Dear supporter,

Thank you for choosing World Cancer Research Fund’s information booklet, Move More.

Modern day living increasingly involves us sitting more and moving less. As well as contributing to our nation’s expanding waistlines – which is one of the biggest lifestyle risk factors for cancer – research has shown that a lack of physical activity can directly increase our cancer risk.

Fitting activity in can seem tricky – even the recommended minimum of 30 minutes a day – and despite the wide range of health benefits, many of us don’t meet this.

This booklet explains the benefits of being physically active, and provides practical advice to help you move more and reduce your risk of cancer.

We hope you find this booklet interesting and informative. Help us spread our cancer prevention messages by sharing it with your family and friends.

Yours faithfully,

Marilyn Gentry
Founder
Contents

5 Reduce your cancer risk
6 Moving more to reduce your cancer risk

8 Be a healthy weight

10 Take the first step

12 Get your heart pumping

14 Feel stronger

16 Improve your flexibility

17 Sit less

18 Living with and beyond cancer

19 Cancer Prevention Recommendations
Move more

We have developed 10 Cancer Prevention Recommendations based on robust, up-to-date scientific research from around the world. This booklet explains the importance of physical activity for cancer prevention, and gives tips and advice to help you move more.
Reduce your cancer risk

Almost all of us are affected in one way or another by cancer, and the current statistic is that one in two people in the UK will develop cancer during their lifetime. But we are not powerless. Most of us know that smoking and too much sun exposure increase our risk of cancer, but did you know that other lifestyle choices also affect your cancer risk? By eating a healthy diet, being physically active and maintaining a healthy weight, about a third of the most common cancers could be prevented, that’s about 80,000 cases every year in the UK.

There are no guarantees when it comes to cancer but scientific research shows that if you follow our Cancer Prevention Recommendations (the full list can be found on page 19) and choose not to smoke (or give up smoking), you will have the best chance of living a life free from the disease.

Take simple steps...

You don’t have to make extreme changes to your lifestyle to help prevent cancer. Your health could benefit by simply reshaping some of your habits and everyday routines to fit in more physical activity. Regardless of your age and lifestyle, it is never too late to take steps towards a healthier you.

Keep reading for lots of advice on how you can move more.

If you want to read more about our other recommendations, such as how to make healthy changes to your diet, visit our website: www.wcrf-uk.org
Moving more to reduce your cancer risk

Being active every day is an important way to help reduce your cancer risk, improve your long-term health and help make you feel great. Physical activity, when combined with a healthy diet, can also help you to manage your weight.

Many people think cancer is a result of inherited genes or bad luck. However, research shows that genetics only cause a small proportion of cancers, whereas lifestyle plays a much bigger part.

How much activity should you do?

Aim to do at least 30 minutes every day of moderate to high intensity activity – any activity that raises your heart rate and makes you breathe deeper counts. This can be done in one go, or in smaller chunks of 10 to 15 minutes.

Ideally, as you get fitter, aim to be active for 60 minutes or more a day. The more you do each day, the more you are helping to reduce your cancer risk.

If you aren’t active already, start by introducing some gentle activity and build up slowly – anything is better than nothing. The key is to find something you enjoy, as it is easier to stick to.

Activity facts:

Despite the wide range of benefits that can be gained from physical activity, a third of men and nearly half of women still say that they don’t meet the Government recommendation of at least 150 minutes a week, equal to 30 minutes on 5 days. (England, 2012).

About 1 in 8 cases of breast (in postmenopausal women) and bowel cancers, and 1 in 10 cases of womb cancer in the UK could be prevented by being active for 30 minutes a day at least 5 times a week. That’s over 12,000 cases a year.
Physical activity and cancer

- There is strong evidence that being physically active helps protect against colon (part of the large bowel), breast (in postmenopausal women) and womb cancer.

- Studies show that regular physical activity can help to keep hormone levels healthy. This is important as having high levels of some hormones can increase cancer risk.

