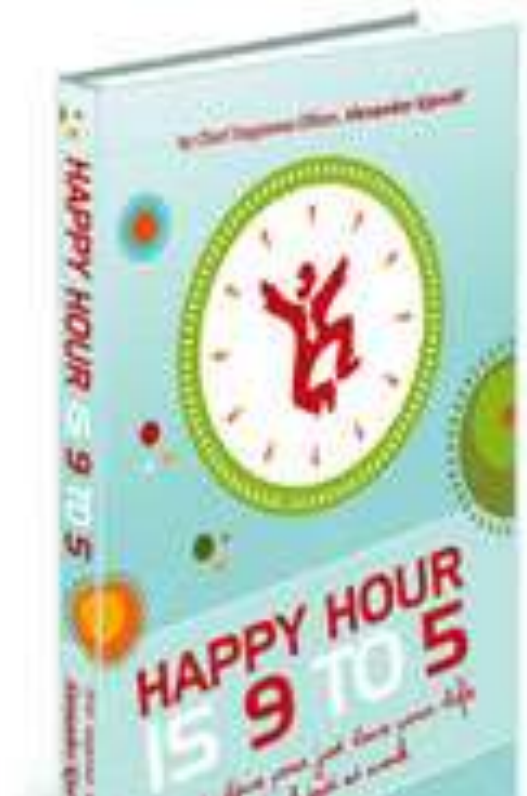


# Healthy People Healthy Business

Presented by

Dr John Lang (Managing Director)  
May 2008



# Good Health Solutions



THE MEANING  
OF  
CORPORATE  
LIFE

# What is Workplace Health?

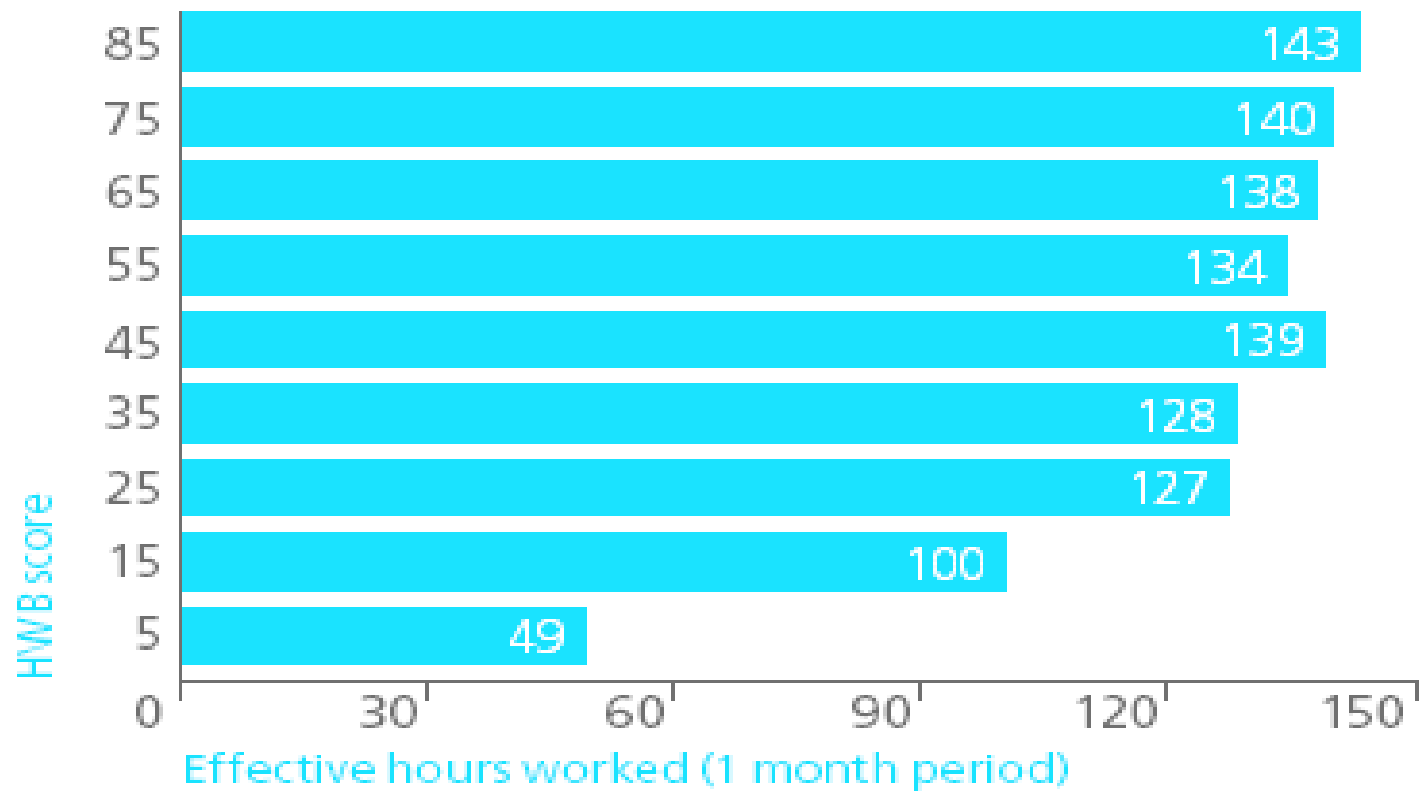
- Health Assessments
  - Executive Health Assessments
  - Various Onsite Health Assessments
- Health Promotion
  - Seminars & Workshops – Various Topics
  - Health Expo's, Newsletters, Health Resource Centre, Fluvax, Skin Checks
  - Weight Management, Wellness Coaching, Smoking Cessation, Healthy Parenting Programs, Work:Life Balance, Emotional Well-being etc.
  - Activities – Walking Challenge, Yoga/Tai Chi, Massage etc.
  - Online Health Information and Support (Work and/or home)
  - Self Managed Programs (weight, exercise, stress, smoking)
- Occupational Health
  - FFD, PEM, Functional Task Analysis, etc.
- Corporate Gymnasiums
- Consultancy
  - Program design
  - Absence and Productivity Management
  - BCMP-PI

# Unhealthy workers don't work much!



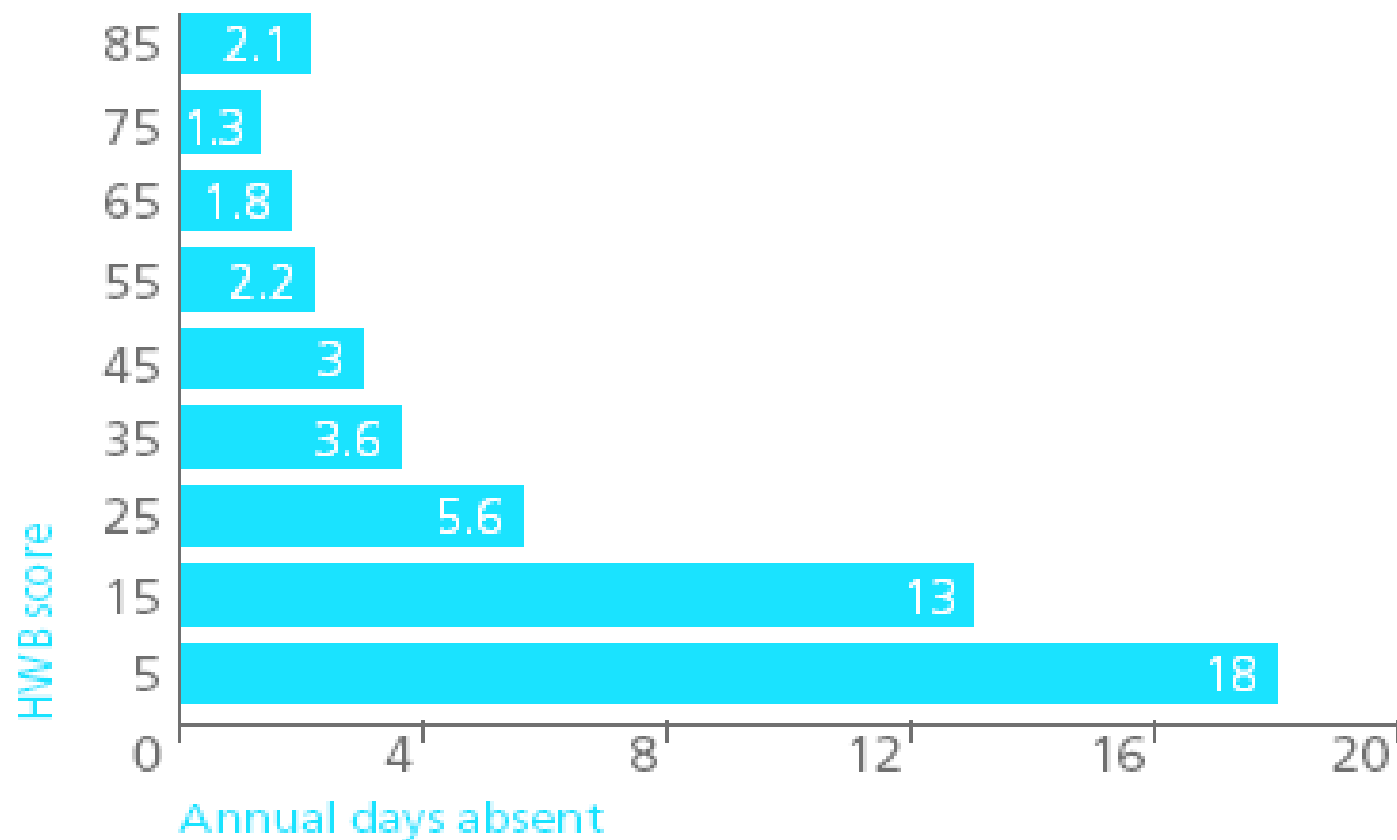
## Health and well-being score vs effective working hours

