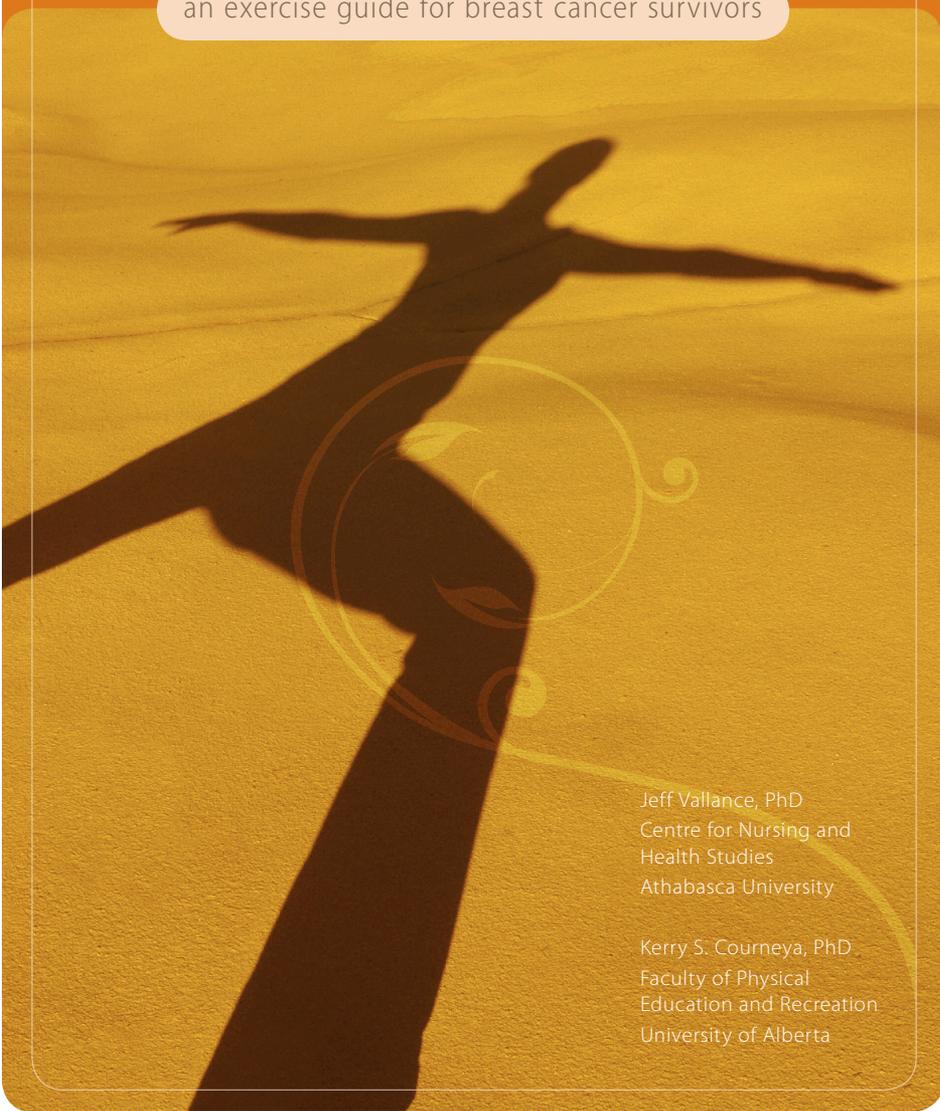


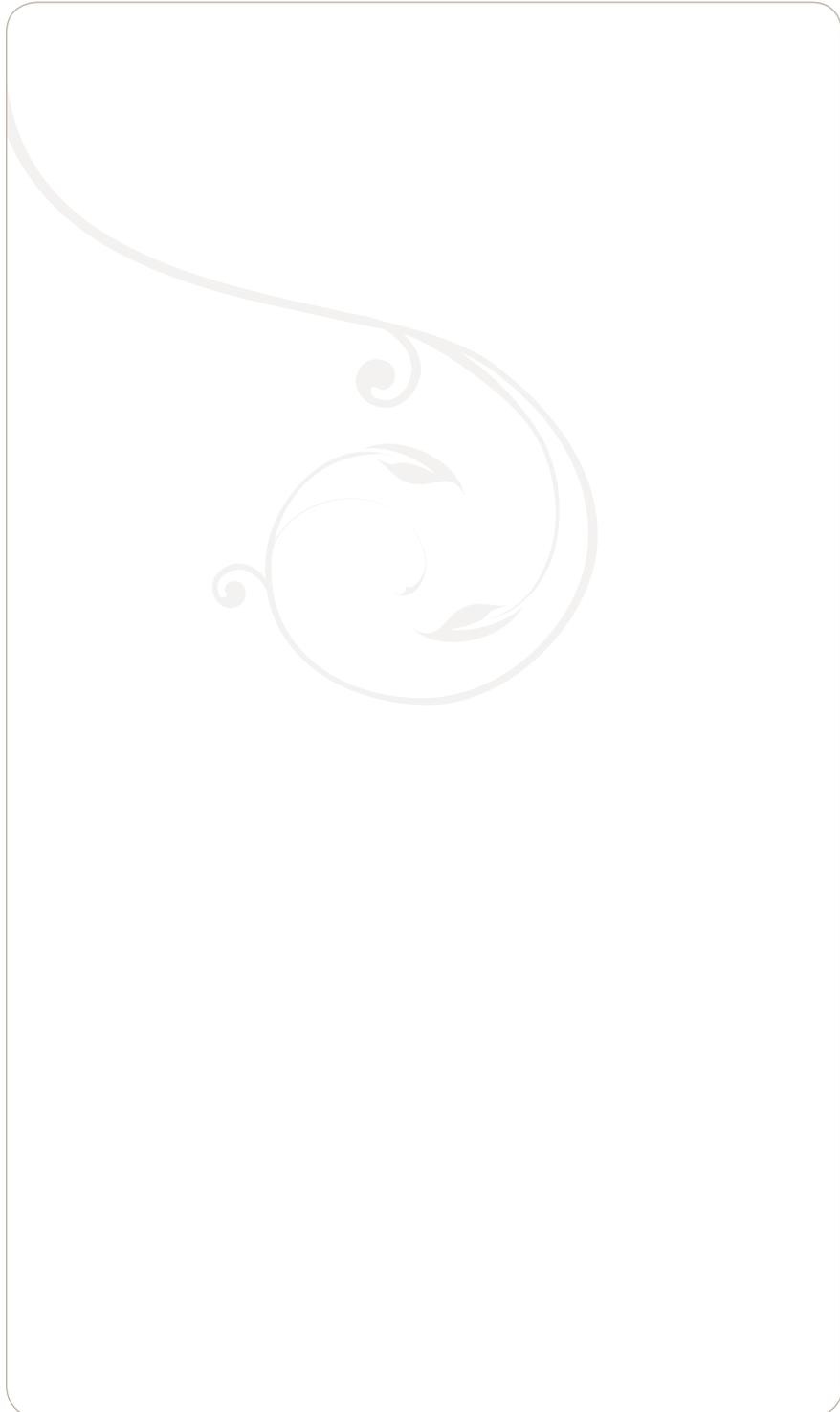
exercise for health

an exercise guide for breast cancer survivors



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“May your walls know joy; May every room hold laughter and every window open to great possibility.”

—Maryanne Radmacher-Hershey, 1995



let's get started

This exercise guide is designed for you

Congratulations on taking the first step in improving your health. Over 20,000 women are diagnosed with breast cancer every year in Canada. Cancer research is now telling us that exercising after breast cancer helps get your body back into shape and keep a positive outlook on life. It may also help prevent recurrence of your cancer.

Exercise is good for everyone, but it is especially important that breast cancer survivors exercise regularly. We created this exercise guide as many women who have completed their treatments are now interested in exercise. The scientific research tells us that breast cancer survivors are at an increased risk of:

- Heart disease.
- Getting a second breast cancer.
- Memory problems.
- Osteoporosis (brittle bones).
- Lymphedema (arm swelling).

The good news is that by exercising regularly you can reduce your risk, and even prevent some of these problems.

The purpose of this exercise guide is to help you add exercise into your daily life. We will tell you about the benefits and the barriers to exercise that other breast cancer survivors have identified. We will also give you tips to help you keep exercising when other things (like cold weather) get in the way.

Inside you will find activities that require you to think about your own exercise habits, setting goals, and some of the barriers that prevent you from exercising. These activities will help you plan an exercise program and help keep you motivated.

Health benefits

Research with breast cancer survivors has shown that exercise can help you improve:

- Your self-esteem.
- Your weight management.
- Your memory (reduce “chemobrain” symptoms).
- Your muscle and bone strength.
- Your life expectancy.
- The chances that you will live a longer life.

Exercise can help you decrease:

- The chances of you dying from breast cancer.
- Symptoms from your breast cancer treatment such as tiredness.
- Arthritis symptoms.
- Your menopausal symptoms.
- Depression and anxiety.
- The chances of you getting breast cancer again.



