



Walking for Health: connecting people and the natural environment

Stella Goddard

Health Programme Manager

Who are Natural England?



Natural England is here to conserve and enhance the natural environment for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings.

We will achieve this by:

- promoting nature conservation and protecting biodiversity;
- conserving and enhancing the landscape;
- securing the provision and improvement of facilities for the study, understanding and enjoyment of the natural environment;
- promoting access to the countryside, open spaces and encouraging open air recreation; and
- contributing in other ways to social and economic wellbeing through management of the natural environment.

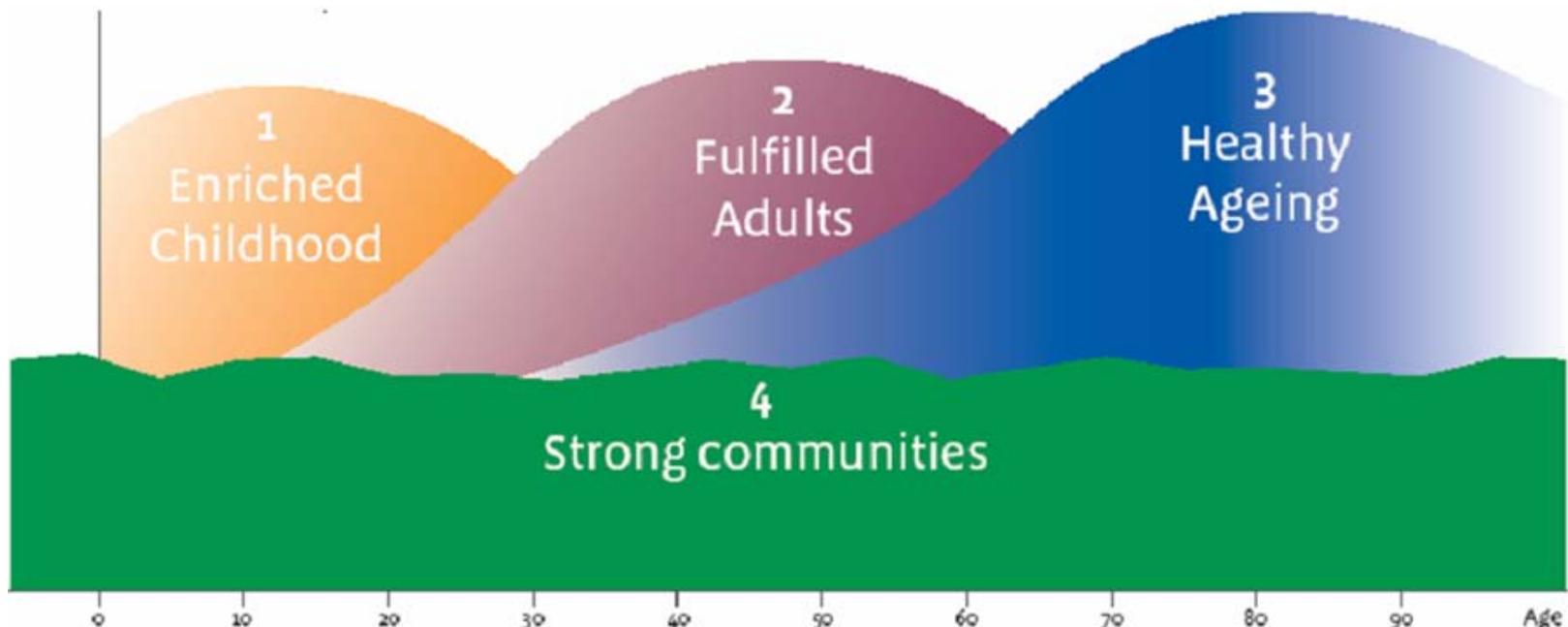
Our Natural health Service: what is the value of this?



Natural England's health and wellbeing policy



Contact with the natural environment helps create strong and healthy communities with more active and less stressed individuals.



