Youngand Strong



The Young and Strong study is led by Dana-Farber Cancer Institute and sponsored by the American Society of Clinical Oncology (ASCO) and the Susan G. Komen for the Cure Foundation.



your user name is: active your password is: youngl

Table of contents

Why exercise is wise	4
What kind of exercise?	6
Start—or keep—moving!	9
Buddy up!	. 12
Break down barriers	. 14
Stick with it!	. 16
Motivation: What works?	. 18
Healthy living	.20
Percurces	23

Welcome to Young and Strong: Active, healthy living for young women with breast cancer.

We have created this program to help young women like you, who have recently been diagnosed.

Many young women ask, "Now that I've been diagnosed, what can I do to take care of myself?" One important answer is to be physically active. This booklet and the Young and Strong website explain how physical activity can help you feel better, improve your overall health and potentially prevent breast cancer recurrence. We offer plenty of tips on how to be physically active after your diagnosis, during treatment, and beyond. If you already exercise, congratulations—keep it up! It is important that you try to stay active at this time.

The Young and Strong program is not meant to provide advice about the medical issues and decisions you may face after your diagnosis. Many resources (including your doctor) offer information about breast cancer risks, treatments, and side effects. This program is designed to give you helpful general information about living well during and after breast cancer, in addition to those resources.

In this booklet, we cover the benefits of physical activity during and after breast cancer. We also offer tips on how to become—or stay—active. Although you may be going through big changes right now, remember that you can live a full, active life during and after breast cancer treatment.

If you have any study-related questions, please contact us using the information below.

On behalf of the Young and Strong team, thank you.

Ann H. Partridge, мр, мрн

Young and Strong Principal Investigator

Director, Program for Young Women with Breast Cancer Dana-Farber Cancer Institute

Associate Professor in Medicine Harvard Medical School

Email: youngandstrong@partners.org

Phone: (888) 814-3324

Website: active.youngandstrong.org

Jennifer Ligibel, MD

sizue

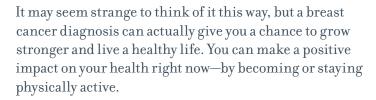
Young and Strong Co-Investigator

Medical Oncologist, Breast Oncology Center Dana-Farber Cancer Institute

Assistant Professor in Medicine Harvard Medical School

Why exercise is wise

do for your health. It can help you control your weight, lower your risk of heart disease and diabetes, and maintain healthy bones. It may even lower the risk of breast cancer recurrence.



Research shows that young women with breast cancer often exercise less than recommended and gain weight during treatment. One common treatment is chemotherapy, which is specifically known to cause weight gain. Gaining weight increases the risk of diabetes and heart disease, as well as the risk of lymphedema (painful swelling) in the arm and chest area (see page 8). In addition, studies suggest that exercising less and/or gaining weight may increase the chance of recurrence (breast cancer coming back in the breast or in other parts of the body). Physical activity can reduce fatigue and depression and improve mood.

Young women with breast cancer may go through early menopause. This can cause weight gain, along with an increased risk of bone loss and heart disease. Heart disease is the number-one cause of death in women, but regular exercise can help prevent it.

For all of these reasons, cancer experts agree that physical activity is one of the keys to good health, both now and in the future. They offer three main recommendations for young women with breast cancer:

- Get back to your normal daily activities as soon as possible after surgery (if your treatment included surgery).
- Continue with your daily routine (including physical activity) as much as you can during and after non-surgical treatments, like chemotherapy.
- If you don't exercise regularly already, talk with your doctor about a safe way to get started.

Other important reasons for women with breast cancer to get regular physical activity are to:

- prevent weight gain
- raise self-esteem and improve body image
- · improve mood, quality of life, and sleep
- lower anxiety and depression associated with treatment
- strengthen bones and lower the risk of osteoporosis
- increase strength and range of motion in the shoulders and arms (if there was surgery to that area)
- reduce fatigue, nausea, and other side effects of treatment
- possibly lower the risk of cancer recurrence and death

Is physical activity safe for me?

