

“Prescribing” Exercise and Nutrition in Cancer Care



Effectively “prescribing” exercise and nutrition alongside oncology treatment appears to have uncertainties. Wellness is comprised of an array of activities—exercise, physical activity, nutrition, sleep, meditation, and mindfulness—and has the largest effect across the life spectrum. Therefore, as more evidence is showing, all the activities encompassed under the wellness umbrella can be applied to cancer prevention and the cancer care continuum.

When talking about cancer prevention, people generally think of preventing the disease. However, cancer prevention should not merely focus on pre-cancer. Clinicians and oncology providers should also discuss ways to reduce the risk of disease prior to disease initiation, as well as reducing the risk of progression and recurrence with retention of quality of life (QoL). To assist patients and survivors with improving their QoL, oncology-centric physical activity and nutritional plans are essential to maintaining a healthy lifestyle. Accordingly, exercise and nutrition should be viewed as a necessary “prescription” for patients.

Unfortunately, many cancer care team members do not know that wellness in its entirety can be applied across the cancer care continuum—pre-cancer, pre-treatment, treatment, post-treatment, and during metastatic treatment. It is important for providers to know exactly why patients need physical activity and nutrition, and that evidence-based recommendations can and should be incorporated into a cancer center’s comprehensive wellness program. In this article, we hope to demystify the process of incorporating these plans into oncology practice for multidisciplinary cancer teams.

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Examining the Evidence

Chronic diseases, such as obesity, play a large role in potentially acquiring or worsening cancer related symptoms in patients.¹ Traditionally, obesity has been defined as a body mass index (BMI) greater than 30 kg/m². Today, obesity is further categorized into 3 classes: Class 1 (BMI = 30.0-34.9 kg/m²), Class 2 (BMI = 35.0-39.9 kg/m²), and Class 3 (BMI greater or equal to 40.0 kg/m²). BMI is calculated using a person’s body weight and dividing it by the square root of their height. If not already incorporated into the electronic health record (EHR) in a clinic, BMI can easily be calculated manually (weight in kilograms divided by the square root of height in meters) or using an online BMI calculator.

Over the course of 26 years, overweight and obesity rates have risen dramatically in the United States. Data from the 1988-1994 National Health and Nutritional Examination Survey (NHNES) found 56 percent of adults aged 20 years or older were overweight or obese.² In contrast, 2016 NHNES data reported that overweight and obesity status affects nearly 7 in 10 Americans, with 36.5 percent of Americans classifying as obese.³ In age groups 2-19 years, we see a prevalence rate of 18.5 percent; affecting 13.7 million children and adolescents.⁴ These trends are similar to smoking trends before and after a landmark study showed that smoking was directly linked to lung cancer.⁵ Currently, about half of the U.S. population is unaware that there is a direct link between obesity and cancer; therefore, education between providers and patients is key to combating this rising public health threat.⁶

To prevent and further diminish the effects of cancer, our first recommendation is that patients should participate in a reasonable amount of exercise and physical activity throughout the week.

Obesity risk factors can be subdivided into unhealthy lifestyle and environments, age, family history/genetics, race/ethnicity, and sex.⁷ However, the dramatic increases in overweight and obesity rates among Americans over the last 26 years can most likely be attributed to an increase in portion size and decrease in activity levels. Figure 1, right, illustrates the concept of energy balance. When you eat more calories than you burn, your risk of gaining weight increases. When energy intake begins exceeding energy expenditure, weight gain occurs and continues to rise if not corrected through energy expenditure.⁸ Conversely, burning more calories than you eat increases your likelihood of losing weight. Patients may ask why they have not lost weight while regularly exercising. In turn, it is important to ask about their eating habits to further educate these patients about energy balance. In fact, tracking food intake has been shown to be one of the most effective weight loss strategies.⁹

Obesity is linked to higher risks of cancer. In a 2002 monograph, the International Agency for Research on Cancer (IARC) declared overweight and obesity as causes of several cancers.¹⁰ In 2012 it was estimated that 28,000 new cases of cancer in men (3.5 percent) and 72,000 in women (9.5 percent) were due to overweight or obesity.¹¹ According to the American Cancer Society, excess body weight is thought to be responsible for about 8 percent of all cancers in the United States, as well as about 7 percent of all cancer deaths.¹²

In 2014, it was estimated that annual medical costs in the United States for treating obesity were about \$150 billion.¹³ On average, individual medical costs may be 41.5 percent higher in obese patients than those of normal weight. Obese persons may also see higher absenteeism from work and medical bills—41 percent higher than those without obesity.¹⁴ These costs may be an added burden for patients who already pay for cancer-related treatments and sacrifice work hours to participate in treatment.