Myths about exercise

Below are a few myths that prevent people from exercising. Now let's tell the truth!

Myth #1: No pain, no gain!

False: If you are very out of breath or are in pain, then you are exercising too hard. This can be hard on your joints. You get many health benefits from moderate level exercises such as brisk walking (**like you are late for an appointment**). Moderate exercise is any exercise that makes you breathe harder without feeling very out of breath.

Myth #2: You have to exercise for at least 30 minutes at one time to get any health benefit.

False: You can exercise for 10 minutes at 3 different times of the day and still get health benefits. For example, you can take a brisk walk for 10 minutes after breakfast, lunch and supper. Even a small increase in your exercise level will improve your health. Exercise can be planned, such as going to an aerobics class. Exercise can also be unplanned, such as taking the stairs instead of the elevator.

Myth #3: After age 50, there is no point in exercising.

False: Exercise is helpful for people of all ages. Exercising after age 50 helps to prevent brittle bones, some cancers, high blood pressure and heart disease. Exercise even helps prevent creaky and sore joints. In fact, exercise may help you live longer and healthier.

“Every day you may make progress.
Every step may be fruitful. You
know you will never get to the end
of the journey. But this only adds
to the joy and glory of the climb.”

—Sir Winston Churchill (1874-1965)



how can exercise help me?

Breast cancer survivors are now being encouraged to exercise.[†] In this section, we will talk about the most recent scientific studies that have looked at the benefits of exercise for breast cancer survivors. Knowing the benefits of exercise can motivate you to be more active.

Exercise improves your health

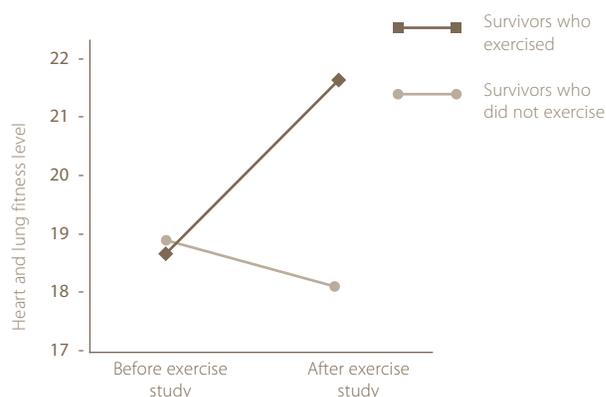
Exercising regularly provides you with many health benefits. Exercise:

- Improves how well your heart works. Doctors believe that heart disease can be reversed through exercise.
- Improves muscle strength. This improves your balance and helps prevent falls.
- Helps control your blood pressure and prevents high blood pressure.
- Helps reduce arthritis aches and pains.
- Helps maintain healthy bones and joints. This may prevent osteoporosis and arthritis.
- Improves your flexibility.
- Can make daily activities feel easier and less tiring.

