Let Food Be Thy Medicine:
What we eat matters for patients, ourselves and our environment

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Survivorship Clinic
Moffitt Cancer Center
Objectives

Identify the importance of engaging our patients in nutrition-related guidance during oncology-based clinical practice

Review current nutrition guidelines for cancer and chronic disease prevention; how to incorporate them into clinical practice and personal space

Discuss the impact of healthy diet on environmental sustainability
Rate of Obesity is 37.7%
Obesity rates survivors referred to Survivorship Clinic

<table>
<thead>
<tr>
<th>Body Mass Index (BMI)</th>
<th>N=657</th>
<th>% in Survivors</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 25</td>
<td>229</td>
<td>34.9</td>
</tr>
<tr>
<td>25-29</td>
<td>219</td>
<td>33.3</td>
</tr>
<tr>
<td>Class I 30-34</td>
<td>122</td>
<td>18.6</td>
</tr>
<tr>
<td>Class II 35-39</td>
<td>59</td>
<td>9.0</td>
</tr>
<tr>
<td>Class III &gt;40</td>
<td>28</td>
<td>4.3</td>
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</tbody>
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65% are BMI>25
32% BMI>30
Advise patients on current weight status and whether there is need to lose weight or prevent weight gain based on BMI category and considerations regarding disease state and treatment; **encourage regular exercise and healthy eating at all points from diagnosis to long term follow up in all patients, regardless of weight status; highlight positive impact that improved diet and increased physical activity can have, including better quality of life, less fatigue, better body image and lower incidence of comorbidity**

Refer patients to appropriate services, such as oncology nutrition, rehab medicine, and exercise physiology.
How Does Physician Advice Influence Patient Behavior?

Evidence for a Priming Effect

Matthew W. Kreager, PhD, MPH; Shobhina G. Chheda, MD, MPH; Fiona C. Bull, PhD

Objective: To explore a potential “priming effect” of physician advice on patient responses to behavioral change interventions.

Design: Randomized controlled trial with a 3-month follow-up.

Setting: Four community-based group family medicine clinics in southeastern Missouri.

Participants: Adult patients (N = 915).

Interventions: Printed educational materials designed to encourage patients to quit smoking, eat less fat, and increase physical activity.

Main Outcome Measures: Recall, rating, and use of the educational materials; changes in smoking behavior, dietary fat consumption, and physical activity.

Results: Patients who received physician advice to quit smoking, eat less fat, or get more exercise prior to receiving intervention materials on the same topic were more likely to remember the materials, show them to others, and perceive the materials as applying to them specifically. They were also more likely to report trying to quit smoking (odds ratio [OR] = 1.54, 95% confidence interval [CI] = 0.95-2.40), quitting for at least 24 hours (OR = 1.85, 95% CI = 1.02-3.34), and making some changes in diet (OR = 1.33, 95% CI = 1.00-1.84) and physical activity (OR = 1.51, 95% CI = 0.95-2.40).

Conclusions: Findings support an integrated model of disease prevention in which physician advice is a catalyst for change and is supported by a coordinated system of information and activities that can provide the depth of detail and individualization necessary for sustained behavioral change.

Arch Fam Med. 2000;9:426-433

What Do Resident Physicians Know about Nutrition? An Evaluation of Attitudes, Self-Perceived Proficiency and Knowledge

Marion L. Vetter, MD, RD; Sharon J. Herring, MD; Minisha Sood, MD; Nirav R. Shah, MD, MPH; and Adina L. Kalet, MD, MPH

Division of General Internal Medicine, Section of Primary Care, Department of Medicine, New York University School of Medicine, New York, New York (M.L.V., S.J.H., M.S., N.R.S., A.L.K.), Department of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania (M.L.V.), Department of Ambulatory Care and Prevention, Harvard Medical School and Harvard Pilgrim Healthcare, Boston, Massachusetts (S.J.H.)

Abstract

Objective—Despite the increased emphasis on obesity and diet-related diseases, nutrition education remains lacking in many internal medicine training programs. We evaluated the attitudes, self-perceived proficiency, and knowledge related to clinical nutrition among a cohort of internal medicine interns.

Methods—Nutrition attitudes and self-perceived proficiency were measured using previously validated questionnaires. Knowledge was assessed with a multiple-choice quiz. Subjects were asked whether they had prior nutrition training.