Figure 3



## Health and well-being score vs annual days absent (year)

Figure 1

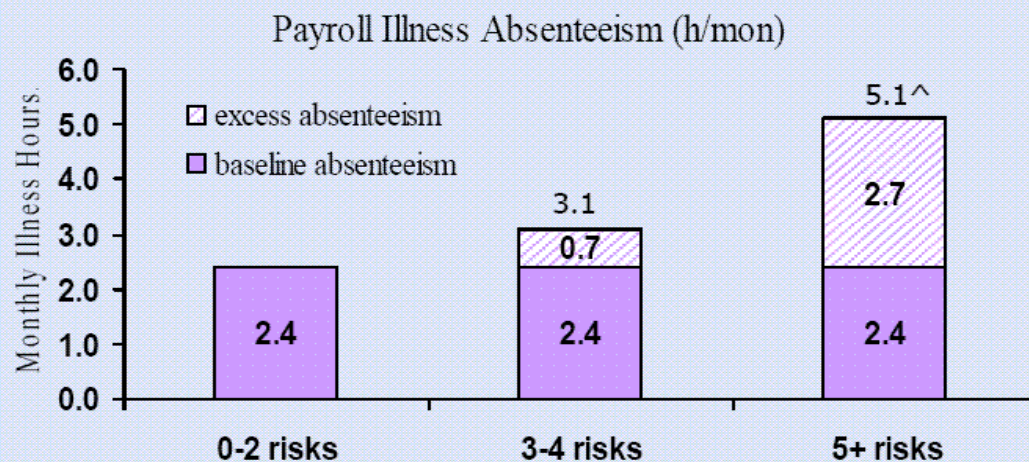


# Return on Investment



Relationship Between Number of Health Risks and Absenteeism

## Excess Payroll Illness Absenteeism (hours/month) by Numbers of Health Risks



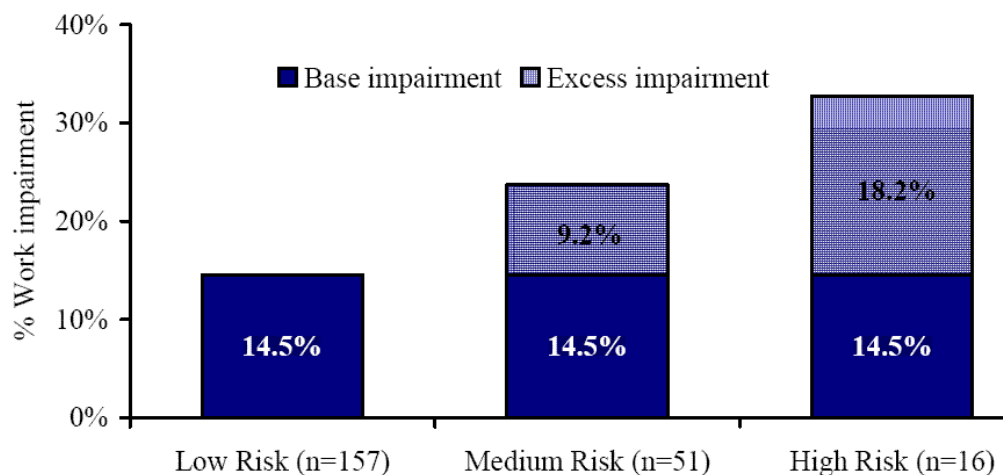
Note: presenteeism and absenteeism values adjusted for age, gender, and number of chronic conditions: \* $p < .05$ ; <sup>^</sup> $p < .10$  (statistical testing compared to 0-2 risks group)

# Return on Investment



## Relationship Between Number of Health Risks and Presenteeism

The following study, published in the American Journal of Health Promotion (*Mar 2006, Vol 20, No 4*) shows the lost productivity directly related to health risks in the Australian workforce. It indicates that workers with 5 or more health risks (high risk) are likely to lose an extra 18% of their productivity.



\*Low risk = 0-2 risks, medium risk = 3-4 risks and high risk = 5+ risks

\*\*Base impairment is that level of impairment you would expect to see in somebody who is low risk.

*The Association of Two Productivity Measures With Health Risks and Medical Conditions in an Australian Employee Population, Musich et al., 2006*

## Meta-evaluation of workplace wellbeing programmes measuring ROI

Number of Studies	42
Average study duration (years)	3.6
People studied	537,319
% sick leave change	-28%
% health costs change	-26%
Cost/Benefit Ratio	1 : 5.63

*later studies showed the most positive results*

*later studies include multi-media and online programmes*

*all programmes included at least three intervention areas*

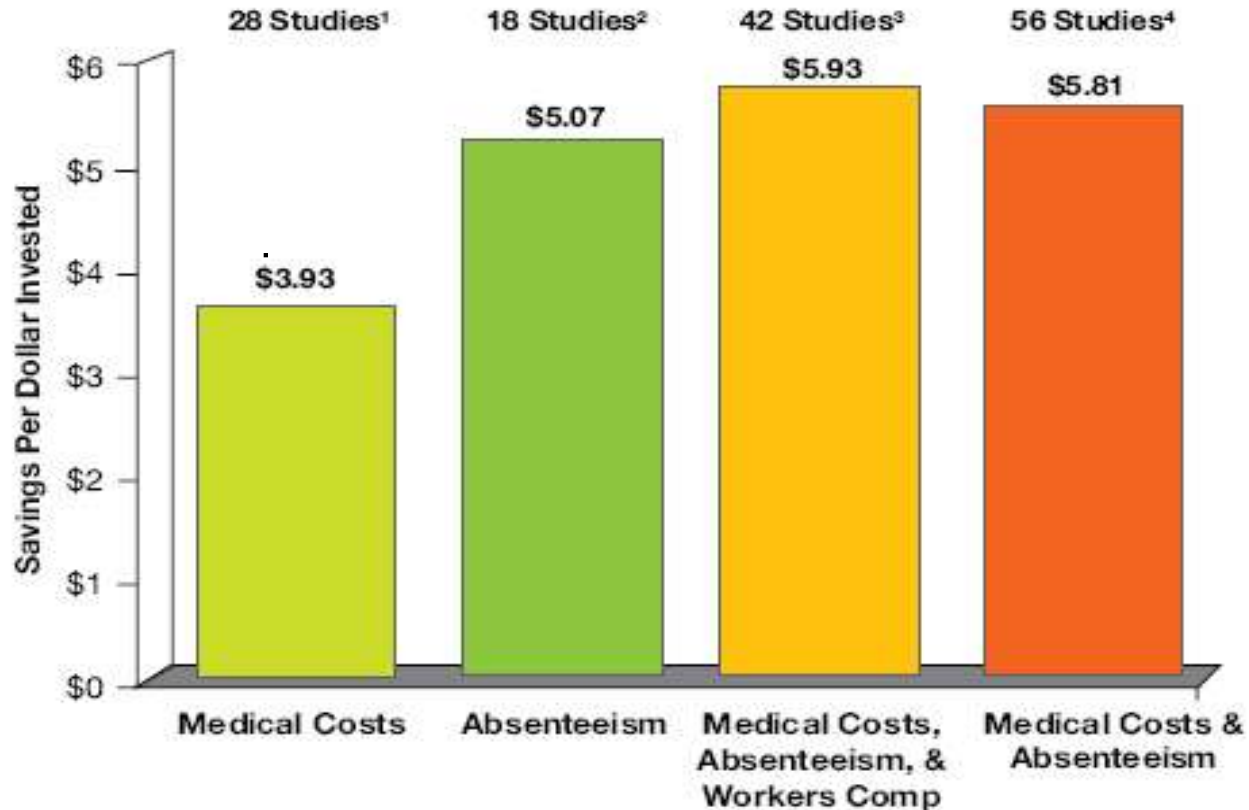
*source: Summex corporation 2003*

# Summary of 2007 findings



<b>Study Parameter</b>	<b>Averages &amp; Totals (N=60)</b>
<b>Average study years</b>	<b>3.77</b>
<b>Observational years</b>	<b>226.3</b>
<b>Year Reported (median)</b>	<b>1995</b>
<b># of Study Subjects</b>	<b>552,339</b>
<b># of Control Subjects</b>	<b>200,259</b>
<b>Average # of Program Targets</b>	<b>5.1</b>
<b>% Change in Sick Leave</b>	<b>-25.3% (26)</b>
<b>% Change in HCs</b>	<b>-26.5% (27)</b>
<b>% Change in Workers' Comp</b>	<b>-40.7% (5)</b>
<b>% Change in Disability Mang.</b>	<b>-24.2% (3)</b>
<b>C/B Ratio</b>	<b>1:5.81 (22)</b>

