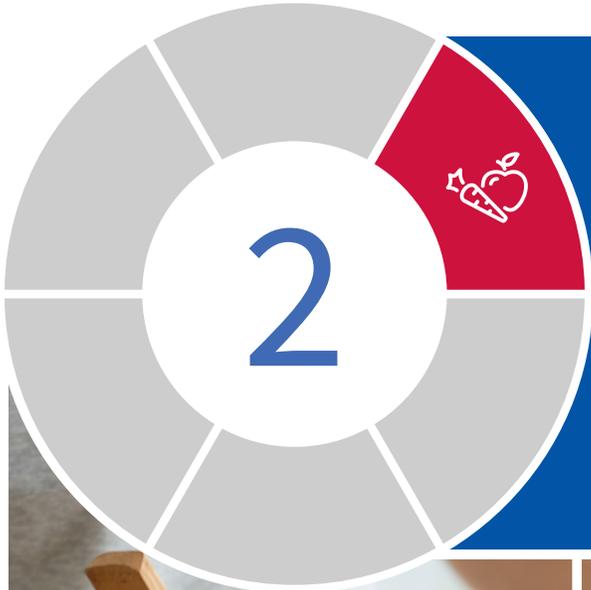


Nutrition, Physical Activity, Body Weight, and Cancer Survivorship

2022

A 6-Part Informational Series for Healthcare Teams



Nutrition for Cancer Survivors



NUTRITION FOR CANCER SURVIVORS

This is brief 2 of 6 in the *Nutrition, Physical Activity, Body Weight, and Cancer Survivorship* series for healthcare teams that work with cancer survivors.

Eating nutritious foods can help cancer survivors to manage their energy levels, feel better, and stay stronger.¹ The nutritional needs of cancer patients depend on their type of cancer, treatment, and side effects.

Cancer or its treatment might create eating challenges such as poor appetite, difficulty chewing, swallowing, digesting, and fatigue. The inability to maintain adequate nutritional status due to cancer symptoms and treatment side effects is common and can negatively impact overall clinical outcomes.² A recent study of cancer patients with locally advanced or metastatic disease reported that 73% experienced involuntary weight loss and that BMI and percentage weight loss predicted survival independent of cancer site or stage.^{2,3}

Because patients undergoing cancer treatment often have effects from the treatment or cancer that can impact their nutritional status and their ability to maintain healthy body weight, it is recommended that nutrition screening, assessment, and counseling begin as soon as possible after a diagnosis.

Nutrition Screening and Assessment

Cancer survivors can benefit from a nutrition assessment from the time of diagnosis forward because it can help them to achieve and maintain healthy body weight and prevent or resolve nutritional deficiencies. During treatment, a healthy body weight and nutritional status might help to improve their tolerance to cancer treatments. After treatment, a healthy lifestyle and body weight may increase survival and reduce the risks of new primary cancers.^{4,5}

Patients undergoing treatment or care should be screened for risk of malnutrition and monitored on an ongoing basis. Because the nutritional needs, eating habits, and food absorption capabilities of patients can be altered by cancer treatments, it is essential to consider multiple factors such as their current nutritional status, future treatments, and anticipated symptoms and side effects.^{6,7}

Monitoring a patient's nutritional status should continue for some time after treatment because many factors can influence their nutrient intake. Ongoing screening and assessment may be needed to prevent or resolve nutritional deficiencies, help survivors to maintain healthy body weight, and manage any ongoing side effects of treatments that may interfere with good nutrition.⁸

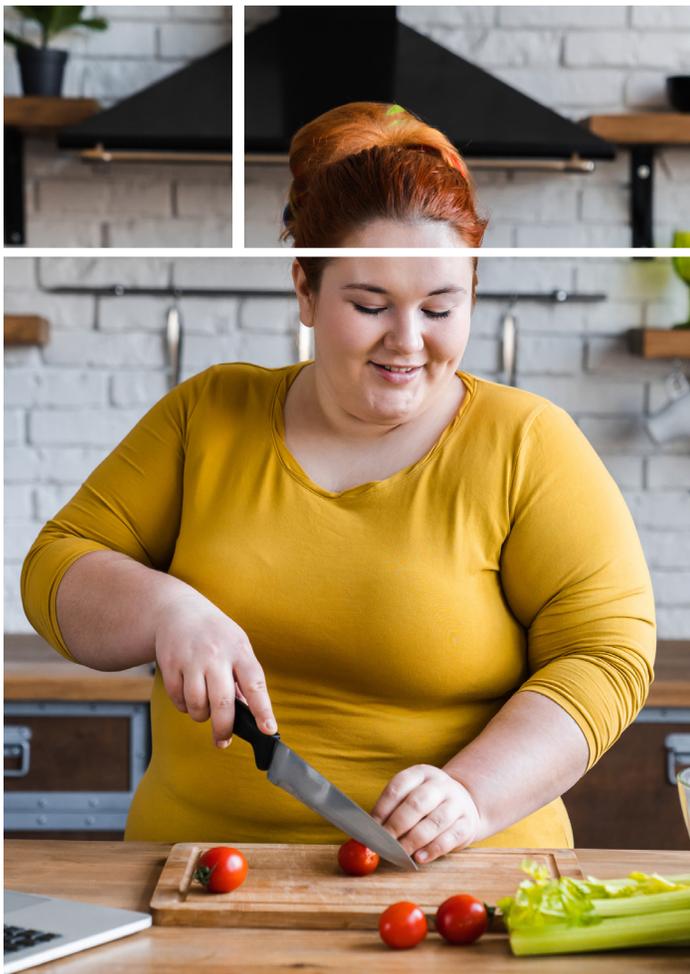
The **Malnutrition Screening Tool (MST)** is a simple screening tool that has been validated for use with cancer patients and is recommended by the Academy of Nutrition and Dietetics for use with adults.⁹ A member of the healthcare team should be identified as the key person responsible for malnutrition screening, nutrition care, assessment, intervention, and surveillance.^{10,11}



