

# ODP Portfolio Review: Data Snapshot

## NIH Pathways to Prevention Workshop: Nutrition as Prevention for Improved Cancer Health Outcomes

### Introduction

The [Pathways to Prevention \(P2P\) Workshop: Nutrition as Prevention for Improved Cancer Health Outcomes](#) was convened in July 2022 to assess the available scientific evidence for the effectiveness of providing nutritional interventions before or during cancer treatment to improve health outcomes for people with cancer. Previous studies have shown that interventions like medical nutrition therapy can help people with cancer keep a healthy body weight, maintain strength, respond to cancer treatment, and have a better quality of life. The goals of the workshop were to synthesize available evidence, identify research gaps, shape a research agenda, and develop an action plan to advance the field. Published products from the workshop include the Independent Panel Report, Systematic Evidence Review, and Federal Partners Meeting Report, which are available on the [workshop webpage](#).

### Purpose

A portfolio review was conducted during fall 2021 as part of the National Institutes of Health's (NIH) assessment of current federal agency support in the workshop topic area and informed by NIH subject matter experts. Aims of the review were to quantify and characterize current research activities, inform the identification of potential research and funding gaps, and provide a baseline to measure against future progress.

### Methods

NIH research projects (Types 1–9) funded from fiscal years 2016–2022 (FY16–22) were searched using the NIH RePORTER database based on the Research, Condition, and Disease Categories classified for both “Cancer” and “Nutrition.”

Project titles and abstracts were screened for relevance and included in the final dataset if they focused on nutritional interventions for populations of adults diagnosed with cancer including therapies, cognitive behavioral therapy, and lifestyle interventions pre-treatment and during treatment. Research projects were excluded if they included basic research or ineligible grant types (including career development and infrastructure awards). Relevant projects were manually screened and validated internally by Westat coders, Office of Disease Prevention staff, and NIH subject matter experts to ensure relevance to the research topic.

The funding and number of projects were broadly summarized across NIH Institutes and Centers to assess and develop a baseline of relevant research.

### Results and Summary of the Data

- The initial search yielded approximately 496 projects, of which 18 (3.6%) were determined to be directly relevant to the focus of this P2P workshop.

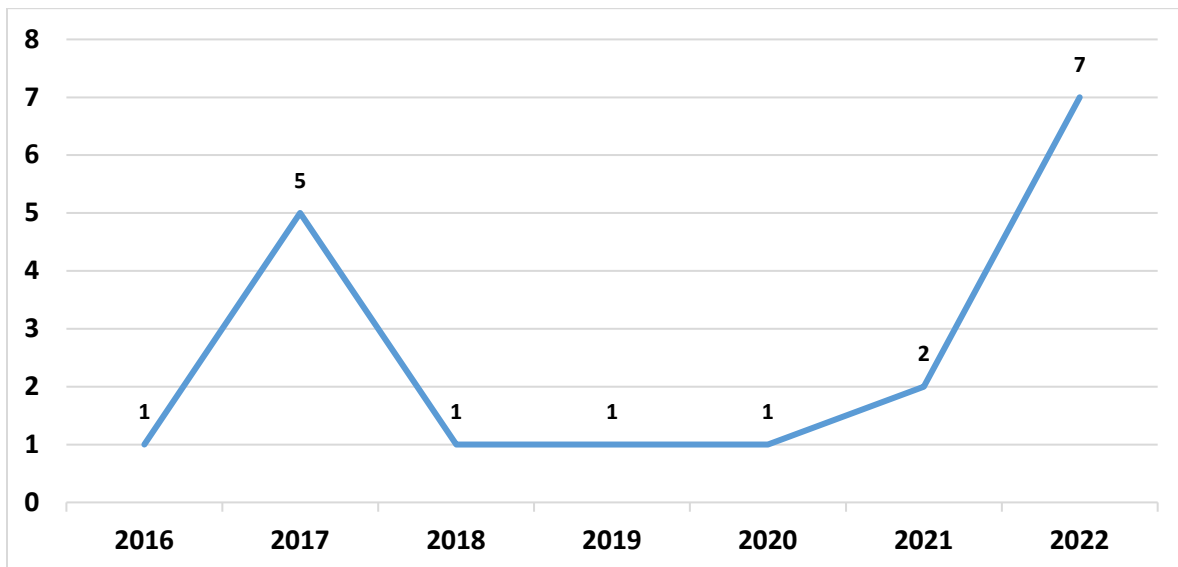
- The National Cancer Institute supported all 18 relevant research projects with funding totaling \$8,487,167.
- From 2016–2017, there was an increase from one to five in the annual number of relevant projects. There was a decline between 2018–2020 and then an increase again from two to seven relevant projects between 2021–2022.