Yes! In general, if you were in good health before you were diagnosed, it should be safe for you to exercise now. The American College of Sports Medicine (ACSM), the world's largest organization of sports medicine and exercise science experts, has developed exercise guidelines for people undergoing cancer treatment and for cancer survivors.

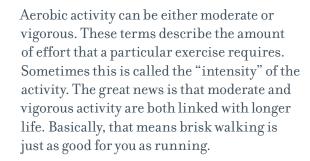
According to the ACSM, walking is a safe type of exercise for almost all people with cancer. They also say that, as a woman with breast cancer, you should be careful about doing upper body exercises (including some yoga poses). Before starting upper body exercises, you should talk with an exercise professional familiar with the needs of women going through breast cancer treatment. This person can help you prevent arm injuries or lymphedema. (Read more about lymphedema in the next section.) Ask your doctor for a recommendation or visit the ACSM's website (www.acsm.org).

Most women with breast cancer don't need a professional fitness evaluation to start exercising at a moderate level of intensity (like brisk walking). However, it's always a good idea to talk with your doctor before you begin any new exercise program.

For more about levels of exercise intensity, see "Moderate vs. vigorous" on the next page or visit our website at active.youngandstrong.org.

What kind of exercise?

of moderate, aerobic (cardio) activity during and after your treatment for breast cancer. *Aerobic activity* is any exercise that makes you breathe a little heavier and get a little bit sweaty. Heavier breathing makes your body work harder, which is good for your heart and lungs.



Moderate activity

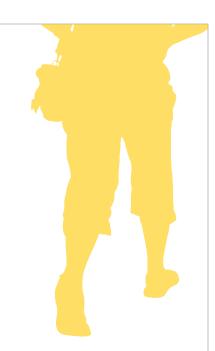
During moderate activity, you will notice that:

- your heart rate and breathing will get faster
- you may sweat a bit
- if you are not used to being active, you may be slightly sore for a day or two

How do you know if you're working at moderate intensity?

- If you can talk or sing without puffing at all, you could probably push a little harder.
- If you can comfortably talk but not sing, you're exercising at the right intensity.
- If you can't talk at all without gasping, you should slow down the pace.

Kayaking and ice skating are examples of moderate activities.



Vigorous activity

Vigorous activity requires more effort than moderate activity. During vigorous activity, you will notice that:

- your heart rate and breathing will get much faster
- you will be very sweaty
- · you may not be able to talk easily

One example of a vigorous activity is a spinning class.

Recommendations

Possible side effects of treatment, such as diarrhea or vomiting, may contribute to dehydration. During any kind of activity, be sure to drink plenty of water and listen to your body if it asks you to slow down or stop.

Experts recommend that all women (with or without breast cancer) get at least:

 150 minutes or more of moderate-intensity aerobic activity each week (e.g., brisk walking)

or

• 75 minutes or more of vigorous aerobic activity each week (e.g., running or spinning)

One great way to reach 150 minutes of exercise a week is to **briskly** walk at least 10,000 steps a day. Walking is good, because you can do it anywhere and you don't need any special equipment. All you need is a sturdy pair of shoes and a little motivation.

To help you reach your walking goals, try:

- walking with a friend or family member
- using a pedometer (a device that counts your steps). You can buy a pedometer at most sporting good stores. If you have a smart phone, you may be able to download an app that will count or track your steps.

Weight-bearing workouts

Weight-bearing exercise means that you're working against gravity. This is important for your body, because it strengthens your bones. Walking is one weight-bearing exercise. Others include:

- jogging or running
- climbing stairs
- dancing

The story on strength training

Strength training, or lifting weights, helps build strong muscles, bones, and joints. It also seems to boost metabolism (the way your body turns food into energy). It's good to include strength training in your exercise routine. However, as a young woman with breast cancer, you should be aware that some women may develop *lymphedema* when they lift heavy weights (see next page).

About lymphedema Lymphedema is when fluid h tissues of a particular part of

Lymphedema is when fluid builds up in the tissues of a particular part of the body and causes painful swelling. After breast cancer surgery or radiation, you may develop or be at risk for developing this condition. If so, it will most likely affect your arm or breast/chest area on the side of your body where you received treatment.

