



Evidence Based Nutrition for Cancer Patients & Survivors

Today's Chat Agenda

- **Updates: Community Oncology Alliance (COA) and COA's Patient Advocacy Network (CPAN)**
- **Jenn Lafferty Intro**
 - Nutrition challenges for people with cancer along the care continuum
 - Managing nutrition impact symptoms
 - Advocating for Medical Nutrition Therapy (MNT) for all people with cancer
 - Resources



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The Role of Nutrition Before, During and After Cancer

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Discussion Outline

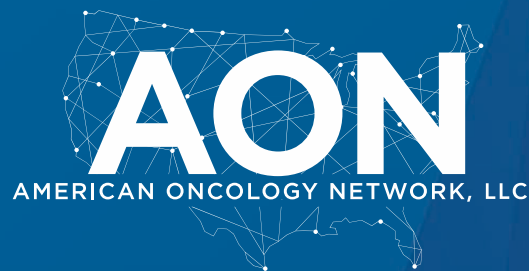
- Potential Nutrition Concerns and Outcomes Across the Cancer Continuum
- Diet Recommendations
- Nutrition Impact Symptoms and Other Nutrition Challenges Facing People During Treatment
- Malnutrition and Cancer
- Cancer and Nutrition Advocacy
- Resources

Potential Nutrition-Related Concerns and Outcomes Across the Cancer Continuum

		<i>Diagnosis</i>		<i>≥5 years after diagnosis</i>
<i>State in continuum</i>	Cancer prevention	Initial treatment	Early posttreatment	Long-term cancer survivorship
Potential nutrition concerns	<ul style="list-style-type: none"> • Obesity, loss of muscle mass • Energy-dense food intake • Excessive dietary supplement usage • Food contamination 	<ul style="list-style-type: none"> • Nutrition impact symptoms • Immunosuppression • Drug-nutrient interactions • Weight and body composition changes 	<ul style="list-style-type: none"> • Fatigue • Endocrine disorders • Weight and body composition 	<ul style="list-style-type: none"> • Weight loss or gain • Decreased bone density • Endocrine disorders • Cardiovascular complications
Potential nutrition outcomes	<ul style="list-style-type: none"> • Improved weight and body composition • Improved blood glucose control • Improved immune function 	<ul style="list-style-type: none"> • Tolerance/adherence to treatment • Fewer infectious complications • Improve weight and body composition • Delay or prevent disease progression • Improved quality of life • Improved survival 	<ul style="list-style-type: none"> • Decreased fatigue • Improved functional status • Faster recovery • Improved weight and body composition • Decreased risk for recurrence and subsequent cancer • Improved survival • Improved quality of life 	<ul style="list-style-type: none"> • Fewer late effects of treatment • Improved functional status • Improved weight and body composition • Decreased risk for recurrence and subsequent cancer • Improved survival • Improved quality of life

Robien K Denmark-Wahnefried W, Rock CL. Evidence-based nutrition guidelines for cancer and survivors: current guidelines, knowledge gaps, and future research directions. J AM Diet Assoc. 2011;111(3):368-375.

Diet Recommendations



Drink Mostly Water and Unsweetened Drinks

- Drinking a lot of sodas or sugary drinks can contribute to weight gain that increases your risk for cancer
- One 12-ounce can of soda contains 9 teaspoons of sugar or high fructose syrup, 150 calories, and zero nutrients
- Bottled teas, lemonades, “energy” drinks, and many “juice drinks” also add ample amounts of extra sugar
- Choose still or sparkling water
- Drink unsweetened tea and coffee
- Infuse tea with lemon or cucumber



Limit Processed Foods to Help Control Calorie Intake

- Fast and convenience foods can be tempting, but over time, eating that way can have negative impacts on your health and lead to weight gain, which can increase your risk for cancer
- High in fat and sugar, but low in fiber and nutrients
- Fast and convenience foods are often served in large portions
- Fuel up on foods that are minimally processed and include fruit and vegetable ingredients
- Keep healthy snacks on hand for when cravings strike
- Read nutrition facts labels when shopping and compare calories per serving, fat and sodium, and select foods that are minimally processed

