

Advisory

www.pwc.com/nl

Bewegen loont!

NISB: 2 November, 2010

Frank van Kommer

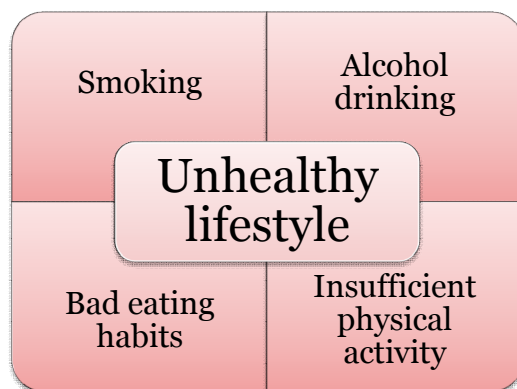


pwc

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.

*Lower boundary is a pessimistic scenario, upper boundary – an optimistic one

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

3.4%

* source: Volksgezondheid toekomst verkenning 2006

Set up of the PwC project

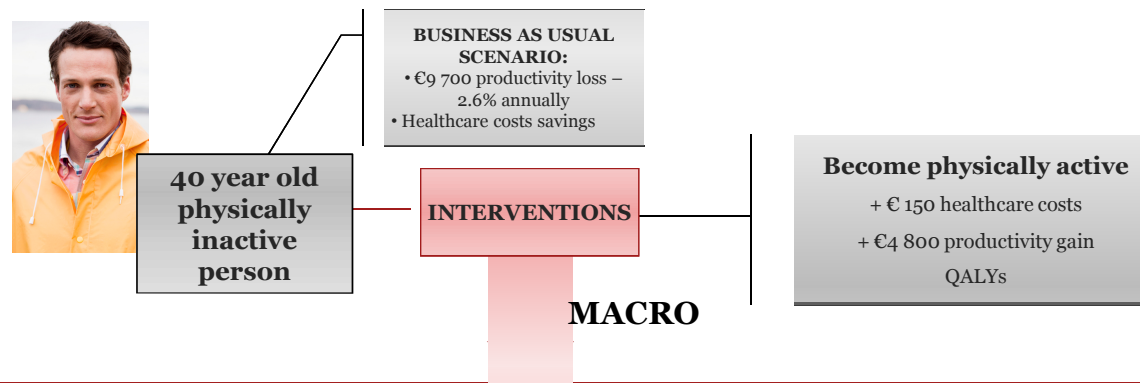
We took a **MACRO** approach.

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
Financial			
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
Non-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 reach scenario	<ul style="list-style-type: none"> •Community intervention (incl. mass media) •Intensive lifestyle programme 	<ul style="list-style-type: none"> • 40% • 10% 	668 mln EUR	0.57% pt obesity reduction + 0.9% pt physical inactivity reduction	1200 mln EUR	83%

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

- >30 minutes
- 5 days/wk

Youth
NNGB

- >60 minutes
- 7 days/wk

Fitnorm

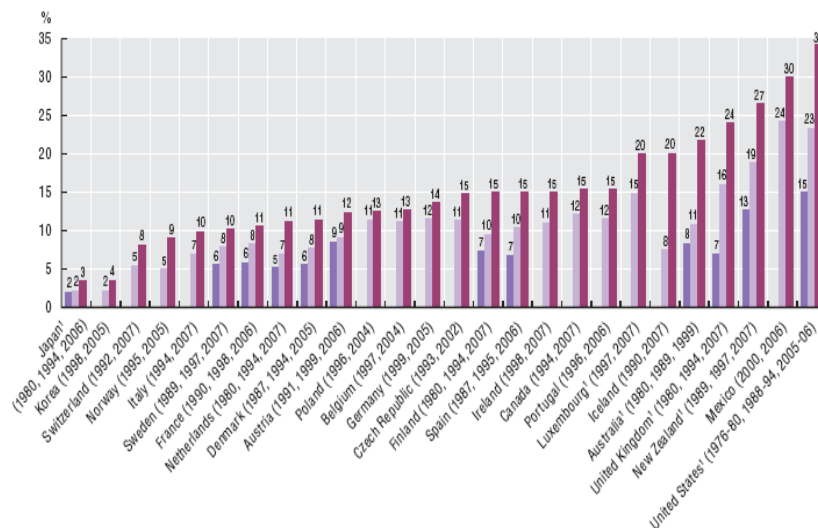
- >20 minutes
- 3 days/wk
- vigorous exercise