Similar to the general public, obesity rates among cancer survivors is increasing. NHNES data showed the prevalence of obesity in cancer survivors increased significantly from 22.4 percent to 31.7 percent from 1997 to 2014.¹⁵ Although these data are often contrary to what the general population thinks, providers are seeing firsthand these concerning trends in cancer clinics and programs. As healthcare providers, we want to see this trend decrease and providing wellness solutions will help to right the ship.

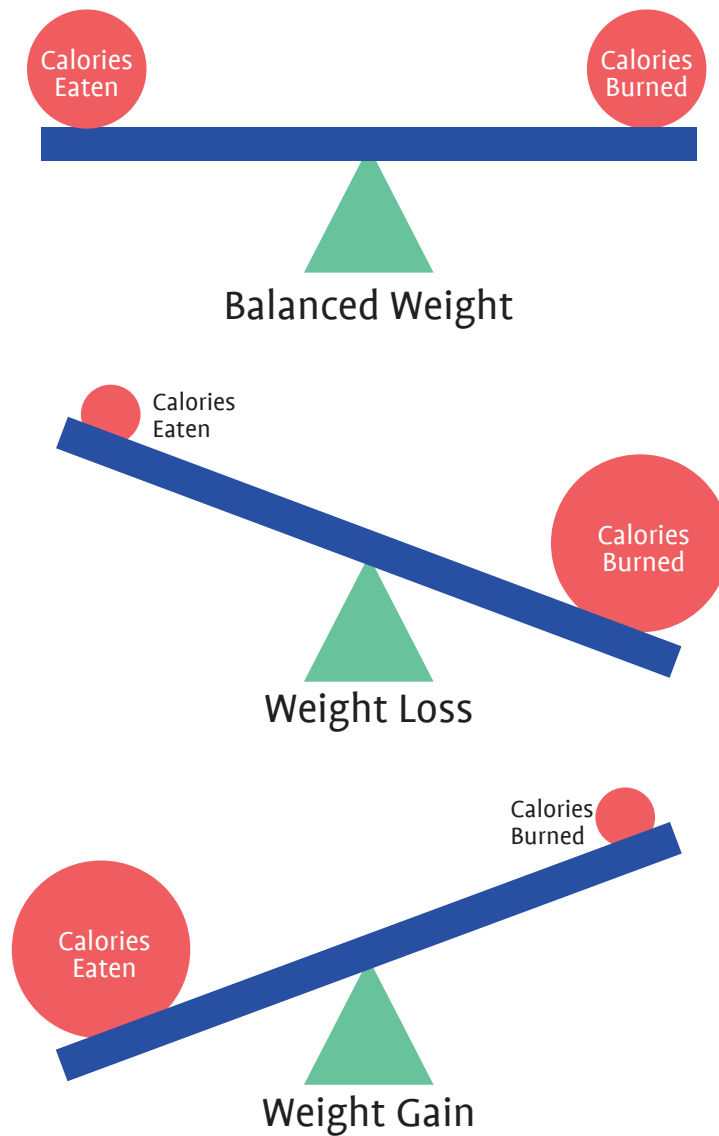
These increases pose a major problem because obesity is linked to increases in cancer recurrence, death, comorbidities, treatment related symptoms, and a decrease in quality of life.¹⁶ Overweight and obese cancer patients may also increase their risk of acquiring other cancers. Examples include esophageal, liver, kidney, stomach, colorectal, gallbladder, pancreatic, ovarian, endometrial, post-menopausal, breast, and advanced prostate cancer.¹ Evidence is also showing that obesity may be associated with a decrease in treatment effectiveness. It is well known that increasing physical activity and maintaining a healthy diet are effective in weight management. Therefore, the solution is simple: providers must begin “prescribing” exercise and nutrition to cancer patients.