- Being active can lower insulin resistance. Insulin resistance – a condition where the hormone insulin becomes less effective at lowering blood sugar levels – has been shown to have a role in cancer development.

- Activity helps move food through the digestive system more quickly, reducing the amount of time that any cancer-causing substances are in contact with the lining of the bowel.

- Being overweight or obese is linked to many types of cancer. As physical activity uses calories it can help in maintaining a healthy weight.

Other benefits of physical activity:

Being active can also help reduce the risk of:

- Heart disease
- Stroke
- Osteoporosis
- Type 2 diabetes
- Depression
- Cognitive decline and dementia

Physical activity can help to:

- Lower blood pressure
- Increase bone density
- Raise levels of ‘good’ cholesterol and lower levels of ‘bad’ cholesterol
- Control blood sugar levels
- Improve mood
- Improve balance for day-to-day activities
- Ease symptoms of arthritis
Be a healthy weight

Did you know that being a healthy weight is the most important way you can reduce your risk of cancer, after choosing not to smoke? About two in every three adults in the UK are overweight or obese so, as a nation, we are doing a lot of potential harm to our health.

Get the balance right

Your weight is a balancing act between the energy you put in (calories) and the energy you use. So, as well as what you eat and drink playing an important role in maintaining a healthy weight, physical activity does too.

There is strong evidence that being active for 60 minutes or more a day can reduce your risk of gaining weight.

On the opposite page are some popular activities and the amount of calories they burn. The higher the intensity of the exercise, the more calories you will burn.

Our recommendation is to do moderate to vigorous activity every day. Moderate activity includes walking briskly and swimming. Vigorous activity includes jogging and cycling.

Weight and cancer

There is strong evidence that being overweight or obese increases the risk of developing cancer of the bowel, oesophagus (adenocarcinoma only), pancreas, stomach (cardia only), kidney, liver, breast (in postmenopausal women), womb, ovary, prostate (advanced only) and gallbladder.

See if you’re a healthy weight for your height by using our body mass index (BMI) calculator: www.wcrf-uk.org/bmi-calculator

See how many calories you could burn by being active: www.wcrf-uk.org/exercise-calculator
Working off calories

Here are some examples of activities you can build into your day, and a guide to how many calories you can burn in **30 minutes**.*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoga (hatha)</td>
<td>95</td>
</tr>
<tr>
<td>Vacuuming</td>
<td>130</td>
</tr>
<tr>
<td>Walking</td>
<td>135</td>
</tr>
<tr>
<td>Gardening</td>
<td>145</td>
</tr>
<tr>
<td>Climbing stairs</td>
<td>155</td>
</tr>
<tr>
<td>Rowing machine</td>
<td>185</td>
</tr>
<tr>
<td>Hiking</td>
<td>205</td>
</tr>
<tr>
<td>Badminton</td>
<td>215</td>
</tr>
<tr>
<td>Swimming (leisurely)</td>
<td>235</td>
</tr>
<tr>
<td>Jogging</td>
<td>270</td>
</tr>
<tr>
<td>Aerobics</td>
<td>285</td>
</tr>
<tr>
<td>Tennis</td>
<td>285</td>
</tr>
<tr>
<td>Cycling</td>
<td>290</td>
</tr>
<tr>
<td>Dancing</td>
<td>300</td>
</tr>
<tr>
<td>Martial arts</td>
<td>400</td>
</tr>
<tr>
<td>Running (7mph)</td>
<td>425</td>
</tr>
</tbody>
</table>

*This shows the approximate calories burnt by a 77.5kg (12st 3lb) adult of average build.
Take the first step

Everyone can benefit from physical activity and it’s never too late to get active. Research has shown that an active lifestyle extends life expectancy, and is a key way of maintaining our mental and physical wellbeing.

Step 1: Look at where you are at
Look at your day-to-day routine. Make a note of when you fit activity in now and where you could do more – even if it’s just a bit more of what you already do, for example walking for longer, or slightly faster.