# US Meta-Analysis Data on Prevention 144 Studies



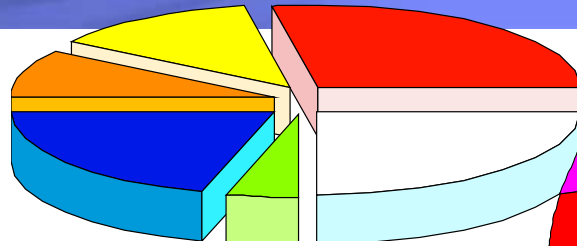
1. Aldana, SG, *Financial impact of health promotion programs: a comprehensive review of the literature*, AJHP, 2001, volume 15:5: pages 296-320.
2. Aldana, SG, *Financial impact of health promotion programs: a comprehensive review of the literature*, AJHP, 2001, volume 15:5: pages 296-320.
3. Chapman, LS, *Meta-evaluation of worksite health promotion economic return studies*, AHP, 2003, 6:6, pages 1-16.
4. Chapman, LS, *Meta-evaluation of worksite health promotion economic return studies: 2005 Update Art of Health Promotion*, 2005, p. 1-16.

*The Program Attributable Benefits Model* (Shepherd 1992)

- **Program Benefit = N x P x M x C**

**Where;**

- **N = Prevalence of Need**
- **P = Participation**
- **M = Likelihood of Needs being Met**
- **C = Likelihood of Changes being Made**



If only half need what you are offering....

.. and only half of them participate ....

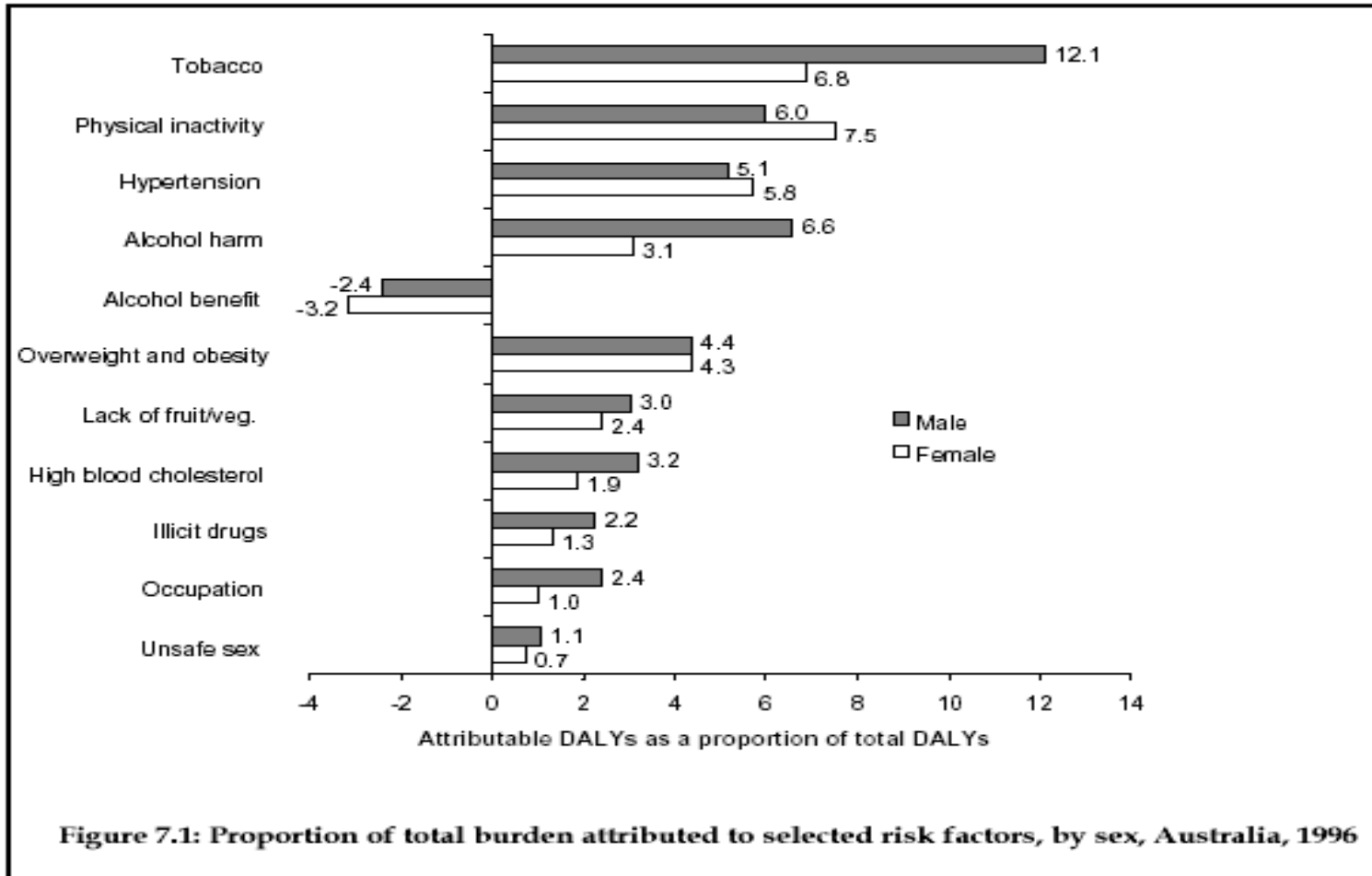
... and only half of them have their needs met ....

... and only half of them make changes....

$$\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = \frac{1}{16}^{\text{th}}$$

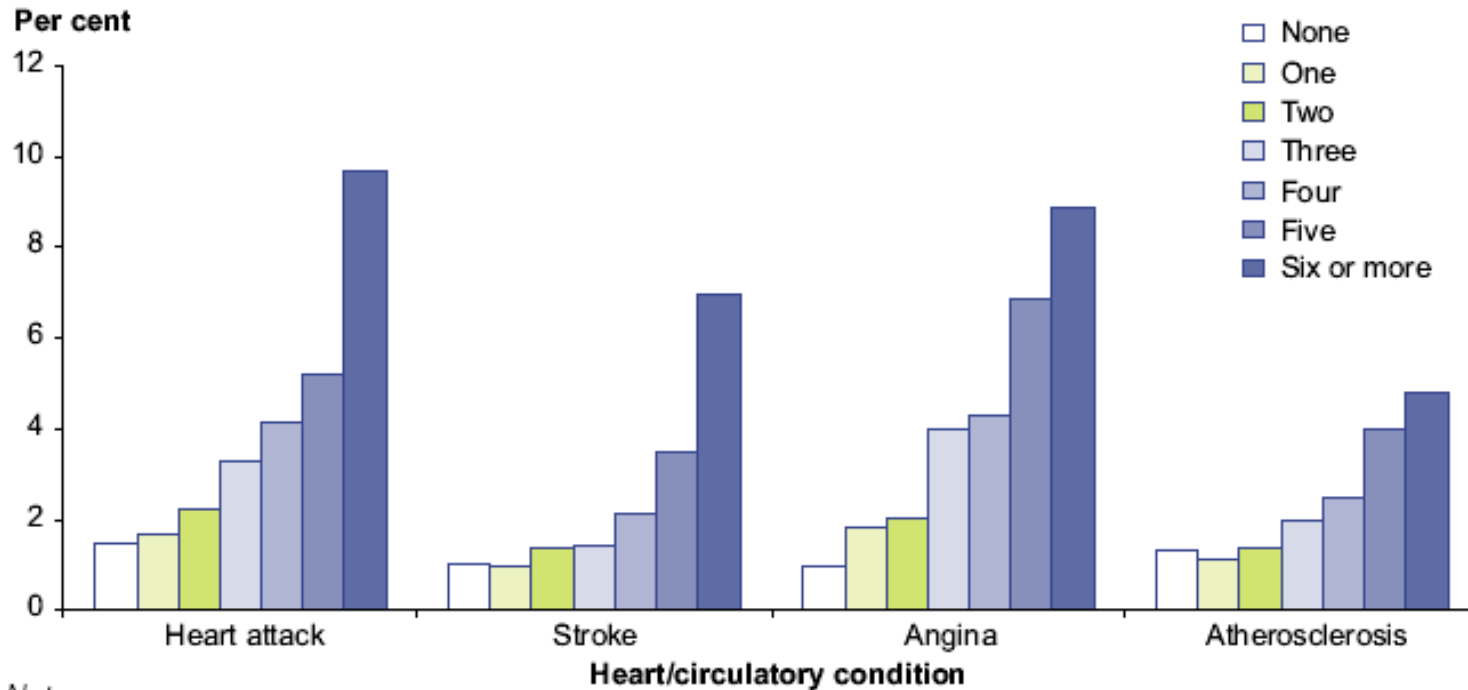


# Lifestyle and DALY's



# Risk Factor Synergy

**Figure 3: Prevalence of selected heart/circulatory conditions by number of risk factors reported among Australians aged 18 years and over, 2001**



