## **Chemo Brain**

People sometimes develop what is called chemo brain or brain fog during or after treatment. Chemo brain is a cognitive change where patients can be more forgetful, have difficulty focusing, may be slower to respond and have trouble finding words. This can be caused by chemotherapy, radiation, or the cancer itself. These symptoms can fade relatively quickly after treatment, or they can persist.

Fatigue, depression, anxiety, poor nutrition/hydration, and medications may also contribute to or worsen chemo brain. First, address these issues with the assistance of your health care provider, to see if it helps with your mental clarity. You can also try some of these recommendations:



#### Minimize distractions during tasks.

Don't try to multi-task. Prioritize your tasks and do them one at a time.

#### Jog your memory with notes and reminders.

Keep a small notebook or planner and a pen on hand to keep notes and to help remember things. If you have a smart phone, utilize the notes and calendar functions. Set alarms with reminders on your smart phone.

#### Pick a spot.

Designate a spot for commonly used items and keep them there when not in use. For example, when you're finished watching television, put your remote in the same spot each time.

#### **Exercise your brain.**

Read, do crossword puzzles or other word games, or learn a new skill or hobby.

#### Exercise your body.

Exercise has been shown to help boost your mood and decrease fatigue, which could be a contributor.

#### Make a routine.

Try to follow a routine for daily tasks.

If you feel that chemo brain is severely interfering with everyday tasks and work, talk with your doctor. They may be able to refer you to a specialist who may have additional recommendations.

Sources: www.cancer.org/treatment/treatments- and -side-effects/physical-side-effects/changes-in-mood-or-thinking/chemo-brain.html

www.mdanderson.org/patients-family/diagnosis-treatment/emotional-physical-effects/chemobrain.html www.cancer.gov/publications/patient-education/life-after-treatment.pdf



# Rehabilitation can help with that?

Rehabiliation isn't only for older people or those who are recovering from injuries. Rehabilitation can benefit you in many ways through physical, occupational and speech therapies. During the course of your cancer journey, you may experience a lot of changes, some physical and some mental. Specialized cancer rehabilitation can help assist you in moving forward after treatment and improving overall quality of life.

#### **Mobility**

One of the more obvious ways rehabilitation is beneficial is that it can improve mobility and function. During treatment, you may have been less active and gotten weaker, so you may need some help regaining our strength. Surgery, radiation, or chemotherapy may have caused certain side effects that altered your balance, range of motion, or decreased sensation, requiring assistance in adapting to those changes.

#### **Fatigue**

One of the most common side effects of cancer treatment is fatigue. Fatigue that doesn't improve overtime or that interferes with your quality of life can be treated with rehabilitation services. Therapists can do this by educating you on energy-conserving techniques and fitting you for assistive devices, if needed. They can develop a safe exercise regimen for you that includes both aerobic and strengthening exercises, as exercise is proven to help decrease fatigue.

#### Lymphedema

Lymphedema is swelling to the area of the body near where the lymph nodes have been removed and/ or lymphatic vessels have been damaged. This can cause discomfort and affect your mobility or function. Rehabilitation can help by fitting you for a compression garment, providing lymphatic massage, and helping to decrease your risk of infection.

#### **Pain**

Sometimes people experience pain during or after their treatment. Pain can be caused by the cancer itself or can be a side effect of treatment. Surgery and radiation can often leave scar tissue that is painful and interferes with movement. Therapists can use a technique called scar tissue mobilization to treat this. Pain can also be caused by peripheral neuropathy, which is tingling and numbness in the fingers and toes. Peripheral neuropathy can cause issues with balance due to decreased sensation. These issues can be treated with balance and strengthening training, massage, stretching, and sensory re-education.

#### **Sexual Side Effects**

Some people experience sexual side effects from their treatments, including vaginal dryness, incontinence, and pain with intercourse. Rehabilitation offers programs to help strengthen the pelvic floor and help you address these symptoms.

#### **Cognitive Impairment**

"Chemo brain" is a side effect experienced by some having difficulty finding the right words and/or are more forgetful. This typically gets better over time, but in cases where it doesn't improve or interferes with work, school, or daily living, rehabilitation can offer cognitive retraining and strengthening.