The Effects of Physical Activity

To prevent and further diminish the effects of cancer, our first recommendation is that patients should participate in a reasonable amount of exercise and physical activity throughout the week. Patients may see improved mobility in daily activities alongside better physical and mental health, and mood enhancements.¹⁷ However, only 30 percent of cancer survivors are meeting physical activity recommendations.¹⁸ When utilized alongside a healthy lifestyle, it is possible that physical activity may be a more affordable treatment and preventative option against obesity, cancer, and other comorbidities, compared to costlier operations, medications, and treatments.

Exercise and physical activity act as a protectant against acquiring additional cancers, co-morbidities, cancer treatment symptoms, cancer recurrence, and death.¹⁸ Epidemiologic evidence shows that physical activity can reduce the risk of breast cancer by about 20 to 40 percent, colon cancer by at least 20 percent, and endometrial cancer by about 20 to 30 percent, proving that exercise and physical activity are important aspects of cancer care.¹⁷ Physical activity also has positive effects on cancer biology in the body’s many systems. It affects internal mechanisms and pathways, such as hormonal pathways, inflammatory pathways, immune-related pathways, metabolic mechanisms, and physiologic mechanisms. From this information, teams of scientists are now

Figure 1. Illustration of the Concept of Energy Balance



working to identify the most biologically effective type, duration, and dose exercise. However, what we absolutely know is that movement is key.

It is important to note that the term “exercise” does not have the same meaning for every patient. For most, exercise is defined as planned, structured, and repetitive movement designed specifically to improve or maintain physical fitness. Thus, when talking to cancer patients about exercise, providers should focus on the word “movement.” Movement can mean going to the gym or lifting weights, but the term is not limited to those activities. Providers simply telling cancer patients to “exercise” may not be as effective as explaining to them specifically *how* to move or do

physical activity. Through personal experience, prescribing “movement” to cancer patients has proven to be more successful than prescribing “exercise.” This may be in part to the notion that as humans, we move every day. Therefore, movement may appear to be a simpler, achievable task when compared to discussing exercise.

Studies show that decreasing one’s sitting time can now be more important than vigorous exercise in decreasing the risk of cancer.¹⁹ In other words, risk of cancer is increased when there is little to no exercise alongside ample sitting time throughout the day.¹⁹ Consider asking your cancer patients to focus on decreasing their sitting time as an alternative to increasing their exercise

time. Sitting time may be part of a patient's job, for example, in an office environment. Offer your cancer patients specific recommendations to reduce their sitting time, such as having a desk that can be converted to work both sitting and standing, or asking patients to get up and walk at regular intervals to get water or to talk to a person in their office versus emailing or calling. A simple alarm on a watch or cell phone can be a great reminder to get up and move. For those who would like to track the number of steps they have achieved, there are many fitness trackers in all price ranges on the market. Rather than immediately striving towards 10,000 steps, the goal should be to increase the numbers of steps gradually each week. This will not only achieve increased physical activity but also keep a sense of accomplishment and therefore motivation.

It is important for providers to stay up-to-date on current evidence-based recommendations. Statistics show a frequent occurrence of eating disorders among cancer patients due to the overemphasis on food by doctors and family members while patients are starting treatment.

While patients are in clinic, providers should be identifying and implementing ways to help patients, and their caregivers, move more. Patients and families could use the time waiting for an appointment to walk around and a simple text could let them know when to return for their appointment. If deemed safe, patients should be allowed to move and/or walk during chemotherapy treatments. A small portable pedal exercise could be used during chemotherapy to allow for movement while sitting for their treatment.

Although sedentary behavior will still occur in environments like at home, patients should aim to increase their energy expenditure to balance and ultimately decrease their sedentary lifestyle.¹⁸ Healthcare providers should be mindful that definitions of physical activity will be different between patients with different thresholds. Even if the patient can only accomplish 10 minutes of light walking, it is still more beneficial than having no mobility at all.