Nutrition Counseling

Studies have shown that nutrition counseling during treatment can improve dietary intake, reduce treatment-related symptoms, and improve the quality of life for patients.^{12,13}

Patients who are at risk of malnutrition, as determined through screening, should be referred to a Registered Dietitian Nutritionist (RDN) or Registered Dietitian (RD) and begin individualized nutritional counseling sessions with regular monitoring as part of their care plan. Preferably, patients should see a certified oncology nutrition specialist. If an oncology dietitian is not available, an appointment with a dietitian associated with the care clinic may be arranged. [The Academy of Nutrition and Dietetics](#) has an [online tool](#) to find registered dietitians by ZIP code.



A Healthy Eating Pattern

Adequate nutrition can help patients to maintain their body weight, maintain their ability to stay on treatment regimens with fewer changes, and improve their surgical outcomes and quality of life.¹⁴

A healthy diet is based on a dietary pattern that is more than just individual foods, nutrients, or supplements. Instead, a healthy dietary pattern refers to the entire pattern of a person's overall diet over time – their customary habits around diet and eating. A healthy dietary pattern contains nutrient-dense foods and beverages in amounts that achieve recommended calorie limits. For more information and examples of healthy dietary patterns, see the [Diet Guidelines for Americans 2020-2025 report](#).¹⁵

During treatment, a healthy dietary pattern is one that provides patients with sufficient nutrition to build and maintain their strength during treatment. Patients may need to adjust their diet to consume higher-calorie foods to maintain healthy body weight.¹⁶

After treatment, or for patients who are not experiencing malnutrition or nutrition-related side effects, cancer survivors should also follow healthy dietary patterns as outlined in the [ACS Guideline for Diet and Physical Activity for Cancer Prevention](#). Specific dietary recommendations in the ACS prevention guideline emphasize a dietary pattern rich in a variety of plant foods, such as vegetables, whole fruits, whole grains, and beans/legumes, but limited in or not including red and processed meats, sugar-sweetened beverages, highly processed foods, and refined grain products.

Resources and References



Resources – For Providers

Source	Resources	Link
Alliance to Advance Patient Nutrition	Malnutrition Screening Tool (MST)	https://www.mass.gov/doc/malnutrition-screening-tool/download
Academy of Nutrition and Dietetics	Find a Nutrition Expert	https://www.eatright.org/find-a-nutrition-expert?rdType=url_edit&rdProj=fane_update&rdInfo=fae
CA: A Cancer Journal for Clinicians	American Cancer Society Guideline for Diet and Physical Activity for Cancer Prevention journal article	https://acsjournals.onlinelibrary.wiley.com/doi/full/10.3322/caac.21591
American Cancer Society	American Cancer Society Guideline for Diet and Physical Activity for Cancer Prevention webpage	https://www.cancer.org/healthy/eat-healthy-get-active/acs-guidelines-nutrition-physical-activity-cancer-prevention.html
Department of Health and Human Services	Dietary Guidelines for Americans	https://www.dietaryguidelines.gov/

Resources – For Patients

Source	Resources	Link
Academy of Nutrition and Dietetics	Find a Nutrition Expert	https://www.eatright.org/find-a-nutrition-expert?rdType=url_edit&rdProj=fane_update&rdInfo=fae
American Cancer Society	Eat Healthy webpage	https://www.cancer.org/healthy/eat-healthy-get-active/eat-healthy.html
American Cancer Society	Tips for Healthy Eating handout	https://www.acs4ccc.org/wp-content/uploads/2021/05/Tips-For-Healthy-Eating.pdf
American Cancer Society	Nutrition for People with Cancer webpage	https://www.cancer.org/treatment/survivorship-during-and-after-treatment/staying-active/nutrition.html