[†] Doyle, C., et al. (2007). *Nutrition and physical activity during and after cancer treatment. An American Cancer Society guide for informed choices. CA A Cancer Journal for Clinicians, 56, 323-353.*

Study: Improving fitness level

Dr. Kerry Courneya and Dr. John Mackey from the University of Alberta recently reported that breast cancer survivors who exercise have better heart and lung fitness than those survivors who do not exercise[†]. In the graph below, you can see that exercisers improved their heart and lung fitness by 3 points. Non-exercisers actually decreased their heart and lung fitness by 1 point.



[†] Courneya, K., et al. (2003). Randomized controlled trial of exercise training in postmenopausal breast cancer survivors: Cardiopulmonary and quality of life outcomes. *Journal of Clinical Oncology*, 21, 1660-8.

Exercise may reduce the risk of your cancer coming back

We know that regular exercise may lower the risk of a woman getting breast cancer. But exercise also lowers the risk of the cancer returning[†]. **In a recent research study, researchers found that women who exercised after their breast cancer diagnosis lived longer than women who did not exercise after their diagnosis. It was found that walking as little as three hours per week had the greatest benefit.**

A recent study gave us some very exciting news^{††}. A team of researchers studied 5,000 breast cancer survivors. Their results revealed that women can help protect themselves against their cancer returning by maintaining a healthy body weight. Dr. Pamela Goodwin from the Mt. Sinai Hospital in Toronto also reported that overweight survivors may have a higher risk of having their cancer return^{†††}.

Exercising can also help you maintain a healthy body weight. If you can prevent weight gain or even lose weight, you may lower the chances that your breast cancer will come back.

If you feel you are overweight, try not to worry. The latest research says that people can still be overweight and fit. People who are overweight may get even more health benefits from being fit.

[†] Holmes, M., et al. (2005). Physical activity and survival after breast cancer diagnosis. *Journal of the American Medical Association*, 293, 2479-2486.

^{††} Kroenke, C., et al. (2005). Weight, weight gain, and survival after breast cancer diagnosis. *Journal of Clinical Oncology*, 23, 1370-8.

^{†††} Goodwin, P.J. (2001). Weight gain in early-stage breast cancer: Where do we go from here? *Journal of Clinical Oncology*, 19, 2367-9.

Exercise helps you feel good about yourself

Women who exercise report feeling better about themselves and their appearances. Several research studies tell us that exercise helps breast cancer survivors feel better about themselves.

Survivors in these studies reported that exercise helped them:

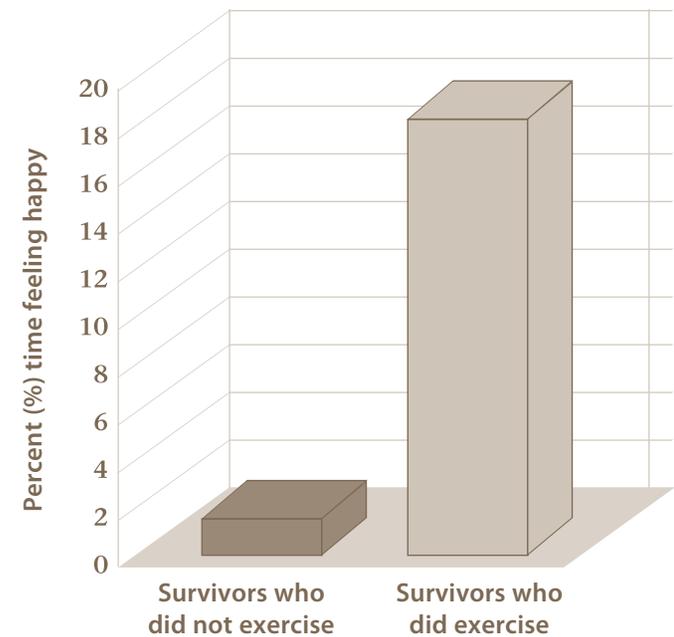
- Feel satisfied and happy with their body weight, shape, and appearance.
- Increase their self-esteem.
- Reduce their depression.
- Reduce their anxiety.

Exercise helps you do things to improve your health, and this will help you feel more positive about yourself.



Study: Feeling happy

Dr. Courneya's study also looked at whether survivors who exercised were happier than those who did not exercise[†]. This study showed that survivors who exercised showed greater improvements in their happiness. Compared to survivors who did not exercise, those who did had a whole extra day of happiness per week. Get happy by getting your exercise!



[†] Courneya, K., et al. (2003). Randomized controlled trial of exercise training in postmenopausal breast cancer survivors: Cardiopulmonary and quality of life outcomes. *Journal of Clinical Oncology*, 21, 1660-8.

Exercise helps you get your mind off cancer

Do you ever find yourself worrying about whether your cancer will come back? Exercise is a great way to distract yourself from the day-to-day worries about your cancer coming back and side effects you might still have.

Choose an exercise setting that stimulates you. For example, you may feel more motivated to walk outside than on a treadmill.

Some excellent areas to walk include the local park or even a shopping mall. Some of the local running stores may even provide you with maps of local walking trails around your neighborhood. They may also have walking programs that will help you to find walking partners.

Exercise helps you relieve stress

Exercise is also a great way to relieve any stress you have. Exercise can distract you from the challenges that you might face during the day.