The Effects of Nutrition

Similar to physical activity and exercise, it is important to know your patients and familiarize yourself with their eating habits. Nutrition is another major aspect of wellness that can help reduce risk of cancer due to overweight or obesity. Providers need to be clear with cancer patients about the differences between nutrition,

diet, and dieting. "Nutrition" is the act or process of receiving appropriate amounts of nutrients. This includes protein, fat, carbohydrates, vitamins, minerals, and water as a means of survival.¹⁸ A "diet" simply refers to what one eats and drinks daily. On the other hand, "dieting" refers to restricting oneself to a specific diet for the goal of losing weight. A "nutritious diet" is what everyone should strive for and what providers should be communicating to their patients.

When undergoing a diet modification program to lose weight, patients should set a maintainable goal in reducing their energy intake. Desirable calories consumed per day is currently recommended at 1,600-2,400 per day for adult women and 2,000-3,000 per day for adult men. Patients should also aim to lose 1-2 pounds per week. These numbers may be adjusted depending on the patient and their specific needs at the time of modification.²⁰

Most patients struggle to maintain a nutritious diet. Unfortunately, many believe that any nutritional or diet program is safe and effective at lowering risk and recurrence for cancer, so long as it also reduces weight. This is a common myth. Many patients may also find it easier to find a specific diet plan and follow it. Due to these popular myths surrounding diet and nutrition, providers need to start with basic education for their cancer patients—discussing the basics of healthy nutrition and suggesting patients track their daily intake. By helping patients understand the differences between nutrition and diet and empowering them with knowledge, patients can then ask necessary questions and be a part of a shared decision-making process. Providers should also discuss moderation in diet, as it is common for patients to disregard the idea of moderation either because of misconceptions in the media or the misconception that exercise burns many more calories than it does. Unfortunately, a 10-minute walk does not burn off the calories of a burger or candy bar.

Patients should be aware that by consuming proper nutrients alongside their physical activity routine, their body can feel better and build energy and stamina at faster rates. Overeating causes weight gain and unhealthy habits, and moderating such will make it easier to incorporate healthy food choices into a patient's diet.

It is important for providers to stay up-to-date on current evidence-based recommendations. Statistics show a frequent occurrence of eating disorders among cancer patients due to the overemphasis on food by doctors and family members while patients are starting treatment.²¹ Anorexia and bulimia, for example, are the most common eating disorders found in breast cancer patients. With this knowledge, physicians should also screen for eating disorders during cancer treatment and regular check-ups.

Dispelling Popular Myths

Patients may enter a cancer program believing that they need to become vegetarian or vegan to have a more nutritious diet or, in some cases, to beat cancer. However, while some evidence exists, the data is not robust enough to support any one specific diet. Providers should ensure that patients do not worry about these and other weight loss specific diets (e.g., Keto-, Paleo-, Low-Carb-, and Atkins-diets) so long as they are eating a nutritious diet, daily.

Patients may also believe negative myths about the benefits of exercise during cancer treatment. Many are unaware that exercise is safe during treatment and that exercise is likely to decrease the negative side effects of treatment, while increasing quality of life. A list of common myths can be found in Figure 2, below.

Similar to myths among patients, lack of information can take place at the clinical level. One example of this is the benefits of prehabilitation.²² Prehabilitation is a perfect window of opportunity to begin to get patients active and ready for cancer treatment, especially during possible treatment delays. The more prehabilitation offered to cancer patients—simply getting them to move—the more likely patients are to keep physically active during treatment. Further, cancer patients who undergo prehabilitation prior to surgery have shown to have better surgical and treatment outcomes.²² Patients enrolled in prehabilitation are also more likely to stay on treatment longer and not stop treatment due to negative symptoms.²² Overall, the data has shown that prehabilitation is an ideal window of opportunity to make a positive difference to cancer patients.