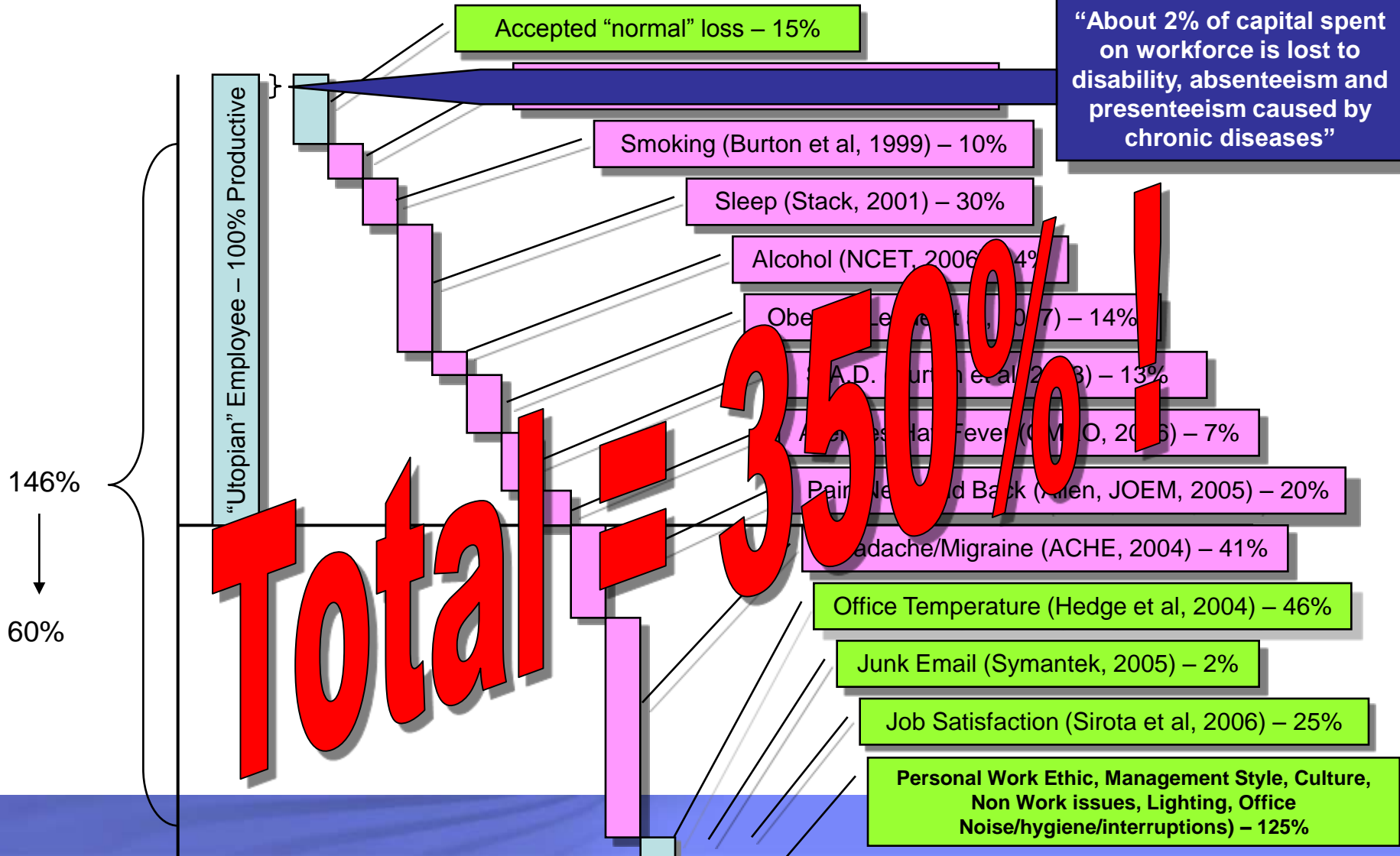
Notes

# The Problem with Assessing the Impact of Single Risks in Isolation



World Economic Forum, 2007

“About 2% of capital spent on workforce is lost to disability, absenteeism and presenteeism caused by chronic diseases”



# Participating Companies

- Westpac
- Accor
- TAFE
- WHK Greenwood
- Club Assist
- IAG
- AMP
- Sydney Institute
- Leader Newspaper
- ING
- DuPont
- Veda Advantage
- Alinta
- Siemens
- JACS
- Curtin VTEC
- SAS
- LMHS
- Dept of Infrastructure
- Dept of Public Prosecutions
- Good Health Solutions

Total Participants = 4500



- Westpac
- Accor
- TAFE
- WHK Greenwood
- Club Assist
- IAG
- AMP



- Sydney Institute
- Leader Newspaper
- ING



- DuPont
- Veda Advantage
- Alinta
- Siemens

Total Participants = 4500



- JACS
- Curtin VTEC
- SAS
- LMHS



- Dept of Infrastructure
- Dept of Public Prosecutions
- Good Health Solutions



# What did we set out to Investigate?

- Quantifiable relationships between
  - Physical Health
  - Psychological Health
  - Lifestyle
  - Chronic Conditions
  - Work Environment
  - Corporate Culture

