

WELLNESS EDUCATION FOR CANCER NUTRITION



A COMMUNITY STUDY TO IMPROVE
PATIENT INTAKE OF FRUITS, VEGETABLES
AND OTHER PLANT FOODS
SHOWN TO IMPROVE
CANCER TREATMENT OUTCOMES



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INTRODUCTION



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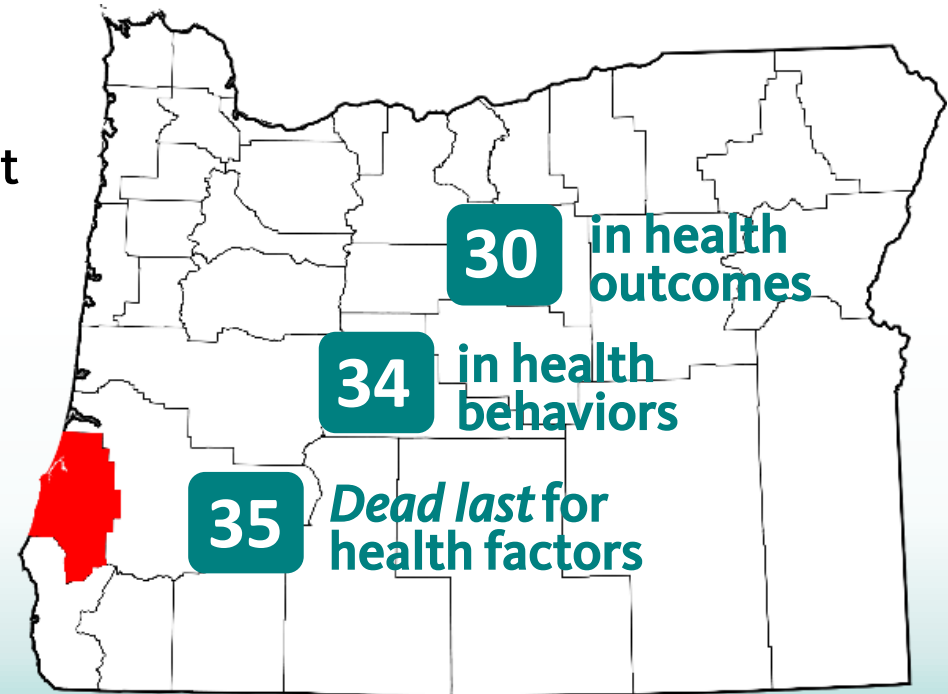
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WELLNESS EDUCATION FOR CANCER NUTRITION

- 3-Tiered cancer study funded by OHSU Knight Cancer Institute Community Partnership Program
- Awarded to OSU Coos County Extension Family & Community Health, Feb 2019

RATIONALE

- Cancer is the #1 cause of death in Coos Co
- RWJF 2018 County Health Rankings



COUNTY HEALTH RANKINGS



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HEALTH OUTCOMES

- Length of life
- Quality of life
- Poor physical & mental days
- Low birthweight

34

HEALTH BEHAVIORS

- Smoking
- Obesity
- Physical activity
- Alcohol use
- Sexually transmitted infections
- Teen births

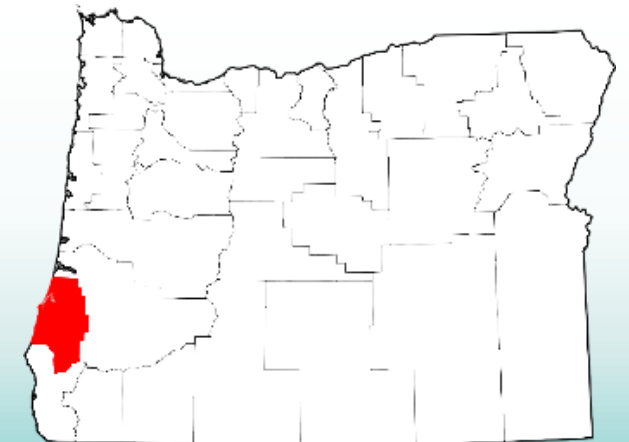
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HEALTH FACTORS