#### Would you benefit from rehab services? Talk to your health care provider.

Source: www.curetoday.com/community/amy-vant/2015/05/what-is-the-role-of-physical-therapy-in-cancer-recovery

**UL Health** Brown Cancer Center

Survivorship Clinic 502-562-6887 UofLBrownCancerCenter.org

## Why am I so tired?

#### **Dealing with fatigue**

Fatigue is perhaps the most common symptom cancer patients experience. You might be asking yourself, "If I am done with all of my treatments and am cancer free, why am I so tired?" It is normal to experience fatigue during treatment and for a period following treatment as you recover from surgery, chemotherapy, and/or radiation. Ideally, fatigue should gradually improve after treatment is complete, but sometimes that is not the case for a number of different reasons.

#### **Common Causes of Fatigue**

- Abnormal labs
- Chemotherapy
- Radiation
- Surgery
- Anxiety
- Depression

- Poor nutrition
- Poor hydration
- Poor sleep hygiene
- Pain
- Medications
- Hormonal changes

The good news is there are plenty of ways to improve your energy levels and decrease fatigue. First, ask yourself:

- 1. Do you feel persistent fatigue despite a good night's sleep?
- 2. Does fatigue interfere with your usual activities?
- 3. How would you rate your fatigue on a scale of 0 (none) to 10 (extreme) over the past month?

If you answered "yes" to any of these questions or you rated your fatigue as a four or greater, then you are considered to have moderate to severe fatigue and this should be addressed.

The first step in treating your fatigue is to discuss this with your health care provider. If your fatigue is mild, you can still benefit from the interventions discussed on the next page, but if symptoms worsen, discuss this with your doctor.

## Why am I so tired?

#### **Dealing with fatigue: now what?**

If there is something that is specifically causing your fatigue, then the cause needs to be treated. You can try a number of things to address the cause and improve your overall fatigue levels:

#### **Decrease stress by:**

- Using alternative therapies or distraction (yoga, meditation, music therapy, art therapy)
- Talking with a counselor
- Joining a support group

**Meet with a nutritionist** and develop a plan to eat healthier and maintain proper hydration.

**Participate in physical therapy** to learn energy conservation techniques, and address pain if that is contributing to fatigue.

**Talk with your doctor** about changing or adjusting any medications that might be the cause.

**Get adequate sleep** by taking short naps during the day, if needed, and maintaining a regular sleep schedule that allows for 7-8 hours of sleep per night.

#### Last, but not least, exercise!

There are studies that link exercise to decreased fatigue and improved energy levels. According to the National Comprehensive Cancer Network, "Research has found no harmful effects on patients with cancer from moderate exercise and, in fact, has demonstrated that those who exercised regularly had 40 to 50 percent less fatigue."

Exercise has also proven to improve quality of life, decrease stress levels, and can help you lose weight, which can in turn decrease your risk of cancer recurrence. Start slow, and work your way up as tolerated. The Physical Activity Guidelines recommend, at the very least, to avoid inactivity, and to perform 150 minutes per week of moderate activity. If you have limitations or safety concerns related to exercise, speak with your doctor first so he/she can assist in finding an exercise program that works for you.

#### Sources:

www.nccn.org/patients/resources/life\_with\_cancer/fatigue.aspx
www.nccn.org/patients/resources/life\_with\_cancer/exercise.aspx
www.nccn.org/professionals/physician\_gls/pdf/survivorship.pdf
www.cancer.net/sites/cancer.net/files/asco\_answers\_fatigue.pdf
www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fatigue/managing-cancerrelated-fatigue.html
Implementing the Exercise Guidelines for Cancer Survivors article

Implementing the Exercise Guidelines for Cancer Survivors article health.gov/paguidelines/guidelines/adults.aspx

Health Brown Cancer Center

# Sexual Health and Cancer Survivorship

#### How is your sex life?

Did your oncologist ask you this question at any time during your cancer experience? Chances are they did not. Statistically, less than 50 percent of cancer patients report having had any conversation with their doctors about their sexual health.

