Physical Activity For Health

Benefits of regular physical activity include a reduced risk of: heart disease, stroke, high blood pressure, bowel cancer, type 2 diabetes, breast cancer, osteoporosis, and obesity. In addition, many people feel better in themselves. Regular physical activity helps you to control your weight, and may help ease stress, anxiety, and depression. Ideally, you should do at least 30 minutes of moderate aerobic physical activity, at least five days per week. Plus, a couple of sessions of muscle strengthening activities per week. However, anything is better than nothing. For example, a daily brisk walk of about two miles is a realistic goal for many people and can have a big impact on health risk.

What sort of physical activity should adults do, and for how long?

Adults should aim to do a mixture of aerobic activities and muscle-strengthening activities.

Aerobic activities

Aerobic activities are those that make the heart and lungs work harder. Basically, anything that makes your heart rate increase, and makes you at least mildly out of breath. For example: brisk walking, jogging, swimming, cycling, dancing, badminton, tennis, etc. You can even use normal activities as part of your physical activity routine. For example, fairly heavy housework, DIY, or gardening can make you mildly out of breath and mildly sweaty. Consider a brisk walk to work or to the shops instead of using a car or bus, etc.

To gain health benefits you should do at least 30 minutes of moderate aerobic physical activity, on most days (at least five days per week).

- 30 minutes per day is probably the minimum to gain health benefits. However, you
 do not have to do this all at once. For example, cycling to work and back 15 minutes
 each way adds up to 30 minutes. Try to increase the amount to 40-60 minutes per
 day if you can.
 - For people who need to manage their weight and are at risk of putting on weight and becoming obese, it should be for 45-60 minutes.
 - For people who have been obese, or are still obese and are aiming to lose weight, it should be for 60-90 minutes.
- Moderate physical activity means that you get warm, mildly out of breath, and
 mildly sweaty. It does not have to be intense. However, some evidence suggests that
 the more vigorous the physical activity, the better for health particularly for
 preventing heart disease.
- On most days. You cannot 'store up' the benefits of physical activity. You need to do it regularly. At least five days a week is recommended.

Realistically, walking is likely to be the activity chosen by many people. But, this is fine as brisk walking is an excellent moderate physical activity. One report about physical activity stated: "The bottom line - walking two miles a day can cut the risk of death by half".

Muscle-strengthening activities

In addition to the above aerobic activities, adults should aim to do a minimum of two sessions of muscle-strengthening activities per week (not on consecutive days). Muscle-strengthening activities include a progressive weight-training programme, stair climbing and similar resistance exercises that use the major muscle groups. Ideally, the activities and exercises should not only aim to improve or maintain muscle strength, but also to maintain or improve flexibility and balance. A session at a gym is possibly ideal, but activities at home can easily suffice. For example, stair climbing, stretching and resistance exercises can be done at home which do not involve any special clothing or equipment.

A 'session' should be a minimum of 8-10 exercises using the major muscle groups. Ideally, to maximise strength development, use some sort of resistance (such as a weight for arm exercises) and do 8-12 repetitions of each exercise. The level (weight) of each exercise should be so that you can do 8-12 repetitions before the muscle group tires. So, for example, for the upper arm muscles, hold a weight in your hand and flex (bend) the arm up and down 8-12 times - which should make your arm muscles tire.

You can do the exercises one after another to complete a session. Or, you can split a session up over a day of, say, bouts of 10 minutes.

What about older people, children and teenagers

Older people

For older people, the above recommendations still apply, depending on ability. A particular goal for older people should be, where possible, to maintain or increase flexibility and balance. So, the 'muscle strengthening' activities, on two days a week, should perhaps focus on these areas. Maintaining flexibility and balance helps older people remain independent, and reduces the risk of falls, and injury from falls.

Children and teenagers

Children and teenagers should get at least one hour a day of moderate physical activity. The hour can be made up from various shorter sessions each day. So, it can be achieved by a mixture of play, PE, games, dance, cycling, a brisk walk to school, sports, various outdoor activities, etc.

What are the health benefits of physical activity?

The health benefits of doing regular physical activity are well documented in research studies. The greatest health benefits occur when the least active people become moderately active. However, there are still benefits to be gained when moderately active people become very active. In other words, people who do more than the recommended 30 minutes a day are still likely to gain some extra reductions in health risks. Health benefits include the following:

Heart disease and stroke

On average, the risk of developing heart disease such as angina or a heart attack is markedly reduced in people who are regularly physically active compared to those who are not. For example, inactive people have almost double the risk of having a heart attack compared to those who are regularly physically active. Physically active people are also less likely to have a stroke. Physical activity is good for the heart muscle itself, but it also reduces some 'risk factors' for heart disease and stroke. For example, on average, blood pressure, cholesterol, and body weight are lower in people who are regularly physically active compared with those who are not.