Combinorm

- NNGB and/or Fitnorm

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 Netherlands

Obesity in different age groups, 2009*

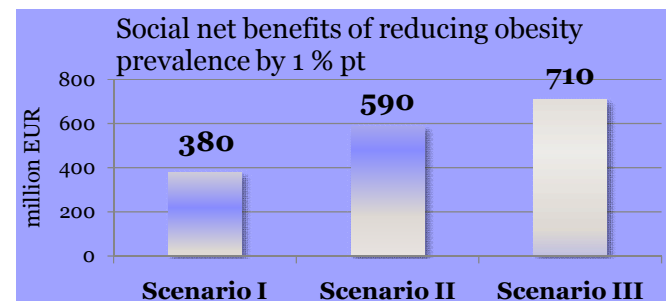
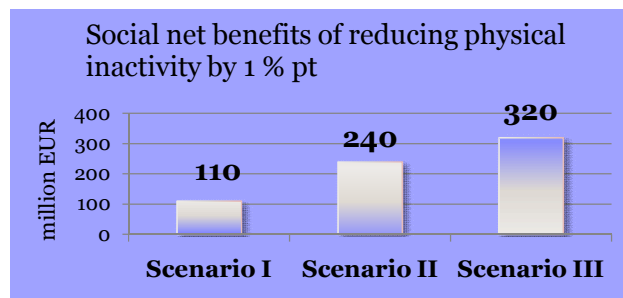
Age	Obesity Prevalence (%)
15-24	4%
25-44	10%
45-64	13.5%
65+	15%

*source: CBS Netherlands

Interventions

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

	Package of interventions*	Reach	
Scenario I	1. Community interventions (local publicity campaigns) 2. Intensive lifestyle program (food & exercise advice and workshops)	Low	34%
Scenario II		Moderate	ROI 83%
Scenario III		High	131%



*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).

Our findings

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

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

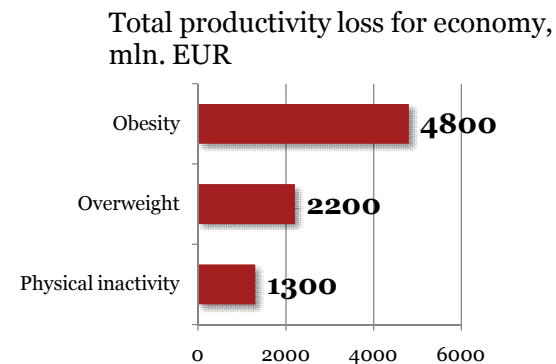
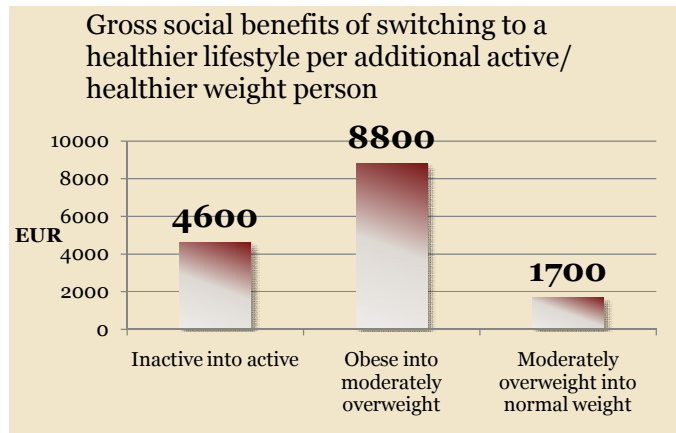
Productivity loss due to obese-related sick leave – **4.88%**.

