

Stopping Smoking and Physical Activity

Research shows that being physically active whilst stopping smoking can help in many ways by:

- Reducing nicotine withdrawal symptoms, particularly cravings
- Reducing weight gain
- Improving self esteem
- Boosting the immune system
- Reducing the risk of chronic diseases, e.g. heart disease, cancer
- Releasing feel good chemicals so you feel more positive about quitting smoking (therefore reducing anxiety or depression)
- Keeps you busy so that you can focus on your exercise rather than a cigarette

These changes can be made by a variety of methods:

- "Lifestyle" activities (eg. walking, gardening, housework)
- Structured exercise (eg. swimming, aerobics)
- Sports (e.g. football, netball)
- Home—based workouts (e.g. workout videos or exercises done from the comfort of your own chair, especially suitable for those with mobility problems)

Evidence shows that withdrawal and cravings to smoke are lower during and after:

- 5 to 10 mins on a bike at moderate intensity (breathing slightly harder than normal)
- one mile walk at your own pace
- a weekly walking programme
- 5 minutes of isometric exercises (i.e. pushing or pulling an immovable object, like pushing against a wall)

Contact your local council, your doctor or local NHS to see what exercise schemes are happening in your area. Many areas have organised walking groups, some offer use of gyms at discounted rates to certain people and some areas offer free health checks and exercise programs.

Information for Health Professionals

Withdrawal/desire to smoke is lower:

- after 30-40 mins on exercise bicycle at vigorous intensity (Bock et al, 1999)
- during and after 5-10 mins on exercise bicycles at moderate intensity (Ussher et al, 2001)
- during and after one mile self-paced walk (Taylor et al 2005)
- after 5 mins of isometric* exercise (Ussher et al, submitted)
- during a 7 week walking programme (Ussher et al, 2003)

*Isometric exercise - Exercise involving muscular contractions without movement of the involved parts of the body/joints to strengthen and tones the muscle. Eg. pushing against a wall, placing palms of hands together and pushing.

Reasons for Physical Activity Reducing Withdrawal and Cravings

Psychological explanations:

- Distraction (Ussher et al 2001, Daniel et al, in press)
- Expectations (Daniel et al submitted)
- Achievement

Physiological explanations:

- Activity mimics the effects of nicotine, eg stimulates central nervous system, increased blood glucose)
- Opioids, eg. beta-endorphins

Can Physical Activity Increase Quit Rates?

From: Ussher et al 2005 Cochrane Review

- Physical activity programme, eg. 30-40 mins exercise, three times a week, plus standard treatment
- 13 studies reviewed
- 3 studies showed significantly higher quit rates for exercise versus control at end of treatment
- 1 study showed higher quit rates at 3 and 12 month follow-up for exercise versus control (12% versus 5% at 12 months)
- 1 study showed increase abstinence for exercise versus control at 3 month follow-up for not at end of treatment or 12 months.
- 9 studies showed no difference in quit rates for exercise versus control.
- Generally exercise adherence was poor

Summary

Despite good evidence that physical activity reduces cravings and withdrawal:

- Evidence from only 1 study for physical activity increased quit rates at 12 months
- This lack of evidence may be due to poor adherence to the physical activity programme.