and

- Absenteeism and Presenteeism

# Calculating Productivity Loss from Chronic Conditions

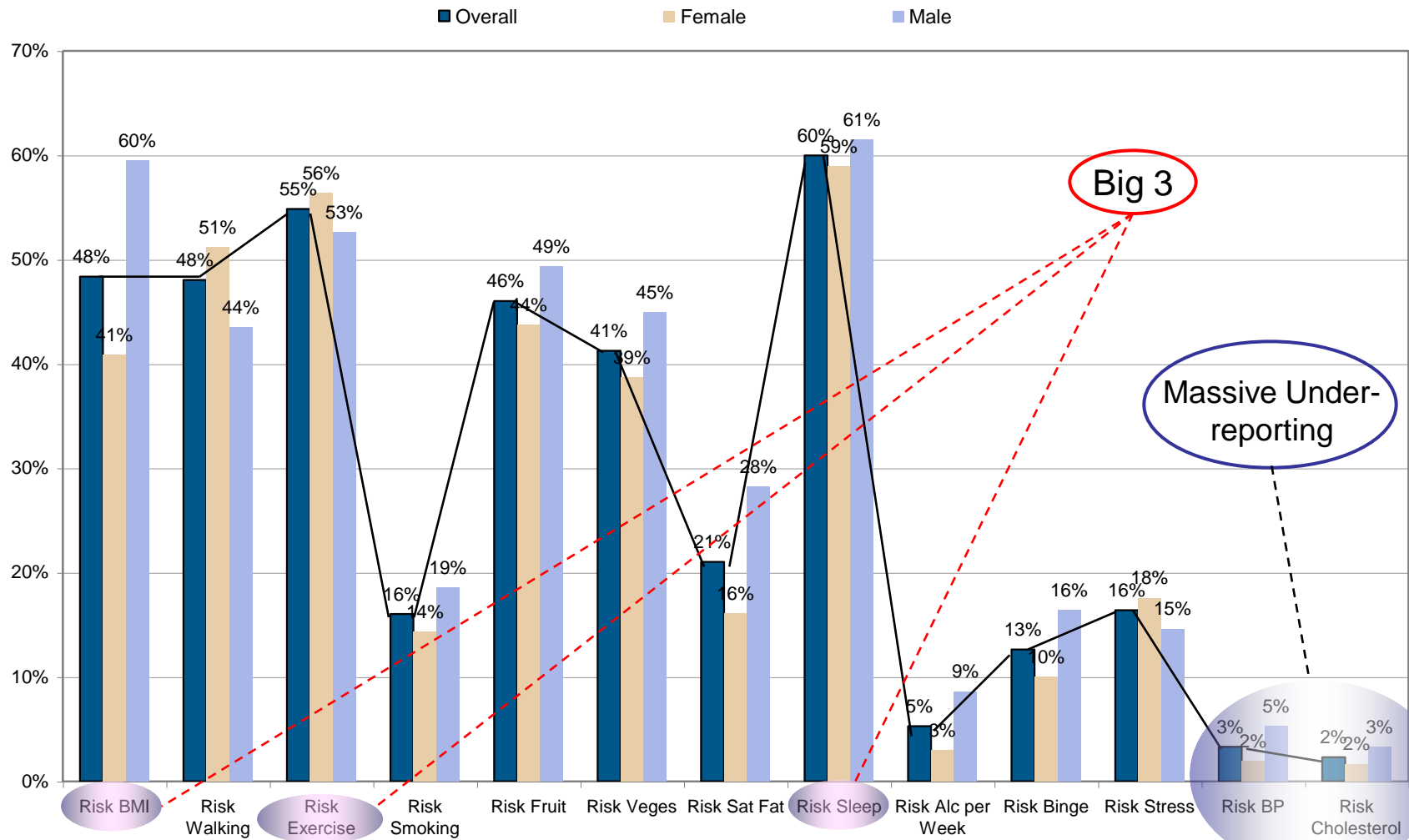
## GHS HAPS 2007

Prevalence		Don't suffer from this condition	Suffer, but it has no impact	Has small impact (<10%)	Has moderate impact (10-20%)	Has severe impact (>20%)
57.41%	Neck/Back Pain	42.59%	21.50%	22.78%	9.82%	3.31%
50.32%	General Fatigue or Low Energy	49.68%	18.48%	21.21%	7.79%	2.85%
45.44%	Other Headaches	54.56%	20.05%	18.88%	4.71%	1.80%
40.27%	Sleeping Problems	59.73%	15.11%	15.57%	6.97%	2.61%
31.14%	Allergies/Hay Fever	68.86%	16.10%	10.75%	2.85%	1.45%
23.53%	Migraines	76.47%	7.61%	9.59%	4.59%	1.74%
21.56%	Overweight/Obesity	78.44%	14.82%	4.01%	1.86%	0.87%
14.88%	Asthma	85.12%	10.28%	3.20%	0.81%	0.58%
13.19%	Arthritis	86.81%	6.91%	3.95%	1.80%	0.52%
12.61%	High Blood Cholesterol	87.39%	10.28%	1.63%	0.41%	0.29%
12.14%	Irritable Bowel Syndrome	87.86%	5.23%	4.01%	1.86%	1.05%
10.81%	High Blood Pressure	89.19%	7.50%	1.92%	0.81%	0.58%
9.18%	Chronic Pain	90.82%	3.43%	3.14%	1.98%	0.64%
6.28%	Chronic Heartburn	93.72%	3.83%	1.69%	0.35%	0.41%
4.88%	Stomach/Intestinal Ulcer	95.12%	2.56%	1.39%	0.70%	0.23%
4.42%	Heart Condition	95.58%	3.02%	0.99%	0.12%	0.29%
3.54%	Skin Cancer	96.46%	2.85%	0.35%	0.23%	0.12%
2.79%	Chronic Bronchitis/Emphysema	97.21%	1.16%	0.70%	0.58%	0.35%
2.56%	Diabetes	97.44%	1.34%	0.76%	0.29%	0.17%
2.09%	Osteoporosis	97.91%	1.28%	0.41%	0.17%	0.23%
1.57%	Other Cancer	98.43%	0.52%	0.52%	0.35%	0.17%

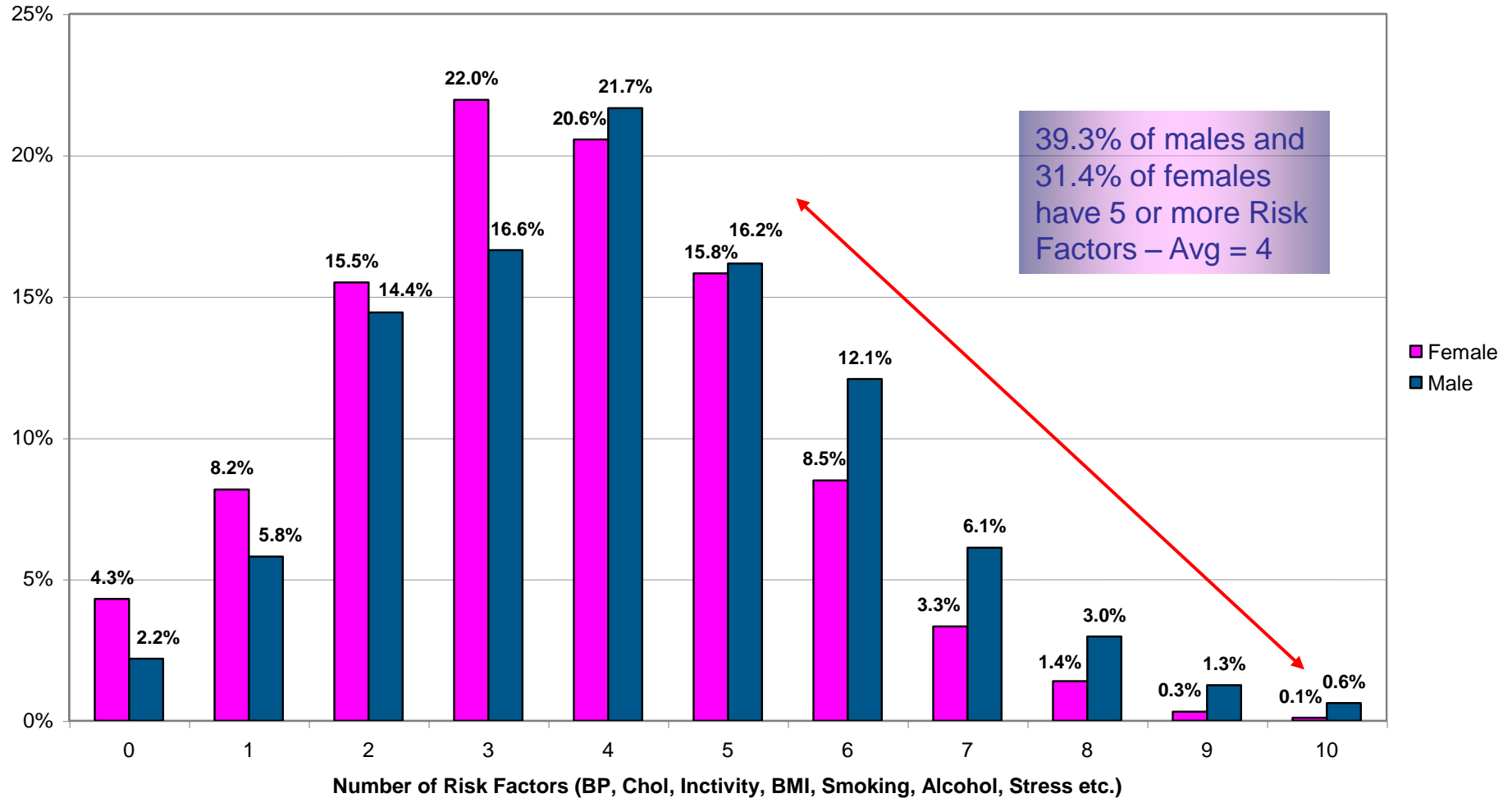
# Cost of Chronic Conditions

Hours Lost pp	Days Lost pp		D	E	
26.8	3.4				
35.6	4.5				
78.4	9.8				
62.4	7.8				
117.4	14.7				
128.6	16.1		1.3%	29,973	
117.8	14.7		1.8%	13,089	<b>Hours Lost - Per Person</b>
150.6	18.8		3.9%	16,874	<b>52</b>
223.2	27.9		3.1%	9,273	
249.4	31.2		5.9%	11,130	<b>% Lost - Per Person</b>
			6.4%	7,743	<b>2.60%</b>
			5.9%	5,282	
71-80	24.50	51	7.5%	7,717	
81-90	28.13	20	11.2%	4,575	
90-100+	29.44	23	12.5%	5,751	
		2145		111,408	
* Those with no Chronic Conditions					