Our understanding of lymphedema has changed in recent years. Studies now show that moderate upper body strength training does not seem to increase a woman's risk of developing this kind of severe swelling. In fact, moderate upper body strength training may actually decrease symptoms for women who have lymphedema. Some experts recommend that women wear a lymphedema sleeve whenever they do upper body exercises.

If you choose to try upper body exercises, be sure to consult with an exercise professional who specializes in working with cancer patients. Then start very slowly, take it easy, and listen to your body.

To learn more about different kinds of exercise as well as lymphedema, visit our website at active.youngandstrong.org.

Start or keep—moving!

IT CAN BE HARD to make health changes and stick with them, but you can do it! Change rarely happens by chance, and the people who stick with it for good find that it really helps to make a plan. As you work on your plan to get (or keep) moving, try some of these strategies.

Make a motivation list

Physical activity can reduce depression, elevate mood, and increase self-esteem. Whether you're a seasoned exerciser, just getting started, or somewhere in between, take a moment to think about what motivates you. Make a list of the reasons why physical activity is good for you, and why it's especially important to your health now. People who aren't physically active—or who stop exercising—often ignore these benefits. They also may not believe they can overcome the things that stop them from exercising. See page 18 for ideas from other young women with breast cancer about how to address these issues.

Think about which exercise benefits are most important to you personally. Then put your list in a place where you can see it, to help you stay motivated.

Pick a goal

Whether you're a beginner or upping your intensity level, picking a goal that's right for you is an important first step. Remember, the recommended goal is 150 minutes or more of moderate physical activity (or 75 minutes or more of vigorous activity) per week. To reach that goal, you should exercise for a short time every day or for a longer time a few days a week. Do what works best for your lifestyle. Just remember that your exercise should last for at least 10 minutes at a time, before it counts toward your goal.

A goal should be specific (says exactly what you will do) and realistic (something you really can do). For example, saying "I want to exercise more" is not specific. You won't know if you are actually meeting this goal. Instead, think of a goal like "I will walk at least 30 minutes, five days each week." This is specific and realistic. In short, it's a great goal.

After a while, re-think your goal. Is it too easy? If so, you might want to make your walks longer or add some vigorous activity to your routine. A good way to do this is to jog for a bit during a walk.

Plan ahead

Planning ahead can help you fit exercise into your days. Here are some helpful tips for getting started:

- A couple of days before you want to go walking or work out, pick a set time.
 This way, you can invite a friend to join you.
 - Put out your exercise clothes the night before your scheduled time.
 This will help you remember to get moving in the morning.
 (Exercising first thing in the morning means you won't have to worry about squeezing it into your schedule later in the day.)

Track your progress

Whether you're new to exercise or not, keeping a record or log of your progress can help you move toward your physical activity goal (or maintain it). For example, you can track the total distance, number of steps using a pedometer, or minutes you walk each day.

A tracking log clearly shows your progress, as it's happening. It also lets you follow how you're doing from one day to the next and how close you are to reaching your overall goal.

In addition to tracking your progress, you may want to keep track of barriers—things that get in the way or make it hard for you to meet your goals. Try to think of ways to overcome them. For a list of some common barriers and suggested solutions, see "Break down barriers" on page 14.

If you are trying to change other health habits, consider tracking them, too. For example, you might want to increase the number of fruits and vegetables you eat. Start by writing down the number of servings you eat now, and decide how many more you want to add to your diet. Use a log to see your progress.

To download our tracking log for physical activity, visit active.youngandstrong.org, then print as many copies as you need. Feel free to adapt the log to track other goals, as well.

Get support

Tell people close to you that you are trying to get more exercise. This includes family members, friends, and co-workers. People who get support from others are more successful at getting or increasing their exercise—and sticking with it—than people who try to do it alone. Friends really do help. For more on this important topic, read "Buddy up" on page 12.

Take small steps

If you are just beginning to exercise, or starting up again after a break, be realistic; don't try to ramp up all at once. If you get more physical activity than you are used to at one time, you may overdo it. This can lead to pulled muscles or other problems. Taking on too much may also make you feel discouraged and frustrated. So, make these changes gradually and start with a small, reachable goal.