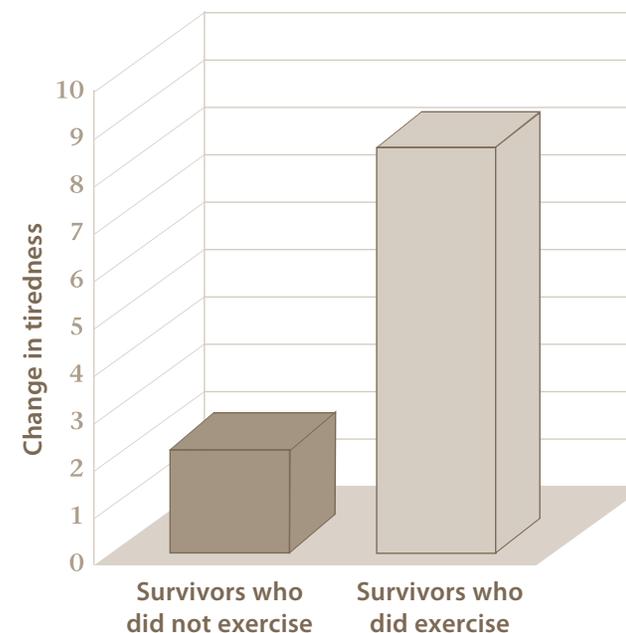
Other breast cancer survivors agree that exercise relieves stress. A recent survey found that the majority of breast cancer survivors believe exercise helps relieve their stress[†]. Also, research studies have found that regular exercise actually reduces stress and anxiety^{††}.

[†] Courneya, K., et al. (1999). Utility of the theory of planned behavior for understanding exercise during breast cancer treatment. *Psycho-Oncology*, 8, 112-122.

^{††} Petruzzello, S.J., et al. (1991). A meta-analysis on the anxiety-reducing effects of acute and chronic exercise: Outcomes and mechanisms. *Sports Medicine*, 11, 143-82.

Study: Reducing tiredness

Studies have examined how exercise affects tiredness in breast cancer survivors[†]. This chart shows that survivors who exercised felt less tired. Survivors who did not exercise did not report very much change in how tired they felt. **Exercisers actually lowered their tiredness by almost 10 points. This means survivors reduced their tiredness by 25%.**



[†] Courneya, K., et al. (2003). Randomized controlled trial of exercise training in postmenopausal breast cancer survivors: Cardiopulmonary and quality of life outcomes. *Journal of Clinical Oncology*, 21, 1660-8.

“If you worried about falling off the bike, you would never get on.”

—Lance Armstrong, testicular and brain cancer survivor, 7 time ‘Tour de France’ Champion



Exercise improves your energy level

Exercise can decrease symptoms of tiredness and give you more energy. Breast cancer survivors tell us that the main reason they exercise is because it improves their energy level.

Surviving breast cancer and ending treatments can cause survivors to have fatigue and a lack of energy. This lack of energy may limit your ability to do the daily activities that you once found easy.

Exercise helps reduce feelings of tiredness in many ways. Exercise helps your red blood cells work better. The red blood cells carry oxygen through your body. When you are not active, oxygen is not used very well in the body. When you exercise, you are increasing the ability of the body to use oxygen in the blood. This helps your body use oxygen more effectively, and helps you feel more energized.

Research studies suggest that as little as 30 minutes of brisk walking per day may reduce tiredness.



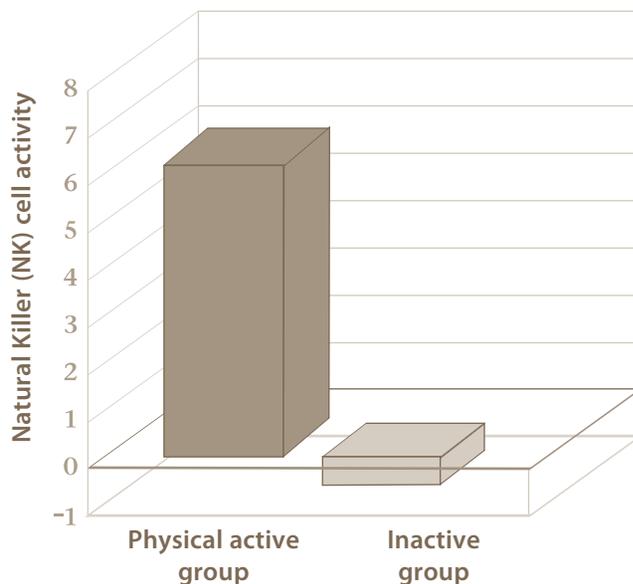
Exercise helps you improve your immune system

The immune system reacts to invaders that you don't want in your body, such as when you catch a cold. If your immune system is working well, it has a better chance of getting rid of these invaders.

A recent study examined breast cancer survivors who exercised[†]. They found that exercise can improve the immune cells that fight off breast cancer tumors. The benefits were even seen in those women who were taking hormone treatments such as Tamoxifen. Survivors who did not exercise did not get these immune system benefits.

The good news is that you can help your immune system by exercising. Moderate level exercise such as brisk walking is very helpful.

Definition: Immune cells are cells produced in the body that protect us from disease.



[†] Fahey, A., et al. (2005). Randomized controlled trial of exercise and blood immune function in postmenopausal breast cancer survivors. *Journal of Applied Physiology*, 98, 1534-40.

Exercise may help you live longer

You're never too old to increase your level of exercise. If you don't exercise your body ages faster.

Consider these facts:

- The more you move, the better you feel.
- More active older adults have the same function and fitness of those much younger.
- More active people continue to be independent.
- There is strong research evidence that people who exercise live longer and have fewer illnesses.[†] And the good news is that you don't have to exercise for the entire day. Even small amounts add up!

The bottom line is that exercise adds years to your life!

Exercise helps you get things back to normal

A breast cancer diagnosis and treatment may cause lasting changes in your life. You might find yourself thinking about your breast cancer experience quite often. This may affect other areas of your life, such as your relationships or your job. Sometimes you just want things to get back to normal.

Exercise is one activity you can do to help maintain a normal lifestyle. By learning to plan exercise into your day, your planning and time management skills might even improve. This can help your days go a little smoother.