Prescribing Physical Activity

Before prescribing exercise, or movement, providers must first be able to differentiate between moderate activity and vigorous activity in order to educate their patients effectively. Providers and their patients can use the “talk test” to determine if this activity falls under moderate or vigorous activity. This test is an easy, low-resource method that takes into account the patient’s current level of fitness. During moderate activity, patients can talk but cannot belt out their favorite song during the activity, such as a brisk walk. If, during a brisk walk, patients cannot say more than a few words without pausing for a breath, the activity should be considered vigorous for these patients. This sort of communication is key when explaining current exercise, or movement, recommendations to patients. Moderate activity may also include activities such as water aerobics, general gardening, and slow-paced bicycling. Vigorous, in contrast, may include jogging, swimming laps, singles tennis, aerobic dancing, jumping rope, and hiking uphill. Activities will differ for oncology patients, but the overall goal is for each patient to be physically active to the best of their abilities.

Figure 2. Common Physical Activity Myths During Cancer Treatment

1. Myth: Exercise is not safe during cancer treatment.

Truth: Being physically active is highly recommended during treatment.

2. Myth: Patients shouldn’t worry about exercising after being diagnosed with metastasis.

Truth: Exercise decreases negative side effects and increases quality of life.

3. Myth: Exercise exacerbates symptoms of treatment.

Truth: Exercise decreases fatigue, depression, anxiety, nausea, and pain.

4. Myth: Patients should not continue their same level of activity.

Truth: Activity should be a consistent yet dynamic component care.

5. Myth: Patients cannot stop once they start exercising.

Truth: Breaks are okay...flexibility based on tolerance.

6. Myth: Exercise doesn’t make a difference after diagnoses or treatment.

Truth: Exercise increases treatment effectiveness and quality of life and decreases risk of recurrence, progression, mortality, and morbidity.

Current cancer risk reduction recommendations include at least 150-minutes of moderate intense activity or 75-minutes of vigorous intense activity each week, or a combination of the two.²³ This activity does not need to be done all at once, and most providers prefer it to be spread out throughout the week. That said, activity needs to be done, at minimum, 10-minutes at a time. An example could mean moving at a moderate rate (walking) for 10-minutes, 15-times throughout the week for some patients. As mentioned previously, if patients do not know if their activity is moderate, have them perform the talk test. The idea is always to communicate movement in a way that is non-judgmental and approachable. It is okay if a patient starts with 10-minutes once a week and works up from there. Through non-judgmental and encouraging communication, patients are more likely to reach the recommended goal.

Many cancer patients may need a little extra help with a physical therapist or an occupational therapist to determine how to safely and effectively fit in some type of movement into their daily lives.

Providers should also find activities that patients want to perform, as opposed to mandating an activity. Whether their preference is walking their dog, gardening, or going to the gym, encourage patients to be active in forms of their choosing. As previously discussed, movement, or physical activity, can take shape in many forms. Make sure to ask patients what activities they enjoy and show them how those activities can be a form of physical activity. As a final reminder, patients need to decrease their sitting time. This one action is arguably the biggest—and most effective—change they can make.

When prescribing physical activity, remember to tell patients to start slow, take their time, and always consider side effects and timing. By starting smaller, moderate activities, patients can then work toward more vigorous activity. Patients need to know that activity is allowed to ebb and flow. The week of chemo-infusion may not be the best week to do the most exercise for one patient, but the next week after or the week before may be a more ideal time. Then, with each infusion, activity might become easier once maintained. Just because patients need to take a break from their routine, does not mean they have to give it up completely. Reminders of how physical activity positively affected patients prior to the break will encourage them to continue.

While it is important that patients do partake in physical activity or movement, providers should be considerate of precautions pertaining to patient safety. Providers should remind patients not to go to a busy gym during infusions due to decreased immune-function, but to instead perform home exercises or

participate in clinic-run programs. Fall prevention is paramount. Depending on the baseline fitness of the patient, some may be more prone to falling than others. For patients wanting to be active during chemotherapy, but are at high-risk of falling, providing a pedal machine while they are sitting is ideal. For patients where the risk is not as high, allowing them to walk alongside a wall with a handrail while holding their IV pole would be beneficial. The idea is to be creative in ways of providing movement options that are safe and feasible within the clinical setting. It is also important to remind patients to be aware of potential side effects that may inhibit their activity, such as neuropathy. However, it is equally important to give patients potential solutions, such as using a recumbent bike, the handrail attached to a wall, or even a walker or cane.