## Implications

Review of the NIH research portfolio found that less than two dozen projects were funded over the last six years that developed, tested, or assessed the impact of nutritional intervention among adults diagnosed with cancer before or during treatment. A body of high-quality evidence exists indicating that in people with cancer, malnutrition including both under- and over-nutrition is associated with adverse effects and poor health outcomes. However, the evidence reviews and workshop presentations revealed large gaps in knowledge, including standard definitions associated with nutritional status, lack of validated instruments to assess status, and the overall effectiveness and cost-effectiveness of nutritional interventions for patients diagnosed with cancer.

This summary of NIH’s FY16–22 portfolio represents a baseline that will be used to measure future progress as the [independent panel's report recommendations](#) and federal partners action plan are implemented to address this critical research need.

## Relevant NIH-Funded Projects by Fiscal Year (FY16–22)



## NIH Projects Relevant to the Workshop Topic (FY16–22)

Project Number	Project Title
1R01CA227479-01	<a href="#"><u>(11) Diet Modification to Augment Radiation for Breast Cancer Brain Metastases</u></a>
1R21CA215557-01A1	<a href="#"><u>A Mobile-Support Program to Facilitate Nutritional Caregiving in Head and Neck Cancer</u></a>
3R01CA207753-03S1	<a href="#"><u>A randomized trial of lifestyle guidelines on breast cancer biomarkers and treatment adherence</u></a>
1R01CA207753-01A1	<a href="#"><u>A randomized trial of lifestyle guidelines on breast cancer biomarkers and treatment adherence</u></a>
1F31CA268894-01A1	<a href="#"><u>Bridging the Gap: Evaluating why and how to implement lifestyle programs for cancer patients into routine clinical oncology care</u></a>
1OT2CA278669-01	<a href="#"><u>CANCAN - Cambridge</u></a>
3R01CA227479-04S1	<a href="#"><u>Diet Modification to Augment Radiation for Breast Cancer Brain Metastases</u></a>
1R01CA260901-01A1	<a href="#"><u>Early clinical trials for Angelica herbal supplements for prostate cancer interception</u></a>
1R21CA218888-01	<a href="#"><u>Every Day Counts: A Lifestyle Program for Women with Metastatic Breast Cancer</u></a>
1R01CA258349-01A1	<a href="#"><u>High-dose Vitamin D Supplementation for ADT-Induced Bone Loss in Older Prostate Cancer Patients</u></a>
1R01CA207749-01	<a href="#"><u>Impact of Web-Based Lifestyle Interventions on Prostate Cancer Prognosis</u></a>
1R01CA205406-01A1	<a href="#"><u>Novel randomized controlled trials of vitamin D supplementation in patients with colorectal cancer: Impact on survival and biology</u></a>
1R21CA256644-01A1	<a href="#"><u>Prolonged Nightly Fasting as a Behavioral Intervention for Obesity Reduction and the Prevention of Progression in Precursor Multiple Myeloma</u></a>
1U01CA271277-01	<a href="#"><u>TeleHealth Resistance exercise Intervention to preserve dose intensity and Vitality in Elder breast cancer patients (THRIVE)</u></a>
1R01CA258222-01	<a href="#"><u>Time-Restricted Eating and Cancer: Clinical Outcomes, Mechanisms, and Moderators</u></a>

Project Number	Project Title
1U01CA271278-01	<a href="#">Trial of Exercise and Lifestyle (TEAL) in Women with Ovarian Cancer</a>
3R01CA214890-04S1	<a href="#">Vitamin D and Follicular Lymphoma</a>
1R01CA214890-01A1	<a href="#">Vitamin D and Follicular Lymphoma</a>

### **Additional Information**

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