



# Food Is Hope

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# Disclaimer

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Information in this presentation is for educational purposes only and is not offered as medical advice or recommendation.





# What's the Best Diet for Cancer?

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- Vegan/Plant Based
- Vegetarian
- Pesco vegetarian
- Lacto Ovo Vegetarian
- Paleo
- Ketogenic
- Mediterranean
- Plant Focused



# The Best Diet is the One That Works For You

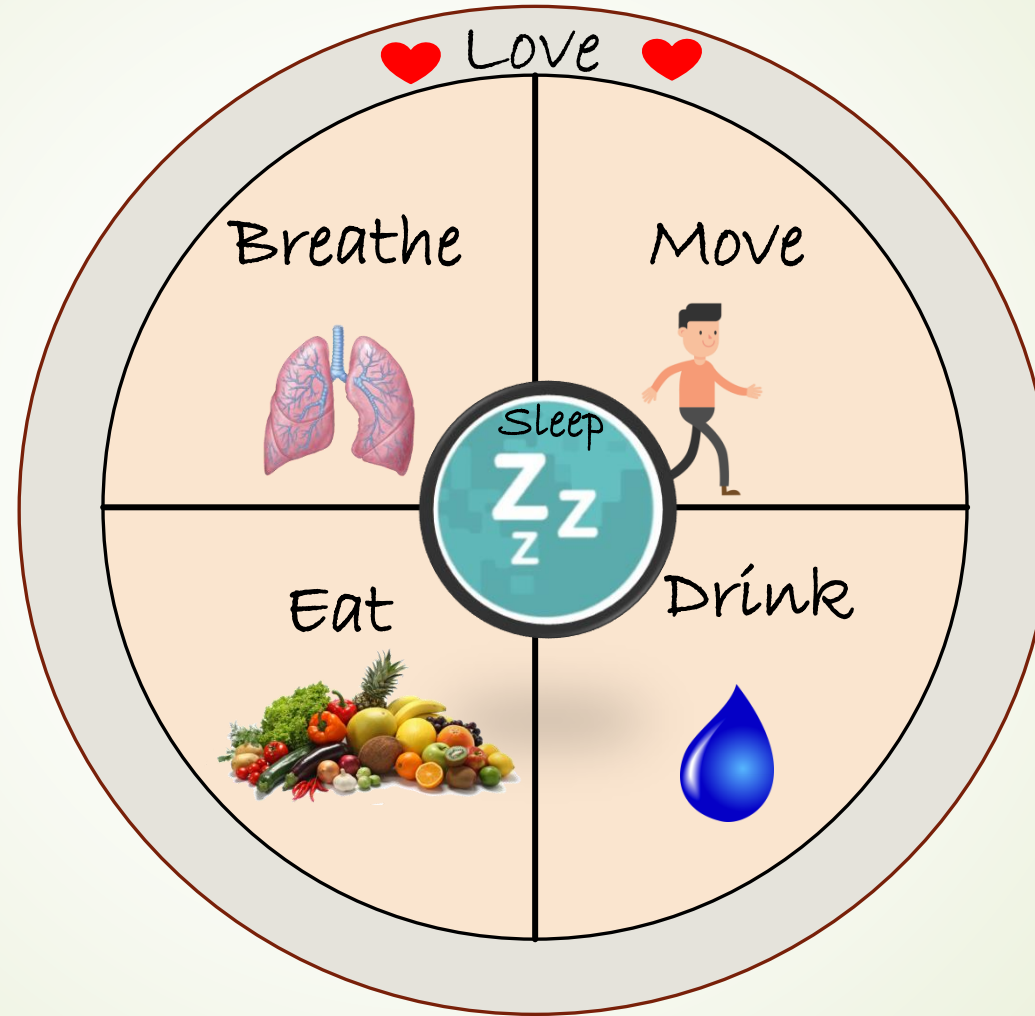


- *Personalized Nutrition*
- Honor Individual Needs
- 4Cs
  - Constitution
  - Condition
  - Context
  - Commitment
- Likes/Dislikes