#### Why is this?

You are getting a lot of information and you might think this is not a priority, and if the doctor doesn't bring it up, then maybe you shouldn't either.

#### Well, let's talk about it!

Your sexual health can be impacted by your cancer diagnosis and treatment. Sometimes this is a physical issue, sometimes it is an emotional issue. Sometimes it is both. Either way, it is important to know, and by reaching out you can find help.

As a cancer survivor, you already know there are things in your life that have changed. Both men and women may find their interest in sex is different or they may be experiencing pain during sex. These are the two biggest issues that cancer survivors report. So, if you are dealing with either of these issues, remember two things:

- 1. You are NOT alone!
- 2. TALK about your issues.

#### Who can help?

Start with your doctor. They can help navigate any physical issues. Brown Cancer Center also employs a team of social workers with a wide range of expertise available to discuss any survivorship issues, including a Licensed Clinical Social Worker trained in sexual health counseling. Sessions with the sexual health therapist are held in a private office and will remain confidential. This is a safe place to discuss this important issue.

#### For more information, contact: Kim Williams, LCSW

Oncology Social Worker and Sexual Health Therapist 502-262-9686

# I'm a Cancer Survivor... shouldn't I be happy?

Dealing with post-treatment stress, anxiety, guilt and fear of recurrence

After treatment, most patients go into a stage of healing and recovery. You no longer are overwhelmed with appointments, treatments, scans, and blood draws. This allows for time to reflect, which may stir up a number of mixed emotions. You might feel obligated to put on a happy face and celebrate. You may feel relieved. You may also experience some anxiety, fear and/or guilt ... and that's okay.

#### **Fear of Recurrence**

As you transition from active treatment to surveillance, day-to-day care and monitoring now becomes your job, and not seeing the cancer care team as often may leave you feeling uneasy. It's hard to know if or when a patient might experience a recurrence and this unpredictability can contribute to anxiety. This is a common fear of survivors. The good news is there are things you can do to cope and decrease fear or anxiousness.

First, let your doctor know how you are feeling. Every patient is different and each person worries about different things. If your health care providers are aware of your concerns or worries, they can talk with you to help ease some of those fears. They can provide information about what you should be watching for and which symptoms to report. You may have multiple questions to ask the doctor, so keep a journal to remember important questions. Or if it's something you are immediately concerned about, call the triage line at 502-562-4370 to speak to a nurse at UofL James Graham Brown Cancer Center.

Although you may not ultimately be able to control if your cancer comes back or not, there are certainly positive ways that you can influence your health. Focus on what you can control, such as being informed about your diagnosis and ways to reduce your risk of recurrence.

For example, there is good evidence that being a healthy weight can decrease the risk of cancer recurrence. Eating a healthy diet and being active are good ways to help with both physical and mental health. Your doctor can support your efforts to engage in healthy behaviors by talking with you or referring you to a dietician or physical therapist.

Finding ways to relax and distract yourself from thoughts and fears can also be beneficial to your health. Meditation, yoga and massage therapy are all great ways to relax. Finding activities that you enjoy and making time to do those things can help with stress management. Activities such as reading, observing nature, listening to music, or getting together with friends can improve mood and help in your transition to survivorship.

Lastly, talk to other people about your feelings. There are a number of ways that are helpful for expressing emotions. Consider talking with a friend or family member to share how are you feeling. Join a cancer support group at the cancer center or in the community, such as Gilda's Club. There are both in-person support groups and online communities where you can meet and talk to other people who have had a similar experience.

You may also receive support from a counselor who specializes in working with cancer survivors. While most patients have occasional thoughts or fears of recurrence, anxiety is a persistent state of worry that interferes with quality of life and may impact mood, sleep, or appetite. Your doctor can assist in referring you to a counselor if you feel that you would benefit from having professional support.

## I'm a Cancer Survivor ... Shouldn't I be happy?

#### Dealing with post-treatment stress, anxiety, guilt and fear of recurrence

#### Survivor's Guilt

Some survivors experience what is called "survivor's guilt." This is when a survivor experiences feelings of guilt that may stem from a thought that there was something you could have done differently to have either prevented the cancer or spotted it sooner, or you may feel guilty that you survived, while others with your same diagnosis did not have the same outcome.

