



Intelligent
Health



Walking Steps Up A Synergistic Approach to Transforming People 4 October 2011

Dr William Bird MBE

Non-communicable diseases represent a new frontier in the fight to improve global health. Worldwide, the increase in such diseases means that they are now responsible for more deaths than all other causes combined.

Secretary General United Nations 2011

The Perfect City

Intelligent
Health



Beautiful Free Vibrant Exciting
Energetic healthy Balanced
sustainable

LIFE

Meet Julie

Intelligent
Health



Meet Julie's dad

Intelligent
Health



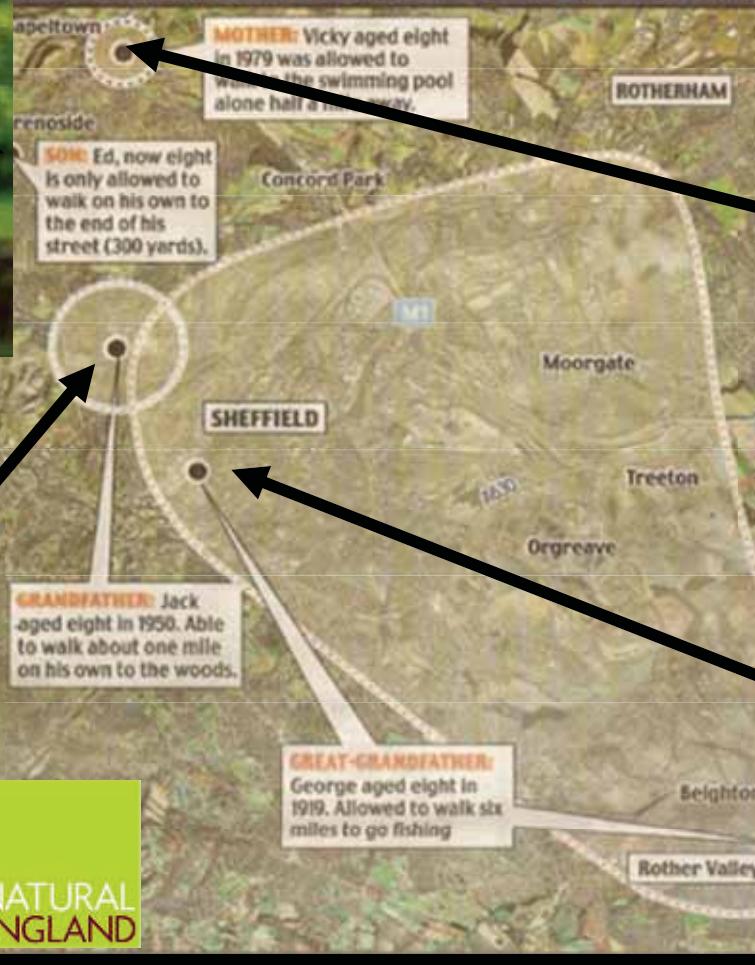
Julie's grandmother

Intelligent
Health





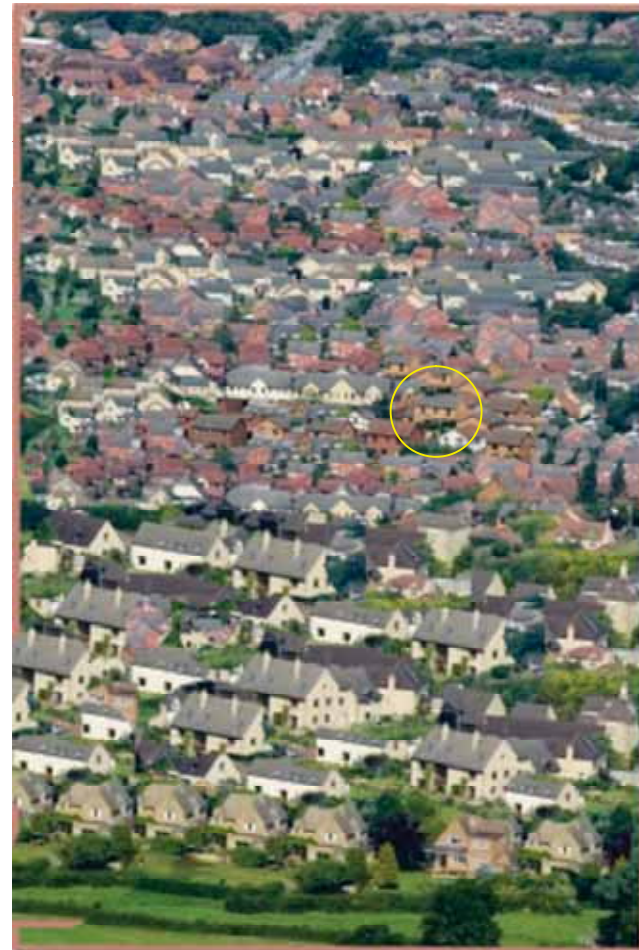
THE CHANGING SHAPE OF PLAYTIME



Intelligent
Health



freedom



Intelligent
Health



People



Place



Purpose



Wellbeing



Intelligent
Health



Resilience

Wellbeing

Healthy
Behaviour



Health

People



Place

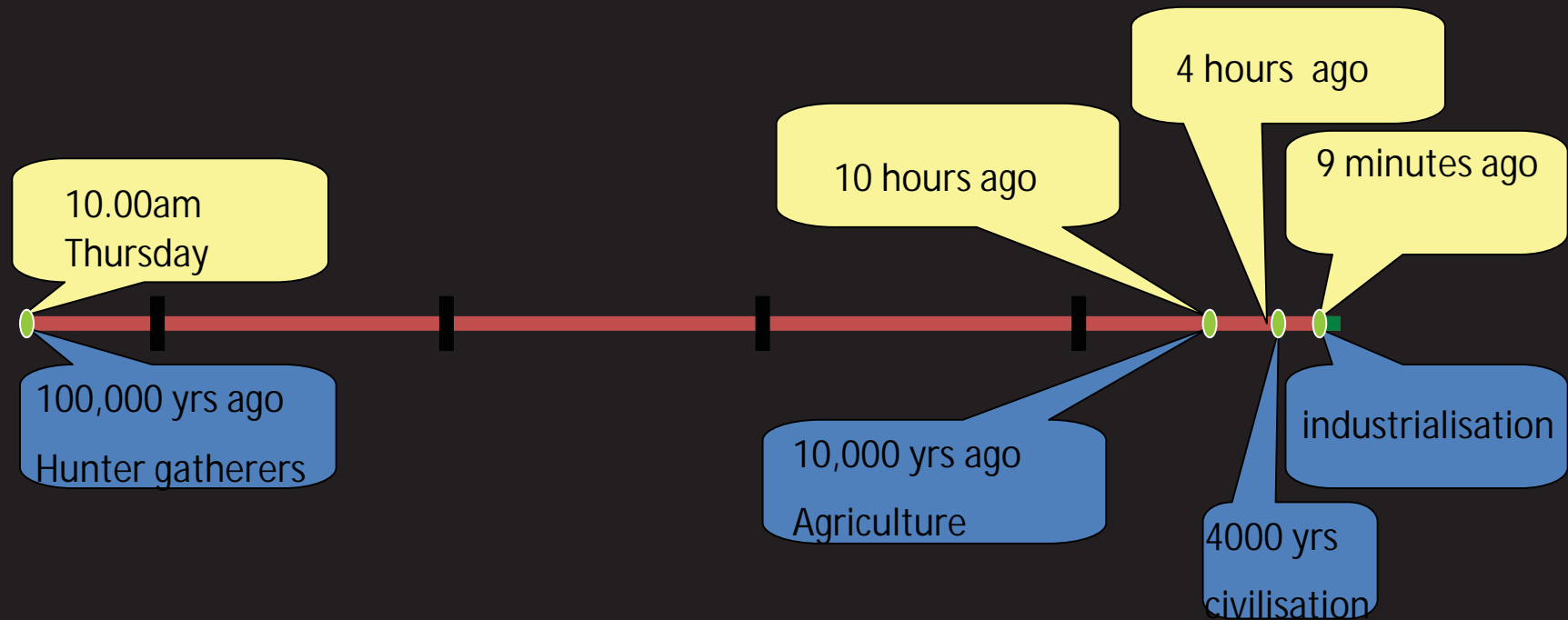


Purpose



Chronic Stress

If we take an hour to equal 1000 years then from Thursday to now is 100,000 years; the time from the origin of mankind to today.