For example, a great long-term goal is to walk for 30 minutes or more per day (or until you reach 10,000 steps in a day). However, it might be unrealistic to meet that goal right from the beginning, and that's OK.

If you are new to this, start with a goal of walking 20 minutes a day (or until you reach 5,000 steps a day). After you meet this goal for two weeks, add some more minutes (or steps) to your goal. Gradually continue to add time or steps each day, until you eventually reach your long-term goal.

Be positive

As you start to increase your physical activity—or keep up with it—positive thoughts can really help steer you in the right direction. Don't ignore your worries and concerns, but do think about how you can replace them with positive thoughts. Make a list of these worries and some possible ways to address them. Talk through barriers with your buddy to get even more ideas.

Be patient

People often get tired when they start to exercise more, and breast cancer treatment can be particularly draining. If you already exercise, your treatment schedule may make it hard to find time for physical activity, but keep at it!

Because your treatments may leave you with less energy than you're used to, you may want to rethink your workouts. You might need to switch to a new kind of activity or stop exercising completely for a short time. Even so, try not to get discouraged. Most women who try to exercise are successful. Listen to your body and be patient.

In general, you should try to fit 30 or more minutes of moderate activity into your day. If necessary, you can break your workouts into several 10-minute chunks or do 15 minutes in the morning and 15 in the evening.

If you're not up to being physically active, give yourself permission to take a day off or to do a little less than usual. Instead of walking for 30 minutes, go for 15. Even a short walk can help you feel better physically and raise your spirits.

Celebrate!

In any case, be proud of yourself for trying. Pat yourself on the back for starting—or continuing—an exercise program while you're in treatment. Focus on positive thoughts and celebrate your successes. After meeting your goal for a week or more, do something nice for yourself. You could go to the movies, go shopping, or go out with a friend. Do whatever feels like a reward to you!

For more "Motivation tips," see page 18 or visit the "Stick with it!" section of our website at active.youngandstrong.org.

Buddy up!

THERE NEVER SEEMS to be enough time in a day. Like many young women, your days are probably filled with work, school, and family.

Finding time for physical activity might seem impossible right now. Remind yourself that exercise is important to your physical and mental health, and that it can help you sleep better and improve your mood. Keep it on your to-do list, set goals, and start slowly.

It may take time and planning to fit physical activity into your schedule, but you can do it, especially if you have support! Your family and friends can help. Lots of studies show that it's easier to be physically active when you get support from those around you. So choose an exercise buddy to support you. This person can be a friend, a family member, a co-worker, a neighbor, or anyone else you think can help.

The most important thing is that you feel comfortable telling this person that you have breast cancer. Knowing about your treatments and their possible side effects will give your buddy a chance to offer extra support when you need it most.

When picking an exercise buddy, look for someone:

- who has helped you with things in the past
- you can count on to check in with you
- who can cheer you on
- who has helped you make other types of changes in your life
- who makes you feel particularly good about yourself
- who may be willing and able to exercise with you!

Of course, you can always have more than one buddy if you want, so pick as many as you need!

Share your goals

Let your buddy know why being physically active is so important for young women with breast cancer. (See "Why exercise is wise" on page 4.) Explain what your exercise goal is and be specific. Instead of saying "I want to get more exercise," say:

- "I want to walk 30 minutes a day, on at least 4 days a week."
- "I want to continue going to the gym 3 days a week."

Also, think about what kind of help you need. If you want your buddy to exercise with you, plan ahead and schedule times to exercise together. If you want your buddy to take care of your kids while you exercise, figure out some specific dates and times in advance. If you want your buddy to check on your progress, think about how often, and ask your buddy to stick with that plan. (We recommend checking in at least once a week, in person or over the phone.)

Ask your buddy to encourage you and acknowledge your hard work. There will be days when you may be discouraged or tired from your treatment. Those are the days when you'll really appreciate an extra boost. Make sure your buddy knows that.

Explain that if you hit a stumbling block, nagging won't help, but encouraging words will. Your buddy should be a help, not a pain. If you find that you've picked the wrong person for this role, find someone new.

For more, visit active.youngandstrong.org.