Make sure to also look at pre- and post-surgery precautions, or consider physical and occupational therapy for patients. Many cancer patients may need a little extra help with a physical therapist or an occupational therapist to determine how to safely and effectively fit in some type of movement into their daily lives. This scenario is also one where prehabilitation may prove to be most useful.

For those patients who are already active or for those who are open to increasing their activity level, in addition to the benefits of movement, providers should advise patients to incorporate strength training for both muscle health and bone strength. Without going to the gym, simple exercises can be done at home such as using soup cans as arms weights or the wall for pushups. For the legs, squats with a chair or wall for balance can be done. Patients should be advised to gently stretch after all strength exercises.

Providers should help patients determine their limitations and safe exercises to practice. During treatment, the discussion of movement after treatment should begin so that patients have a plan. After treatment, patients may exercise in different environments (i.e. home, clinic, fitness center) and should be taught how to utilize basic resources in different scenarios. This may include adapting a routine walk around their hospital unit into a routine walk around the patient's house or block. These conversations can happen within an appointment or casually during the hours of chemotherapy infusions or time spent walking from the waiting room to the exam room. Once staff and providers are educated on the key information above, informative yet casual conversations may make large impacts on patient knowledge, motivation, and implementation of healthy lifestyle choices.

Prescribing Healthy Nutrition

Regarding nutrition, eating healthy starts with consuming a variety of foods to get optimal nutrition and nutrients. These include proteins, fats, carbohydrates, water, vitamins, and minerals. This is especially important for cancer patients. Patients may start small and allow their diet to grow. For patients who like to garden, providers can encourage physical activity in the garden and improve their diet by planting a variety of vegetables to use in their meals. Poor eating habits should not be stopped immediately, as cutting these types of behaviors altogether may

have a greater potential for relapse into old habits. Moderation is key.

Providers should understand that the nutrition needs of patients will vary from person to person and, just like physical activity, may ebb and flow, depending on the timing the treatment. Especially when patients are in the middle of a treatment that causes abdominal distress, the “optimal” diet may be intolerable during that time. Keeping the discussion of nutrition informative while non-judgmental and motivational is crucial. For special needs, a nutritionist or dietitian with expertise in oncology can help providers and patients be creative in ways to get the nutrition needed depending on the type of cancer, treatment, and side effects the patient is experiencing. Some general recommendations and tips providers can offer to their patients are listed in Figure 3, page 28.

Another good tip to tell patients is to be mindful while eating—that is if they feel less than ideal after consuming a specific food or drink, that item should most likely be decreased or cut from their diet. Further, if they feel amazing right after but then feel a “crash” an hour later, that item may also be one to decrease or cut. The opposite is also true with foods that make the body feel well for a sustained amount of time.

As part of regular check-ups, patients should have their diets monitored and do their best to stay within a healthy diet. This will not only help during treatment but initiate good habits for after treatment.

Providers should also remind patients to keep hydrated, especially those who may be experiencing vomiting or diarrhea. Patients should be advised to drink about eight 8-ounce cups of liquid each day. Showing patients what 8 ounces looks like will help with adherence since a common misconception is that you need eight “glasses” which contain more ounces. All liquids (soups, milk, and even ice cream and gelatin) count toward fluid goals; however, striving for water and limiting highly caloric beverages is best.

Some patients may choose to drink alcohol. Drinking alcohol is safe when consumed in moderation; however, consumption should be limited to no more than 1 drink per day for women and no more than 2 drinks per day for men. One drink is defined as: 12 ounces of beer (5 percent alcohol), 5 ounces of wine (12 percent alcohol), 1.5 ounces of 80-proof liquor (40 percent alcohol). The percent of pure alcohol varies within and across beverage types. Although the standard drink amount is helpful for following health guidelines, they may not reflect customary serving sizes.²⁴ For example, while a 12-ounce run of the mill beer (5 percent alcohol) is considered 1 drink, a 12-ounce Indian Pale Ale (IPA; 9 percent alcohol) is 1.8 drinks. Similarly, given the alcohol content, a typical margarita is about 1.8 drinks and others with extra ingredients may be up to 2.7 drinks. Patients can cut out the daily IPAs or cocktails and replace them with a lighter drink to slowly decrease alcohol consumption. It is important for patients to be cautious of over pouring. Additionally, if a patient does not drink, they should not start.¹⁸