Results—Of the 114 participants, 61 (54%) completed the survey. Although 77% agreed that nutrition assessment should be included in routine primary care visits, and 94% agreed that it was their obligation to discuss nutrition with patients, only 14% felt physicians were adequately trained to provide nutrition counseling. There was no correlation among attitudes, self-perceived proficiency, or knowledge. Interns previously exposed to nutrition education reported more negative attitudes toward physician self-efficacy (p = 0.03).

Conclusions—Internal medicine interns’ perceive nutrition counseling as a priority, but lack the confidence and knowledge to effectively provide adequate nutrition education.
WHAT IS A PLANT-BASED DIET?

A plant-based diet offers powerful health benefits, including lower risk for cancer and many other chronic diseases. AICR evidence shows that eating whole grains, vegetables and other plant foods contribute to cancer protection. Choosing a diet that puts plant foods first also helps support a healthy weight – the most important lifestyle factor for reducing cancer risk, other than not smoking.

VEGETARIAN, VEGAN, PESCATAIRAN, FLEXITARIAN…

WHAT EXACTLY IS A PLANT-BASED DIET?

A plant-based diet is a diet built around a plate filled with mostly vegetables, fruits, whole grains and beans.
Transition to the *New American Plate*

AICR.org

Stage 1: The Old American Plate

Stage 2: The Transitional Plate

Stage 3: The New American Plate
Adherence to the Mediterranean diet and risk of breast cancer in the European prospective investigation into cancer and nutrition cohort study


Affiliations + expand
PMD: 23180513 DOI: 10.1002/jjc.27958 Free article

Abstract

Epidemiologic evidence suggests that the Mediterranean diet (MD) could reduce the risk of breast cancer (BC). As evidence from the prospective studies remains scarce and conflicting, we investigated the association between adherence to the MD and risk of BC among 335,062 women recruited from 1992 to 2000, in ten European countries, and followed for 11 years on average. Adherence to the MD was estimated through an adapted relative Mediterranean diet (aMED) score excluding alcohol. Cox proportional hazards regression models were used while adjusting for BC risk factors. A total of 9,009 postmenopausal and 1,216 premenopausal first primary incident invasive BC were identified (5,862 estrone or progestrone receptor positive [ER+/PR+] and 1,018 estrogen and progestrone receptor negative [ER-/PR-]). The aMED was inversely associated with the risk of BC overall and in postmenopausal women (high vs. low aMED score: hazard ratio [HR] = 0.94 [95% confidence interval [CI]: 0.88, 1.00] p trend = 0.048, and HR = 0.93 [95% CI: 0.87, 0.99] p trend = 0.037, respectively). The association was more pronounced in ER+/PR+ tumors (HR = 0.80 [95% CI: 0.65, 0.99] p trend = 0.043). The aMED score was not associated with BC in premenopausal women. Our findings show that adherence to a MD excluding alcohol was related to a modest reduced risk of BC in postmenopausal women, and this association was stronger in receptor-negative tumors. The results support the potential scope for BC prevention through dietary modification.
Whole Grains: Going Against the (Refined) Grain

Dietary Fiber: Fiber Is Your Friend.

Fruits and Vegetables: More Is More

Protein: Animal vs. Plant Power

Fats: The Good, the Bad and the Ugly

Sugar: Less Is More.
Going against the (refined) grain

Examples: Quinoa, whole wheat, farro, barley, whole oats

Meal planning tip: Make a pot of a “grain of the week” weekly and multi-task it for breakfasts, lunch bowls and dinner sides.
Dietary Fiber: Fiber is your friend.

Dietary Fiber
25-35g/day

S.A.D. standard american diet
12-15g/per day fiber

Soluble Fiber:
Dissolvable in water, lowers LDL.
- oats, peas, beans, apples, citrus, carrots, barley

Insoluble Fiber:
Aids in digestion and increases stool bulk
- whole wheat flour, wheat bran, nuts, beans, cauliflower, green beans, potatoes.