Break down barriers

EACH WOMAN'S EXPERIENCE IS UNIQUE. However, many young women with breast cancer find that a common set of issues can get in the way of being physically active—for example, finding the time, the energy, the motivation, or what to wear.

> There are many common barriers to physical activity during breast cancer treatment. The following suggestions may help you move past them.

Barriers from breast cancer and treatment

Exhaustion. Your treatment may make you tired. But moderate exercise (like walking briskly or riding a bike) makes your blood circulate better and brings more oxygen to your brain. This can make you feel more energized and ready for even more activity.

Sleep. In this booklet, we've talked a lot about exercise, but it is just as important to get good, sound sleep. If you exercise, you will probably sleep better and feel more rested the next day. You may also find that you need to take naps, even if you've never been a regular napper in the past. If you get tired during the day, take a five- to 10-minute nap. Allow yourself that down time. Afterwards, move ahead with your day, take a walk around the block, or go up and down a few flights of stairs at work.

Lower energy or less **strength.** If you are used to exercising, you may find that you can't do as much as you're used to, but there's no need to push it. Your body needs time to heal. Slowly work your way

back up to where you'd like to be. If you usually walk for 30 minutes at a time, walk for 10 minutes instead. Over time, you can work back up to your full 30 minutes or more. Once you get to that point, think about whether you're ready to take on more.

Depression. There may be days when you're depressed or angry about your diagnosis, and other days when you're just worn out. It's OK to skip a day, or do less than you would like. Just try to get some physical activity on most days of the week. Even 10 minutes of physical activity is good for

your physical and mental health.

Workout comfort

Wearing the right athletic clothing can increase your comfort and your confidence when you exercise. You may want to consider workout gear that is specially designed for women with breast cancer, including bathing suits, sports bras, and sun protective clothing. Look for this clothing online, in some specialty intimate apparel stores, or in boutiques at cancer centers.

Some women wear a wig
when exercising and
others prefer not to
wear anything on their
heads. Additional
options include a
scarf, a headwrap, or
a hat. Some women
have a second wig
that they use when
working out. Choose
whatever feels best for
you, or try out several until you

find the one that works best.

General barriers

Aside from issues related to breast cancer treatment, lots of other things can get in the way of physical activity. Of course, there are good ways to move past these as well.

No time. You may already be exercising on a daily basis and not counting it! Be sure to count the steps that are part of your commute or other daily activities. The simplest example of this is walking. Think in terms of 10-minute chunks. There are a lot of minutes in the day and walking time adds up quickly!

Many people walk (at least part of the way) to and from work or school. Going up and down the aisles in a store also counts. To squeeze in more steps, get off the train or bus one stop earlier than you normally do, park further from the door, or take the stairs at work or school.

Bad weather. If you go walking outside in the winter, be sure to wear extra clothing. Layers work well. You may feel chilly at first, but walking briskly or jogging will quickly warm you up.

I get bored easily. Try different activities until you find something you like. This may be the perfect time to try something you've always wanted to do. Maybe that means starting to bike, play tennis, or take a dance or aerobics class.

For more, visit active.youngandstrong.org.

Stick with it!

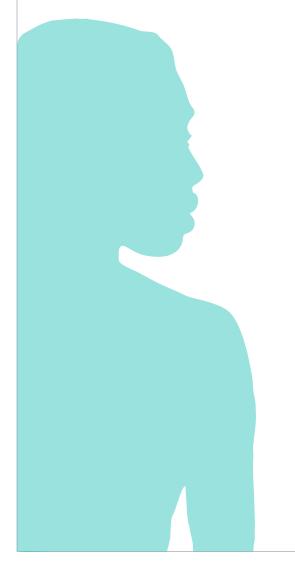
we've already explored the idea that being active will help your physical and mental health, now and in the future. It can be hard to set goals and stick with an exercise plan for the long haul, but it's worth it.

Exercise seems to have long-term benefits for young women with breast cancer, so it is important to get on track and stay there. To turn your activity into a habit, try some of these tips.