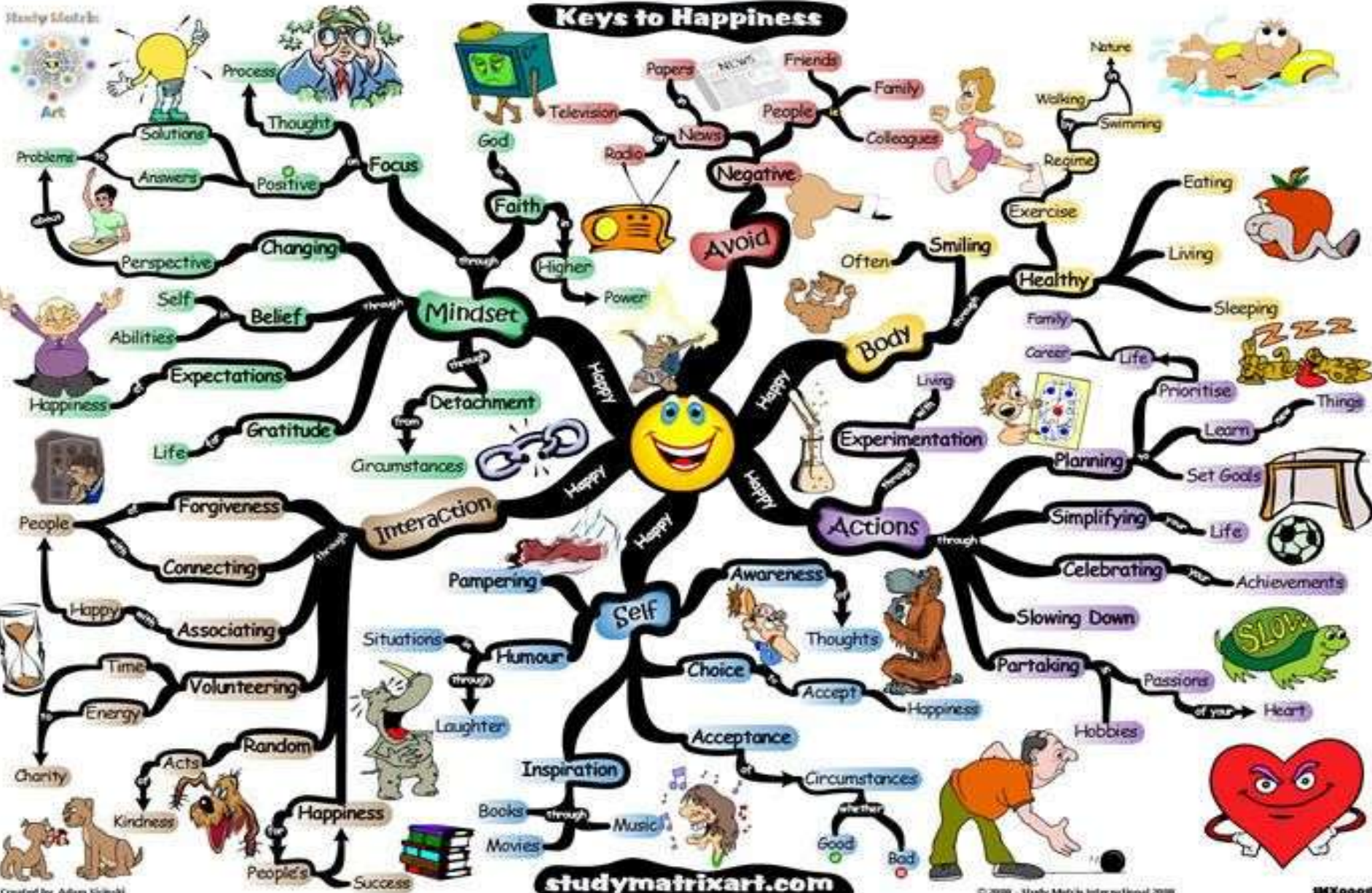
# Lifestyle Related Risks



# Prevalence of Multiple Risks



# Keys to Happiness



# Benefits of Happiness?

A recent review of all the available literature has revealed that happiness does indeed have numerous positive by products, these include;

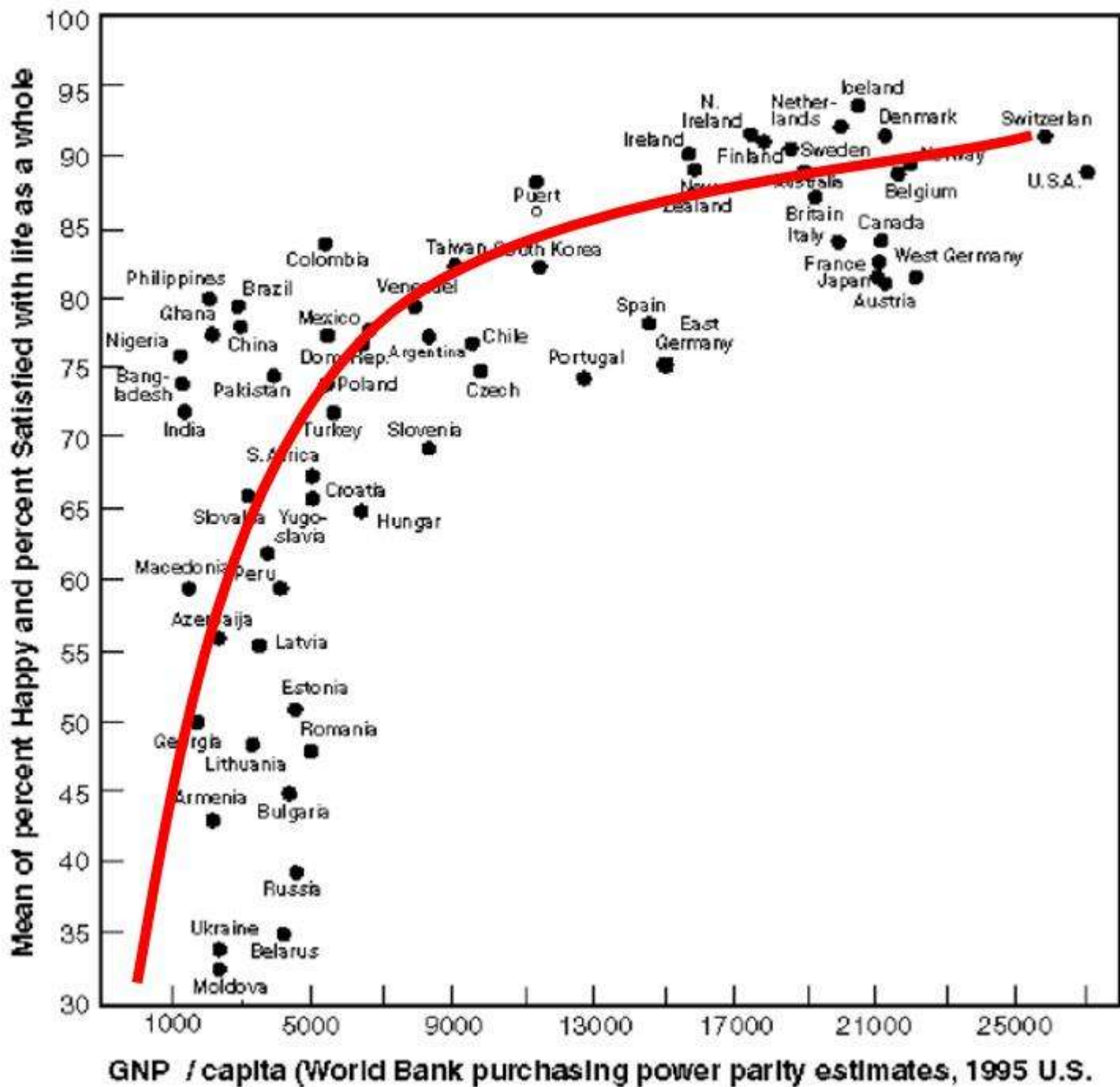
- higher income
- superior work outcomes (productivity and quality of work),
- larger social rewards (e.g., more satisfying and longer marriages, more friends, stronger social support, and richer social interactions),
- more activity, energy, and flow, and better physical health (e.g., a bolstered immune system, lowered stress levels, and less pain) and even longer life.
- happy individuals are more creative, helpful, charitable, and self-confident, have better self-control, and show greater self-regulatory and coping abilities.

**Sonja Lyubomirsky Ph.D.**  
**Professor Stanford University**



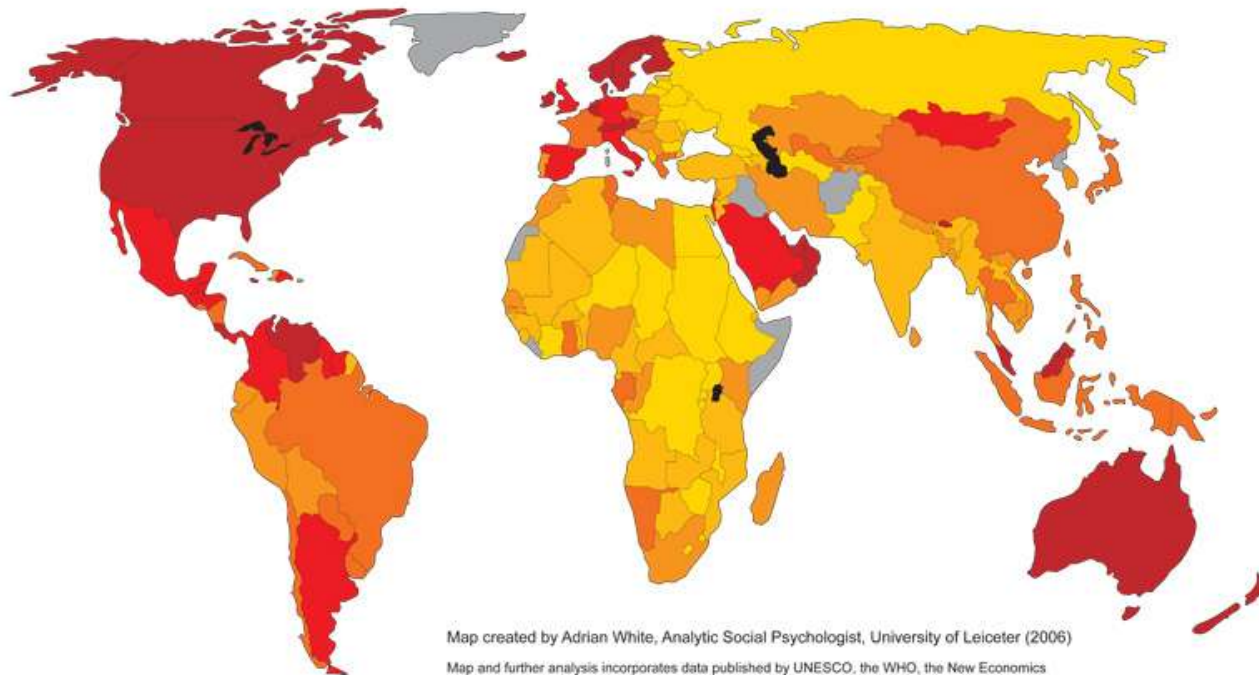
# Money can't buy Happiness

*Or can it?*



# Good Places to Live

A Global Projection of Subjective Well-being:  
The First Published Map of World Happiness



Map created by Adrian White, Analytic Social Psychologist, University of Leicester (2006)

Map and further analysis incorporates data published by UNESCO, the WHO, the New Economics Foundation, the Veenhoven Database, the Latinbarometer, the Afrobarometer, the CIA, and the UN Human Development Report.





