



# The Effect of Exercise on Liver Cancer

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## What You Need to Know About Exercise and Liver Cancer

You're in treatment for liver cancer, or perhaps your treatment has just concluded. Your doctor has provided a long list of lifestyle changes you must employ to improve your health and wellness. Exercise is on the list but is likely the last thing on your mind.

You're feeling tired, uncomfortable in all types of weather, and your bones ache. You're probably thinking of putting that exercise off for a few months, but you truly shouldn't. This is a common trap that many people diagnosed with liver cancer fall into.

The benefits of exercise are incredibly positive, and clinical studies have proven the benefits of exercise on numerous occasions.

### The Benefit of Exercise for Cancer Patients

According to the American Cancer Society, "Studies have shown that patients who follow an exercise program tailored to their personal needs feel better physically and emotionally and can cope better, too."

Basically, this means that any exercise routine should be tailored to fit your physical situation. If you have never exercised before being diagnosed with cancer, it isn't realistic to think that you'll jump up and run a 5K every day.

However, should you cease to exercise, you should also expect that your muscle strength, endurance, and physical fitness will decline – which is why staying active – even a little bit, is recommended.

### Exercise and Cancer Prevention

And those of you who have survived liver cancer – what role does exercise have in cancer prevention?

According to Kerry Courneya, Ph.D., professor and Canada Research Chair in Physical Activity and Cancer at the University of Alberta in Edmonton, Canada, "Several recent studies suggest that higher levels of physical activity are associated with a reduced risk of the cancer coming back, and a longer survival after a cancer diagnosis."

She noted that being overweight after cancer treatment may shorten survival times, and may increase the risk of cancer reoccurring.

Courneya notes that exercise should begin during cancer treatment, if able. If not, it should start as soon as possible. And exercise should include aerobic exercise as well as resistance training. Aerobic exercise reduces the risk of complications, such as heart attack and stroke, while resistance training builds muscle.

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What if you're just too tired to exercise?

While the general recommendation for healthy individuals is 30 to 60 minutes of vigorous exercise, five days per week, you don't have to shoot for this recommendation right away.

Start small. Break your goal down into "bite-sized" mini-goals. Instead of going for a 30-minute walk, try walking on your treadmill for 5 minutes. Then, walk for another 5 minutes later that day. You can continue to increase your time, incrementally, until you feel stronger.

## Walking Works

Beginning a program of brisk walking for thirty minutes a day, four times a week has been shown to improve mood, help in maintaining a healthy weight and reducing fatigue. There are also lesser-known reasons that may be enough to motivate you to pull on your sweatpants and lace up your sneakers. Here are a few:

- **It is free.** Do you have a road, sidewalk, field, trail or track nearby? How about a pair of sneakers? Great, because you have everything you need to go for a walk. Walking is a great way to start exercising because there is no startup cost, fees or memberships required. Many patients face financial hardships, and walking can be a great way to save money and maintain an exercise regime.
- **It is safer than medications.** Medications for depression work really well for many people. For others, side effects and dosing changes are problematic, frustrating and sometimes downright scary. Walking has one main side effect: improved physical health! Researchers believe that completing a walking program helps serotonin, dopamine, norepinephrine and tryptophan production in the brain. Antidepressants target these same chemicals.
- **It improves self-image.** You probably already know that walking improves your mood by increasing the amount of desirable chemicals in the brain, but it can also improve your self-image. When people are active, they feel accomplished; when people are inactive, they feel disappointed and ashamed. You will be more likely to have a positive image of yourself if you're exercising. You will look better and feel better.
- **A change in the environment.** Staring at the same four walls is a depressing prospect for anyone. Cancer treatment may have limited your energy, your motivation and ability to leave home. Walking allows you to see your city. You will come to rediscover beauty that you may have missed like changing leaves, flowers growing or sunlight shining through the clouds. It is a great way to restore some needed faith and appreciation.
- **Changing your mind.** People claim that walking brings the mind to a meditative state or engages the mind to allow for processing thoughts and feelings. Either scenario is a fantastic change for someone impacted by cancer. Walking can be your therapy away from therapy. When you unlace your shoes, you may have a fresh perspective and new road to travel.

## And Don't Forget Yoga!

The ancient practice of yoga may also be beneficial for people with liver cancer. The yoga asanas, or poses, are thought to have benefit to certain parts of the body – thus there are specific asanas that *may* be beneficial to the liver. If done regularly, these asanas may promote healing of the liver, although the poses are not curative.

## Kapalbhati Pranayama

**Kapalbhati pranayama** is a breathing exercise that is thought to promote liver health by releasing hepatocellular damage. This breathing exercise is performed by sitting upright, relaxed, with legs crossed. To perform this breathing exercise, follow these instructions:

1. Take a deep breath, in through the nose, and out through the mouth.
2. Then, inhale deeply through the nose, filling the belly about  $\frac{3}{4}$  with air.
3. In a rapid motion, forcefully expel the air from the lungs while simultaneously bringing the belly button in towards the spine.
4. Allow the lungs to fill up naturally.

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5. Repeat this cycle 10 times.

### **Ardha Matsyendrasana**

**Ardha matsyendrasana** is a twisting asana that is thought to reduce the impact that liver disease has on the body. In order to perform this exercise, follow these instructions:

1. Sit in a cross-legged position.
2. Bring the left leg over the right leg, so that the left leg is against the abdominal wall.
3. Bring the left arm by the tailbone, and draw the right arm around the left leg.
4. Turn your head towards the right, and direct the gaze in that direction.
5. Repeat on the opposite side.

### **Dhanurasana**

**Dhanurasana**, commonly called bow pose, helps to stretch the liver. It is thought to stimulate the liver and be helpful for people with fatty liver disease. To perform bow pose:

1. Lie on the stomach.
2. Raise the chest and head off of the floor, while simultaneously raising the legs off of the floor.
3. For an extra challenge, reach behind and grab your ankles with your hands.
4. Repeat 10 times.

### **Naukasana**

**Naukasana**, commonly called boat pose, increases activity and is thought to release toxins from the body. To perform boat pose:

1. Lie on your back.
  2. Using the hips and buttocks as a fulcrum, lift the legs off the floor, while simultaneously lifting the torso off the floor.
  3. Hold the posture for as long as possible.
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