Build a routine. If you've only been exercising now and then, try to do it more regularly. Set aside time just for physical activity. Then make it a priority and keep to that schedule. For example, you might always work out in the morning or go to the gym every Monday, Wednesday, and Friday. Maintaining consistency will be a huge help when you're going through all the changes that come with breast cancer and its treatment. If you already exercise regularly, keep up the good work.

Stick with your supports. Keep checking in with your family and friends about how they can help you meet your physical activity goals. Remember to be specific about what you need.

Keep on tracking. It's common to "drift" away from new physical activity habits. This may happen so slowly that you don't even realize you're back to your old ways. One way to fight this drift is to make sure that you're tracking regularly. If you've slowed or stopped using your physical activity tracking log, get back into the habit. Seeing what you've done over time can really renew your motivation.





Review your progress. Ask yourself these questions about your current physical activity goal:

- Has this goal been easier to meet than you thought it would be? What can you do to make it more challenging? If you've been walking 30 minutes a day on 5 days of the week, think about walking a little longer or adding a sixth day.
- Has it been harder than expected to meet this goal? Why? Is there anything you can do to make it just a bit easier right now?
- If a goal is too hard, don't let yourself get so frustrated that you just give up. Keep revising your goal until you can reach it.
- What changes in your exercise habits make you most proud? You may not have reached your final goal, but remember to give yourself credit for all the great work you have done.
- Are you getting bored with your exercise routine?
 Don't get stuck in a rut. Add some variety by trying a new type of exercise or a new class. If you are used to walking, try jogging or running.

Don't let setbacks set you back! Even if you have been exercising for a while, there will be setbacks. There may be days when you can't or don't want to exercise. You may feel worn out from treatment. Allow yourself to take those days off. The important thing is to try to get back to exercising as soon as you feel you can.

Regular, ongoing exercise is key to good health. The sooner you can make physical activity a part of your everyday life and keep it there, the healthier and better you'll feel.

Reward yourself. Whether you're new to physical activity or an old pro, continue to pat yourself on the back whenever you reach a goal. Be proud of all you are doing for yourself during this time. Do what you can, when you can, and remember to reward yourself. You deserve it!

See the next page for more tips on how to get and stay motivated for exercise, or visit the Young and Strong website at active.youngandstrong.org.

Motivation: What works?

TO HELP YOU FIND your inner exerciser and keep her going, we went straight to the source. We've collected suggestions from other young women with breast cancer about what has motivated them.

Too busy? Frazzled?

Build exercise into your family's routine. Ride bikes with your kids, walk them to school, or get involved in an exercise program together. Some communities have parent-child classes for activities like martial arts, dance, gymnastics, or swimming. Not only will this make you healthier, it's also great for your kids' health.

Protect your "just-for-me time." Set aside time to exercise several days a week and make it sacred. Take time away from kids and family in the morning to get your thoughts together. Leave the house for a 10-minute walk or go through a short exercise video behind closed doors. At work, you can take a walk during your lunch break. Or arrange to work from home one day a week, and spend the time you'd usually be commuting on exercise instead.

Want to be entertained?

Many gyms have TVs, so try to go at a time when your favorite show is on, and bike or run during the show. If you exercise at home, record your favorite program and watch it only during the time you set aside for exercise. To get at least 30 minutes of activity, exercise from the beginning right through to the end of the show.

Load up your iPod. You'll be amazed how the time flies when you pick your own soundtrack!

Put together a playlist of favorite tunes you find meaningful. Don't stop moving until you've heard the whole list. Listen to an audio book and keep moving for a few chapters or for a pre-set amount of time.

Gyms are too expensive?

Try one for free! Gyms often give out free visitor passes, so you can try out their facilities and classes. If you'd rather exercise at home, check out exercise DVDs from the library until find one you like.

Be a mall walker! Walk briskly through the mall for 30 minutes. While you're at it, you can:

- window-shop for current fashions and sales
- check out the sports store windows for a new pair of walking or running shoes
- buy a special item at the end of your walk (If you can't buy something every time, put a little money in a jar each time you walk, and save it up over time.)

Use community resources. If the mall doesn't interest you, try a local track. Many schools allow people to use their outdoor tracks after hours. Community centers often have low-cost or free physical activity programs. You could also walk around a neighborhood where you've always wanted to live or through a park in that area.