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

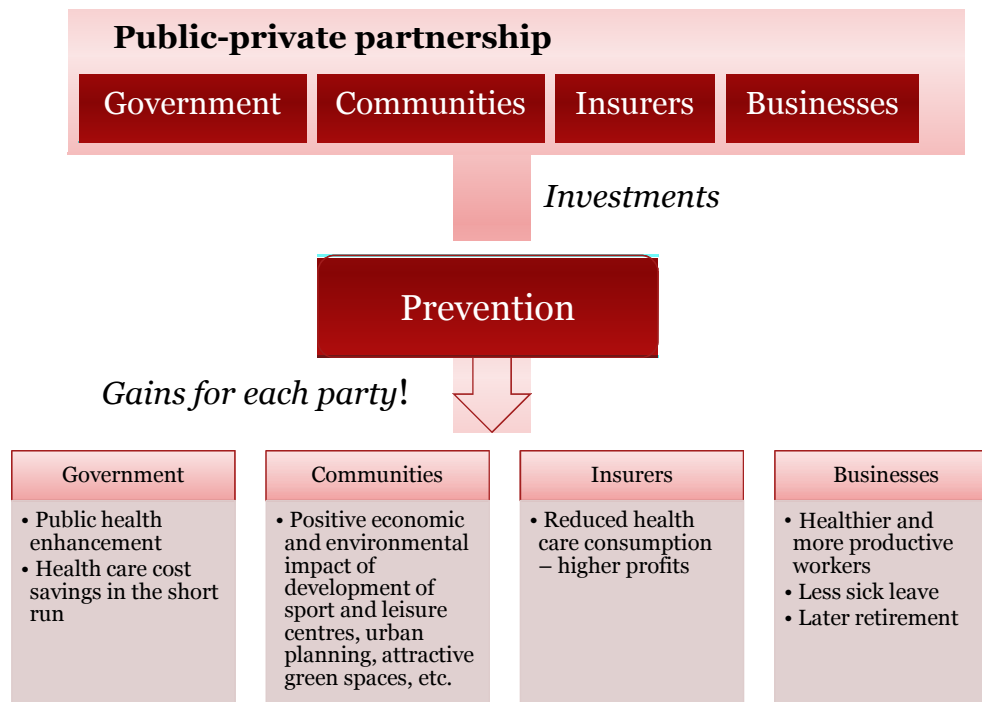
Over a lifetime it creates a loss of about **€2 300**.*

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

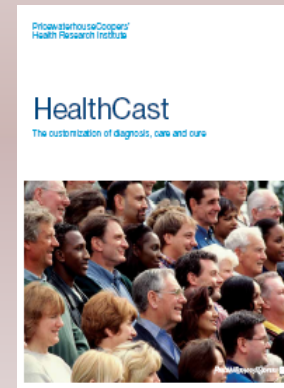
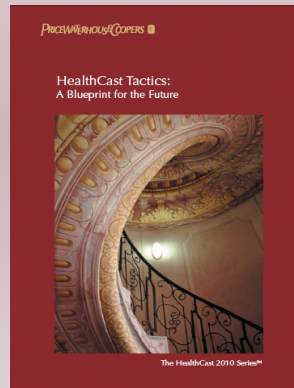
* Assuming that a loss starts accumulating after a person becomes 40 years old on average.



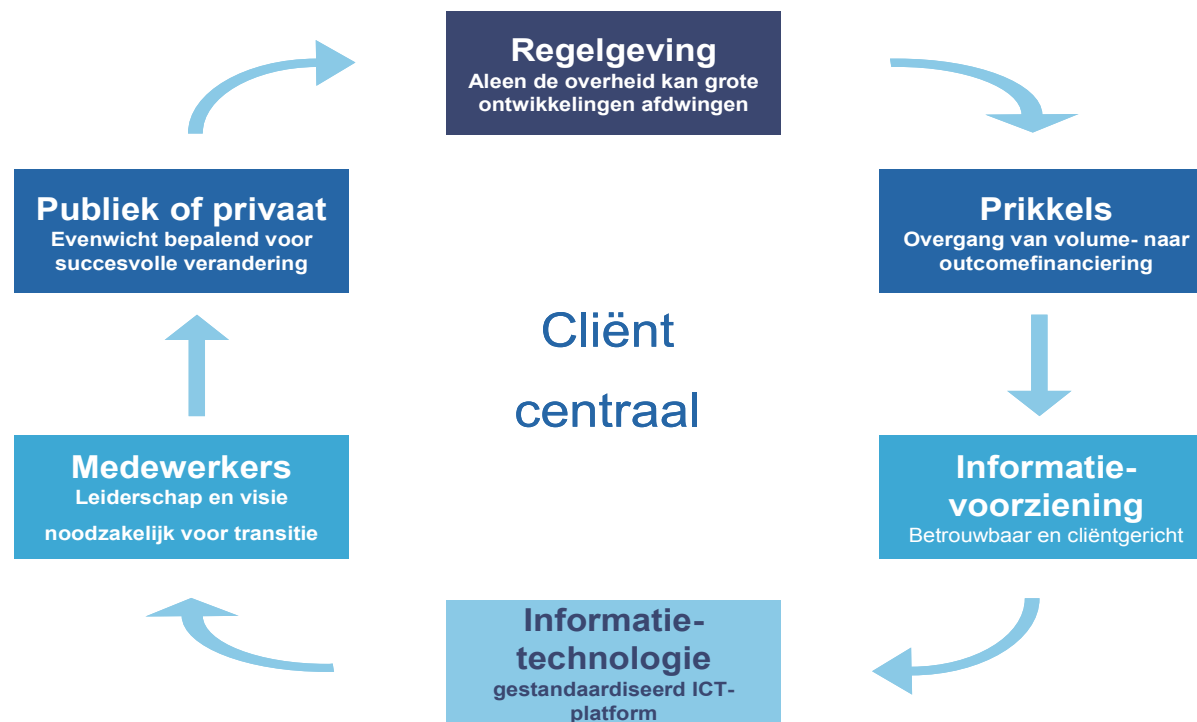
How to make it happen?