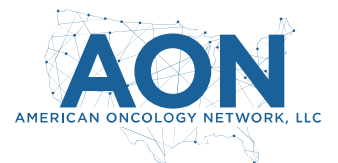


Take Action to Manage Body Fat

Types of Cancer

- Breast Cancer
- Colorectal Cancer
- Endometrial Cancer
- Esophageal Cancer
- Gallbladder Cancer
- Kidney Cancer
- Liver Cancer
- Mouth, Pharynx, and Larynx Cancer
- Ovarian Cancer
- Pancreatic Cancer
- Prostate Cancer
- Stomach Cancer

- Too much body fat can produce proteins called cytokines which trigger inflammation
- Having excessive body fat can cause your body to produce too much estrogen, insulin and other hormones
- Risk for cancer increases with having excess visceral fat and significant excess body fat
- Eat nutritious foods, in healthy portions
- Avoid sugary drinks and alcohol
- Be physically active; move more, sit less



Limit Consumption of Red and Processed Meat

- You don't have to eat red meat to get the nutrients you need, but eating moderate amounts provides a good source of protein, iron, zinc, and vitamin B12
- Eating more than 18 oz. of red meat weekly can increase your cancer risk (colorectal cancer)
- Eat little, if any, processed meat
- Think of lean meat as a side dish
- Eat meatless a few times a week



It's Best Not to Drink Alcohol



- Be mindful and conscious of your alcohol intake in social situations
- Order smaller sizes and avoid doubles
- Sip slowly
- Alternate alcoholic and non-alcoholic drinks
- Try alcohol free beer, wine and spirits
- Try Kombucha, seltzer, club soda

World Cancer Research Fund International. *Diet, Nutrition, Physical Activity and Cancer: a Global Perspective - The Third Expert Report*. [homepage on the internet] London, UK:

World Cancer Research Fund International; 2018 Available from: <https://www.wcrf.org/dietandcancer>.

Enhance Your Diet with More Plant Foods

- Vegetables and fruits may help to protect you from a host of cancers – such as colorectal, esophageal, mouth, pharynx, larynx, and stomach
- Phytochemicals can protect cells from the damage that may lead to cancer
- Make whole grains, vegetables, fruits, beans and lentils a major part of your normal diet
- Strive for at least 30g of fiber from food sources
- Include a minimum of 3.5 cups to 5 cups of vegetables and fruits



- 2/3 or more plant foods
- 1/3 or less animal foods

How do Plant Foods Fight Cancer?

Biological process protecting the cell, preventing initiation and progression	Examples of nutrients shown to support the process
Detoxification of carcinogens	Isothiocyanates, flavonoids
Protection of DNA from oxidation	Vitamins A, C, D, E and selenium
DNA repair	Folate, selenium, lycopene, retinoids
Cell cycle regulation	Polyphenols, retinoids, folate, selenium
Promotion of cell differentiation	Long-chain-omega-3 fatty acids, vitamin D, retinoic acid
Induction of apoptosis in initiated cells	Curcumin, polyphenols, sulforaphane, isothiocyanates, quercetin, lycopene
Prevention of angiogenesis	Indol-3-carbinol, curcumin
Suppression of inflammation	Omega-3 fatty acids, indol-3-carbinol
Regulation of hormonal signals	Soy isoflavones, vitamin D, carotenoids