Survivor's guilt can be common, but again, there are ways to cope. First, do not consider yourself at fault for your diagnosis. You cannot control if you or someone else gets cancer or how they will respond to treatment. Similar to dealing with a fear of recurrence, you can also use distraction and relaxation techniques, join a support group, or talk with a counselor.

A few different ways to deal with guilt is to find ways to express your thoughts and emotions. You may also try to connect with things that help you experience gratitude or to feel happy. Keeping a journal and writing down these thoughts, both positive and negative, help process your emotional response to your cancer experience. Sometimes you just need a good laugh. Use humor to help with your emotions by watching a funny movie, reading funny jokes or quotes, or think about a funny memory.

#### **Other Stressors**

There may be a number of different things that can lead to post-treatment distress. You might experience stress related to finances, persisting side effects of treatment, body changes, or decreased physical function. Having some stress is normal but sometimes stress can turn into anxiety.

If you find yourself feeling stressed most days of the week, or you notice that you have decreased or little to no interest in the things you once enjoyed doing, then talk to your doctor and express what is causing this stress. Your doctor or counselor can suggest resources to help with your stress and anxiety. If you are experiencing persistent or moderate to severe problems with mood or coping, your doctor may suggest counseling.

Social workers can help with work and finance-related stressors. Physical therapists can help with mobility issues and develop an appropriate exercise program. Dieticians can help with diet and weight loss. A sexual counselor is also available.

Ultimately, know that you are not alone and that your health care provider and our staff are here to support you. Talk to a doctor, nurse, or social worker about the things that are bothering you so that we can better help and support you and your family in this time of transition.

Sources:
Denise Thomas, M.Ed., LPA, NCC
www.cancer.gov/about-cancer/coping/survivorship/new-normal
www.cancer.gov/publications/patient-education/life-after-treatment.pdf
www.cancer.net/coping-with-cancer/managing-emotions/coping-with-guilt

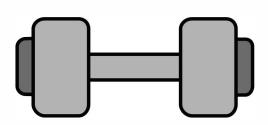
Health Brown Cancer Center

# American Cancer Center Guidelines: Nutrition & Physical Activity

# ACHIEVE AND MAINTAIN A HEALTHY WEIGHT THROUGHOUT LIFE.

- Be as lean as possible throughout life without being underweight.
- Avoid excess weight gain at all ages. For those who are overweight or obese, losing even a small amount of weight has health benefits and is a good place to start.
- Get regular physical activity and limit intake of high-calorie foods and drinks as keys to help maintain a healthy weight.





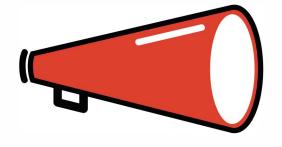
#### BE PHYSICALLY ACTIVE

- Adults: Get at least 150 minutes of moderate intensity or 75 minutes of vigorous intensity activity
  each week (or a combination of these), preferably spread throughout the week.
- Children and teens: Get at least 1 hour of moderate or vigorous intensity activity each day, with vigorous activity on at least 3 days each week.
- Limit sedentary behavior such as sitting lying down, watching TV, and other forms of screen-based
- Doing some physical activity above usual activities, no matter what one's level of activity, can have many health benefits.

# EAT A HEALTHY DIET, WITH AN EMPHASIS ON PLANT FOODS.

- Choose foods and drinks in amounts that help you get to and maintain a healthy weight.
- Limit how much processed meat and red meat you eat.
- Eat at least 2½ cups of vegetables and fruits each day.
- Choose whole grains instead of refined grain products.





#### IF YOU DRINK ALCOHOL, LIMIT YOUR INTAKE.

• Drink no more than 1 drink per day for women or 2 per day for men.

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For additional information or questions, please contact your Oncology Dietitian at 562-4755.

## **Plant-Based Diet**

### Plant-Based Diets and Weight Management

Most fruits and vegetables are low in protein, fat, and calories. If you are having trouble maintaining your weight during cancer treatment, talk with your oncology dietitian about how to get the nutrients you need.

