



“If you are able, doing physical activities can also provide a routine that may help you mentally, not just physically” –
Dr Kate Hallsworth

Why is physical activity/exercise important if I have primary liver cancer?

One of the main symptoms of HCC is fatigue or tiredness. Sometimes even your usual activities can make you weary and the last thing you may want to think about is exercise. However, if you can maintain or increase your physical activity, this can help your heart and lung fitness and your muscle strength - both key to keeping you going when you have HCC.

If you are able, doing physical activities can also provide a routine that may help you mentally, not just physically. It can offer opportunities to meet other people and reduce the social isolation felt by a lot of people with HCC.

Will physical activity not make my fatigue worse?

Most of the evidence suggests that physical activity and/or exercise does not make fatigue worse in people with liver disease. Taking part in physical activity and exercise can often make you feel better - not just physically but it holds positive benefits for reducing anxiety and depression and can help you to sleep better too.

What type of physical activity/exercise should I be doing?

It doesn't really matter what type of physical activity of exercise people with HCC do - there are no specific HCC-related guidelines. The most important thing is to find something enjoyable that you can build into your daily routine.

It can be helpful to start gently and build up gradually, both in time and intensity. Little and often is a good way to start allowing you to feel fitter without becoming too exhausted. Walking and swimming are good options and adding gentle muscle strengthening exercises can be beneficial. Performing gentle exercises in the home can also be a good way to improve fitness - the LWLC website offers some examples of exercises to start with at home.

How much exercise should I be doing?

Try to incorporate some physical activity and/or exercise into your daily routine - the amount may depend on how you feel on a particular day. You may have good days and bad days. Some people find that pacing activities allows them to do more, both at home and at work. It helps to plan things carefully, avoid doing too much on one day, or if you have a busy day one day, try to ensure that the next day is less busy to allow yourself to catch up.

Remember, some physical activity each day is better than none - and little and often may be key!

Physical activity, exercise, sedentary behaviour...what's the difference?

Physical activity - any body movement that requires you to use more energy than resting, and it incorporates many of the activities carried out as part of the daily routine e.g. washing the car, hoovering, walking the dog.

Exercise - a subcategory of physical activity in which planned, structured and repetitive movements are performed to maintain or improve fitness. Types of exercise include: aerobic (core stability), resistance (muscle strength), Pilates (core stability), yoga (flexibility).

Sedentary behaviour - any waking activity characterised by low levels of energy expenditure and a sitting or reclining posture. Reducing the amount of time you spend being sedentary each day has multiple health benefits

Physical activity and exercise.
Where to start...

Think about what you normally do on a day-to-day basis at the moment (consider what you do during home/work/leisure time) - it may help to write this down. This will act as your "baseline" measure to allow you to see if this changes moving forwards.

Things to include and think about may be:

- Are you mainly sedentary? Do you spend most of the day sitting down?
- Do you work? What does your work involve?
- Do you currently use an activity monitor (e.g. a Fitbit)? What's your average daily step count?
- How far can you walk? How long can you walk for?
- Do you do any regular exercise?
- What have you enjoyed in the past?
- Whatever your level, are you able and willing to try?

It is worth thinking about whether your health problems restrict your activity levels as this could determine what you try moving forwards.

Ideas for increasing physical activity:

- Walk for part of your usual route to family, friends, the shops (e.g. get off the bus 1 stop earlier).
- Break up sitting time by standing up and walking for 1 minute every hour - if you're sitting watching television, use the advert breaks as a prompt to stand up and move around.
- Take the stairs instead of the lift
- Walk the dog once a day if you have one
- Join a walking group
- Do some gardening or mow the lawn
- Help with the housework

Lots of short bouts of physical activity can be just as good as long periods of activity - the more done overall throughout the day, the better!

General recommendations for exercise:

Lots of different activities can help improve/maintain your fitness. This could include going for a walk, gardening or playing a sport. It is important to exercise your body so you feel you are pushing yourself a little more than you do in your normal day to day activities. You may notice your breathing and your heart beat quickening or you may start to sweat. These are all good signs that you are working your body at the correct level, providing you feel comfortable throughout the activity.

Starting with a few minutes of a new activity and gradually increasing it helps to improve fitness without causing other problems such as muscle strains.

Aerobic exercise (e.g. brisk walking, cycling):

It is important to set achievable goals, especially in people who are not as fit as they were or who have HCC. Set your goals and try and gradually build up to these - the more physical activity/exercise undertaken, the better!

Moderate intensity should:

- Raise your heart rate
- Make you breathe faster and harder
- Make you feel warmer
- You can talk, but are not able to sing

Moderate intensity can include:

- Brisk walking
- Swimming
- Cycling
- Exercise classes

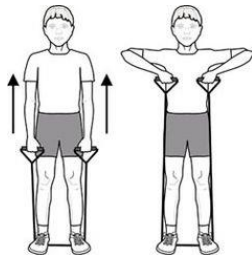


Resistance (strengthening) exercise:

Guidelines recommend resistance exercises that target the main muscle groups on at least 2 days/week.

Examples for a home exercise programme:

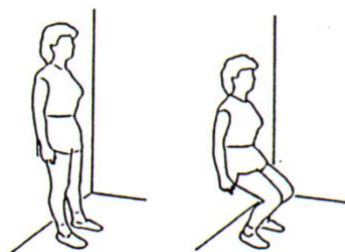
Upright row - lifting your arms as shown below (you might lift tins of food as light weights, or use a resistance band, to build up and make the exercise more difficult).



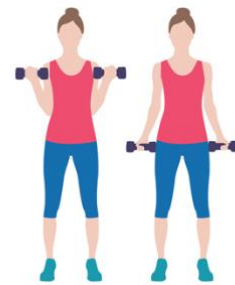
Calf raise:



Leg extension/sit to stand/wall squat:



Bicep curls (you can use light weights/tins of food to make this more difficult):



Wall press:



You can find more workout ideas and short exercise clips on the LWLC website.