Explore your state. Every state has gorgeous nature trails and bike paths to explore—at varying levels of difficulty. Start at a level that's comfortable for you, then work your way up to more challenging levels.

Feeling bored?

Try something new! Check out a new or unusual type of exercise, like:

- Zumba dance classes
- power yoga
- · dragon boat racing
- · rowing programs
- fencing

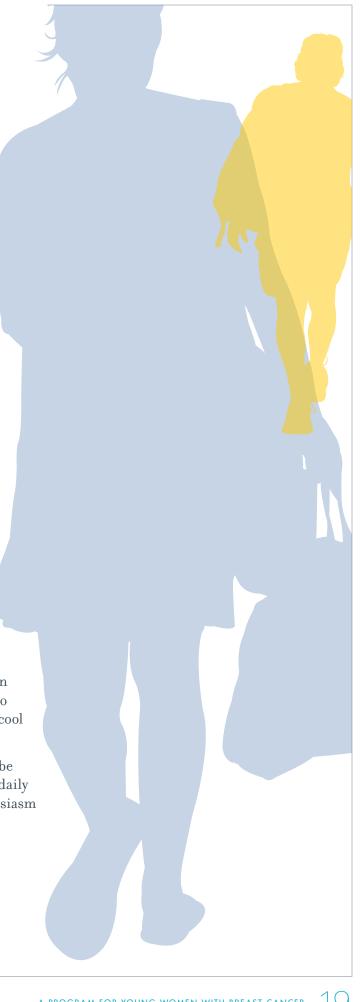
Some facilities have programs designed especially for breast cancer patients, to help you get—or stay—active after diagnosis.

Need some company?

Stay social. Good friendships can be very important during breast cancer treatment. To be sure you get the support and connection you need, make plans to exercise with a friend. Even if you want to sleep in or skip a day, chances are you won't do it if it means leaving your friend in the lurch. You could also join an activity club, then make it more fun by asking people you like to join, too.

Meet your goals while helping others. Sign up for a fundraising walk or race, then train for it. Bring your own team or meet new people during the event. It feels great to raise money for a worthy cause, and you'll probably get a cool tee-shirt.

Don't forget your furry friend. An animal that needs to be walked every day is a great way to make sure that you get daily exercise, as well. Dogs love to be outside, and their enthusiasm is infectious!



Healthy living

LIVING WITH BREAST CANCER presents many challenges. It can affect your body, your mind, and the ways you look after yourself and others.

In general, you should follow the same healthy-living guidelines recommended to *all* women. For example:

- maintain a healthy weight
- · eat lots of fruits and vegetables
- avoid fatty foods
- be physically active
- · don't smoke

You should also be aware of healthy-living recommendations just for women with breast cancer.

Weight

Women tend to gain weight with chemotherapy, probably because the effects of chemotherapy can make it hard to stay active. Some evidence shows a link between weight gain and breast cancer recurrence.

If you are overweight when you're diagnosed or gain weight after that, you may have an increased risk of cancer recurrence. As a result, doctors recommend that women with breast cancer try to get to an ideal weight and maintain it.

Diet and nutrition

A well-balanced diet can help you stay healthy during and after treatment. It can also help you keep your energy up during chemotherapy and radiation.

Young women with breast cancer—like all women—should eat a diet high in fruits and vegetables and low in fat. It's unclear whether eating a certain amount of fruits and vegetables can reduce your cancer risk. It is clear that fruits and vegetables are good for you in general.

You should also be sure to eat healthy (complex) carbohydrates, rather than less healthy (simple) ones. Complex carbs include whole-wheat pasta, brown rice, and legumes like black beans and lentils. Simple carbs include things like cakes, pies, cookies, white rice, and pasta. Along with regular exercise, eating well can help you reach and stay at a healthy weight. In addition, women with breast cancer should pay special attention to several specific types of food and drink.



Soy

Soy-based products are a good source of protein. But, soy foods (e.g., soy milk and tofu) often contain *isoflavones* (eye-so-FLAY-vonz). These substances affect the body like a weak dose of estrogen. High levels of estrogen have been linked to increased breast cancer risk.