Step 2: Build up to 30 minutes
If you don’t do regular moderate intensity physical activity at the moment, start by doing 5–10 minutes every day for a week or two; then make it 15 minutes, adding more time over the next few weeks until you are getting at least 30 minutes of activity each day.

Step 3: Mix it up
Once your fitness starts to improve, why not try doing different activities, such as yoga, Pilates, swimming, dancing, golf or even some energetic gardening or housework? Doing a variety of activities keeps it interesting, and finding things you enjoy makes it easier to stick to.

If you have a health condition that may prevent you from being physically active, check with your doctor or health professional first; otherwise, age and current level of fitness shouldn't stop you from being active.

Top tips for getting active:

- **Active transport.** Instead of using public transport or driving, try cycling, jogging or walking briskly for all or part of your journey.

- **Keep it fun.** An activity you enjoy is easier to stick to. Inviting a friend or family member for a game of tennis or to join you for a jog can make it more fun and help them get healthier too.

- **Lunch break.** Use your breaks to get active. Maybe you can go for a swim or attend an exercise class, or simply stick on your trainers and go for a run or brisk walk?

- **Be proactive.** Make small changes like taking the stairs; walking up the escalator; standing up while you talk on the phone; or getting up to talk to a colleague.
Types of activity

Regardless of your age, your current level of fitness or whether you are a woman or a man, it is important to include different types of activity in your routine.

Physical activity can be aerobic (cardiovascular), strengthening (also called toning or resistance) or exercises to improve flexibility and balance. Each helps your body in a different way. See the next few pages for more information on the different types of activity.

Make it a habit

Initially you will need to make the effort to be more active, but with motivation and support it will soon become just part of what you do – in other words, a habit.

<table>
<thead>
<tr>
<th>Today I achieved:</th>
<th>Types of activity</th>
<th>Time being active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Get your heart pumping

Aerobic activity

This type of activity helps to strengthen your heart and lungs and makes them work more efficiently. Any activity that raises your heart rate to a safe level for a period of time is an aerobic activity.

Aerobic activity burns calories and is important for keeping a healthy weight.

Try the exercises on the opposite page...

► Begin with a warm-up. Go for a 5-minute walk or march on the spot, rolling your shoulders. Halfway through, start lifting your knees a little higher. Next, take 2 steps sideways to the left and then to the right. Repeat 4 times and then finish with a few gentle squats.

► Start slowly. Give your body a chance to get used to the new activity and go at a pace that feels comfortable.

► Cool-down at the end. Gently repeat the warm-up, without lifting your knees higher at the halfway point.

► Push yourself. When you can complete your routine with ease then try to boost its intensity by doing more repetitions or introducing a new exercise. This way you’ll continue to further strengthen your heart and lungs.
**Jumping jacks**

- Stand with your feet together and arms at your sides. Bend your knees and jump, moving your feet apart. Raise your arms out to the sides until your hands are level with your shoulders.

- Jump again, keeping your knees bent, to bring your feet back together and your arms back to your sides. Take care to put your heels down on the floor each time you jump.

**How many times?**
Repeat 10 times.

**Too hard?**
Step out to the left with your left leg and raise both arms to shoulder height at the same time. Then step back to the centre and repeat using your right leg.

---

**Step-ups (use a sturdy step)**

- Step up on to the step, leading with your right leg. Keeping the right foot on the step, bring your left foot up to meet it.

- Step back down, leading again with the right leg and bringing your other foot down to join it. Keep going for a minute and then switch to lead with your left leg. Go as fast as you are comfortable with.

**For how long?**
1 minute leading with the right leg, then 1 minute leading with the left leg.

**Too hard?**
Perform the exercise by stepping forwards and backwards on a level surface.

---

Always remember that it is more important to do the exercises properly than to do lots of repetitions. If you find yourself unable to do the number of repetitions suggested, do fewer until you get fitter. It’s better to start slowly and build up.
Feel stronger

Strengthening exercise

Exercises that work our muscles against weight or resistance are called strengthening exercises. From the age of 30, our muscle strength starts to decrease by a small amount every year. That’s why strengthening exercises are important for everyone.

