THE BENEFITS OF PHYSICAL ACTIVITY

Walkability and Wayfinding Seminar

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How did I get here?

Research conducted 1999 - 2003 in the City of Bunbury:

Perceptions of active modes of transport to increase incidental physical activity

Objectives

To investigate:

• community attitudes towards different modes of transport into and within the CBD of the COB

• individual and environmental barriers and facilitators to using modes of transport other than the private motor vehicle

• community attitudes towards aspects of the physical environment, to identify those which are and are not conducive to physical activity, especially for every-day transport

• ways to increase participation in incidental physical activity, especially for every-day transport
Methods

• Qualitative research
• 14 focus groups
• 87 participants:
  • gender
  • employment status
  • living > or < 2 km from the CBD
• Reported preference for driving, walking, cycling or using public transport into and out of the CBD
Primary influences on choice of transport

- Psychological influences
- Time
- Distance, destination and purpose of the trip
- Safety
- Weather and seasonal conditions
- Planning and organisation of clothing and special equipment
Psychological influences

Most participants acknowledged the health, social, environmental and economic benefits of walking, cycling and travelling by public transport

(even though, if they could, most preferred to travel by motor vehicle)
So ....

Not all influences are amenable to change

Encouraging people to increase their physical activity by using active modes of transport is challenging

Highlighting the many benefits of physical activity is one strategy (of the many required)
What are the benefits of physical activity?
Health benefits

Level 1 evidence:

.... improved health and functional ability, reduced chronic illness and disability

National Heart Foundation of Australia. 2009. Blueprint for an active Australia.
Health benefits

Reduced risk of:

• Heart disease (by 50%)
• Having a second heart attack
• Stroke
• High blood pressure and high cholesterol
• Obesity (and assists with weight management)
• Developing and dying from some cancers

Assists with coping, rehabilitation and survival from many forms of cancer

US Centre for Disease Control and Prevention: http://www.cdc.gov/physicalactivity/index.html
Health benefits ... specifically

Decreases body fat

Prevents / delays all-cause risk and mortality, and cardiovascular events

Increases:
• Recovery from heart attack
• Muscle, muscle strength and bone density
• Energy

Improves:
• Sleep
• Quality of life and long term health
• Fitness and stamina
• Immune system
• Blood pressure
• Weight loss and sustained management
• Management of, and QoL for some chronic diseases

Diabetes benefits

“PA is a key element in the prevention and management of T2 diabetes”*

Improves:
• Blood glucose control, insulin action, fat oxidation and storage in muscles
• Blood lipid profile
• Blood pressure management
• Symptoms of depression and health-related QoL

Increases:
• Glucose uptake in active muscles (lower BG fasting levels in individuals up to 24 hours post moderate – vigorous resistance exercise)

Can:
• Prevent or delay progression to T2 Diabetes (from Impaired Glucose Tolerance - IGT)
• Assist to maintain blood sugar levels (BSL) in those with non-insulin dependent diabetes
• Prevent development of gestational diabetes in pregnancy

Evidence:
• Structured PA and modest weight loss combined can lower T2D risk by up to 58% in high risk populations
• Combined aerobic and resistance exercise may be more beneficial than either alone

Mental Health Benefits

Improves:
• Self esteem and confidence
• Mood and sense of wellbeing
• Concentration, memory and learning
• Performance at school
• Psychological wellbeing and mental awareness

Reduces:
• Stress, anxiety and depression
• Feelings of fatigue and depression

National Heart Foundation of Australia. 2009. *Blueprint for an active Australia.*
Walking in communities and formal physical activity programs can

Increase:
• Cohesion within families and community connectedness

Improve:
• Social/community networks and social capital

Social benefits

Encourages:
• A sense of belonging
• Children to walk to school

Mobilises people to engage with their neighbours and the wider community
Promotes neighbourhood safety and helps to build safer communities
Can help reduce a sense of isolation and loneliness
LET'S WALK TO SCHOOL
It's really cool to walk to school!
Environmental benefits

Reduces:
- Greenhouse gas emissions and air pollution (if used to replace car trips)
- Traffic congestion
- Noise pollution

A variety of transport choices adds to the environmental ‘aesthetic’ of communities

Economic benefits

If more Australians were physically active for just 30 minutes a day, the Australian healthcare system could save $1.5 billion annually

- Fewer medical interventions
- Reduced demand on health services
- A more productive workforce which is less prone to injury, with less associated compensation and rehabilitation costs

# Benefits of Active Living at Work

For employees:

- Improved
  - Fitness and health
  - Productivity and morale
  - Job satisfaction and team spirit

Reduced stress and back injuries

Benefits of Active Living at Work

For organisations:

Reduced:

- Absenteeism and staff turnover
- Stress and back injuries
- Workplace injuries
- Worker’s compensation costs
- Claims against group benefit plans (USA and Canada)

Improved productivity
What are the benefits of physical activity across the lifespan?
For children and families cont...

- Fewer risk factors for cardiovascular disease

- Less likely to be overweight and/or obese and to have poor adult health

- Positive association with cognitive functioning and/or academic success

Inactive children are more likely to become inactive adults

Parents are key influencers of children’s participation in physical activity

For adults

Lower:

• All-cause mortality

• Rates of chronic diseases
For older adults

Promotes:
• Healthy ageing
• Better mental and social health

Provides opportunities for:
• Social engagement and support - particularly for people who may be socially isolated

Reduces the risk of:
• Dying prematurely
• Developing heart disease
• Impaired glucose tolerance
• Type 2 diabetes
• High blood pressure and colon and breast cancer
• Osteoporosis
• Falls, through improved flexibility, strength and balance

Every Day for Life!
Be Active, Your Way,
Age is no barrier
Guidelines for Adults

• Think of movement as an opportunity, not an inconvenience

• Be active every day in as many ways as you can

• Put together at least 30 minutes of moderate-intensity physical activity on most, preferably all, days

• If you can, also enjoy some regular, vigorous activity for extra health and fitness

Fitness Benefits of Different Physical Activities

Aim to make

“... healthy choices (for physical activity) easy choices...”

Nancy Milio, 1987
Get active your way...

build physical activity into your daily life...

at home
at school
at work
at play
on the way

.... that's active living!