

Information for General Practice on Physical Activity and Heart Disease

There is widespread recognition that physical inactivity is a major risk factor in cardiovascular disease, second only to the population risk attributed to smoking, and greater than the risk attributed to high cholesterol or hypertension.¹

Physical activity benefits males and females of all ages. There is increasing evidence that many benefits occur relatively soon after the adoption of an active lifestyle and are likely to occur at whatever age physical activity is commenced.¹



Heartsite www.heartfoundation.com.au
Heartline 1300 36 27 87

NSW HEALTH

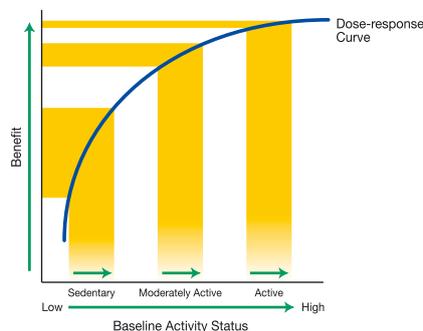
- ♥ Regular physical activity throughout life reduces the **incidence** and **fatality rate** from cardiovascular disease by **up to 50%**.²
- ♥ For those with existing heart disease, being regularly active can decrease the chance of dying from another heart attack **by 25%**.³
- ♥ Regular physical activity can reduce **blood pressure** (systolic and diastolic), decrease the risks for ischaemic **stroke for older adults** and favourably influence lipid profiles.²

Physical Activity Guidelines

The Australian Physical Activity Guidelines emphasise the importance of incorporating physical activity into daily living, as well as increasing leisure time activities.⁴

- ♥ Put together at least 30 minutes of moderate-intensity activity on most, preferably all, days of the week. (A total of 150 minutes or 3350 kilojoules per week).
- ♥ Be active everyday, in as many ways as you can.
- ♥ Think of movement as an opportunity and not an inconvenience.
- ♥ If you can, also enjoy some regular vigorous exercise for extra health and fitness.

Moderate activity will cause a slight, but noticeable increase in breathing and heart rate, and may cause light sweating. Vigorous activity will cause hard breathing (or puffing and panting).



Adapted from Blair SN, Kohl HW, Barlow CE et al.
Figure 1. The greatest health benefit of physical activity is seen in people who change their physical activity status from sedentary to moderately active.

Target Groups

Maximum health benefits are achieved when people are moved from sedentary to moderate levels of activity (Figure 1).⁵ Over half of all Australians are not active enough for cardiovascular health benefits. Australian research has identified population groups that are less likely to be physically active. These include: married women with children, adults (particularly those in their 40's and 50's), the less educated and those from cultural and linguistically diverse communities.²

For prevention of CVD

- ♥ Regular physical activity is beneficial for people with one or more existing risk factors such as unfavorable lipid profile, high blood pressure, overweight and diabetes.

For existing CVD

- ♥ Regular physical activity can assist participants attending cardiac rehabilitation following myocardial infarction, cardiac procedures or surgery to prevent further events.⁶
- ♥ An individual approach to advice is best, taking into account age, personal preference, co-morbidities, usual activity level and musculoskeletal integrity.⁷
- ♥ Patients should begin at low intensity and duration and gradually increase over several weeks, particularly in the post-acute event period. Advise the patient to begin with one or two activities over several weeks, work towards achieving a goal and moving beyond it.⁷
- ♥ It is recommended that over time people should aim to include 30 minutes or more of moderate intensity physical activity on most, if not all days of the week. The amount of activity can be accumulated in shorter bouts, such as three 10-minute walks. Vigorous physical activity is generally not encouraged for people with coronary heart disease.⁷

- ♥ Monitor progress/response to the physical activity regimen at each patient visit.⁷

Note: Anyone with a chronic illness needs a medical clearance to engage in moderate intensity physical activity.

Safe Practice

The health risks of moderate intensity physical activity are very low when compared with the benefits. Musculoskeletal injuries are the most common health problems that have been associated with unaccustomed, excessive amounts of physical activity. Myocardial infarction and sudden death are extremely rare during physical activity, occurring primarily among inactive persons with advanced atherosclerotic disease who engage in strenuous activity to which they are unaccustomed. Sedentary individuals should be discouraged from undertaking sudden vigorous exercise in favour of moderate activity. Advise the person to be active only when feeling well, under temperate conditions and to be comfortably attired.