Intelligent
Health



Chronic Stress

~~Resilience~~

~~Healthy
Behaviour~~





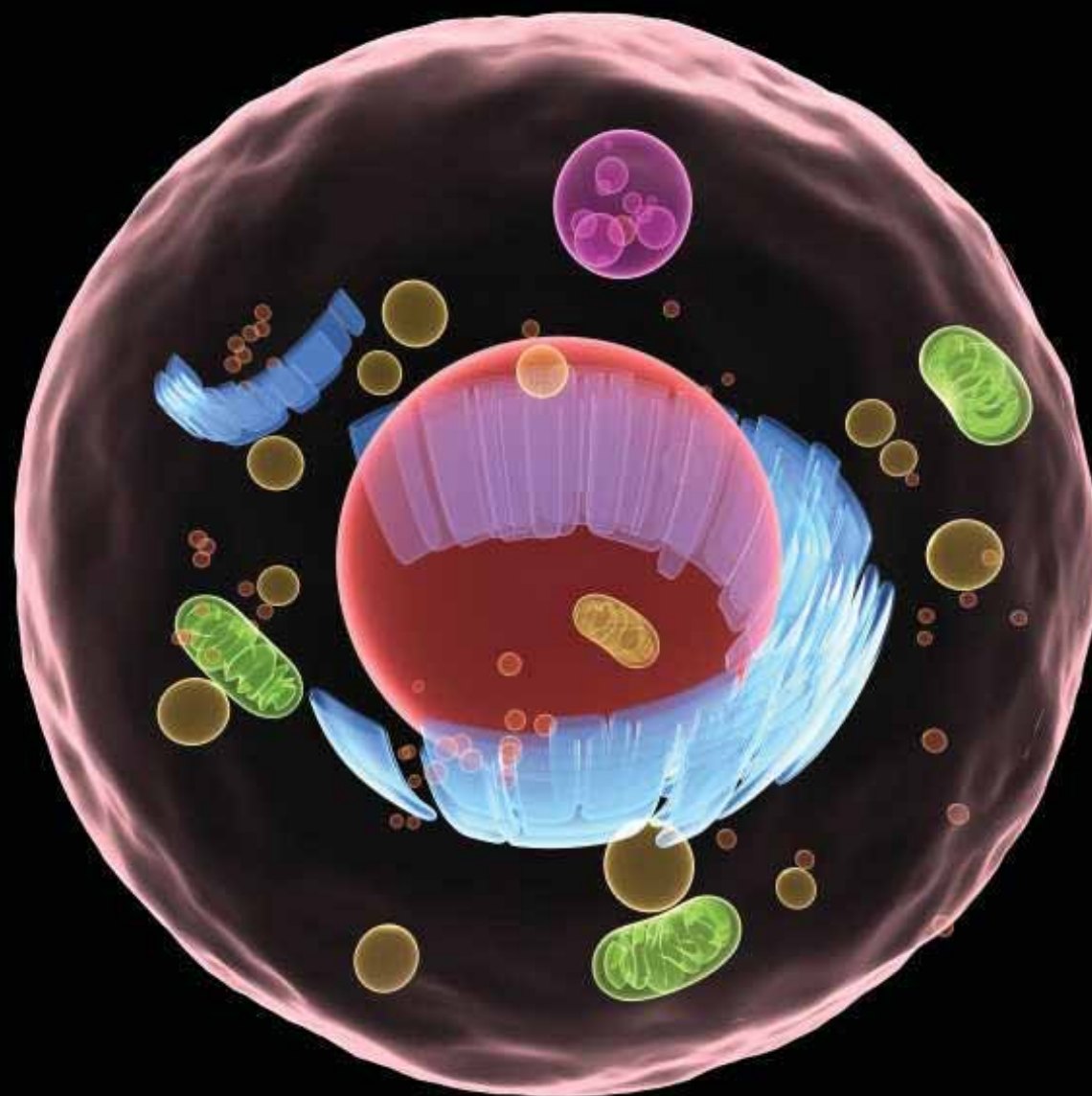
Intelligent
Health



Chronic Stress

Stress Hormones

Unhealthy
Behaviour





Intelligent
Health



Chronic Stress

Stress Hormones

Unhealthy
Behaviour

Mitochondrial damage

Mitochondria as a key component
of the stress response.
Manoli et al. Trends in
Endocrinology and Metabolism
Vol 18 No 5 2007