Strengthening exercises can:

► Improve blood sugar control.
► Build bone density to reduce the risk of osteoporosis.
► Strengthen core muscles to reduce back pain and improve balance.

Strength exercises can be done using free weights (eg. dumbbells or even cans of food or water bottles), weight machines or resistance bands. You can also do exercises that use your own body weight, for example press-ups.

Try the exercises on the opposite page...

► Begin with a warm-up. See instructions on page 12.
► Start slowly. Give your body a chance to get used to the new activity and only do what feels comfortable.
► Cool-down at the end. Gently repeat the warm-up, without lifting your knees higher at the halfway point. Gently stretch the muscles you have worked.
► Push yourself. When you can complete your routine with ease then try to boost its intensity by doing more repetitions, increasing the weight you’re using or introducing a new exercise. This way you’ll continue to further strengthen your muscles.

30mins = 185 calories
The arm dip

- Sit on the ground with your knees bent and your feet flat on the floor. Place your palms flat on the floor behind your bottom, your fingers pointing towards your body.
- Breathing in, slowly lower your body towards the floor by bending your elbows behind you (not out to the sides). Keep your back straight. Count to two as you lower, then push up, breathing out, back to the start position.

How many times?
Repeat 10 times, rest for 30 seconds, then do another 10.

Too hard?
Sit on a chair. Hold a light weight above your head with your arm straight. Lower your hand down behind your head, then push up back to the starting position. Repeat 5 times, then repeat with the other hand.

The arm curl

- Sit on a chair with your feet hip-width apart, your shoulders held back and your stomach muscles held firm. Hold a weight in each hand.
- Hold your arms by your sides, lightly resting your elbows on your waist. Breathing out, slowly lift the weights in a smooth arc towards your shoulders to the count of four. Keep your wrists firm and your elbows on your waist.
- Pause a few inches from your chest, then slowly lower back to the starting position as you breathe in.

For how long?
Repeat 10 times, rest for 30 seconds, then do another 10.

Too hard?
Use lighter items as weights or just lift your arms without any weights.

Become familiar with the proper technique for each strength exercise to make sure your muscles benefit and you stay injury free. It is more important to do the exercises properly than to do lots of repetitions. If you find yourself unable to do the number of repetitions suggested, do fewer until you get fitter. It’s better to start slowly and build up.
Improve your flexibility

Flexibility and balance are important especially as we age. Regularly doing flexibility and balance exercises that work your joints through their full range of motion can help you to keep moving and stay active. By staying mobile and improving your balance you could prevent yourself from having a fall.

Although flexibility and balance exercises are gentle and do not usually count towards your 30 minutes of physical activity, they are still important for good health.

Try the pose below...

- **Begin with a warm-up.** See instructions on page 12. Even for gentle exercises like these it is important to warm up as this helps to prevent injury. Try our yoga pose below or try a yoga or Pilates class. There are also helpful books and websites that can show you more flexibility and balance exercises.

### Triangle pose

This pose is great for balance and building strength in your lower back and thighs. Start by holding each side for 30 seconds, then build up to two minutes as you improve.

- Stand with a straight spine and feet together.
- Place feet slightly wider than shoulder width apart, rotating your right foot out to the right.
- Breathing in, lift your arms to shoulder-level.
- Breathing out, bring your right hand down to your right foot and hold. Breathe normally.
- Repeat on the other side.
Sit less

As well as moving more, it is important not to sit or lie down more than necessary, when not sleeping. Limiting your sedentary time can help you maintain a healthy weight. If you work in an office or spend a lot of time sitting down, try to take regular standing breaks.

Sedentary behaviour and cancer

Sedentary behaviour is any activity that uses up very little energy and involves sitting or lying down, except for sleeping. For example, sitting at a desk, watching television or using a computer.

Our research has shown that sedentary behaviour is linked to weight gain, and being overweight increases cancer risk.

Even if you have to sit down for long periods of time, you can still break this up by following our tips below.