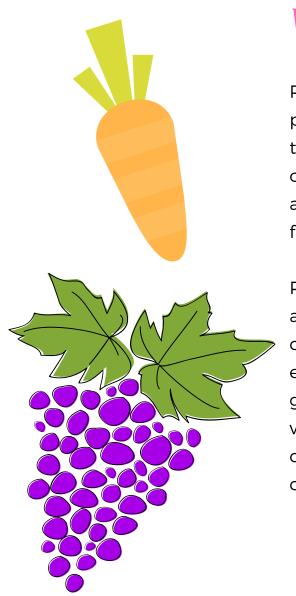
# What are the benefits of a plant-based diet?

Eating a diet rich in plant-based foods—such as vegetables, fruits, nuts, legumes, whole grains, herbs, and spices—may help protect your body and keep you healthy during and after cancer treatments. The vitamins, minerals, fiber, and other phytochemicals in plant-based foods may help with disease prevention.

## What Are Phytochemicals?

Phyto-chemicals are substances that give plant foods their flavor, color, fiber, and texture. The crunch of an apple, the tart taste of a cranberry, the warm aroma of cinnamon, and the bright color of a pumpkin all come from phyto-chemicals.

Phyto-chemicals may also help prevent cancer and damage to your cells' DNA. Different colors of plant-based foods tend to provide di erent phytochemicals. Therefore, it makes good sense to eat a balanced diet rich in a variety of colorful plant foods. Review the chart on the next page for some choices to consider.



# Plant Foods Rich in Phytochemicals

Color	Plant Food
Red	Tomatoes, kidney beans, strawberries, raspberries, watermelon, pink grapefruit, cranberries, red apples, red grapes
Orange	Carrots, sweet potatoes, winter squash, cantaloupe, peaches, mangoes, oranges
Yellow	Yellow summer squash, corn, pineapple, lemons, turmeric, olive oil
Light Green	Lettuce, celery, zucchini, cucumbers, asparagus, artichokes, limes, green grapes, green apples, kiwi
Dark Green	Cabbage, broccoli, spinach, brussels sprouts, kale, beet greens, turnip greens, collard greens, many herbs
Blue/Purple	Beets, purple eggplant, purple grapes, blueberries
White	Onions, garlic, mushrooms, cauliflower, potatoes
Brown	Cinnamon, nuts, brown rice, whole wheat, other whole grains, flax seed, chocolate, coffee, tea

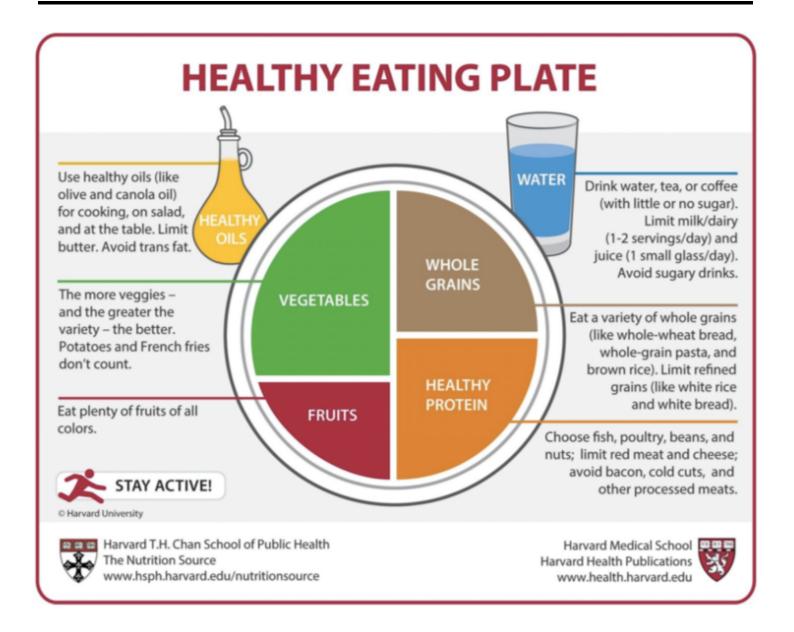
# How Can I Add More Plant Foods to My Diet?