Cancers

Cardiovascular

Diabetes

Dementia

Depression

Obesity

25% of adults in Canada are obese

25% of children in Canada are overweight or obese

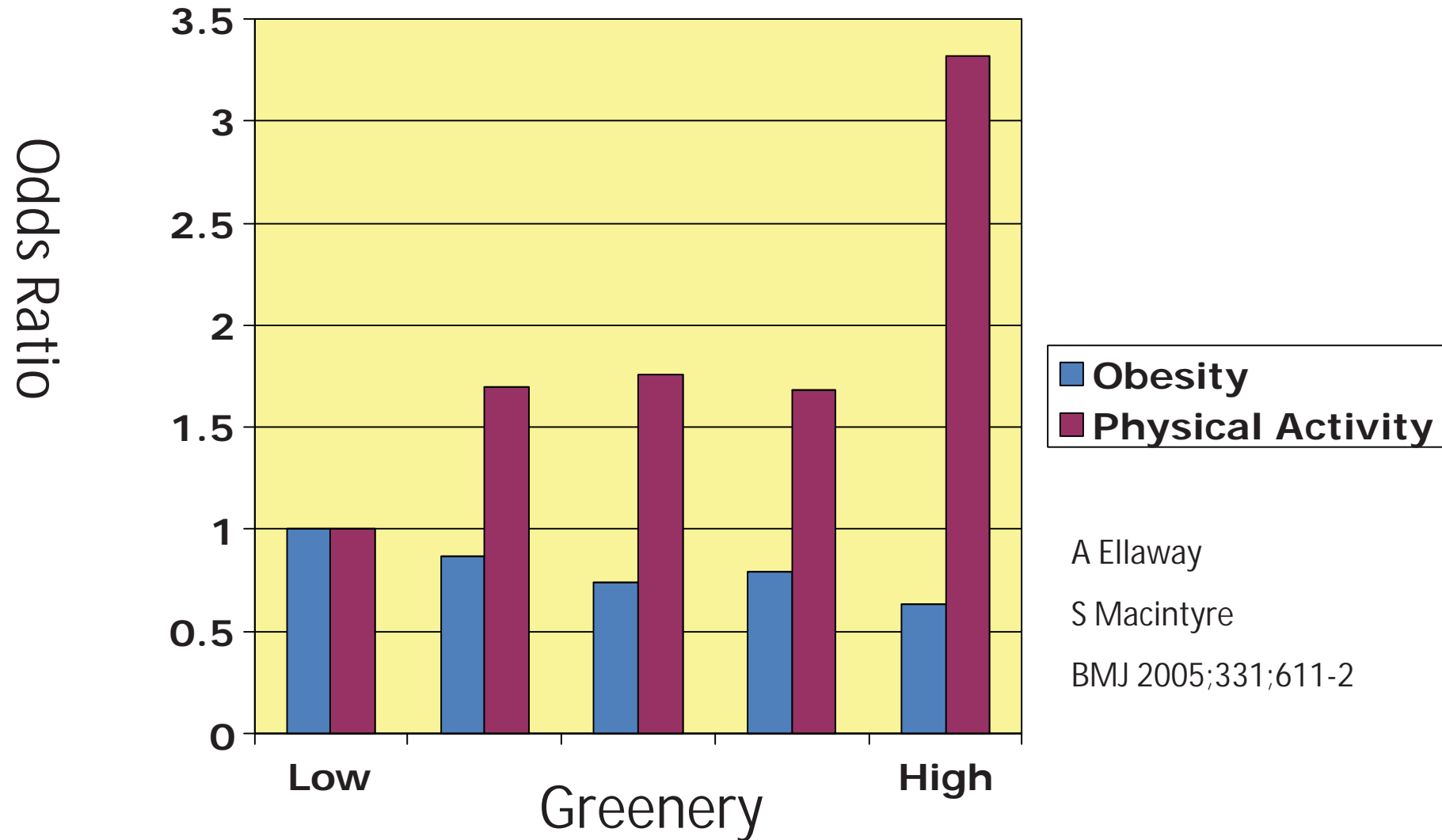
This costs Canada \$4.3 billion



Diabetes

- 1.9 million Canadian men and women have diabetes. This represents about 1 in 17 Canadians - 5.5 % of all women and 6.2 % of all men.
- Cost is \$8 Billion
- Up to 80% of cases of type 2 diabetes can be prevented





Benefits of Physical Activity

Intelligent
Health



++ = Strong effect + = Slight effect • = no effect

	CHD	CVA	Diabetes	Depression	Colon Cancer	Breast Cancer	Hip Fracture	Lung Cancer	Dementia	Prostate Cancer	Mortality
Physical Inactivity	++	++	++	++	++	++	++	+	++	+	++
Smoking	++	++	•	+	+	•	•	++	++	•	++
Cholesterol	++	+	•	•	•	•	•	•	•	•	•
Hypertension	++	++	•	•	•	•	•	•	++	+	++
Diet	++	++	++	•	++	•	+	•	•	•	++

Benefits of Physical Activity

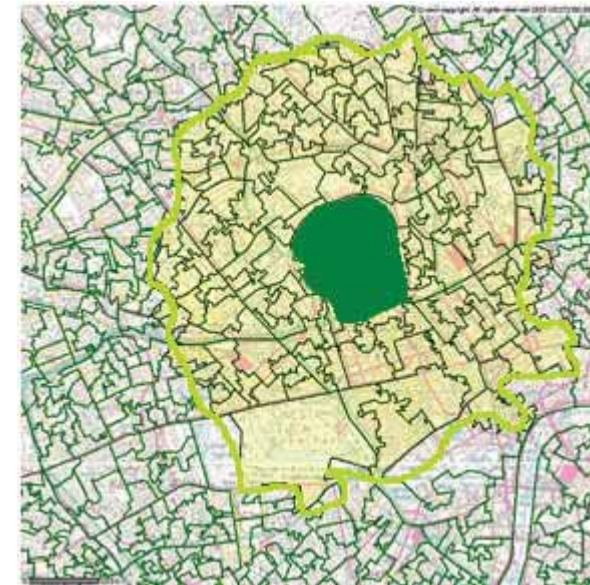


Each QALY costs:

- £17,000 for statin supplement
- £9,515 for smoking cessation
- £440 for physical activity

Cost benefit of PA in a Park

- Regents Park contributes 6.1% of recommended activity for every person within a 2km radius
- The population within 2km of The Regents Park is 199,480 = 0.62% of the UK population
- The Regents Park is therefore a health resource that provides opportunity for physical activity valued at £4.1 million and £643,000 to the economy and NHS respectively each year.