[†] Leitzmann, M., et al. (2007). Physical activity recommendations and decreased risk of mortality. *Archives of Internal Medicine*, 167, 2453-2460.

“Sometimes I think a lot about the cancer I had. Sometimes I also don’t feel very healthy. But exercise allows me to feel like I am doing something positive for my well being. Also, getting out to do my exercises helps me physically as well as emotionally.”

—Joy, Lethbridge (Age 59)

getting support

What do oncologists think about exercise?

Most oncologists now encourage their patients to do regular exercise. Here is what some oncologists in Canada say about exercising after breast cancer.



“The studies that are emerging in the exercise and cancer area are very supportive of the role that exercise can play. Here at the Cross Cancer Institute, we place a lot of emphasis on continuing to be active both during and after breast cancer treatment. We have found that exercise can improve your physical fitness as well as your quality of life. I recommend to all my patients to do their best to stay active as much as possible.”

—Dr. John Mackey, Medical Oncologist,
Cross Cancer Institute

“Breast cancer treatments often leave patients with fatigue and weakened immune systems. Based on our research as well as others, there has been good evidence of both physical and psychological benefits of exercise both during and after treatments. All the patients that I see at our centre go for physical fitness testing and a specialized exercise program is then developed for them. Exercise is a non-toxic, inexpensive, easy activity that doesn’t have to be done in a fancy facility. And it’s never too late to start.”

—Dr. Roanne Segal, Medical Oncologist,
Ottawa Regional Cancer Centre



“There is increasing evidence that exercise is important after being diagnosed with breast cancer and when treatments are finished. I suggest that eating well, looking after stress, and doing regular exercise is important as it benefits your health. I suggest to all my patients that they do some kind of exercise and pay attention to how much they can do and build up. If they are not familiar with exercise, I recommend they begin slowly and build up to a level they are comfortable with.”

—Dr. Karen Gelmon, Medical Oncologist,
British Columbia Cancer Agency



Getting support can help you exercise

Your spouse, partner or a friend can help motivate you to get out and exercise. When you go for your exercise, encourage your support person to exercise with you. Then you can both get the benefits of exercise. You can even challenge each other to exercise more. Have your support person use the goal setting activity on pages 30 and 31. Set at least one goal together.

Use each other to help set exercise goals and hold each other responsible for meeting these goals. Remember to celebrate when you achieve your goals.

Is your spouse or partner willing to exercise with you?

activity 1

What are some of the activities that you and your support person enjoy doing together?

1. _____
2. _____
3. _____

“I feel better, I feel less sleepy, and I have more energy after I exercise!”

—Catherine, Medicine Hat, (Age 34)



Other family members can also help

Getting the support of your family to do exercise is very helpful in starting and maintaining your program.

Now is your chance to become a role model for healthy living for your spouse, kids, and even your grandkids.

Here are some tips to help get your family active:

- Take lessons together in a new sport, such as tennis or golf.
- Go for a walk or bike ride in your neighborhood.
- Go to the nearest park and play ball games, such as softball, soccer or volleyball. Bring along a frisbee.
- Go for a hike in a nature preserve or park. Bring a book about local birds or flowers, so you and your kids can spot birds and plants on your hike.
- Jump rope. It's a great exercise and it can be done almost anywhere.



activity 2

Pick 3 activities you can do with your family over the next month:

1. _____
2. _____
3. _____

How your friends can help

Your friends can be great motivators for exercise. If your friends do not exercise, share this guide with them. If most of your friends already exercise, see if you can join them. They can be a great source of advice.

Have fun with your friends by forming a walking group. Meet once or twice a week at a central location. Walk around your favourite park.

Remember, there is scientific evidence showing exercise that is as simple as walking may help you live longer, and even prevent your breast cancer from returning.

Gather your friends and join in a Learn To Run class. For example, running and walking stores offer several programs to suit what you are looking for. They offer clinics on walking, jogging, and marathons. They have women-only clinics and clinics specifically designed to help you train for the Canadian Breast Cancer Foundation's **Run for the Cure**.

“The path to our destination is not always a straight one. We go down the wrong road, we get lost, we turn back. Maybe it doesn’t matter which road we embark on. Maybe what matters is that we embark.”

—Barbara Hall, 1993



how much exercise should I do

The recommended goal

Experts recommend that you exercise:

- At least 5 days a week.
 - At least at a moderate level.
 - For 30 minutes or more.
- or
- You can do vigorous activities, like running, for a minimum of 20 minutes at least 3 days of the week.
 - And if you can, do activities to build your muscular strength (like weight lifting), twice a week.

How often should I exercise?

Exercise should be performed at least 3-5 days of the week depending on the intensity level. If you choose moderate intensity exercise (like brisk walking), exercising every day is even better. This might seem hard, but we will give you some helpful tips in this guide on how to exercise everyday.

If you are doing vigorous exercises, you should try and do these exercises on at least 3 days of the week. Vigorous exercises involve any exercise that makes your heart beat fast and makes you feel as though you are out of breath. If you are exercising with someone else, it would be difficult to talk to them because your breathing is very heavy. Examples of vigorous exercises include running, squash, or hard cycling (up a hill!).

How hard should I exercise?

Try to exercise at least at a moderate intensity. Moderate level exercise is any exercise that makes you breathe harder without feeling out of breath. If you are exercising at a moderate level you should start to sweat after 10 minutes. If someone were to see you walking at a moderate intensity, they would think you were late for an appointment.

Walking quickly (like you were late for an appointment) is a moderate level exercise.

When you are feeling like more of a challenge, you can progress up to more intense exercises, like hard cycling or running. Try these exercises for at least 20 minutes each time, on 3 days of the week.

“I find exercise to be very beneficial to me, both physically and mentally. It keeps me going each day. My body feels good and my self-esteem is higher. By exercising, I can maintain a fairly good energy level.”

—Patricia, Grande Prairie (Age 75)



How much should I exercise?