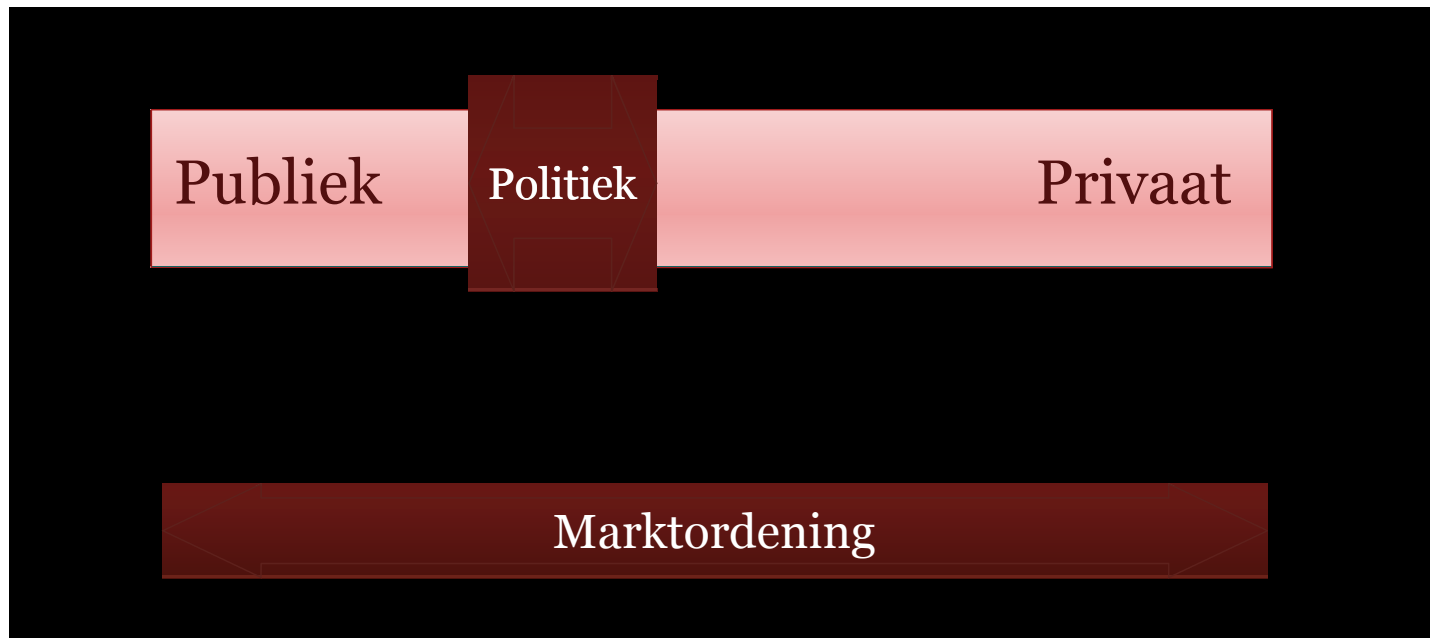
Al meer dan 10 jaar wereldwijd thoughtleadership door middel van HealthCast - studies