· Aim to meet the goals for fruits and vegetables provided in MyPlate (www.ChooseMyPlate.gov). Depending on their age, activity level, and gender, adults should eat 1.5 to 2 cups of fruits and 2 to 3 cups of vegetables every day.

#### To meet your goals:

- Fill at least half of your plate at every meal with raw or cooked vegetables and fruits. For example, feature beans or vegetables as your main dish. Have fresh fruit with your whole grain breakfast cereal or as dessert.
- Snack on fruits, vegetables, and their juices, too.
- Each week, aim to eat some fruits and vegetables of every color.
- · Make at least half your grains whole.
- Use a variety of spices and herbs to add avor to meals and snacks.
- · Choose plant oils, like olive oil, instead of animal fats, like butter or lard.
- Substitute plant proteins for meat, and plan meatless meals.

# Food for Thought:



### Additional Resources

- To find recipes for plant-based meals and snacks, go to the American Institute for Cancer Research (AICR) Test Kitchen Web site:
   www.aicr.org/reduce-your-cancer-risk/diet/reduce\_diet\_recipes\_test\_
  - kitchen.html
- For more information about a well-balanced diet and tools to set goals and track your individual eating plan, visit MyPlate: www.ChooseMyPlate.gov

# Health Brown Cancer Center

## NUTRITION FOR BREAST CANCER SURVIVORS

Good nutrition is important during and after treatment for breast cancer. Managing your weight, staying active, and limiting alcohol intake can help decrease the risk of your cancer returning.

# HOW CAN I LOSE WEIGHT SAFELY?

- 1 Exercise
- 2 Portion Control
- 3 Limit fat intake

If you need to lose weight, do so gradually. Aim for no more than 1-2 pounds of weight loss per week.

# WHY SHOULD I MAKE LOWER FAT CHOICES?

Limiting the fat in your diet will cut calories. In addition, cutting back on saturated fat and trans fats can lower your risk of diseases such as diabetes, heart disease, and stroke.

# REACHING AND MAINTAINING A HEALTHY WEIGHT

- After a breast cancer diagnosis it is very important to avoid gaining excess weight.
- Weight gain following breast cancer treatment may increase production of estrogen. The increase in estrogen can increase risk for breast cancer reoccurrence. Check with your health care provider to decide on a healthy weight for you.

# STAYING PHYSICALLY ACTIVE

- Regular exercise can help maintain a
  healthy weight and may help prevent
  cancer reoccurrence. mild exercise can
  also help prevent fatigue Aim for at
  least 150 minutes of physical activity
  a week, and try to be active most days
  of the week. If you have not been
  physically active in the past, talk with
  your doctor before starting an exercise
  program.
- Start slowly and increase activity as tolerated. Check with your cancer center for a referral to a local gym or trainer with experience in cancer survivor issues.

## TIPS FOR HEALTHY-WEIGHT DIET

- Choose a variety of foods from all food groups to ensure that you get enough vitamins, minerals, fiber, and other nutrients.
- Choose fiber-rich fruits, vegetables, and whole grains.
- choose lean meats and nonfat or low-fat dairy foods.
- Avoid fried foods and foods cooked in fats (such as butter, lard, margarine, shortening, or cooking oil).
- Use low-fat or fat-freee condiments, dressings, and sauces.
- Read food labels and use a fatgram/calorie counter to track the fat and calories that you are eating.



# AVOIDING OR LIMITING ALCOHOL

Cancer recurrence rates are higher for women who have more than one alcoholic drink per day. Therefore, it is important to avoid alcohol or limit the amount you drink. One drink is equal to a 12-ounce beer, a 5 ounce glass of wine, or 1.5 ounces of liquor.

## MANAGING MENOPAUSE LIKE SYMPTOMS

- Prevent fatigue by eating small meals every 4 to 5 hours throughout the day and by choosing foods that are lower in fat mild to moderate physical activity can help you feel more energetic.
- Help manage hot flashes and night sweats by avoiding hot beverages, spicy foods, and alcoholic beverages.
- Dressing in layers of clothing that can be removed if you get too hot, turning on a fan, and sipping ice water may also help manage hot flashes.
- Talk to your doctor before trying any herbal remedies for hot flashes.