The primary goal is to help you increase your exercise level by at least 150 minutes of moderate intensity exercise per week. This 150 minutes is above and

beyond what you are currently doing right now. So for example, if you already do 90 minutes per week of moderate intensity exercise, the goal of this program is to help you do 240 minutes per week of moderate intensity exercise.

If you are interested in vigorous intensity activities such as running or weight lifting, the goal of this program is to get you doing an extra 60 minutes of vigorous exercise per week.

But don't be afraid, you do not have to do 30 minutes at once! The benefits of exercise can be gained by doing as little as 10 minutes at a time.

For example, if you go for a 10 minute walk after breakfast, lunch and supper you will meet the recommended goal of 30 minutes a day. If you already get 30 minutes a day, we'll show you how to increase your exercise minutes even more.

“Obstacles are those
frightful things you see
when you take your
eyes off your goal.”

—Henry Ford



the way forward

Setting “SMART” exercise goals

The next step is to set some exercise goals. Research has shown that setting goals will help you start and maintain your new exercise program. Setting goals will also help you monitor how much exercise you are doing. Write down your goals and put them on the refrigerator so that your family can see them and help you achieve them.

Use the following “SMART” guidelines when setting goals.

- Specific** Determine exactly what you are going to do and how.
- Measurable** Measure your progress.
- Attainable** Set a goal that is within your reach, not an impossible dream.
- Realistic** Set a goal that is realistic, relevant, and rewarding.
- Time Frame** Set a time frame and allow enough time to reach your goal.

Remember to reward yourself when you have reached a goal. Treat yourself with something that you enjoy, like taking a long hot bath, buying that book you have been wanting to read or buying a new pair of runners.

activity 4: Time to set a goal

step 1

Write a goal for this next week by filling in the blanks below.

Starting on _____,
(day of the week)

I am going to _____

for _____ minutes.

I am going to do this _____ days this week.

There is space in the next few pages to write out your own goals for exercise.



step 2

Write down what else you need to do to be able to meet this goal. For example, you may need to buy some walking shoes or call a friend and ask them to start walking with you. Maybe you need to buy an exercise video or call your local fitness centre and sign up for a class.

step 3

Write down how you will reward yourself if you meet your goal this week.

Example of a walking goal

Starting on Monday, I am going to walk for 30 minutes. I am going to do this 5 days this week (Monday to Friday). I am going to phone my friend Kari to see if she will walk with me after work or at lunch time. If I can do this for 2 weeks I will buy myself a new pair of walking shoes.



Continue to set goals

Continue to set weekly goals until you are meeting the recommended goal of exercising:

- at least 5 days a week or more.
 - at least at a moderate level.
 - for at least 30 minutes or more.
- or
- at least 3 days a week or more.
 - at a vigorous intensity level.
 - for at least 20 minutes or more.

If you already meet the goal of 30 minutes a day, on at least 5 days a week, set goals that will help you get even more exercise per week. The more the better!

You can even set goals that will help you start moving more and sitting less. Some examples might be:

- Instead of getting coffee from the coffee machine at work, I am going to walk 5 minutes to the coffee shop and get a coffee on my coffee break.
- I am going to take the stairs up 5 flights and get on the elevator on the fifth floor instead of getting on the elevator on the main floor.
- I am going to put some music on and dance with my kids for 10 minutes instead of watching their TV show.
- I am going to jump rope during TV commercials instead of sitting for a whole hour.

It all counts!

“Happiness is when what you think, what you say, and what you do are in harmony.”

—Mahatma Gandhi (1869 - 1948)



making it happen

The next part of this guide talks about strategies for living a lifestyle that includes exercise.

Not surprisingly, time is the #1 factor that prevents people from exercising. We all have reasons for not fitting our daily exercise into our busy schedules.

Exercise experts propose the 10-minute solution:

You don't have to set aside an entire half-hour to do your exercise. On those especially busy days, try building in 10 minutes of exercise 3 times a day. For example, you can do some simple exercises for 10 minutes in the morning, take a 10-minute walk during lunch, and work around the block for 10 minutes in the evening. It's that simple and now you have your 30 minutes of exercise.

Here are a few time management strategies that will help you exercise more:

- Combine exercise with other activities (e.g. walking on a treadmill while watching TV or reading).
- Use exercise as transportation.
- Exercise when you have to wait at an appointment or at your child's sport practice.
- Wake up 30 minutes earlier or go to bed 30 minutes later.
- Schedule exercise into your day rather than waiting to see if it fits in.

Are you at work all the time?

Try these work-friendly tips:

- Start by walking to work a few days a week if it is feasible for you.
- Invite a group of co-workers to start a lunchtime walking group.
- Carry letters or parcels to the post office or overnight delivery box rather than having them picked up.
- Use the restroom on a different floor and take the stairs to get there.
- Taking the bus to work? Get off the bus a few stops early and walk the rest of the way to work.

Here are some time saving tips to build exercise into your day:

Instead of:	Try this:
Meeting a friend for coffee	Meet a friend for a walk
Going to a movie	Try a new fitness class
Watching TV for 1 hour	Watch a 30-minute program and then go for a 30-minute walk
Taking the elevator up to your 15th floor apartment	Take the elevator to the 10th floor and walk the remaining 5 floors
Driving a short distance to work	Walk to work
Starting a restaurant club	Sign up in a learn to walk program with your friends
Trying to squeeze exercise in at night	Wake up 30 minutes earlier in the morning and exercise