- Clinical care
- Socioeconomic factors
- Physical environment



**County Health
Rankings & Roadmaps**
A Healthier Nation, County by County



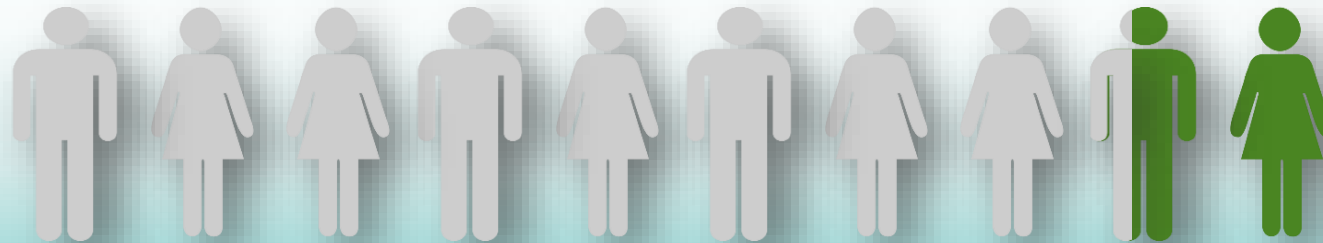
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WHY NUTRITION?



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- Studies demonstrate that intake of fruits and vegetables can improve outcomes for cancer patients by reducing incidence, severity and associated morbidity¹
- High-fiber diets feed the microbiome which improves immunity, reduces toxicity of cancer treatment therapies and enhances effectiveness²
- According to the 2018 Coos County Community Health Assessment, less than 15% of Coos County residents eat the minimum servings of 5 fruits and vegetables each day³
- Extension faculty is the only RD to provide community nutrition education for disease prevention and reversal in the county



1. Cruciferous vegetables and cancer prevention, National Cancer Institute
2. <https://www.sciencedirect.com/science/article/pii/S153561081830120X>
3. Coos County Community Health Assessment (2018)



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WHY NUTRITION?



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- # of health facilities in Coos County that employ Registered Dietitians
- # of full-time dietitians at that facility

16

- # of hours per week allocated for an RD to work with cancer patients at the cancer center
- That time is used to support only high-risk patients (ie: feeding tubes)
- Medium and low risk patients are not referred to an RD and do not receive nutrition support

20

- % of US medical schools that provide nutrition as part of the medical training curriculum



Adams, K., Butsch, W.S. & Kohlmeier, M. (2015). The state of nutrition education at US medical schools. *Journal of Biomedical Education*, vol 2015, Article 357627.



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STUDY TEAM



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Nurse Navigator
Bay Area Cancer Center



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Research Assistant
OSU Biochemistry & Physics



WE CAN GOALS



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**To identify
and implement
intervention strategies
that link cancer patients
with plant-based
nutrition resources
during and post
treatment**

TIER 1

- Identify gaps in current practices of healthcare professionals for including nutrition therapy in treatment care plans
- Prioritize strategies

TIER 2

- Identify and adapt interventions to bridge the gaps identified in Tier 1 surveys
- Implement and evaluate interventions at the pilot site

TIER 3 and LONG-TERM GOALS

- Roll out nutrition intervention strategies county-wide encompassing all disease states
- Encourage medical professionals to engage in professional development in nutrition
- Build community capacity for referrals (hiring RDs, training health coaches)
- Make fruits & vegetables easy to access and consume
- Lower the incidence and prevalence of cancer rates in Coos County



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TIER 1 METHODS



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- Surveyed healthcare professionals and staff from all 10 healthcare sites to determine current practices and attitudes regarding nutrition and patient care
 - ✓ 3 hospitals
 - ✓ 3 federally-qualified health centers
 - ✓ 2 health clinics
 - ✓ Public Health Department
 - ✓ CCO
- Surveyed cancer patients and their caregivers identified through the survivorship program at Bay Area Cancer Center