Resources – For Patients

Source	Resources	Link
Fred Hutchinson Cancer Research Center	Cook For Your Life webpage	https://www.cookforyourlife.org/
Academy of Nutrition and Dietetics	Nutrition During and After Cancer Treatment webpage	https://www.eatright.org/health/diseases-and-conditions/cancer
Cancer.net (ASCO)	Nutrition Recommendations During and After Treatment webpage	https://www.cancer.net/survivorship/healthy-living/nutrition-recommendations-during-and-after-treatment
American Cancer Society	Diet and Activity Guidelines to Reduce Cancer Risk infographic	https://www.cancer.org/healthy/eat-healthy-get-active/acs-guidelines-nutrition-physical-activity-cancer-prevention/infographic.html
American Institute for Cancer Research (AICR)	Treatment Tips: Planning and Preparing	https://www.aicr.org/cancer-survival/treatment-tips/after-treatment/

REFERENCES

1. American Cancer Society. Coping and Living Well During Cancer Treatment. Accessed December 29, 2021. <https://www.cancer.org/treatment/survivorship-during-and-after-treatment/coping.html>
2. Ryan AM, Power Dg, Daly L, Cushen SJ, Ní Bhuachalla É, Prado CM. Cancer-associated malnutrition, cachexia and sarcopenia: the skeleton in the hospital closet 40 years later. *The Proceedings of the Nutrition Society*. 2016;75(2). doi:10.1017/S002966511500419X
3. Martin L, Senesse P, Gioulbasanis I, et al. Diagnostic criteria for the classification of cancer-associated weight loss. *Journal of clinical oncology: official journal of the American Society of Clinical Oncology*. 2015;33(1). doi:10.1200/JCO.2014.56.1894
4. Rock CL, Thomson C, Gansler T, et al. American Cancer Society guideline for diet and physical activity for cancer prevention. *CA: A Cancer Journal for Clinicians*. 2020;70(4):245-271. doi:10.3322/caac.21591
5. American Cancer Society. Nutrition and Physical Activity During and After Cancer Treatment: Answers to Common Questions. Cancer.org. Published June 9, 2020. Accessed December 29, 2021. <https://www.cancer.org/treatment/survivorship-during-and-after-treatment/be-healthy-after-treatment/nutrition-and-physical-activity-during-and-after-cancer-treatment.html>
6. McMahon K, Brown Jk. Nutritional screening and assessment. *Seminars in oncology nursing*. 2000;16(2). doi:10.1053/on.2000.5549
7. Schattner M, Shike M. Nutrition Support of the Patient with Cancer. In: *Modern Nutrition in Health and Disease*. 10th ed. Lippincott Williams & Wilkins; 2006.
8. Kim DH. Nutritional issues in patients with cancer. *Intest Res*. 2019;17(4):455-462. doi:10.5217/ir.2019.00076
9. Skipper A, Coltman A, Tomesko J, et al. Position of the Academy of Nutrition and Dietetics: Malnutrition (Undernutrition) Screening Tools for All Adults. *Journal of the Academy of Nutrition and Dietetics*. 2020;120(4). doi:10.1016/j.jand.2019.09.011
10. American Society of Clinical Oncology. Nutrition Recommendations During and After Treatment. Cancer.Net. Published February 15, 2012. Accessed December 29, 2021. <https://www.cancer.net/survivorship/healthy-living/nutrition-recommendations-during-and-after-treatment>
11. Liposits G, Orrevall Y, Kaasa S, Österlund P, Cederholm T. Nutrition in Cancer Care: A Brief, Practical Guide With a Focus on Clinical Practice. *JCO Oncology Practice*. 2021;17(7):e992-e998. doi:10.1200/OP.20.00704
12. Rock CL, Thomson C, Gansler T, et al. American Cancer Society guideline for diet and physical activity for cancer prevention. *CA: A Cancer Journal for Clinicians*. 2020;70(4):245-271. doi:10.3322/caac.21591
13. Ravasco P, Monteiro-Grillo I, Vidal PM, Camilo ME. Dietary counseling improves patient outcomes: a prospective, randomized, controlled trial in colorectal cancer patients undergoing radiotherapy. *Journal of clinical oncology: official journal of the American Society of Clinical Oncology*. 2005;23(7). doi:10.1200/JCO.2005.02.054
14. Baldwin C, Weekes CE. Dietary counselling with or without oral nutritional supplements in the management of malnourished patients: a systematic review and meta-analysis of randomised controlled trials. *Journal of human nutrition and dietetics: the official journal of the British Dietetic Association*. 2012;25(5). doi:10.1111/j.1365-277X.2012.01264.x
15. USDA. Dietary Guidelines for Americans, 2020-2025. DietaryGuidelines.gov. Published 2021. Accessed December 29, 2021. https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf
16. American Cancer Society. Benefits of Good Nutrition During Cancer Treatment. Published July 15, 2019. Accessed December 29, 2021. <https://www.cancer.org/treatment/survivorship-during-and-after-treatment/coping/nutrition/benefits.html>