REF: Internal report for
Royal Parks Agency
London 2009

Obesity and Green Space

The difference in the weight gain between children living near green and non green areas was 5.1kg for girls aged 16yrs and 5.9kg for boys.



REF Bell et al 2008 Am J Prev Med
2008;35(6):547–553)

Mental Health

- The economic cost of mental illnesses in Canada for the health care system was estimated to be at least \$7.9 billion
- \$6.3 billion was spent on uninsured mental health services and time off work.
- In 1999, 3.8% of all admissions in general hospitals (1.5 million hospital days) were due to mental ill health.



Pills or activity ?

The Chief medical officer (UK) states that “Physical activity is effective in the treatment of clinical depression and can be as successful as psychotherapy or medication” (DH 2004)

Intelligent
Health

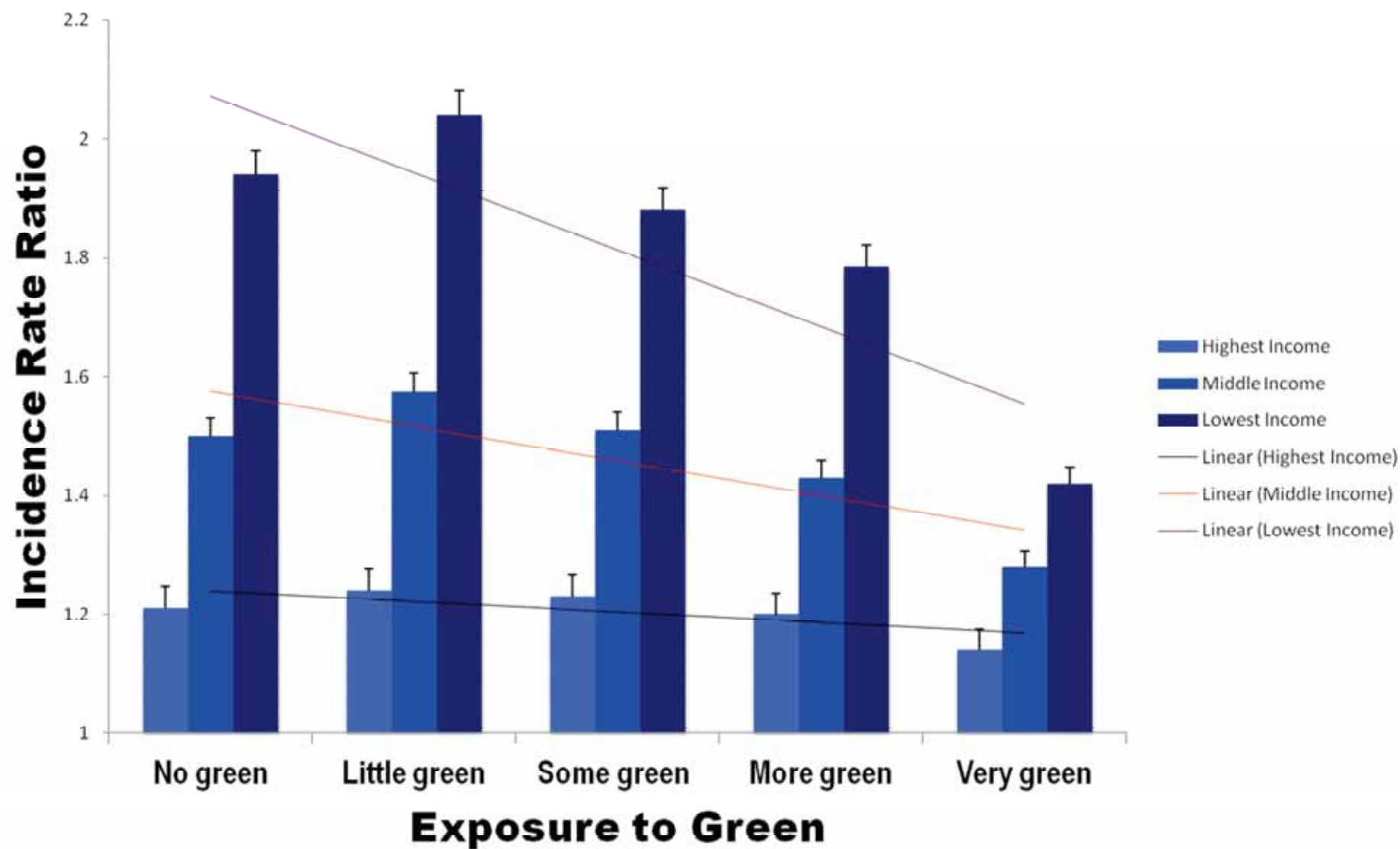


Fair Society Healthy Lives



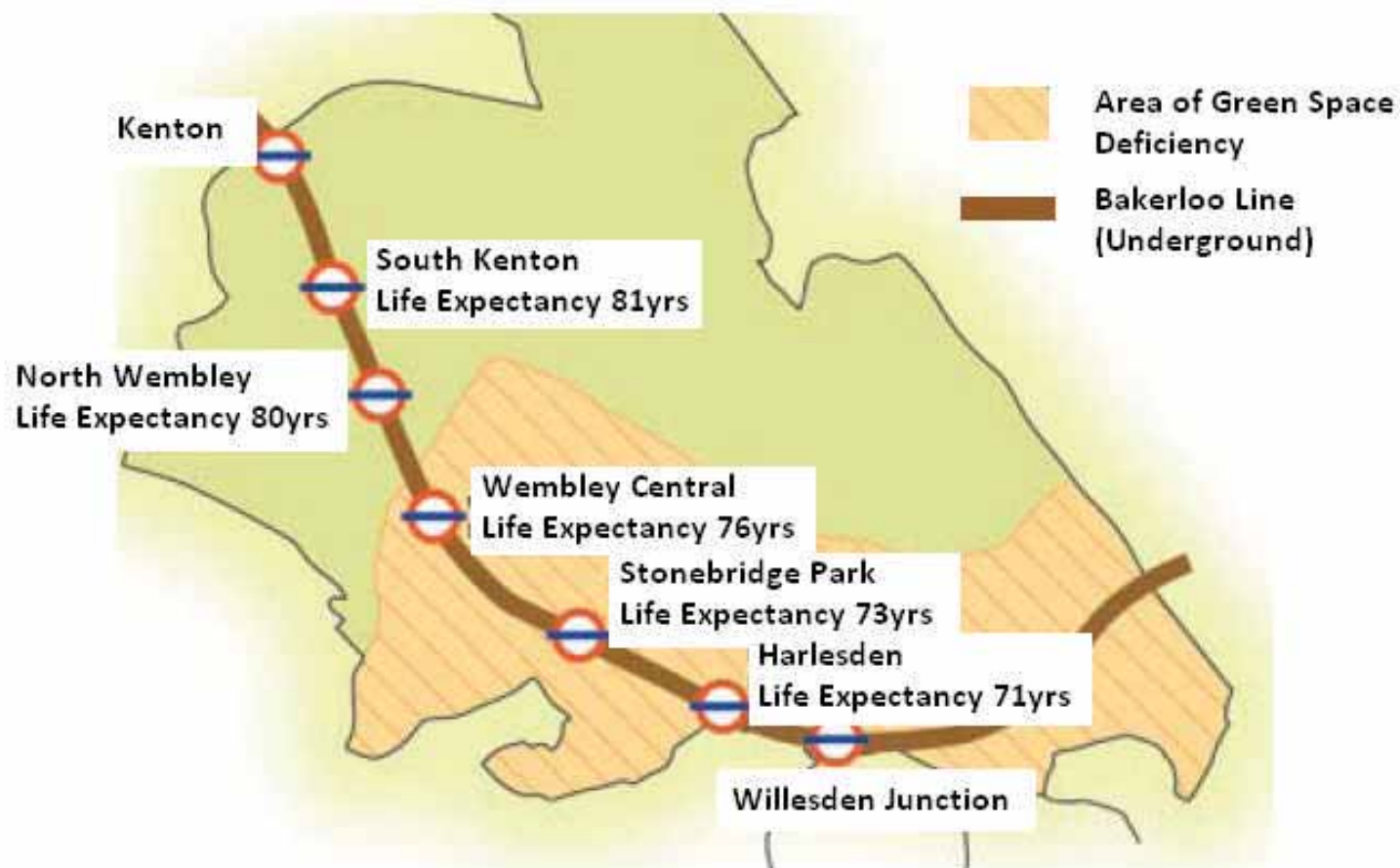
- The budget for new road building, if used differently, could provide 1,000 new parks at an initial cost of £10 million each.
- One thousand new parks could save approximately 74,000 tonnes of carbon, based on a 10 hectare park with 200 trees.