Some studies suggest that high doses of soy can increase the growth of breast cancer cells. Others suggest that soy products may inhibit it. Research is limited on the subject. It is not clear whether or not the amount of soy a woman might eat in a day can cause breast cancer to grow.

The current recommendation is that it's probably OK to eat or drink soy products in moderation. But, you should avoid high amounts of soy isoflavone, including *supplements*, such as concentrated pills or powders.

Vitamin D

Studies show that women with breast cancer often have low levels of vitamin D, and researchers are studying why. Low vitamin D levels can contribute to bone thinning and *osteoporosis* (OSS-tee-oh-puh-RO-suss), a disease that causes fragile bones. Some early studies suggest that low vitamin D may also contribute to breast cancer risk.

Women should take a vitamin D supplement, but there is disagreement about how much. Current guidelines recommend 400 IU (International Units) to 1,000 IU per day. Most over-the-counter multivitamins contain this range, but you should talk with your doctor about what's right for you.

You should also be sure to get the recommended amount of calcium, because it helps your body process vitamin D. Before menopause, women should get 1,000 mg of calcium per day. After, they should get 1,500 mg per day.

Alcohol

If you drink alcohol, do so in moderation. Drinking alcohol seems to increase a woman's risk of breast cancer, but no one is sure why. Some researchers believe that women who drink a lot of alcohol may have high levels of estrogen in their blood, and high estrogen levels have been linked to increased breast cancer risk.

Several other studies have explored whether or not women who drink alcohol after breast cancer have a higher risk of breast cancer recurrence, but the results have been inconsistent. Most studies *do not* show a clear link between drinking alcohol and breast cancer recurrence. However, we still have a lot to learn on the subject.

In addition, young women with breast cancer sometimes go through early menopause, which may raise their risk of heart disease slightly. Alcohol has been shown to protect against heart disease.

Given these competing risks, you should only drink alcohol in moderation (if you drink it at all). On average this means having no more than I serving of wine, or the equivalent, per day.*

Also, if you drink alcohol, getting enough of the vitamin folic acid (also called folate) in your diet may help. It may offset the potentially increased risk of breast cancer associated with alcohol use. The recommended daily allowance of folate is 400 mcg (micrograms) per day.

Remember, there is no substitute for your doctor's input. Always check with your health care provider to make sure these general recommendations are right for you. For more information, visit active.youngandstrong.org.

^{*} A full serving of alcohol is 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of hard liquor.

Resources

active.youngandstrong.org

your user name is: active your password is: youngl

Health and physical activity

American College of Sports Medicine (ACSM)

Promotes healthier lifestyles for people around the globe, through information about sports, sports medicine, and exercise science.

www.acsm.org

Spark People

A free website offering nutrition, health, and fitness tools, as well as support and resources for people trying to live healthier lives.

www.sparkpeople.com

LIVESTRONG at the YMCA

A program that helps people affected by cancer reach their health and well-being goals.

http://www.livestrong.org/What-We-Do/Our-Actions/Programs-Partnerships/LIVESTRONG-at-the-YMCA

Expert advice

American Society of Clinical Oncology (ASCO)

A nonprofit organization focused on improving cancer care and prevention.

www.asco.org

Susan G. Komen for the Cure

The latest information on breast cancer risk factors, early detection and screening, diagnosis, treatment, and support.

http://ww5.komen.org

LIVESTRONG

Free, confidential, one-on-one support for anyone affected by cancer. Works to address issues faced by cancer survivors and to improve their quality of life. www.livestrong.org

Lymphedema

National Lymphedema Network

Information and guidance on the prevention and management of primary and secondary lymphedema. www.lymphnet.org

Compression sleeves or wrapping

BSN-Jobst

Web: www.jobst-usa.com Phone: (800) 537-1063

LympheDIVAs

Medically correct fashion for lymphedema. Web: www.lymphedivas.com

Phone: (866) 411-3482

Clothing and undergarments

Lady Grace Intimate Apparel

www.ladygrace.com

The Woman's Personal Health Resource

www.womanspersonalhealth.com



Produced by Dana-Farber/Harvard Cancer Center Health Communication Core