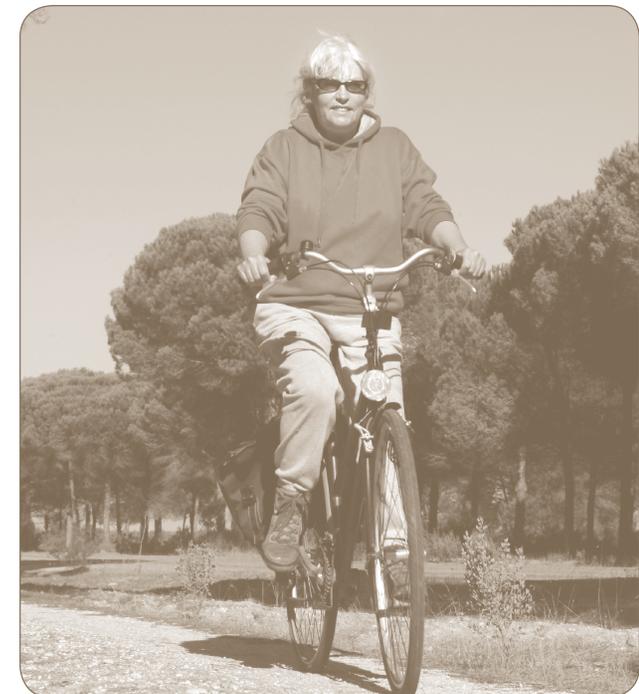


Need some exercise advice?

Depending on where you live, there may be several groups that coordinate walking clubs. For example, your local shopping mall may coordinate a group of people who meet weekly for a brisk walk around the mall. You can also call the local running store for learn to walk and learn to jog clinics.

Your local fitness centre might offer both beginner and advanced exercise classes for a reasonable drop-in fee. Give your local recreation centre a phone call to find out about activities in your area.

By joining in these programs or other programs offered in your area, you will be surprised at how many people you will meet. These clinics can provide you with the extra help you might need. Before you know it, you will have a great exercise support circle.



Still experiencing some side effects?

Breast cancer survivors often report that many of the side effects from chemotherapy and other treatments stay with them even into their survivorship. You as well might still be having some of these lingering side effects. Common side effects include nausea and fatigue, which can prevent you from exercising.

The good news is that exercising may help reduce some of these side effects related to treatment. Are there certain times during the day that your side effects seem to limit you? You can try to exercise when the side effects are not present. So for example, perhaps you only feel fatigue in the evening. If so, try doing your exercise in the morning.

Another strategy is to start off your exercise very slowly. Once you get moving and active, you may find that the side effects you are experiencing may go away the more active you get.

It's cold!

We're not strangers to cold weather! This does not mean that you can't still get your daily exercise. Try these tips:

If you find the weather too cold for your liking, find an indoor activity. You can join or start a mall-walking club. Other indoor areas include the local fitness centre or spa. If you have your own treadmill, the cold days are the days to use it. Try an exercise video from your local library.



Cold weather survival tips

Ease into it. Start slowly to give your muscles a chance to warm up.

Walk at a moderate or slow pace. Winter roads and paths can be icy. The bigger your walking strides, the higher risk you have of falling.

Bring water. Don't assume you only need water in summertime. Dry winter air is dehydrating, and you do sweat away water in the winter.

Stay safe. In bad road conditions, try not to walk where there's traffic. Instead, go to parks, malls, bike paths, high school tracks or streets that draw very few cars.

Wear three layers of clothing. It's better to overdress. You can always take the clothes off if you get too hot.

Avoid cotton. Try clothes made out of material that will keep sweat away from your skin.

Wear gloves. Wear ski gloves, a hat, and a scarf for your neck to help you keep warm. If your ears, hands or head get really cold, go inside.

Try outdoor walking shoes. Lightweight hiking boots are a good option. Stay away from heavy hiking boots that are for mountaineering.

Don't layer your socks. Layers of socks can give you blisters on your feet. Try thin socks designed to keep your feet warm.

activity 5

Think of some places where you can exercise when it is too cold outside for you, and write them down here:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Too tired?

Feeling tired is one of the main reasons breast cancer survivors do not exercise. Being tired has been described as a “vicious cycle”. When you feel tired, you usually want to rest and lie down. But studies show that this only makes you more tired. The trick is to break the tired cycle with exercise. In research studies with breast cancer survivors, walking and other forms of exercise have been found to reduce tiredness. **Studies suggest that as little as 30 minutes of brisk walking per day reduces symptoms of tiredness. Remember, the 30 minutes can be broken into three, 10-minute sessions.**

If you are tired, here are a few tips to maintain your exercise:

- Notice the days and times of the day when you feel fatigued. Then exercise at a time when you feel the least tired.
- Try reducing the level at which you are exercising. If you are walking at a very fast pace, try slowing down your walk or decreasing the distance of your walk.



Other health problems?

Walking and other forms of exercise are just what the doctor ordered.

Individuals with:

- osteoporosis (brittle bones)
- diabetes
- heart disease
- arthritis
- menopause symptoms
- high blood pressure
- fibromyalgia
- overweight/obesity

are now all being encouraged to start exercising. Exercise can also help to prevent and even manage these conditions.

If you have any other medical or health problems, you should ask your doctor or oncologist before starting your exercise program. Otherwise, start exercising at a level that you can tolerate. If you have pain or aches in a particular spot on your body, avoid doing exercises that cause pain in that body area. Exercise is wonderful given that there are so many types of exercises to do, and it can be helpful for so many different things.

What if my cancer comes back?

Some women may experience a return of their breast cancer. Sticking to your exercise program may be very hard during this time. Exercising during treatment for breast cancer is helpful[†].

Studies have found that exercise has a positive effect on physical and mental functioning in women receiving treatment. These benefits include:

- Increased ability to do regular activities.
- Decreased body fat and more muscle.
- Decreased nausea, vomiting and tiredness.
- Improved immune system.
- Improved mood, happiness and self-esteem.

Staying active during your treatments may even help you be able to tolerate the treatments better.



† Schwartz, A., et al. (2001). Exercise reduces daily fatigue in women with breast cancer receiving chemotherapy. *Medicine and Science in Sports and Exercise*, 33, 718-23.

† Segal, R., et al. (2001). Structured exercise improves physical functioning in women with stages I and II breast cancer: Results of a randomized controlled trial. *Journal of Clinical Oncology*, 19, 657-65.