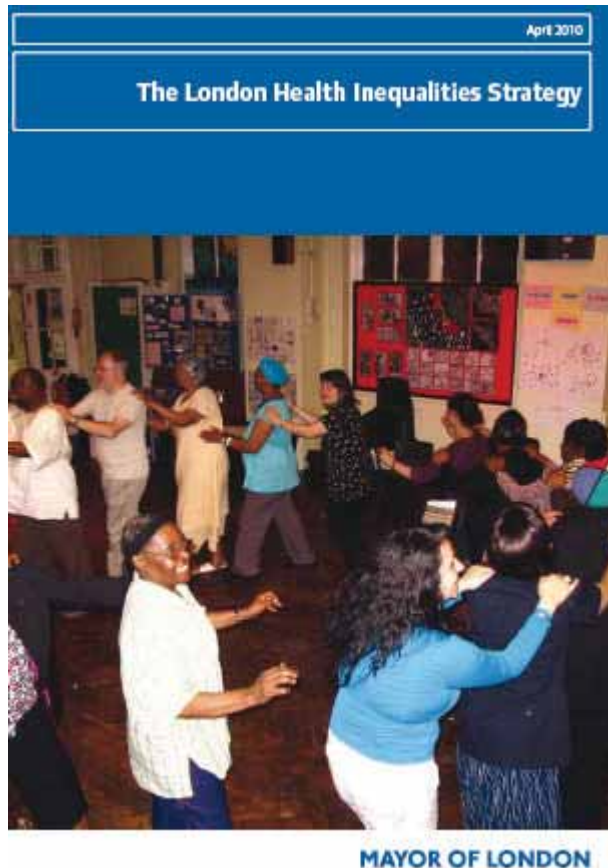


Life Expectancy in Brent (London)

Intelligent
Health



London Mayor's Health Inequalities Strategy



The Mayor's Commitment

"Raise the awareness of the Health Benefits of access to nature and green spaces and extend these benefits to all Londoners."



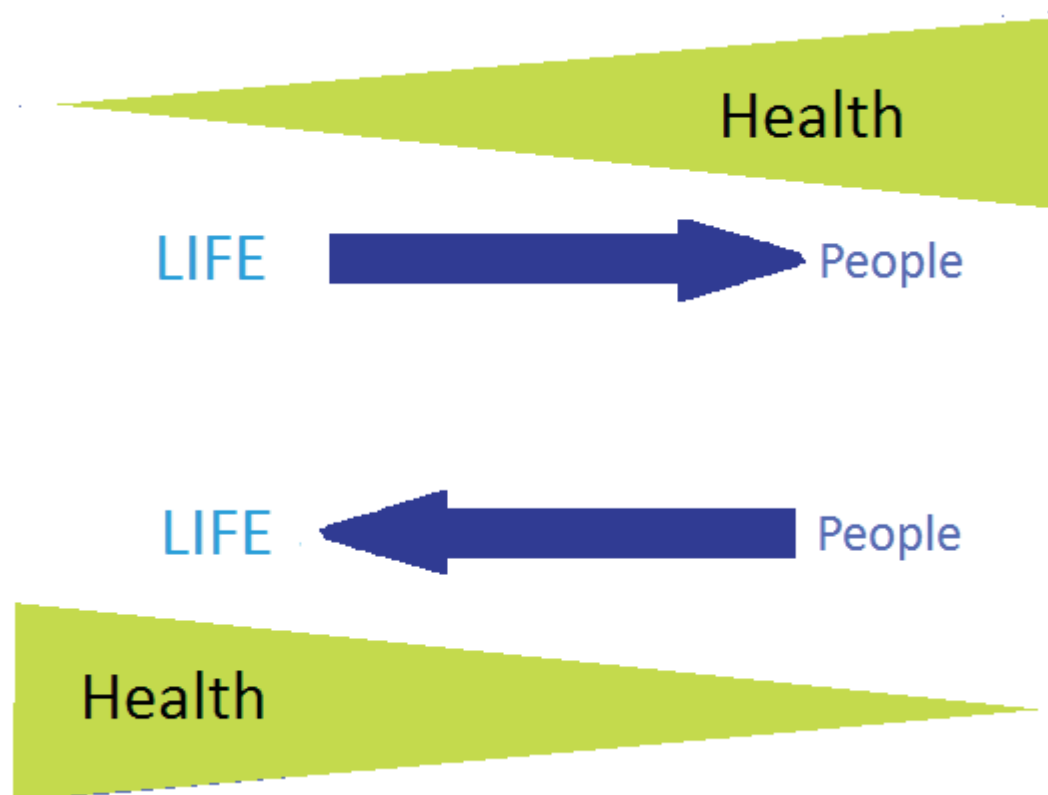
Our Natural Health Service

The role of the natural environment
in maintaining healthy lives

www.naturalengland.org.uk



Our Natural Health Service



Life Supply

Intelligent
Health



- The Registrar of Births Deaths and Marriages said in his annual report of 1845:
- "a Park in the East End of London would probably diminish the annual deaths by several thousands.... and add several years to the lives of the entire population".
- Queen Victoria agreed, and with the backing of 30,000 signatories a brand new park was opened in 1850.