Popular Diets that Fit the Recommendations



FLEXITARIAN DIET



**LACTO-OVO
VEGETARIAN DIET**



MEDITERRANEAN DIET

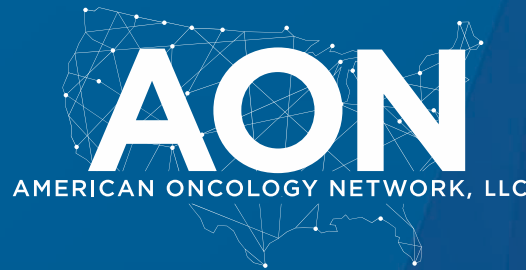


**PESCOVEGETARIAN
DIET (OR
PESCATARIAN)**



VEGAN DIET

Managing Nutrition Impact Symptoms



Common Nutrition Impact Symptoms During Cancer Treatment

Poor Appetite
and Fullness

Constipation

Diarrhea

Nausea/Vomiting

Poor Taste, Taste
Alterations

Fatigue

Malabsorption

Dry Mouth and
Thick Saliva

Difficult and
Painful
Swallowing

Malnutrition and Cancer



Malnutrition – Looks Can Be Deceiving



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What does Malnutrition look like?



Sudden unexpected weight loss



Slow-healing wounds



Loss of appetite



Feeling tired or fatigued



Muscle weakness



Swelling in your ankles, legs, or belly



Frequent nausea, vomiting, or diarrhea



Getting sick often

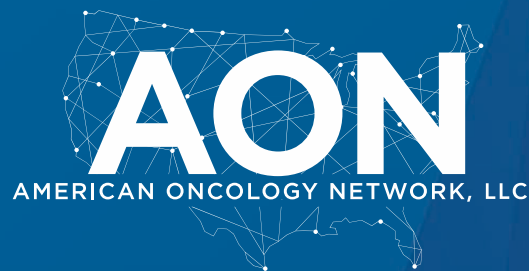
Food Insecurity and People with Cancer

Cancer can be a financially devastating diagnosis. Food insecurity is associated with adverse mental and physical outcomes

- Discuss ability to purchase and access food
- Educate about nutritious, cost-effective food options
- Direct to food assistance resources
- Referral for assistance with applying for supplemental nutrition programs



Nutrition Advocacy



Every Patient with Cancer Needs Access to a Qualified RD

Hindawi
Journal of Oncology
Volume 2019, Article ID 7462940, 8 pages
<https://doi.org/10.1155/2019/7462940>



Research Article

Inadequate Nutrition Coverage in Outpatient Cancer Centers: Results of a National Survey

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Cancer-related malnutrition is associated with poor health outcomes, including decreased tolerance to cancer therapy, greater treatment toxicities, and increased mortality. Medical nutrition therapy (MNT) optimizes clinical outcomes, yet registered dietitian nutritionists (RDNs), the healthcare professionals specifically trained in MNT, are not routinely employed in outpatient cancer centers where over 90% of all cancer patients are treated. The objective of this study was to evaluate RDN staffing patterns, nutrition services provided in ambulatory oncology settings, malnutrition screening practices, and referral and reimbursement practices across the nation in outpatient cancer centers. An online questionnaire was developed by the Oncology Nutrition Dietetic Practice Group (ON DPG) of the Academy of Nutrition and Dietetics and distributed via the ON DPG electronic mailing list. Complete data were summarized for 215 cancer centers. The mean RDN full-time equivalent (FTE) for all centers was 1.7 ± 2.0 . After stratifying by type of center, National Cancer Institute-Designated Cancer Centers (NCI CCs) employed a mean of 3.1 ± 3.0 RDN FTEs compared to 1.3 ± 1.4 amongst non-NCI CCs. The RDN-to-patient ratio, based on reported analytic cases, was $1:2,308$. Per day, RDNs evaluated and counseled an average of 7.4 ± 4.3 oncology patients. Approximately half (53.1%) of the centers screened for malnutrition, and 64.9% of these facilities used a validated malnutrition screening tool. The majority (76.8%) of centers do not bill for nutrition services. This is the first national study to evaluate RDN staffing patterns, provider-to-patient ratios, and reimbursement practices in outpatient cancer centers. These data indicate there is a significant gap in RDN access for oncology patients in need of nutritional care.