† Courneya, K., et al. (2007). Effects of aerobic and resistance exercise in breast cancer patients receiving adjuvant chemotherapy: A multicentre randomized controlled trial. *Journal of Clinical Oncology*, 25, 4396-4404.

Exercise makes my body sore

Soreness from exercise is very common. Exercising too much may cause a dull, achy feeling in the muscles that may occur 24-48 hours after exercise. To prevent this:

- Start your exercise program slowly.
- Don't exercise too hard in a short period of time.
- Try some gentle stretches before and after you exercise.
- Give your muscles a day to relax by doing some lighter exercises (walking).

If your arm is sore and swollen, you may be experiencing some discomfort due to lymphedema. Lymphedema is common in women who have had surgery for their breast cancer. A study by Dr. Don McKenzie at the University of British Columbia suggested that exercise does not make lymphedema worse[†]. This study gave us new evidence that exercise is safe for survivors that may be experiencing some lingering symptoms of lymphedema. A more recent large study also showed that exercising (even weight lifting) during chemotherapy is safe for your arms^{††}

† McKenzie, DC., et al. (2003). Effect of upper extremity exercise on secondary lymphedema in breast cancer patients: A pilot study. *Journal of Clinical Oncology*, 21, 463-6.

†† Courneya, K., et al. (2007). Effects of aerobic and resistance exercise in breast cancer patients receiving adjuvant chemotherapy: A multicentre randomized controlled trial. *Journal of Clinical Oncology*, 25, 4396-4404.

Family matters

You can even try to include exercise into your family duties. Exercise can be a good way to get some good time in with your family. Now is your chance to be an example in your family and help them to be regular exercisers as well.

activity 6

Write down one time each day when you can be active with your family:

Mon: _____

Tues: _____

Wed. _____

Thurs: _____

Fri: _____

Sat: _____

Sun: _____

Now write down the activities you can all do together on these days:

Mon: _____

Tues: _____

Wed. _____

Thurs: _____

Fri: _____

Sat: _____

Sun: _____



Make it fun

There are other ways to get the health benefits of exercise. Try these tips to make exercise more enjoyable:

- Lower your exercise level but exercise for a longer amount of time. For example, if you don't like walking briskly for 30 minutes, try walking at a slower pace for 45 minutes.
- Start moving more and sitting less. It's as simple as taking the stairs, walking to the store, walking through the mall or even enjoying some work in your garden. All these activities add up to give you health benefits.
- Take up a new hobby that involves exercise. Rollerblading, speed walking, and hiking are all relatively cheap exercises that have a lot to offer.

Exercising more can simply be a matter of spending more time on things you already do.

activity 7

What are two ways you can increase your daily activity? For example:

1. *I can walk to get milk instead of driving.*
2. *I can take the stairs at work.*

Now it's your turn:

1. _____

2. _____

I'm always booked

Our daily routines are full of things that prevent us from exercising. Here is an activity for you. Make a list of the barriers in your daily life that affect your exercise. Barrier #1 being the barrier that will most likely stop you from exercising. Then think about some strategies on how you can overcome these barriers. Discovering these barriers is the first step in overcoming them.

activity 8: overcoming barriers

Barrier 1:

The kids always need my attention after work so I can never get out to do any exercise.

Barrier 2:

Barrier 3:

Barrier 4:



strategies

Strategy 1:

Ask my husband if he can look after the kids for 30 minutes on weeknights while I go for a walk with the girls.

Strategy 2:

Strategy 3:

Strategy 4:



“I finally realized that being grateful to my body was key to giving more love to myself.”

—Oprah Winfrey, O Magazine



before you begin

If you notice any of the following stop your exercise and call your doctor or local Health Link.

- An irregular pulse (heart seems to skip a beat).
- Extreme tiredness.
- Unusual muscle weakness.
- Joint or bone pain (besides the everyday aches and pains we have).
- Leg pain or cramps.
- Chest pain.
- Sudden onset of nausea (feel like you are going to vomit) during exercise.
- Dizziness, blurred vision, fainting.
- Shortness of breath or difficulty breathing.
- Fever or shaking with chills.
- Numbness or loss of feeling in hands or feet.

Proper stretching and drinking plenty of fluids can prevent many of these symptoms. It is important to drink fluids before and after exercise so you don't get dehydrated, especially when the weather is warm and humid. Try to drink 1 extra cup of water for every 15 minutes of moderate exercise. Take a water bottle when you exercise and keep sippin'.

“Exercise for me is extremely beneficial. I feel like I am able to achieve something even on days when I don’t feel so well because of the cancer treatments I had.”

—Deborah, Edmonton, (Age 48)



exercise program

If you are looking for a structured program to get you up and walking, this is the one for you. This program was developed by the National Institutes of Health. It’s easy to follow and very effective at helping people get active. The goal of this program is to get you walking briskly for at least 30 minutes. (Program on next page.)



internet resources

American College of Sports Medicine (ACSM)

<http://www.acsm.org>

For all the latest research in sports and exercise science.

Canadian Cancer Society (CCS)

<http://www.cancer.ca>

The CCS has some great links and articles about exercise and cancer.

Canadian Breast Cancer Foundation (CBCF)

<http://www.cbcf.org>

For all the latest information including the popular "Run for the Cure".

Alberta Centre for Active Living (ACAL)

<http://www.centre4activeliving.ca>

ACAL is devoted to improving the health and quality of life of Albertans through physical activity.

Canadian Fitness and Lifestyle Research Institute (CFLRI)

<http://www.cflri.ca>

The CFLRI site has information on everything you need to know about exercise.

Public Health Agency of Canada

<http://www.phac-aspc.gc.ca/pau-uap/paguide/index.html>

This website will teach you how to make choices that will help you prevent disease, stay healthy, and enjoy life to its fullest.

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