Top tips for sitting less:

- Get up to speak to work colleagues instead of sending an email.
- If you are watching television, stand up to change the channel. Why not try standing up and, using light hand-held weights, do some strengthening exercises during the advert breaks?
- Get off the bus one stop early and walk the rest of your journey.
- If you have a cordless phone, take a walk while you take a call.
- Use the stairs rather than lifts and walk up escalators when possible.
Living with and beyond cancer

It is normal to become less active during cancer treatment, but once you have recovered and you’re given the ‘go-ahead’, you can start to build up your activity levels. Aim to be active for at least 30 minutes every day.

Regular physical activity has lots of health benefits. It can help to make you stronger and keep your weight in check. It can also help you manage fatigue and cope better following cancer treatment.

There are indications that being physically active – before and after cancer treatment – is linked to a greater chance of survival.

It is important to check with your doctor or health professional before starting a new exercise plan.

10 great reasons to be active after your cancer treatment:

- People who are active have a better chance of survival.
- Reduces your risk of other diseases such as heart disease, Type 2 diabetes and high blood pressure.
- Helps reduce fatigue.
- Boosts your immune system.
- Helps rebuild muscle.
- Improves your shape.
- Strengthens your bones and reduces risk of osteoporosis.
- Improves flexibility, strength and mobility.
- Burns calories, so can help you to control your weight.
- Helps reduce anxiety and depression, and improves your mood.

More scientific studies are needed before we can fully understand the role of diet and lifestyle and cancer risk in cancer survivors. Based on the available evidence to date, we recommend that, after treatment, cancer survivors follow our Cancer Prevention Recommendations unless they are unable to or have been advised otherwise by a doctor, dietitian or specialist nurse.
Cancer Prevention Recommendations

1 **Be a healthy weight.**
   Keep your weight as low as you can within the healthy range.

2 **Move more.**
   Be physically active for at least 30 minutes every day, and sit less.

3 **Avoid high-calorie foods and sugary drinks.**
   Limit high-calorie foods (particularly processed foods high in fat or added sugar, or low in fibre) and avoid sugary drinks.

4 **Enjoy more grains, veg, fruit and beans.**
   Eat a wide variety of wholegrains, vegetables, fruit and pulses, such as beans.

5 **Limit red meat and avoid processed meat.**
   Eat no more than 500g (cooked weight) a week of red meat, such as beef, pork and lamb. Eat little, if any, processed meat, such as ham and bacon.

6 **For cancer prevention, don’t drink alcohol.**
   For cancer prevention, it’s best not to drink alcohol. If you do, limit alcoholic drinks and follow national guidelines.

7 **Eat less salt.**
   Limit your salt intake to less than 6g (2.4g sodium) a day by adding less salt and eating less food processed with salt.

8 **For cancer prevention, don’t rely on supplements.**
   Eat a healthy diet rather than relying on supplements to protect against cancer.

Special Populations:

9 **If you can, breastfeed your baby.**
   If you can, breastfeed your baby for six months before adding other liquids and foods.

10 **Cancer survivors should follow our Recommendations.**
    After cancer treatment, the best advice is to follow the Cancer Prevention Recommendations. Check with your health professional.

    *And, always remember – do not smoke or chew tobacco.*
About World Cancer Research Fund

We are the leading UK charity dedicated to the prevention of cancer. Our mission is to champion the latest and most authoritative scientific research from around the world on cancer prevention and survival through diet, weight and physical activity so that we can help people make informed lifestyle choices to reduce their cancer risk.

Cancer currently affects one in two people in the UK but about a third of the most common cancers could be prevented by following our Cancer Prevention Recommendations. That’s around 80,000 cancer-free lives every year.

The cornerstone of our research programme is our Continuous Update Project (CUP). It’s the world’s largest source of scientific research on cancer prevention and survival through diet, weight and physical activity. The CUP reviews new research findings to ensure our advice is always up-to-date. Find out more: www.wcrf-uk.org/our-research

For the references used in this booklet or for tips and advice to reduce your cancer risk, please contact us on the details below.