The natural environment can help with the major health problems facing society



| Indirect benefits | Direct benefits |
|------------------------------|--|
| Reducing health inequalities | Moderating impact from extreme weather |
| Improving mental health | Shelter from UV, noise, wind |
| Improving physical activity | Carbon sequestration |
| Reducing obesity | Improved water and air quality |
| Enhancing social cohesion | Food |

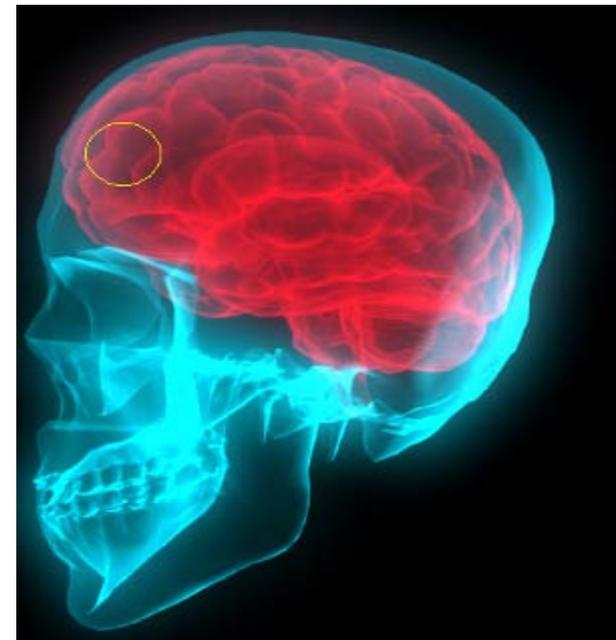
Biophilia Hypothesis

- Proposed by EO Wilson in the 1970s he described it as:
- “the innately emotional affiliation of human beings to other living organisms. Innate means hereditary and hence part of ultimate human nature”.
- Beauty lies in the genes of the beholder



Attention Restoration Theory

- Formulated by Stephen and Rachel Kaplan in the mid 1980s
- The natural environment provides an effective restorative environment which has four qualities:
 - **Being away** from day to day routine,
 - **Fascination**,
 - a feeling of **Extent** allowing exploration and a
 - **Compatibility** to our expectations.
- The benefits occur in the right
- Frontal cortex



Psycho-physiological stress recovery theory

Formulated by Roger Ulrich in the mid 1980s

Based on empirical findings of an immediate positive response to views of nature.

This response causes a rapid reduction in stress (Blood pressure, muscle tension pulse rate) usually within minutes of exposure of nature and is most obvious when the body is already stressed



a)

b)

c)

From EEG studies alpha waves (more calming) are highest in a) second highest in b) and lowest in c).

Nakamura and Fujii (1990)

Healthcare costs



- We spend around £110 billion each year on healthcare in the UK,
- equal to 8.5 per cent of all income.
- Through advances in medicine we are living longer and overcoming more and more diseases.
- In the same period, the population has also become more sedentary
- The result has been an inexorable rise in what can be described as diseases of 21st Century living - obesity, diabetes and depression.
- The Department of Health has warned that nine out of ten adults could be overweight or obese by 2050 if we carry on as we are. Around 2.5 million people now suffer from diabetes, and this is predicted to increase to 4 million by 2025.
- The cost of health care is increasing exponentially

Physical Activity



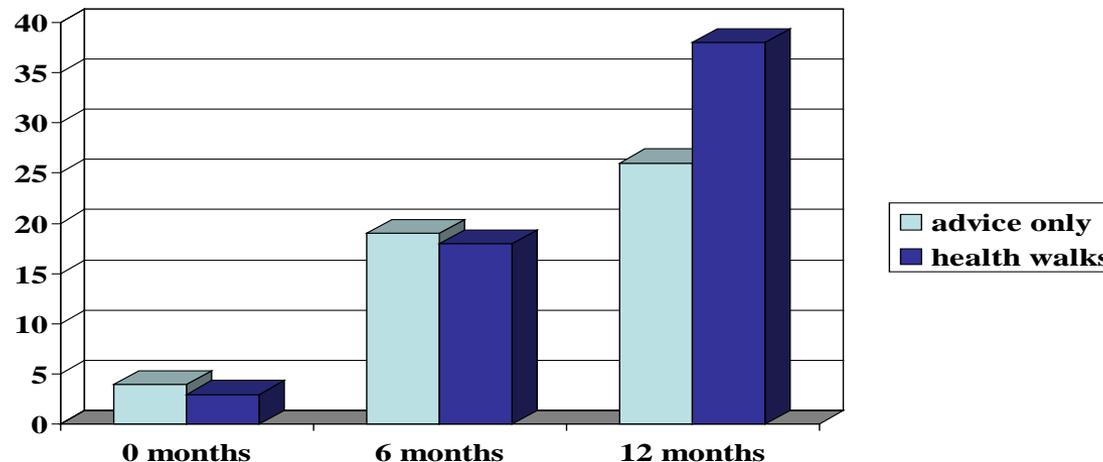
Physical inactivity is a major cause of long term ill-health and early death in Britain

The Natural Environment: a resource for health



Getting out in the natural environment

Advice to take part in health walks (as opposed general advice on the benefit of exercise) is more likely to lead to an uptake of physical activity.