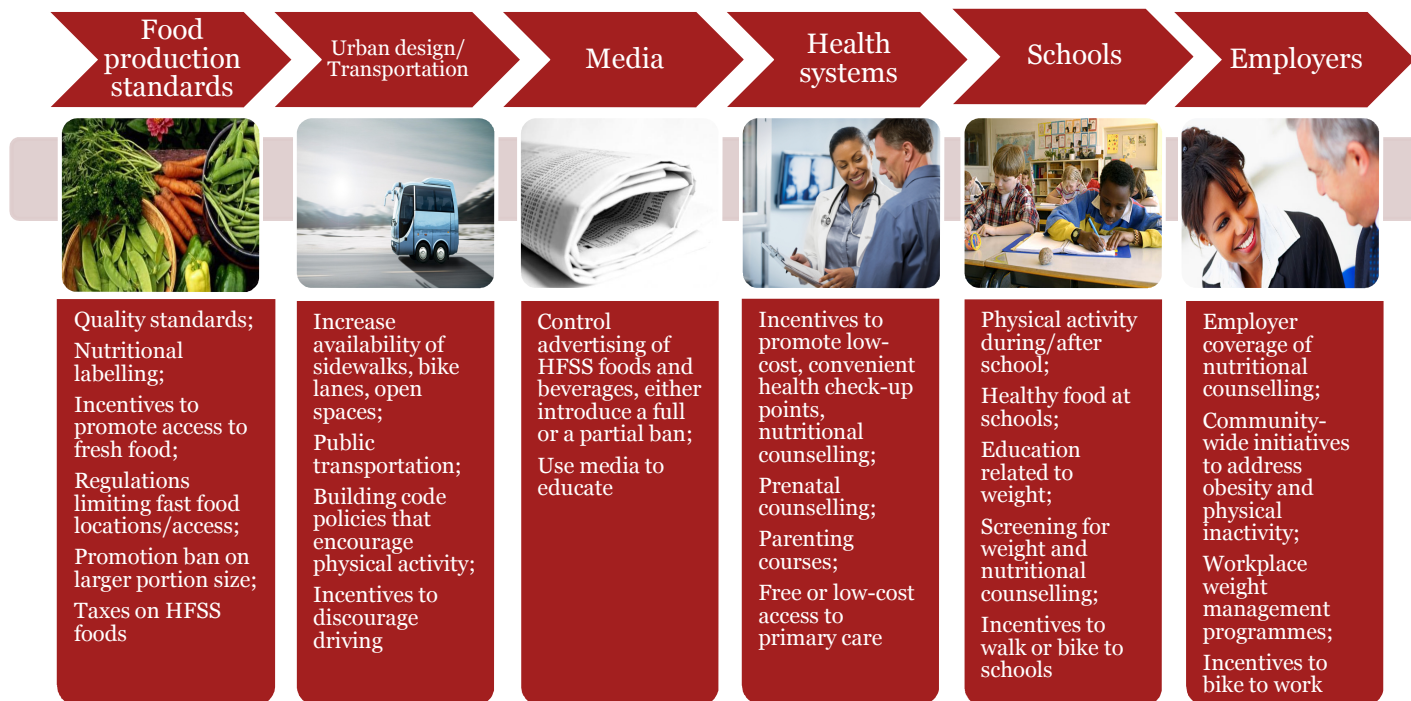
Healthcast onderkent 6 regelknoppen om de cliënt centraal te stellen in het zorgstelsel



Marktordening, publiek of privaat: dat is de vraag



Governments can play a huge role!



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



© 2010 PwC. All rights reserved. Not for further distribution without the permission of PwC.
"PwC" refers to the network of member firms of PricewaterhouseCoopers International Limited (PwCIL), or, as the context requires, individual member firms of the PwC network. Each member firm is a separate legal entity and does not act as agent of PwCIL or any other member firm. PwCIL does not provide any services to clients. PwCIL is not responsible or liable for the acts or omissions of any of its member firms nor can it control the exercise of their professional judgment or bind them in any way. No member firm is responsible or liable for the acts or omissions of any other member firm nor can it control the exercise of another member firm's professional judgment or bind another member firm or PwCIL in any way.