Life Supply

- NHS Forest: Aim to plant 1.3 million trees in and around hospitals, health centres and local communities over next 3 years.

Intelligent
Health



NHS
FOREST
growing forests for health



Every GP practice to plan their Natural Extension. Natural England / NHS Alliance

Intelligent
Health



Balmore Park surgery
New Extension of treatment
area:
Complete in 2007
Cost £0
Benefit to 15000 patients
Open 24 hours a day
Maintained by people of
Caversham.



Green Space
Trees
Fitness path





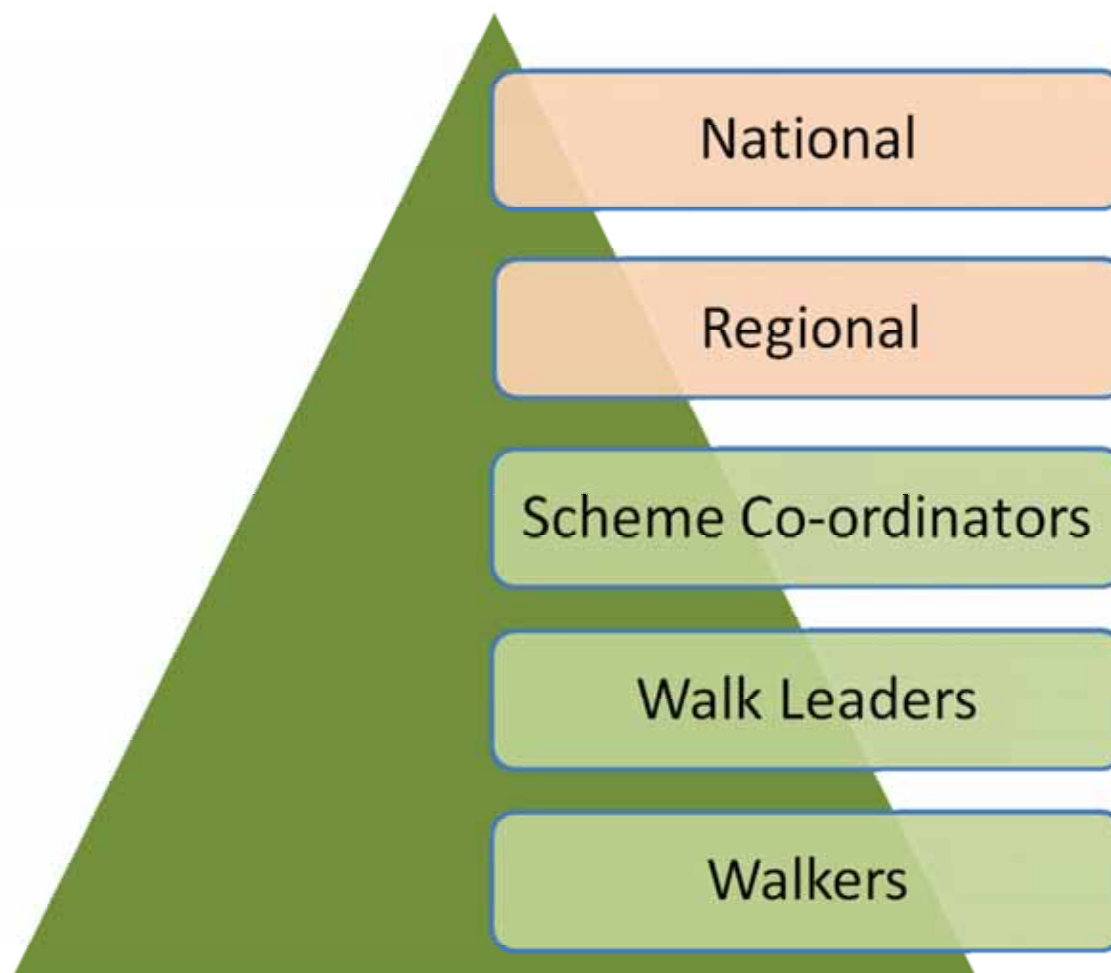
Demand for Life

- Europe's largest walking scheme
- About 175,000 walks a year in 650 schemes (England only)
- 1.8 million contacts a year
- About 10,000 active volunteer walk leaders



Walking for Health

Intelligent
Health



Intelligent
Health



London 2012 Legacy

Intelligent
Health



- From 2013 any school or city can enter the annual International Walk to School Competition.
- This will match any school with any other school anywhere in the world.
- Children will lead the example of reducing CO2 improving air quality and increasing physical activity.



The PAL Scheme

The Physical Activity Loyalty Card Scheme







Life is Good