Can Green Space benefit the Health of the Population?



Senior citizens lived longer with more space to walk and with nearby parks and tree lined streets near to where they live.

Tanaka A, Takano T, Nakamura K, *et al.* Health levels influence by urban residential conditions in a megacity — Tokyo. *Urban Stud* 1996; **33**: 879–945.

For every 10% increase in green space there was a reduction in health complaints equivalent to a reduction of five years of age.

De Vries, S. Nature and health; the importance of green space in the urban living environment. Proceedings of the symposium 'Open space functions under urban pressure'. Ghent: 19–21 September 2001.

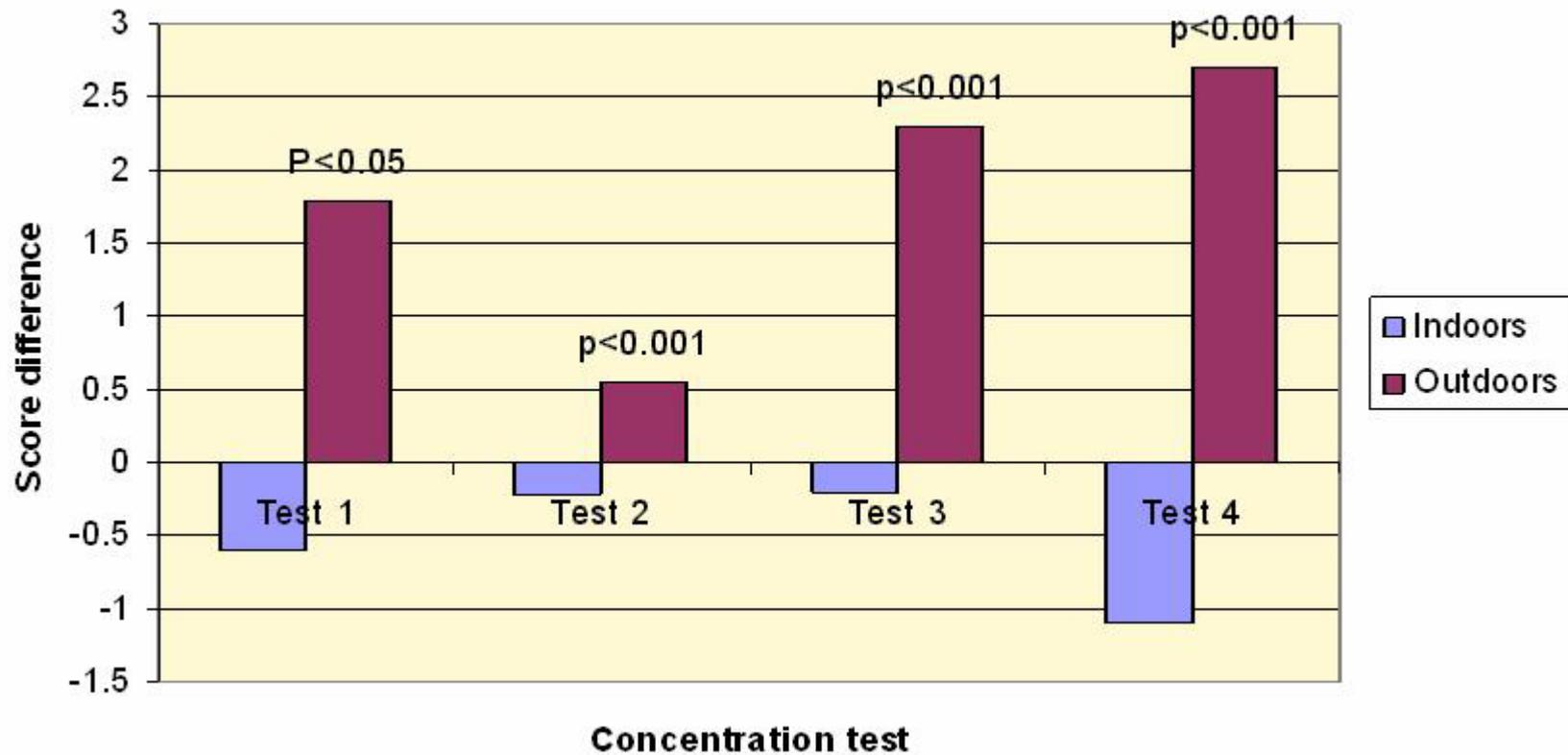
Being within access to Green space can increase levels of physical activity