Meal Planning Tips:
- Add cooked whole grains like quinoa and farro as well as nuts and fruits to salads
- Add whole uncooked oats and seeds (chia, flax) to smoothies
- Lightly toast sprouted grain or whole grain bread for enhanced flavor and texture, top with ricotta cheese or avocado.
- Try hummus and bean dips as a sandwich spread for added fiber and protein.
- Fill ½ of your plate with fruits and vegetables.
Meal Prep Tips:
- Try roasting and air-frying vegetables for use on sandwiches, salads, as sides or in omelets
- Frozen fruits and vegetables are economical and frozen at peak of freshness
- Dried, unsulfured fruits make great snacks paired with nuts, top hot cereals and salads
- Invite kids to select fruits and vegetables when shopping for more buy-in
- Substitute spiralized vegetables or spaghetti squash for pasta. Check out the ready-spiralized veggies in the produce department.

Source: USDA
**Protein: Animal vs. Plant Power**

*Complete Proteins:*
*Animal sources: *eggs, fish, chicken, etc.

*Plant Sources:*
Quinoa, Amaranth, Soy

*Complementary Proteins:*
Beans + Rice
Hummus + Pita
Peanut butter sandwich

**Over-served?**

What we need:
46-56g protein/ day*
*possibly higher based on activity and stress levels

What we consume:
100g protein/ day

Image: Nutrition.org
Meal Planning Tip: The Protein Flip

Classic Chicken Marsala

Mushroom and Chicken Marsala Bowl
Fat: The Good, the Bad and the Ugly
Salmon, Tuna, Fatty Fish
Walnuts, Canola Oil, Flax Seeds
Corn, Soy, Safflower & Sunflower Oils
Olive** & Peanut Oils, Nuts, Avocados
Red Meat, Butter, Cheese, Ice Cream***
Partially Hydrogenated Oil

Seafood Omega-3 Fats
Plant Omega-3 Fats
Plant Omega-6 Fats
Monounsaturated Fats
Saturated Fats
Industrial Trans Fats
Sugar: Less is more.

- Cut the sugar from morning coffee/tea-
- Try not to “drink” your calories, hydrate with unsweetened beverages
- Read labels - Look at added sugar amount
- Ingredients are listed by weight, try to keep sugar out of the first 3
- Enjoy dark chocolate, fruit, or bake your own treats with less added sugar

3500 calories = 1 pound of weight

Sugar
1 tsp = 4g
Women 24g/day, 6 tsp
Men 36g/day, 9 tsp

The American Heart Association recommends that women consume no more than 6 teaspoons and men no more than 9 teaspoons of added sugars per day. Even one 20 oz. soda contains far more than that.

Image: health.harvard.edu
Image: americanobesityassoc.
SOAR 
SURVIVORS OVERCOMING AND ACHIEVING RESILIENCY
A FREE 1.5 hour, nine-week interactive workshop designed to empower breast cancer survivors and promote a healthy transition from active treatment. Learn strategies on nutrition, stress management and exercise to encourage health and well-being.

Weekly sessions
begin Tuesday,
September 7, 2021
6:00-7:30 PM
Virtually on Zoom

To register and for more information please visit our website.

*Enroll prior to August 31, 2021. Contact Diane Reardon at 813-745-3973 or via email to SOAR@moffitt.org for more details.
Animal-Based Foods Are More Resource-Intensive than Plant-Based Foods

PER TON PROTEIN CONSUMED

WRI.org/shiftingdiets
Food is the single strongest lever to optimize human health and environmental sustainability on Earth.

- Summary Report from EAT- Lancet Commission
COVID-19 AND THE FUTURE: WHAT PLANT-FORWARD MEANS NOW

“The COVID-19 pandemic, sadly, has laid bare the poor health of too many Americans. The ‘underlying conditions’ — the chronic diseases from obesity and diabetes to heart disease and many cancers — correctly cited as heightened coronavirus risk factors for causing severe, life-threatening infections and higher death rates are closely tied to unhealthy diets and lifestyle choices. More broadly, these are the same unhealthy food choices that, in the aggregate, undermine our ability to stop climate change and achieve both planetary sustainability and resilience in our food systems.

- Walter Willett, MD, DrPH, Professor and Past Chair, Department of Nutrition, Harvard T.H. Chan School of Public Health; Chair, Menus of Change Scientific & Technical Advisory Council; Co-Chair, EAT-Lancet Commission
Eat food.
Not too much.
Mostly plants.

-Michael Pollan
In Defense of Food
References
-AICR.org
-Myplate.gov
-ACS.org
-Healthmeetsfood.com- CCMS courseware
-USDA.gov
-Heart.org
-Wri.org/shiftingdiets
-ciaprochef.com/MOC/PFbytheNumbers
References cont.