#### **Nutrition and Exercise for Cancer Survivors**

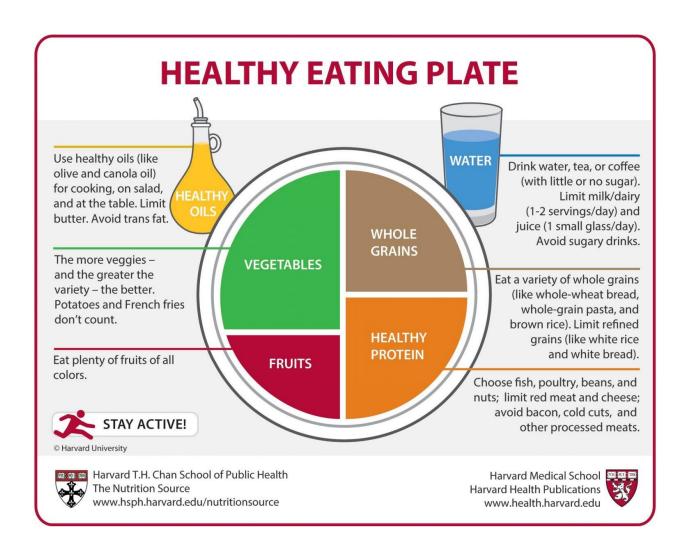
- Nutrition is important during and after treatment for cancer. Managing your weight through a
  healthy diet, staying active, and limiting your alcohol intake can help decrease the risk of your
  cancer coming back
- Excess weight can increase your risk for other chronic diseases as well
- If you need to lose weight, do so gradually (1-2lbs per week) by slowly changing diet and exercise habits that create an lifestyle change
  - Keep active
  - Watch your portion sizes
  - Limit the calorie and fat content that you eat

#### Nutrition Tips:

- Follow the Healthy Eating Plate method to properly structure your meals (pictured on the next page)
  - Focus on having your diet consist of as many plant foods as possible
  - Eat at least 2 ½-3 cups of vegetables and 2 cups of fruit each day, choosing a variety of colors
  - Limit processed meats and red meats
  - Choose whole grains instead of refined grain products
- o Drink no more than 1 alcoholic beverage per day for women, or 2 per day for men

#### Exercise Tips:

- Achieve at least 150 minutes of moderate intensity exercise or 75 minutes of vigous intensity activity each week
- Doing some physical activity above usual activities, no matter what one's level of activity, can have many health benefits!



#### **Healthful Food Examples**

#### Vegetables and fruits:

- Red: Tomatoes, kidney beans, strawberries, raspberries, watermelon, pink grapefruit, cranberries, red apples, red grapes
- Orange: Carrots, sweet potatoes, winter squash, cantaloupe, peaches, mangoes, oranges
- Yellow: Yellow summer squash, corn, pineapple, lemons
- Light green: Lettuce, celery, zucchini, cucumbers, asparagus, artichokes, limes, green grapes, green apples, kiwi
- **Dark green:** Cabbage, broccoli, spinach, brussles sprouts, kale, beet greens, turnip greens, collard greens, asparagus, green beans
- Blue and purple: Beets, purple eggplant, purple grapes, blueberries
- White: Onions, garlic, mushrooms, cauliflower, potatoes

#### Whole Grains:

- Quinoa
- Brown and black rice
- Amaranth, barley, buckwheat, bulgur

#### Healthy Proteins:

- Quinoa
- Lean meats
- Eggs
- Fish and shellfish
- Nuts
- Lentils and legumes (beans)

#### Healthy fats:

- Olive oil
- Avocado
- Nuts and nut butters

#### Healthful spices/flavorings/miscellaneous:

- Turmeric
- Garlic
- Cinnamon
- Green tea
- Dark chocolate

#### Contact your Oncology Dietitian at 502-562-4755 for additional information

Adapted from: ACS Guidelines on Nutrition and Physical Activity, Academy of Nutrition and Dietetics