Giles-Corti B, Donovan RJ. Relative influence of individual, social environmental, and physical environmental correlates of walking. *Am J Public Health* 2003; **93(9)**: 1583–1589.

Reduction in Blood Pressure following a stress event



Concentration of elderly people following 1 hour rest in a garden vs remaining in own room



- Natural England's WfH programme is the most significant delivery mechanism connecting people with their local natural environment.
- Other initiatives include Green Exercise, Access to Nature and Blue Gym.



Walking for Health



- Natural England supported scheme
- Targets sedentary people in areas of health deprivation
- Currently taking around 40,000 people for a led health walk every week
- 2,500 led health walks
- Organised by around 600 schemes across England
- Due to expand four fold supported by the Department of Health
- Local delivery supported by national enabling

What is Walking for Health?



- WfH is the largest programme in the UK promoting physical activity to sedentary people in urban and rural areas.
- Launched in 2000, the successful WfH programme is already helping 32,000 people each week to join led health walks in their local natural environment.
- A new partnership between Natural England and the Department of Health will enable 130,000 people to walk regularly to benefit their health.

What is a health walk?



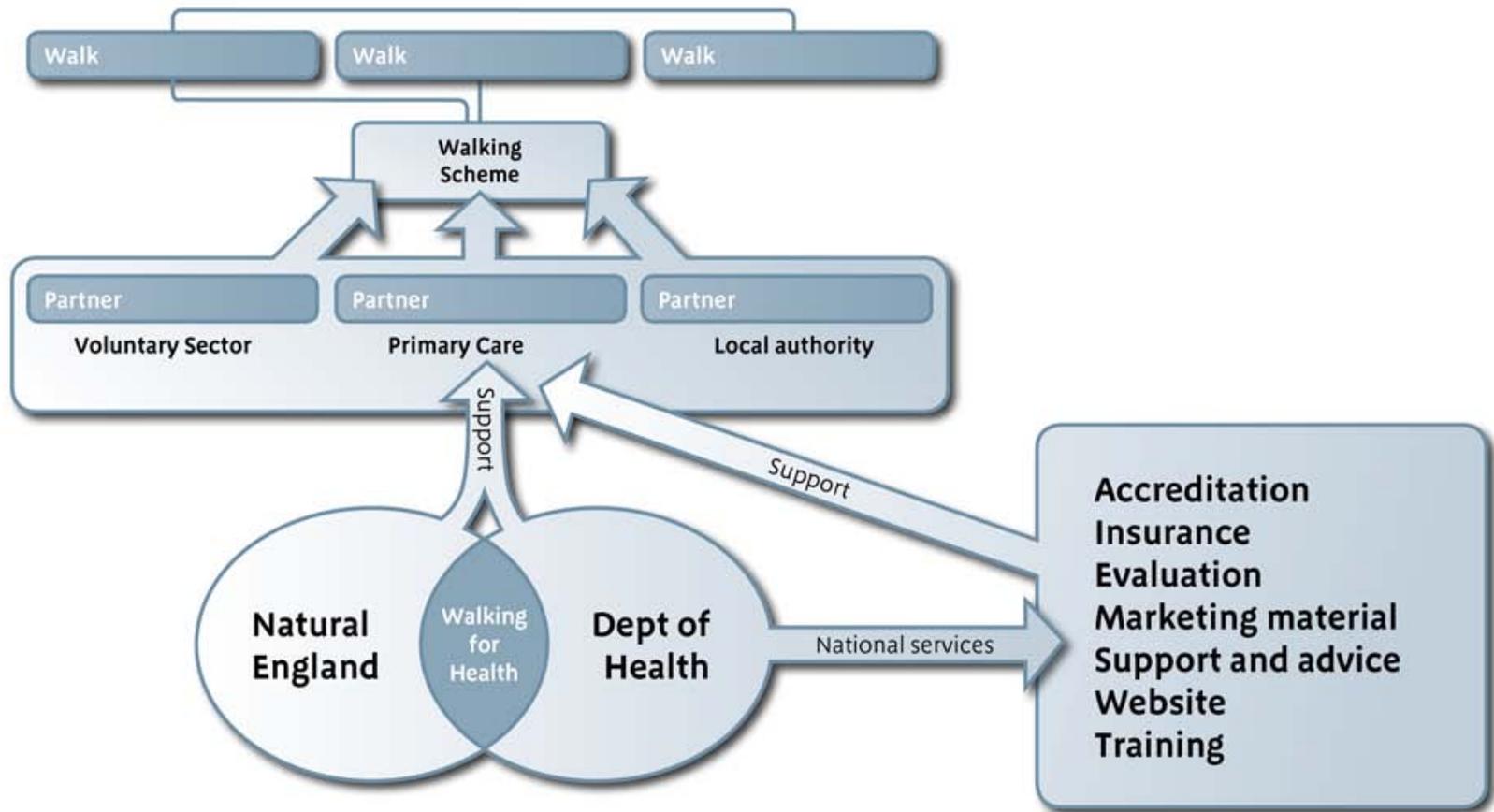
- A health walk is a led walk lasting between 30 minutes and an hour and a half.
- It should be led at a pace which is brisk for the individual.
- It should take place over easy terrain with a level surface and no barriers.
- It should start at a slow pace to allow warm up, speed up for the main part of the walk, and then slow towards the end once more to allow cool down.
- It should make the individual feel warmer and sweat a little, increase their rate of breathing and raise their pulse, but not so fast that they cannot talk