# Which World?



**Which world would you prefer?  
(prices are the same)**

- A. You get \$50k a year and others get half that
- B. You get \$100k a year and others get more than double that

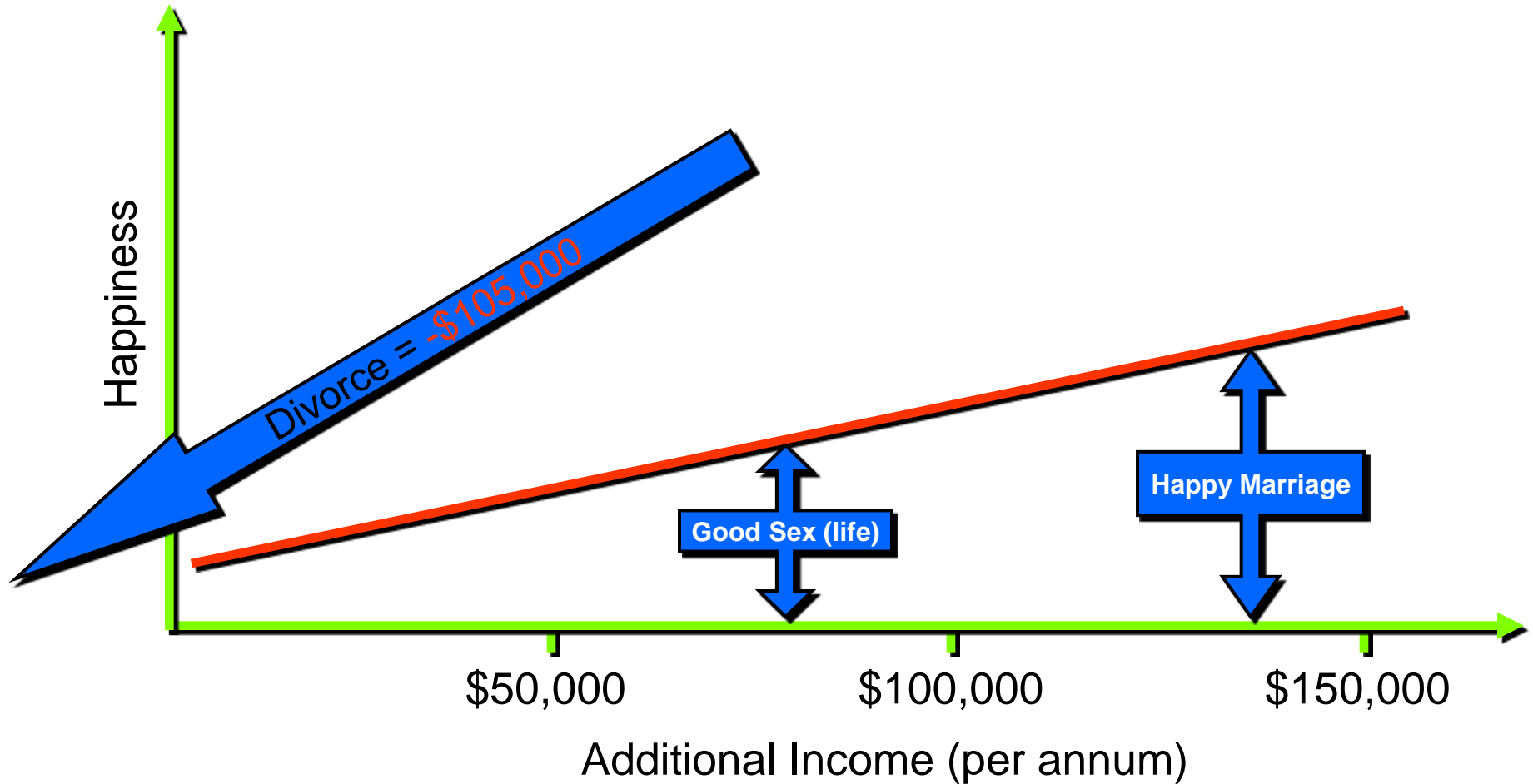
# What about now?



Which world would you prefer?

- C. You have 2 weeks vacation, and others have half that
- D. You have 4 weeks vacation, and others have double that

# The Value of being Happy



# Happiness & Health?

What is the evidence that they are related?

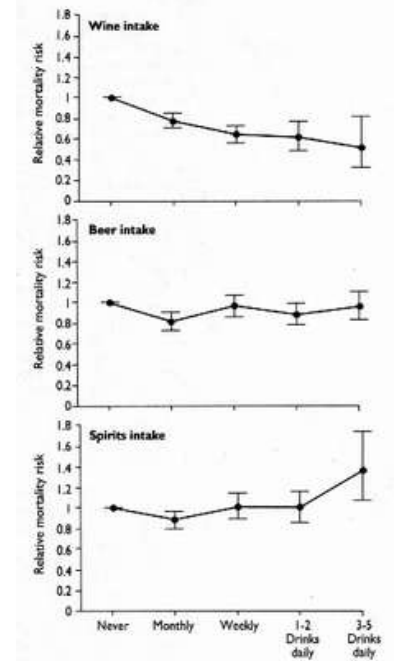
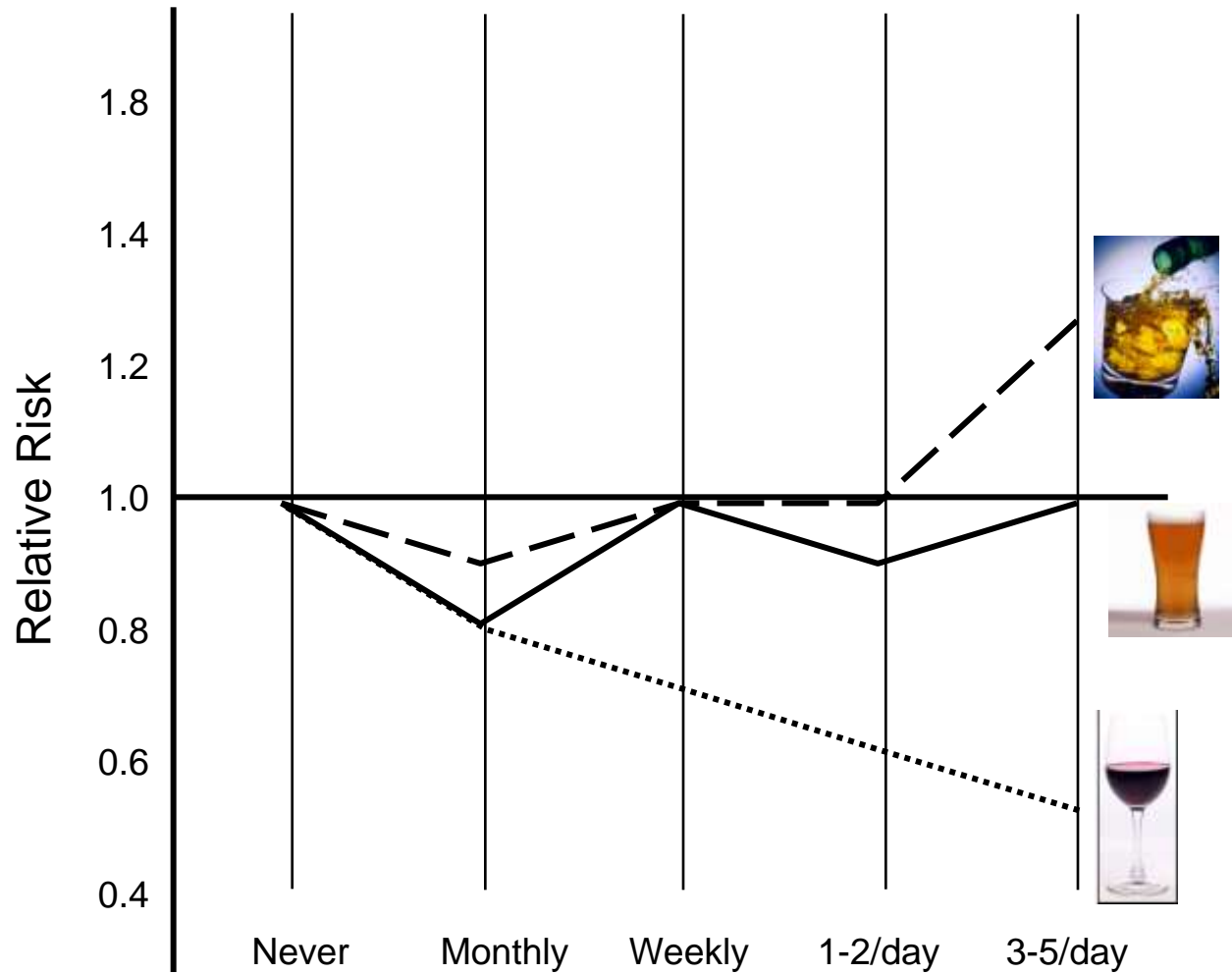
- Prof. Ruut Veenhoven recently 30 studies on happiness and longevity
- Although no correlation was found between happiness and recovery/survival from illness, 19 studies on healthy people showed significant increases in longevity