2

- Held focus groups and personal follow-up sessions to identify potential strategies for bridging gaps identified in surveys



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TIER 1 RESULTS



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HEALTHCARE

- Goal of 40 surveys, received 96, 13 follow-up surveys, 2 focus groups
- 98% of healthcare professionals believe nutrition should be part of patient care plan
- 53% stated they used no nutrition assessment tool
- Lab results and physical exams were considered nutrition assessment tools

SURVIVOR/CAREGIVER

- Goal of 50 surveys, received 87, (58 pt, 29 caregivers), 3 focus groups
- 96% of patients, 95% caregivers believe nutrition should be part of medical treatment plan
- 86% patients stated they received no nutrition assessment
- Nutrition recommendations included “I was told to watch my diet”
- Comments indicated the patient would be more likely to listen to professional nutrition advice over family/friends



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TIER 1 RESULTS



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HEALTHCARE

- 72% stated they have little or no nutrition education
- 51% stated they have little or no confidence in their ability to counsel in nutrition
- 5% with high confidence would most likely be RDs who participated
- #1 problem perceived by healthcare providers is the lack of options for referring patients to qualified nutrition professionals

SURVIVOR/CAREGIVER

- 66% of patients, 50% caregivers have very low confidence in their nutrition education
- 72%/67% stated they did not receive nutrition advice from qualified professionals
- Comments indicated patients are using a variety of websites, books, TV programs, and media to find nutrition information
- Sources may or may not be evidence-based



“We are at a loss as to how to define this, never mind how to address it.”
Healthcare survey feedback



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SUGGESTED INTERVENTIONS

HEALTHCARE

- Policies and procedures to guide clinic process in nutrition assessment
- More options for patient referrals
- Written nutrition guidelines that could be handed to patients
- Educate health professionals and staff in lifestyle medicine practices
- Brochure with reputable online and community resources

SURVIVOR/CAREGIVER

- Nutrition be prioritized by providers
- Written nutrition guidelines
- RD referral for consultation
- List of appropriate websites
- On-going support from health coaches, classes in nutrition and cooking



SELECTED INTERVENTIONS



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1

Provide a Nutrition Assessment Tool (NAT) that can be easily inserted into the patient intake procedures

Provide keys for using the NAT (healthcare staff and patients)

2

Provide written nutrition guidelines

3

Create a resource booklet including local and online opportunities for learning, skill-building and health coaching



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SELECTED TIER 2 INTERVENTIONS

- NAT adapted from Rapid Eating Assessment for Patients (REAP-S)
- Patient and provider keys
- Procedure protocols for implementing
- Written nutrition guidelines
 - ✓ HEAL WELL (AICR) book
 - ✓ Local resources booklet
- Evaluation
 - ✓ All protocols, tools and resources will be evaluated by healthcare staff
 - ✓ Written resources will be evaluated by patients

Patient Name _____ Date of Birth _____ Date _____

Nutrition Assessment Tool (NAT)

Please respond to all 17 questions. Circle the number that represents your typical day.