Walking for Health's successes



- 600 walking schemes.
- Over 16,000 active volunteer walk leaders.
- Over 2,500 walks per week.
- Around 40,000 per week walking.
- Individual walker participation averages 3 times per week.

How the 'model' works



Evaluation / Endorsement from NICE



Outdoor Health Questionnaire (OHQ)

Walking the way to Health

ID Number: Name of Scheme:

A. Participant Details

Full name:



4. In the **past week**, on how many days have you accumulated **at least 30 minutes** of moderate intensity physical activity such as brisk walking, cycling, sport, exercise, and active recreation? (Do not include physical activity that may be part of your job or usual role activities.)

- 0 1 2 3 4 5 6 7

Single Item Metric – fully validated has undergone: Cognitive Testing: Test-Retest Reliability: Concurrent Validity

Definition of cost effectiveness

- According to NICE's Definition:
- Cost effectiveness equates to Value for money.
- A specific health care treatment is said to be 'cost-effective' if it gives a greater health gain than could be achieved by using the resources in other ways.

Demonstration of the socio-economic benefits of the environment.



Economic analysis and evaluation is being undertaken as part of the WfH research programme to identify health and environmental costs, benefits and effectiveness – overall and for individual person.

- Pilot data suggest an average cost of a dose of walking for an individual participant to be £0.84p.
- Early basic models indicate that:
 - over the 3 year period of the WfH Expansion **2817 QALY (Quality Adjusted Life Year)** would be delivered at a cost of **£4000 per QALY**, well below the NICE cost-effectiveness threshold;
 - a life-cost averted saving to the health service of **£81,167,864** over the 3 year period; and
 - a cost-benefit ratio of 1:7.18.

Immediate benefits to people



“Felt better”

“Able to walk to the shops”

“Met new people”

“Regained independence”

“Stopped taking medication”

