Physical Activity

Physical activity is any movement of the body which uses energy. It includes things one might do in daily life, such as housework and walking, as well as organised sports and exercise classes.

There is good quality research evidence to suggest that physical activity helps with depression, anxiety, fatigue, aerobic fitness, quality of life, muscular strength, physical functioning and more. Other evidence indicates that physical activity can reduce risk of cancer recurrence and mortality. People with cancer who engage in physical activity, report benefits to their wellbeing, confidence levels and sense of control.

Penny Brohn UK supports physical activity as safe and beneficial for those with cancer, when following guidance from trained health professionals.
Information on physical activity

This evidence based information sheet aims to provide clearly sourced and reliable information to help you make informed choices about physical activity. If you would like more information on how to access the range of services Penny Brohn UK provides, please contact our Helpline on 01275 370 163. We are able to provide our services free of charge, thanks to the charitable donations and voluntary contributions which fund our work.

Penny Brohn UK opinion

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<th>We support physical activity and include it as part of the Bristol Whole Life Approach</th>
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GP perspective

The benefits of regular physical activity for people with cancer are now well established, but that doesn’t mean it is always easy to start exercising! Once people get over the initial hurdles, the positive effects on mental and physical wellbeing can be significant.

Many people find that walking, simple stretches and even dancing at home to music are all effective ways of getting the benefits of exercise.

Cancer and cancer treatments often affect energy levels. A small amount of gentle exercise can often help reduce feelings of fatigue, so it is important not to shy away from exercise if you feel a bit tired. However it is important to start gently, to monitor progress and to build in plenty of rest and recovery time too. Any activity is better than none, even if it is only a few stretches on some days.

More information: What is physical activity?

Physical activity is any movement of the body using skeletal muscles that burns up energy. It includes things one might do in daily life such as housework, gardening and walking, as well as organised sports, exercise classes such as aerobics or yoga, and working out at the gym.

Physical activity is categorised according to the level of intensity, which depends on how many calories are used. Activities which make you feel warmer and slightly breathless, but you are still able to talk easily, are moderate intensity. Vigorous activities make your heart beat very fast, it’s hard to catch your breath and you can’t talk comfortably. Physical activity needs to be at least moderate for most health benefits, although any activity is better for you than being inactive. Vigorous activities can provide additional health benefits. Weight training and weight-bearing activities are also beneficial for health, as they help to develop muscle strength, build bone and maintain functional ability. This can involve use of weights or using one’s own body weight as resistance. Exercises which increase flexibility are useful for maintaining healthy joints.
**How much do I need?**

- Department of Health guidelines for adults (aged 18–64) on the amount of physical activity needed for health benefits are:
  - 2 ½ hours moderate intensity exercise over a week/ 30 minutes five days per week,
  - or 75 minutes of vigorous activity over a week, which can be combined with moderate activity,
  - muscle strengthening activity at least two days a week.
- Physical activity can be done in blocks of 10 minutes or more and still gives the same benefits.
- Greater amounts of physical activity can lead to greater health benefits. However it is equally important not to over-exercise and drain your energy.
- The guidelines are the same for cancer survivors, but before starting/ continuing physical activity you should consult your medical team. There will be considerations to take into account, depending on the site of the cancer, type of cancer, cancer treatment and its side effects. Other individual factors may affect what activity is appropriate for you. Cancer survivors at any stage are advised to keep active and avoid being sedentary.

**Benefits of physical activity**

Research into more than 20 diseases and serious health conditions including stroke, cancer, type 2 diabetes and obesity\(^3\) demonstrates that physical activity reduces risks and helps people manage their condition better.

Physical activity has been shown to reduce the risk of mental health problems, as well as helping to improve mood and wellbeing\(^3\).

It is thought that physical activity affects cancer both directly and indirectly. There is evidence of specific biological changes in the body that are brought about by physical activity. For example, it can reduce the levels of hormones that are linked to certain cancers, so may prevent recurrence by hormone regulation\(^14\).
What do people who take part in physical activity say about it?

Research studies known as qualitative studies ask people about their experiences. They can tell us what people involved in the study thought about the effects of the activity, but can’t tell us if a particular activity is likely to work for everyone (this is dealt with in the section “What is the evidence?”).

People reported that physical activity had both psychological and physical benefits. In three studies, people said that physical activity gave them a sense of empowerment and control.

Physical fitness, improved strength, less fatigue, better health, pain relief and reduced stress and anxiety were also highlighted in other studies. In one study, people said that physical activity gave them focus, structure and hope for the future. In another, people felt that physical activity had helped them in their return to work.
Is physical activity safe?

On the whole, exercise is considered safe for people with cancer and the negative impact on health from being inactive outweighs any risks associated with physical activity. Evidence shows that physical activity is safe both during and after cancer treatment.

- To prevent pain, nausea or fatigue from worsening, do not engage in high intensity exercise when you are experiencing these or other debilitating symptoms.

- Consider the site of your treatment when planning activities and avoid exercises involving the area until you have fully healed and any complications have been treated.

- If your immunity has been lowered, beware of risk of infection from public fitness centres and swimming pools.

- If your cancer has spread to the bone, you have osteoporosis or numbness in your feet, avoid high impact, weight bearing exercise, contact sport and exercises involving balance, such as running on a treadmill, in order to prevent falls and fractures.

- Avoid vigorous activity if you have a temperature, a deep vein thrombosis or if your platelet count is very low.

- If you have had your lymph nodes removed, build up upper body resistance exercises slowly to avoid lymphoedema. To prevent lymphoedema from getting worse, wear a compression garment.

- If exercise is difficult because of cancer or cancer treatments, or if there is any pain on exercising, advice should be sought from a health professional or a trained fitness instructor who has experience working with people with cancer.
What is the evidence on physical activity?

There is high quality evidence to suggest that physical activity is beneficial for depression, anxiety, fatigue, aerobic fitness, quality of life, immune function, muscular strength, body composition, physical functioning and other cancer site specific symptoms. However there is not enough detail on the amount, intensity, duration and timing of sessions which provide benefits, due to big differences between the studies. Most of the studies are of female breast cancer survivors, so are not representative. Observational studies and review evidence indicates that physical activity can greatly reduce the risk of cancer recurrence and of mortality from cancer and other causes. More high quality research is needed to get a better picture of the benefits of physical activity for all people with cancer.

This is a summary of research findings. A full list of references and an extended summary of the research literature is available upon request from our Helpline.

Other sources of information

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<th>Organisations that offer support and information for people with cancer</th>
<th>More information on complementary therapies</th>
<th>Organisations that represent physical activity</th>
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<td>Cancer Research UK</td>
<td>NHS Evidence</td>
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<td>Tel: 0808 800 4040</td>
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<td>Macmillan Cancer Support</td>
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Contact us:

Helpline 01275 370 163 (Weekdays 9.30am to 5.00pm, 24-hour answerphone)
Email: helpline@pennybrohn.org.uk
Address: Penny Brohn UK, Chapel Pill Lane, Pill, Bristol, BS20 0HH

Statement

Our information and research is designed to help you make informed choices about the services that we provide. From time to time, for illustrative purposes, we may make reference to commonly available products (such as relaxation CDs and popular self-help books). We do not endorse or advertise the use of any specific product.

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