	In an average day how often do you:	Usually Often	Sometimes	Rarely Never	Score
Fruits & Veggies	1. Eat less than 3 servings of whole fruit? Serving = 1/2 cup cut or 1 medium whole fruit. Do not include juice.	3	2		
	2. Eat less than 5 servings of fresh or frozen vegetables like broccoli, green beans, cabbage, cauliflower, asparagus, sweet potato, squash, zucchini, carrot, cucumber, raw lettuce (spinach, kale, Romaine). Serving = 1/2 cup cooked or 1 cup raw	3	2		
Legumes	3. Eat less than 3 servings of beans (black, pinto, lima, garbanzo, etc), lentils, split peas or soy beans? Serving = 1/2 cup cooked	3	2		
Grains	4. Eat more than 3 servings of bread, pasta, rice, pizza dough or other foods made from refined (white) grain products? Serving = 1 slice bread, 1/2 bagel, 1/2 cup rice or pasta, 1 3" slice pizza	3	2		
Meat	5. Eat more than 3 ounces of meat (beef, chicken, fish, game meat)? Serving = approximately size of a deck of cards	3	2		
	6. Eat more than 3 eggs per week ?	3	2		
	7. Eat lunchmeats (ham, salami, roast beef, corned beef, turkey, liverwurst), hot dogs, sausage, pepperoni or bacon?	3	2		
Dairy	8. Consume milk, cream, yogurt, ice cream or cheese?	3	2		
Fats	9. Add butter, margarine or oil to bread, potatoes, vegetables or rice before serving?	3	2		
	10. Eat fried foods such as burgers, pan or deep fried chicken, fried fish, pan fried noodles, French fries or tater tots?	3	2		
Sweets & Snacks	11. Eat sweets like cake, cookies, pastries, donuts, muffins, chocolate or other candy?	3	2		
	12. Eat snack foods like chips, crackers, popcorn, or nuts?	3	2		
	13. Drink juice, soda, fruit drink, sweet tea, punch, Kool-Aid, energy drinks or sports drinks (regular or sugar-free)?	3	2		
Meal Pattern	14. Purchase food from restaurants, take out, fast foods or convenience stores?	3	2		
	15. Follow a special diet, eat or limit certain foods for health or other reasons?	3	2		
Food Insecurity	16. Have trouble shopping for, or preparing food?	3	2		
	17. Worry if your food will run out before you have money to buy more?	3	2		
					Total Score



Gans, K. M., Risica, P.M., Wylie-Rosett, J., Ross, E. M., Stolla, L. O., McMurray, J., & Eaton, C. B. (2006). Development and Evaluation of the Nutrition Component of the Rapid Eating and Activity Assessment for Patients (REAP): A New Tool for Primary Care Providers. *Journal Nutrition Education and Behavior*, 38(5), 286-292.
<https://www.sciencedirect.com/science/article/pii/S1499404605000436?via%3Dihub>

BUILDING COMMUNITY CAPACITY



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- Currently going on during Tier 2 “behind the scenes”
- Provide nutrition education opportunities
 - ✓ CMEs for healthcare staff
 - ✓ Free presentations for residents
- Increase capacity for referrals
 - ✓ Real Balance Global Wellness Health Coach Certification Training
 - ✓ Educate health professionals on reimbursement for shared appointments
- Create and or help market community programs that bridge gaps in healthcare services

Coos Bay Library & Coos Head Food Co-op present

COMMUNITY COOKING WITH THE CO-OP

FREE! FUN!

MONTHLY EVENT: EVERY 4TH THURSDAY!

Coos Bay Library has with Coos outreach, Jamar, to easy, and es to create us virtually

Event Recipe: Jackfruit BBQ Sliders

Thursday July 23 5:30pm

Register for this virtual event <https://is.gd/PTIGU>

COOS BAY PUBLIC LIBRARY (541) 269-1101 <http://coosbaylibrary.org>



OREGON STATE UNIVERSITY EXTENSION FAMILY & COMMUNITY HEALTH presents

Magic Beans

Beans have the power to lower cholesterol, control blood sugars, AND save money!

Featuring Stephanie Polizzi, MPH, RD

Certified Lifestyle Medicine Practitioner
OSU Extension
Family & Community Health

Sponsored by
North Bend Public Library

**Tue Oct 6
12-1:00 pm**

Online Webinar
To join go to:
<https://oregonstate.zoom.us/j/229803250>

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TIER 3 PROPOSAL



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**To expand
the use of nutrition
assessments and
educational resources
across all healthcare
sites and practices in
Coos and Curry
Counties**