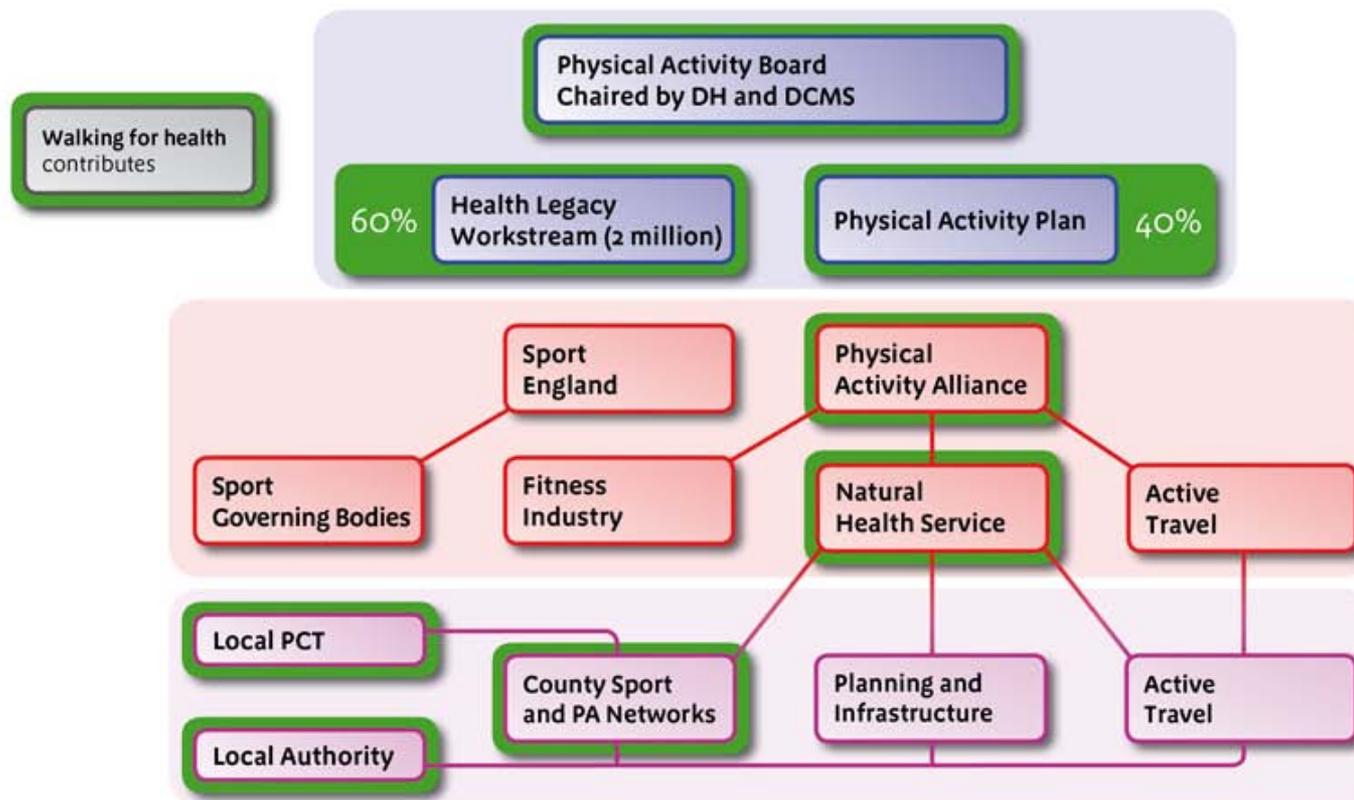
“I’ve lost two stone
through walking”

Other initiatives Walking for Health links with



- The Legacy Action Plan aims to get 2 million more people active by 2012. Walking for Health contributes towards this target.
- The PCTs have vital signs that include childhood obesity and cardiovascular targets that WfH can contribute.
- The new Vascular Checks will require every person over the age of 45 to be screened for vascular disease and physical activity levels.
- The Physical Activity Care Pathway is being rolled out by the Department of Health as a way to deliver physical activity in primary care.

How Walking for Health integrates with government



National Indicators that WfH can help deliver (1)



- **NI 120:** All-age all cause mortality rate.
- **NI 121/122:** Mortality rate from all circulatory diseases and all cancers at ages under 75.
- **NI 137:** Healthy life expectancy at age 65.
- **NI 8:** Adult participation in sport and active recreation
- **NI 110:** Young people's participation in positive activities.
- **NI 55/56:** Obesity in primary school age children in Reception and year 6.

National Indicators that WfH can help deliver (2)



- **NI 119:** Self-reported measure of people's overall health and wellbeing.
- **NI 2:** % of people who feel that they belong to their neighbourhood.
- **NI 5:** Overall/general satisfaction with local area.
- **NI 6:** Participation in regular volunteering.
- **NI 138:** Satisfaction of people over 65 with both home and neighbourhood.

Web Addresses to contact for further information



- www.wfh.naturalengland.org.uk
- www.naturalengland.org.uk
- Thank you for listening