If you already have heart disease, regular physical activity is usually advised as an important way to help prevent the heart disease from getting worse.

Diabetes

If you are regularly physically active then you have a lower risk of developing type 2 diabetes than inactive people. The greater the amount of physical activity that you do, the lower the risk of developing type 2 diabetes.

Weight control

Physical activity helps to burn off excess fat. Regular physical activity combined with a healthy diet is the best way of losing excess weight, and to maintain a healthy body weight. Of prime importance, physically active children are less likely to become overweight or obese adults.

Osteoporosis

Regular physical activity helps to prevent osteoporosis ('thinning of the bones'). The pulling and tugging on the bones by the muscles stimulates bone-making cells which strengthens the bones. This in turn reduces the risk of having fractures when you are older.

Cancer

Regular physical activity roughly halves the chance of developing cancer of the colon (bowel cancer). There is also evidence that breast cancer is less common in women who are regularly physically active.

Mental health

Physical activity is thought to help ease stress, and improve general well-being and self-esteem. Regular physical activity can also help to ease anxiety and depression. It can also help to make you sleep better. (But do the activity during the daytime or early evening, not near to bed time.)

Older people

If you are over 70, you are less likely to fall and be injured if you are regularly physically active.

Are there any risks with physical activity?

- **Injury.** Sprains, and sometimes more serious injuries, are a risk if you do some types of activity such as competitive sports. You can cut down the risk of injury by always warming up before any vigorous activity, and by wearing the correct footwear.
- **Endurance sports** such as marathon running can cause stress fractures, fatigue, and cause menstrual periods to stop in some women.
- Sudden death sometimes occurs in people who are doing some physical activity.
 This is rare if you are used to moderate physical activity. It is more likely to occur if you do not usually do much physical activity, but then do a sudden bout of vigorous activity such as an intense game of squash. However, even in this situation, sudden death is rare.

If you gradually build up to do regular moderate physical activity, the potential health gains greatly outweigh the small risks involved.

Some other points about physical activity

- If you have a condition that concerns you about physical activity, then see a doctor
 before starting a physical activity programme. However, there are few reasons why
 physical activity may be harmful. A common wrong belief is that physical activity may
 be "bad for the heart". On the contrary, physical activity is good for most people with
 heart disease.
- If you are not used to physical activity, it is best to gradually build up the level of activity.
- One big obstacle is the uphill battle to become fit. Many people feel that the first few attempts at physical activity are quite a struggle. Do not get disheartened. You are likely to find that each time it becomes easier and more enjoyable.
- Try and keep physical activity high on your list of priorities. If one kind of activity becomes boring, try switching to other types to maintain the health benefits.
- Some people set their goals too high. For example, aiming for a marathon run. This may take too much time, you may lose enthusiasm, and physical activity may become a drudge. Beware of this pitfall.
- You are more likely to keep on with regular physical activity if you find an activity that you enjoy and that can be fitted into your everyday life.
- Physical activity is not just for young 'sporty' types. It is never too late to start to gain the benefits, no matter how old or unfit you are.

Further help and information

Department of Health - healthy living section of their website

Web: www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/HealthyLiving/fs/en Promoting healthy lifestyles is an important governmental responsibility. The Department of Health runs initiatives to help people quit smoking, eat better and exercise more, as well as health screening projects and training and skills programmes. Lots of information and links to these initiatives are found on this site.

The Keep Fit Association (KFA)

Tel: 01403 266000 Web: www.keepfit.org.uk

Gives thousands of people the opportunity to get together in a spirit of fun and friendship to exercise regularly together.

Walking The Way To Health

Tel: 01242 533337 Web www.whi.org.uk

This is an initiative sponsored by the British Heart Foundation to encourage people who do little physical activity to walk more in their own neighbourhoods.

British Heart Foundation National Centre for Physical Activity and Health

Web: www.bhfactive.org.uk

Putting physical activity and health onto everyone's agenda. Aims to translate research evidence into practice for the promotion of physical activity for the primary and secondary prevention of diseases, particularly heart disease.

References

- Energising Lives: A Guide to Promoting Physical Activity in Primary Care, NHS Health Scotland (July 2008)
- At least five a week: Evidence on the impact of physical activity and its relationship to health, Department of Health (2004)
- British Heart Foundation Factfile 04-2001: Physical Activity and the Heart: An Update.

Comprehensive patient resources are available at www.patient.co.uk

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