1. Introduction

The connection of poor and deteriorating nutritional status with adverse clinical outcomes during cancer treatment is well documented. Malnutrition is estimated to occur in up to 80% of cancer patients at some point during or after treatment [1, 2]. Unlike nonwasting malnutrition, cancer-related malnutrition results in accelerated weight loss

provoked by systemic inflammation and catabolic factors [3]. This concomitant negative energy balance and skeletal muscle loss is further driven by suboptimal dietary intake and metabolic alterations, including elevated resting energy expenditure, insulin resistance, lipolysis, and proteolysis.

A landmark study in 1980 introduced the concept that significant weight loss may compromise cancer patient survival, independent of conventional prognostic indicators

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Health / For Better / Why Oncology Centers Need ...

Why Oncology Centers Need More Dietitians to Help Patients Battle Cancer

Every cancer patient should have access to medical nutrition therapy as part of their standard of care.

By Colleen Spees | June 19, 2020, at 10:27 a.m.



When a patient is receiving cancer treatment, every part of that care is crucial. But despite the best efforts of clinicians around the country, patient care is lagging behind in an important area: nutrition.

In a new national survey of 215 outpatient cancer care centers, researchers found that for every one registered dietitian nutritionist, there are more than 2,300 cancer patients currently in treatment. The survey indicates a significant gap in access for oncology patients in need of nutritional care given



Make a Lasting Difference

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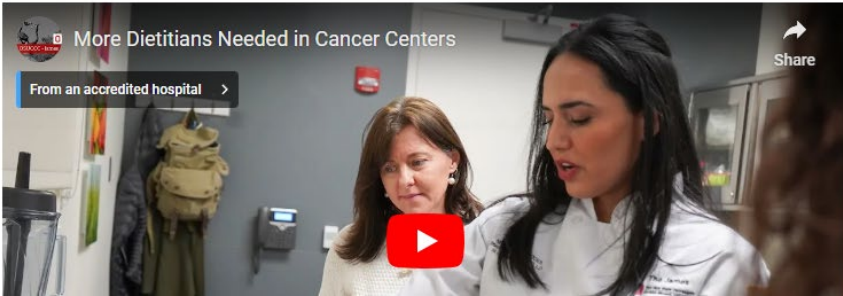
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Study: More Dietitians Needed in Cancer Centers to Help Patients Stay Well-Nourished Throughout Treatment and Beyond

Nutritional counseling optimizes cancer care, yet there's an average of about one dietitian for every 2,300 patients nationally



Multimedia Downloads

Documents

Press Release

(click here for preview)

Microsoft Word Document
PDF

TV Script

(click here for preview)

Microsoft Word Document

Advocacy: Medical Nutrition Therapy Act of 2021

- *S. 1536 Introduced and referred to the Senate Committee on Finance*
- *H.R 3108 Introduced and referred to the House Subcommittee on Health*

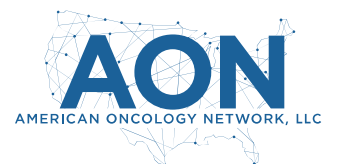
This bill expands Medicare coverage of **medical nutrition therapy (MNT)** services.

Currently, Medicare covers such services for individuals with diabetes or kidney disease under certain circumstances; such services must also be provided by a registered dietitian pursuant to a physician referral.