An easy way of remembering this overall prescription is “M&Ms”—movement, moderation, and mindfulness. If providers

and community wellness programs can utilize “M&Ms” as a foundation in educating their patients, they will produce a successful wellness program with regular participants who are motivated to stay involved. Not only will it will create a difference in patients, it will also create a very healthy community within your cancer program.

Building a Program

When building any new program, always start small—do not try and implement a massive program right out of the gate. Instead, start with a framework and build from there. You will need buy-in from your entire cancer program, especially from those staff who have direct patient contact. Reach out to your physical and rehabilitative therapists as they are a great resource and should be a part of any comprehensive cancer program. With stakeholder buy-in, cancer programs can develop programs in-house to meet the exercise, movement, and nutritional needs of their cancer patients.

An easy place to start is with education. To improve overall health in clinics, we suggest educating staff, incorporating dietitians and nutritionists into the care team, establishing relationships with community wellness providers, providing social support groups, and developing in-house programs.¹⁸ The more providers and staff that are educated in the clinic, the more chances there are to have the casual conversations with patients about their health and well-being.

When prescribing physical activity and nutrition, providers should recognize the positive impact of social support among patients. Social support is a major reason why people either do or do not stick with physical activity or a nutrition regimen. You may find that starting a support group focused on wellness within the clinic is another way to begin your program. For example, establishing a chemo-buddy program for patients to be physically active together, eat healthier, and help hold each other accountable.

Participating in research is also highly beneficial to patients. Research can provide resources that your cancer program might not have that a principal investigator can bring, thus, working towards improving each patient’s recovery. Research can also attract new patients and partners, and it can support your prescription for exercise and nutrition. If an opportunity to take part in a research study arrives, we suggest encouraging your patients to join.¹⁸

Some tips for building your wellness program:


- Before you start, conduct a self-assessment of your existing resources. You may be surprised with what you find.
- Next, appoint a lead person, liaison, and/or program champion. Having a point person is incredibly helpful in the long-term. They can oversee program development and implementation and delegate appropriately.
- You also want to research—see what is out there. You do not always need to reinvent the wheel. See what other cancer programs, in clinics and in the community, are doing around exercise and wellness for their patients and reach out to those programs to see how your clinic can get involved. The field

Figure 3. General Nutrition Recommendations and Tips to Tell Patients

- **Choose foods and beverages in amounts that help achieve and maintain a healthy weight.**
- **Limit consumption of processed meats and red meats.**
- **If you choose to eat red meat, select lean cuts and eat smaller portions.**
- **Choose lean meats and/or fish.**
- **Try substituting a couple of meals with plant-based foods.**
- **Eat at least 2¹/₂ cups of vegetables and fruits each day.**
- **Try for a variety of color when choosing your vegetables and fruits.**
- **Choose 100% juice if you drink vegetable or fruit juices.**
- **Choose whole grains instead of refined-grain products.**
- **Limit consumption of refined carbohydrate foods including pastries, candy, sugar-sweetened breakfast cereals, and other high-sugar foods.**
- **Limit the amount of fat in your meals by choosing a lower-fat cooking method like baking or broiling.**

of wellness is ripe with collaborative opportunities because providers know that they cannot do the work alone. You can partner with established wellness programs, either among hospitals and clinics or other outside programs in the community.

- Finally, remember to include all forms of wellness in your wellness program—exercise, physical activity, nutrition, sleep, meditation, and mindfulness—as this will encourage optimal health outcomes among your cancer patients.

Once you begin to prescribe exercise, or movement, and nutrition at your cancer programs, it is critical to track your results and gather outcomes data, including patient reported outcomes. These data will allow you to show return on investment to your program and patients that, in turn, will allow you to grow your wellness services and contributions to new research. 

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