“The observed positive effects of happiness on longevity are quite sizable and amount to 7-10 years”

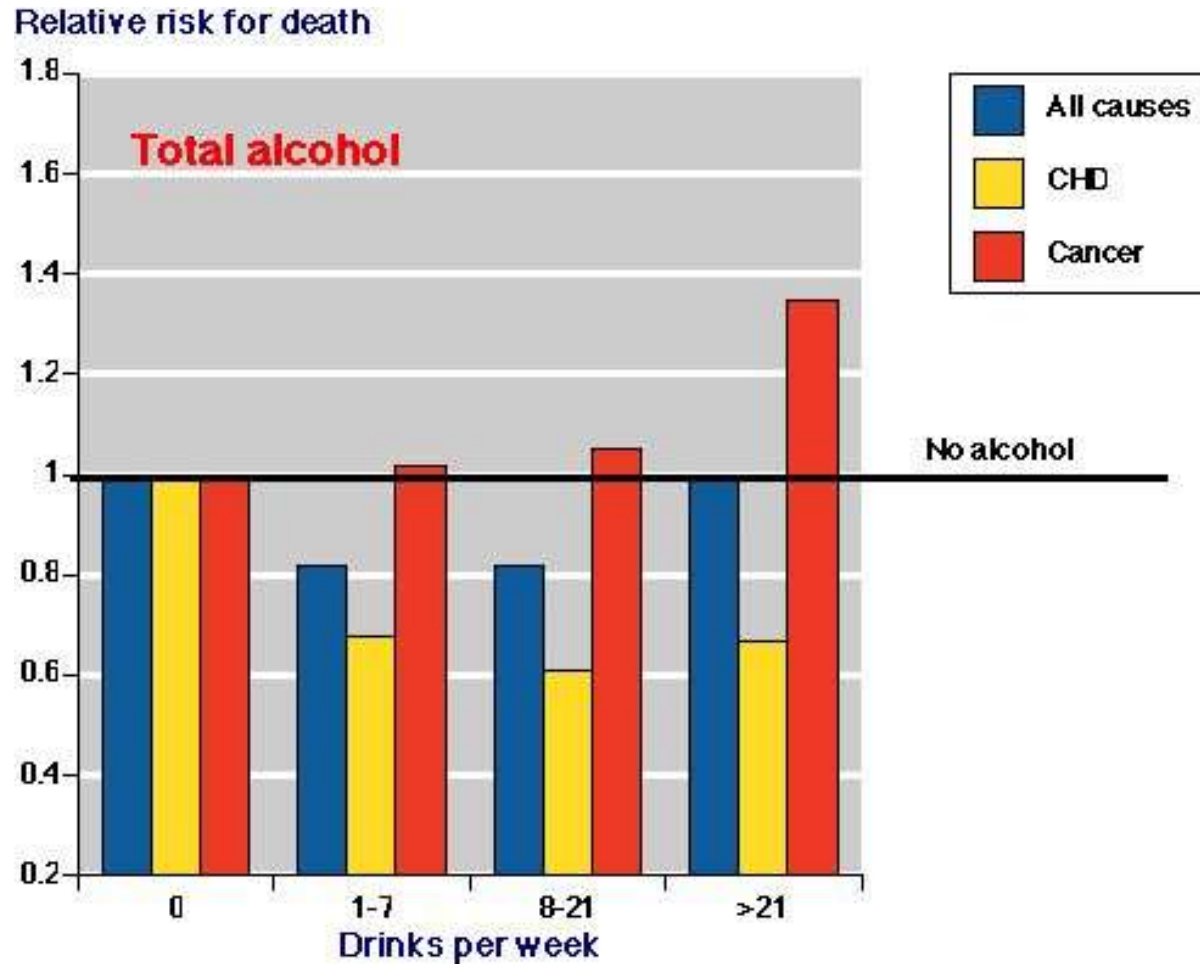
# The Key to Happiness



Finding that things you love doing are  
actually good for you!



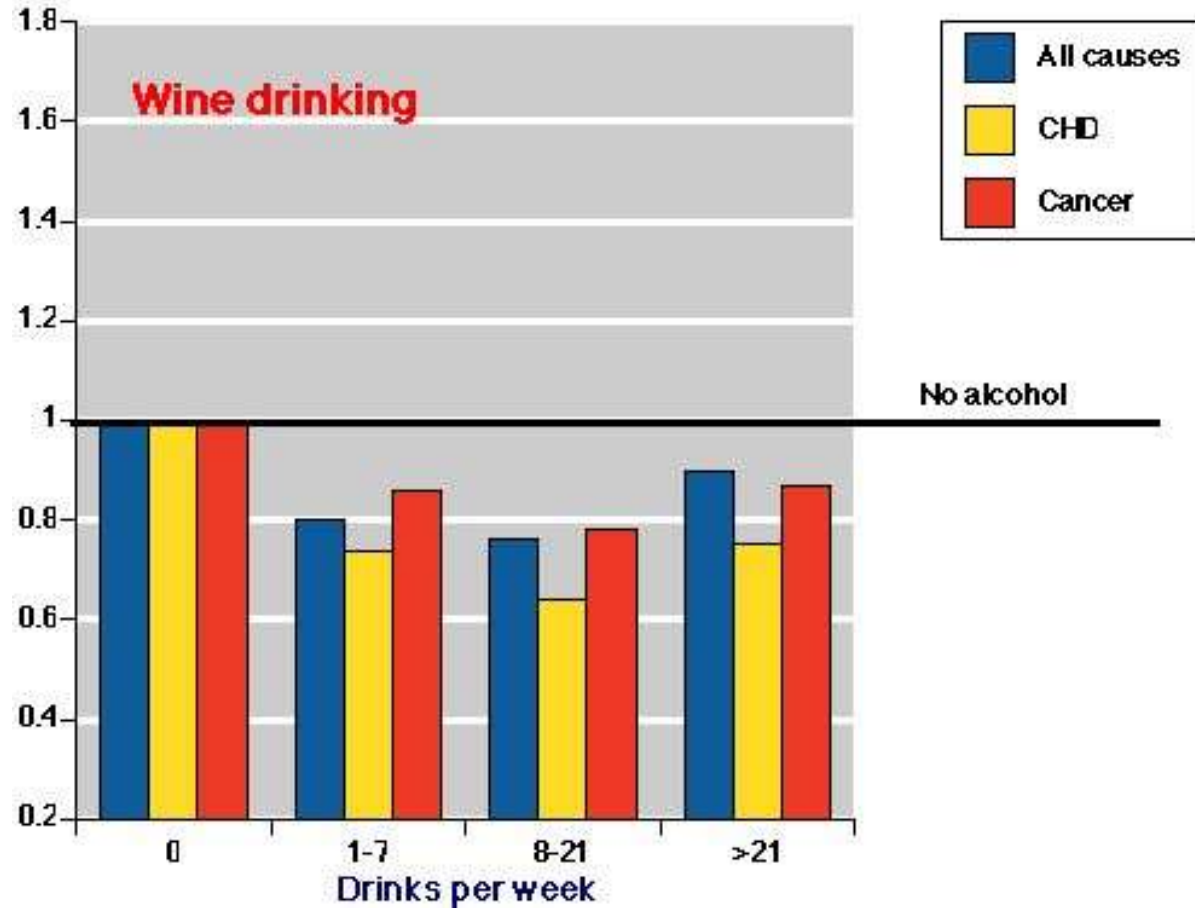
# Alcohol, Mortality, CHD & Cancer



M Gronbaek et al. Type of alcohol consumed and mortality from all causes, coronary heart disease, and cancer. *Annals of Internal Medicine* 2000 133: 411-419.

Participants were 13,064 men and 11,459 women, aged between 20 to 98 years, from three Copenhagen studies.

Relative risk for death  
Relative risk for death  
Relative risk for death



# Q & A