- Expand use of the NAT in primary care and other healthcare settings for patients diagnosed with any chronic condition
- Provide trainings, CME opportunities and resources for healthcare professionals to learn about lifestyle medicine and potential reimbursement for nutrition-related services
- Work with community partners and coalitions to:
 - ✓ Establish programs, classes and resources to help residents make dietary improvements
 - ✓ Expand Veggie Rx or Farmacy programs across multiple county sites
 - ✓ Identify, establish or create sites for teaching kitchens
- Establish a lifestyle medicine program in the county (CHIP*)
- Create a network of certified health coaches and referral opportunities
 - ✓ Support national board coaching certification



ACKNOWLEDGEMENTS



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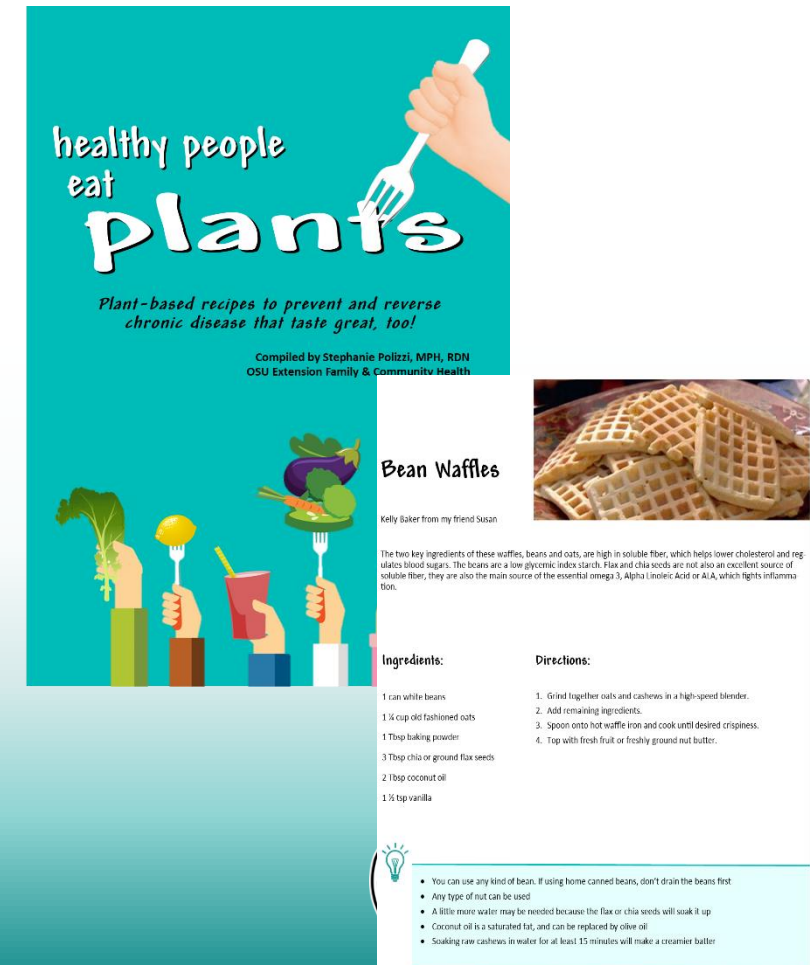
- OHSU
Knight Cancer Institute



- Bay Area Hospital
- Bay Area Cancer Center



- Research team including Jenny Pinard and Mikayla Pivek for their work on the resource booklet and *Healthy People Eat Plants* cookbook
- OSU FCH for allocating FTE to community research



A vertical strip on the left side of the slide featuring a collage of various fruits including grapes, kiwi, pineapple, and tomatoes.

IN CLOSING



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**The food you eat can either be the safest
and most powerful form of medicine,
or the slowest form of poison.**

*Ann Wigmore
Holistic health practitioner, naturopath,
vegetarian and raw food advocate
who believed in eating more plants and less animal foods*



Although the WE CAN study is currently focused on cancer,
the goal is to help Coos County residents increase intake
of fruits and vegetables in order to improve health outcomes
in the prevention and treatment of all chronic diseases.



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THANK YOU!



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**"Let food be
thy medicine
and medicine
be thy food."**

~Hippocrates

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