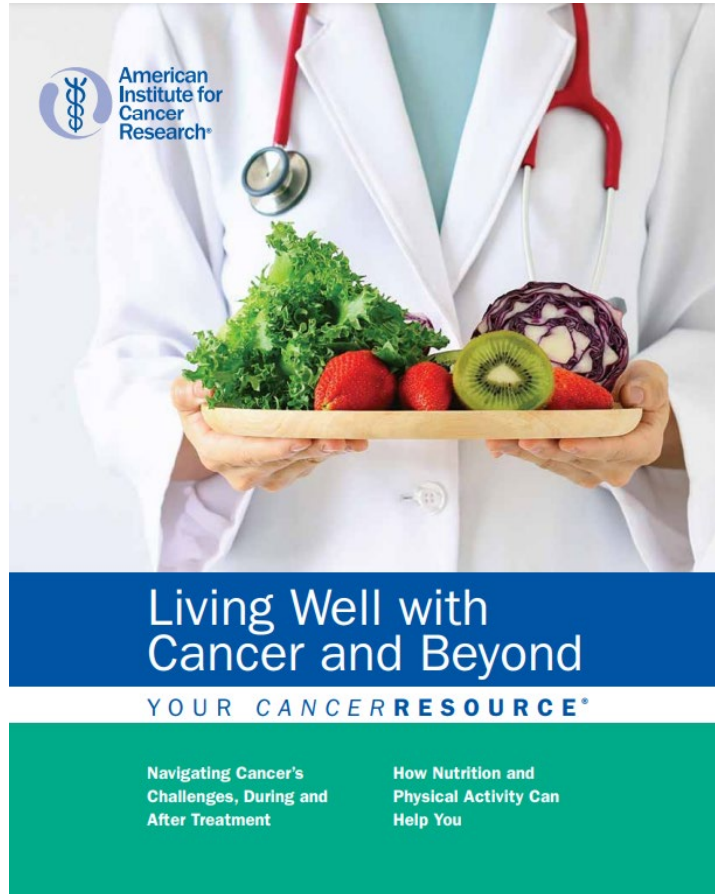
This bill extends coverage to individuals with other diseases and conditions, including obesity, eating disorders, **cancer**, HIV/AIDS, prediabetes, malnutrition, gastrointestinal diseases, cardiovascular disease, and hypertension; such services may also be referred by a physician assistant, nurse practitioner, clinical nurse specialist, or (for eating disorders) a clinical psychologist.

[congress.gov](https://www.congress.gov)

eatrightpro.org/advocacy



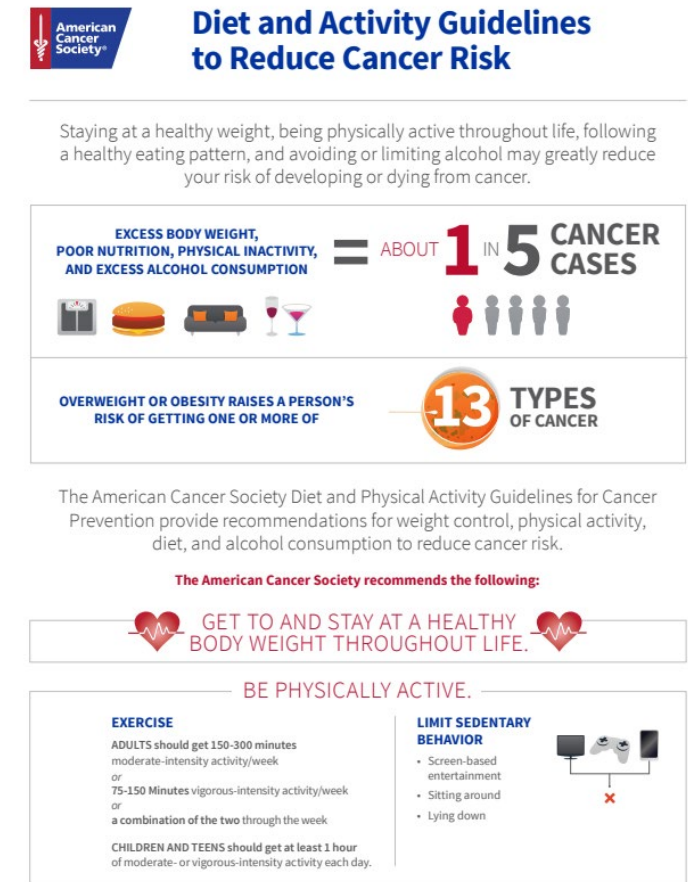
Resources



aicr.org



cancer.gov



cancer.org



Thank You to Jennifer Lafferty & Our Listeners!

Don't miss our next advocacy chat

Wednesday, April 12th at 12:00 pm ET

The Impact of Health Equity on Cancer Care



Audrey Davis, LPC, PM-LPC
Director of Health Equity
Cancer Support Community