm	• NNGB and/or Fitnorm

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# Obesity

# Obesity among adults is increasing in all OECD countries\*



\*source: OECD Health Data 2009, OECD

#### Overweight in the Netherlands, 2009\*

	Overweight	Moderately overweight	Obese
2000	44%	35%	9%
2005	46%	34%	11%
2008	46.9%	36%	11%
2009	47.2%	35%	12%

\*source: CBS Netherla

#### Obesity in different age groups, 2009\*

Age	<
15-24	4%
25-44	10%
45-64	13.5%
65+	15%

\*source: CBS Netherlands

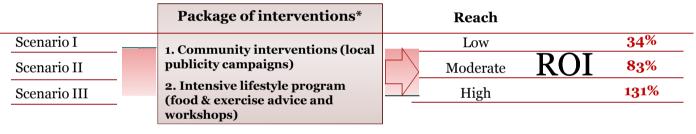
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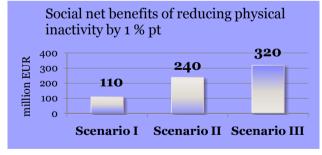
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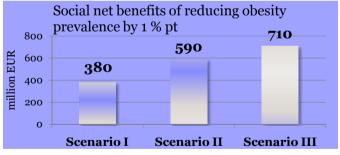
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### **Interventions**

Interventions to reduce the prevalence of physical inactivity and obesity PAY OFF:







\*source: The costs, effects and cost-effectiveness of counteracting overweight on a population level. A scientific base for policy targets for the Dutch national plan for action (Benelmans et al., 2007).

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### **Our findings**

Productivity loss due to physical inactivity-related sick leave – **2.6%**.

Productivity loss due to overweight-related sick leave – **0.63%**.

Productivity loss due to obese-related sick leave – **4.88%.** 

Gross social benefits of switching to a healthier lifestyle per additional active/ healthier weight person 8800 10000 8000 4600 6000 4000 1700 2000 Inactive into active Obese into Moderately moderately overweight into overweight normal weight

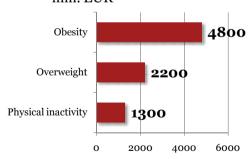
Over a working lifetime of a person who is physically inactive – it is a loss of approximately €9 700.\*

Over a lifetime it creates a loss of about €2 300.\*

Over a lifetime this is equal to the amount of approximately €18 200.\*

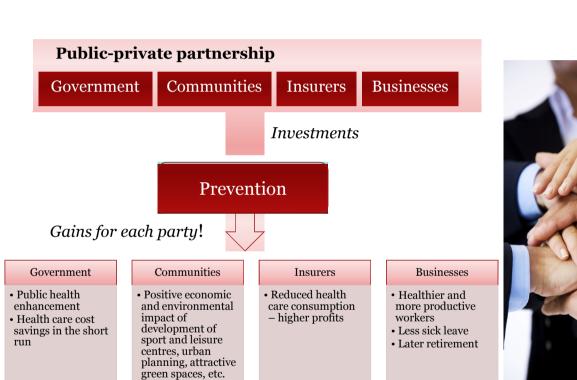
\* Assuming that a loss starts accumulating after a person becomes 40 years old on average.

## Total productivity loss for economy, mln. EUR



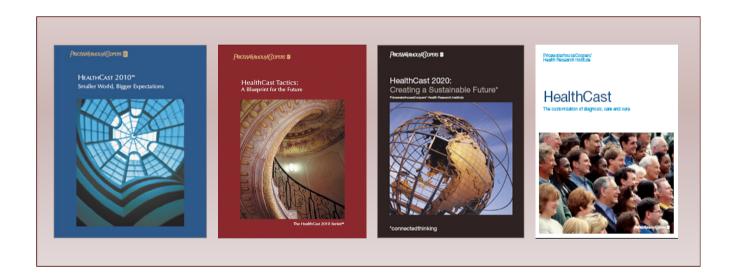
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### How to make it happen?



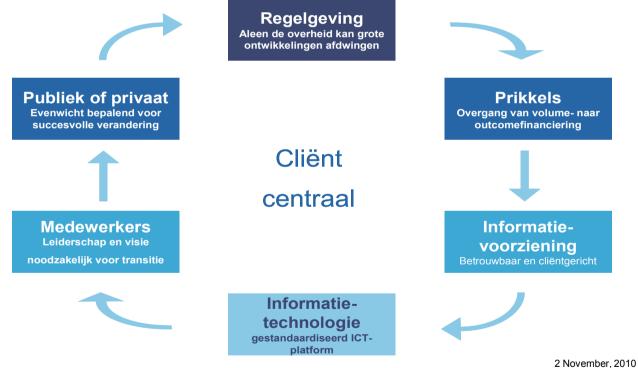
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### Al meer dan 10 jaar wereldwijd thoughtleadership door middel van HealthCast - studies

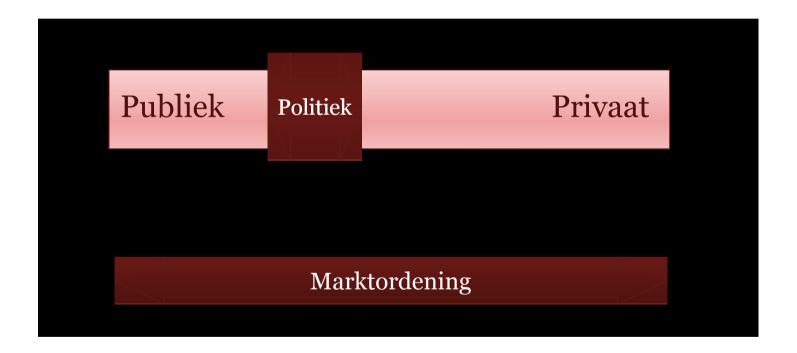


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Healthcast onderkent 6 regelknoppen om de cliënt centraal te stellen in het zorgstelsel



# Marktordening, publiek of privaat: dat is de vraag



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### Governments can play a huge role!

Food production standards

Urban design/ Transportation

Media

Health systems

Schools

**Employers** 



Quality standards; Nutritional labelling;

Incentives to promote access to fresh food;

Regulations limiting fast food locations/access;

Promotion ban on larger portion size;

Taxes on HFSS foods



Increase availability of sidewalks, bike lanes, open spaces;

Public transportation;

Building code policies that encourage physical activity;

Incentives to discourage driving



Control advertising of HFSS foods and beverages, either introduce a full or a partial ban; Use media to

educate



Parenting

courses:

access to

primary care

Incentives to promote lowcost, convenient health check-up points,

nutritional counselling; Prenatal weight: counselling;

nutritional Free or low-cost

Incentives to



Physical activity during/after school;

Healthy food at schools;

Education related to

Screening for weight and counselling;

walk or bike to schools



Employer coverage of nutritional counselling:

Communitywide initiatives to address obesity and physical inactivity;

Workplace weight management programmes;

Incentives to bike to work

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### Closing remarks

Primary
prevention should
become one of the
mile stones of
future health care
systems



- We found that THE RATES OF RETURN in physical activity and healthy weight interventions are significantly positive.

- Prevention pays for everyone:

Individuals - increases welfare and well-being

**Employers** - affects labour force productivity

**Providers** - frees up valuable capacity

**Payers** - reduces aggregate costs

**Governments** - reduces public health care spending and increases productivity

# Dank voor uw aandacht



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