Conditions that require clinical assessment, ongoing monitoring and possibly supervision include: unstable angina, uncontrolled hypertension, severe aortic stenosis, uncontrolled diabetes, complicated acute myocardial infarction (within 3 months), untreated heart failure or cardiomyopathy, symptoms such as chest discomfort or shortness of breath on low exertion, resting heart rate > 100 bpm.⁷

Patients should be advised to stop exercising if they experience:

- ♥ chest tightness/discomfort or pain
- ♥ dizziness or light headedness

- ♥ difficulty in breathing/shortness of breath
- ♥ nausea
- ♥ claudication
- ♥ palpitations.

The Role of GPs and Practice Nurses in promoting physical activity

GPs and practice nurses are well placed to take a leadership role in patient education about the benefits of physical activity and commit to monitoring physical activity and obesity levels in the general population.

There are three reviews of physical activity interventions delivered through general practice in the literature to date.² These reviews detail 17 studies that have been reported to test the effectiveness of advice and conclude that brief interventions involving verbal advice in combination with supporting written materials, can lead to modest (about 10%) short term increases in physical activity participation.²

Addressing physical inactivity in general practice

- ♥ Ask and Assess: Identify patients with risk factors. Screen patient to identify activity levels, concurrent risk factors, lifestyle habits, preferences and identify barriers to participation. Ensure the patient does not have any contraindications to increased activity.
- ♥ Advise: Provide brief advice or counselling about the benefits of physical activity and outline appropriate ways in which they may initiate or increase physical activity levels (tailored to each person's situation). Address some of the barriers that may have been identified previously.

- ♥ Assist: Provide an individualised written prescription for activity and supporting written information for the patient. A physical activity prescription can be generated using Physical Activity Module (PAM) feature in Medical Director and MedTech 32.
- ♥ Arrange: Follow-up and/or referral to appropriate community providers of physical activity.

Physical Activity Module (PAM) – Medical Director/ MedTech 32

PAM is a brief electronic intervention tool currently available on medical software programs Medical Director and MedTech 32. You can use the PAM to:

- ♥ assess your patient's activity levels using the standard two-part questionnaire
- ♥ generate an individualised prescription for appropriate amount, type and duration of activity based on the patient's ability and preferences
- ♥ print a patient information brochure.

The PAM is fully integrated into patient history records and the program's recall system. For detailed instructions on using the PAM contact the GPPA Project Officer or the Heart Foundation on 02 9219 2444.

Heart Foundation Programs and Services

- ♥ Just Walk It program – refer your patient to a community walking group NSW: **1300 36 27 87**.
- ♥ **Heartline** – you and your patient can obtain information on healthy eating, physical activity, blood pressure, blood cholesterol, smoking cessation etc. Call **1300 36 27 87** (local call cost).
- ♥ **Heartmoves** – refer your patient to a safe, low-to-moderate-intensity exercise class suitable for every fitness level, delivered by trained and accredited fitness leaders: Call (02) **4952 4699** for more information.
- ♥ **Heartsite** – www.heartfoundation.com.au

References:

1. National Heart Foundation of Australia Physical Activity Policy Paper, 2001.
2. Bauman A, Bellew B, Vita P, Brown W, Owen N. Getting Australia Active: towards better practice for the promotion of physical activity. National Public Health Partnership. Melbourne, Australia; 2002.
3. Blair SN, Stensei DJ. Physical Activity and Health: The Evidence Explained. London, Routledge. November 2003.
4. Commonwealth Department of Health and Ageing. National physical activity guidelines for Australians. www.health.gov.au/pubhth/publicat/document/physguide.pdf
5. Blair SN, Kohl HW, Barlow CE, et al. Changes in physical fitness and all-cause mortality. A prospective study of healthy and unhealthy men JAMA 1995; 273: 1093-8.
6. Jolliffe JA, Rees K, Taylor RS, et al. Exercise-based rehabilitation for coronary heart disease (Cochrane Data Base Systematic Review, V1 issue CD001800) 2001.
7. National Heart Foundation of Australia & Cardiac Society of Australia and New Zealand Reducing Risk in Heart Disease. Guidelines for preventing cardiovascular events in people with coronary heart disease. 2003.