*The goal of nutrition in treatment is to maximize the healing process.*

# Self Nourishment-Your Health Plan

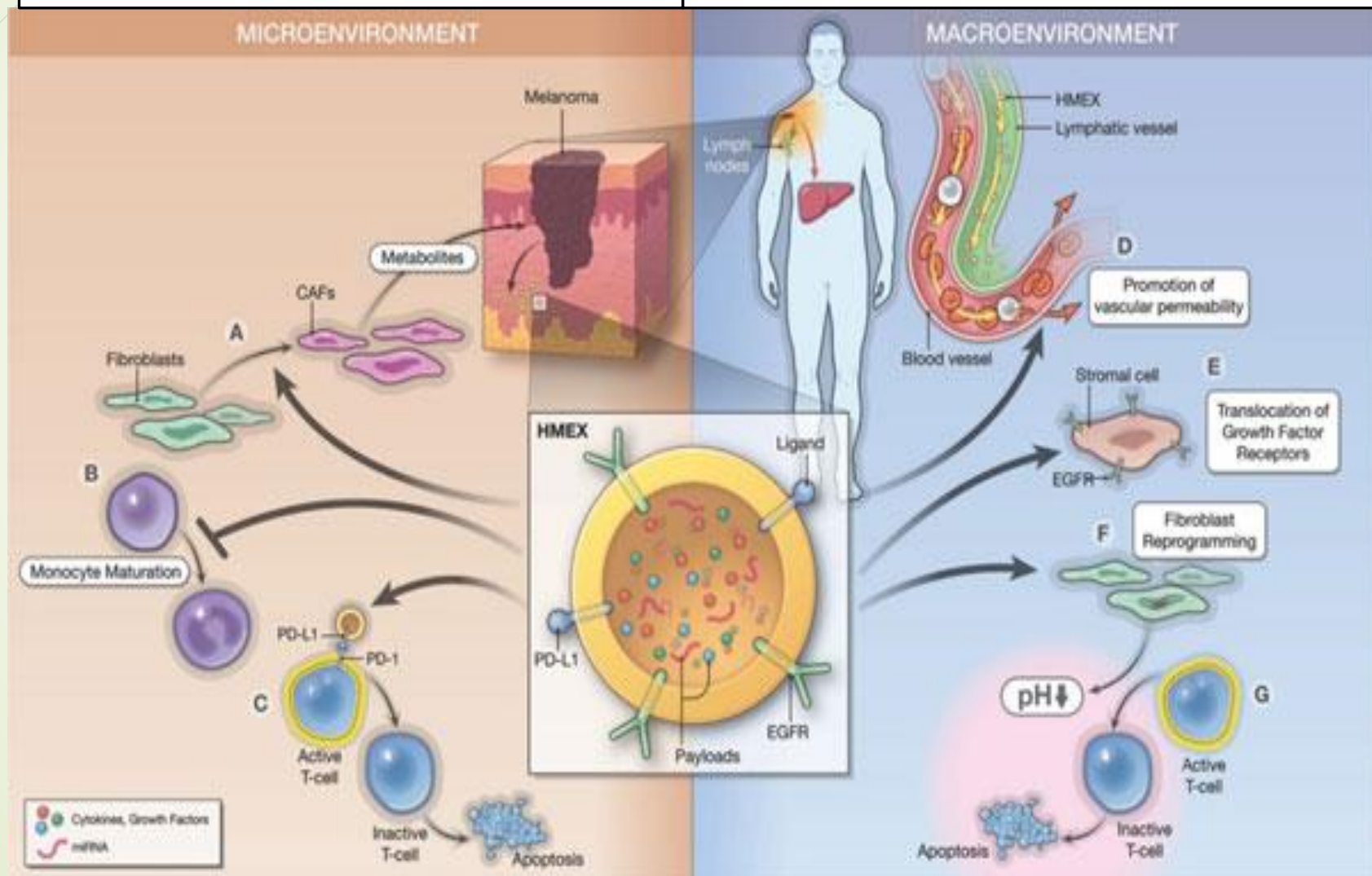
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Build *Life Force* to maintain a strong "terrain"

# Tumor Micro Environment

# Body Macro Environment



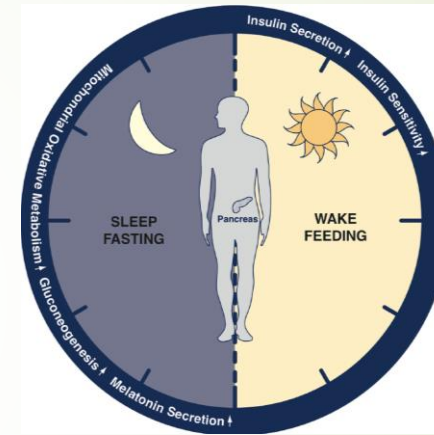
# Your Body Clock-Circadian Rhythm

*Environmental cues-light, dark, food, exercise*

## Circadian disruption

- ▶ alters metabolic pathways
- ▶ disrupts immune function
- ▶ interferes with gene expression
- ▶ Alters DNA repair and cellular division

*"When the clock gets disrupted, cells don't know when to divide, they can divide faster and become a tumor."*

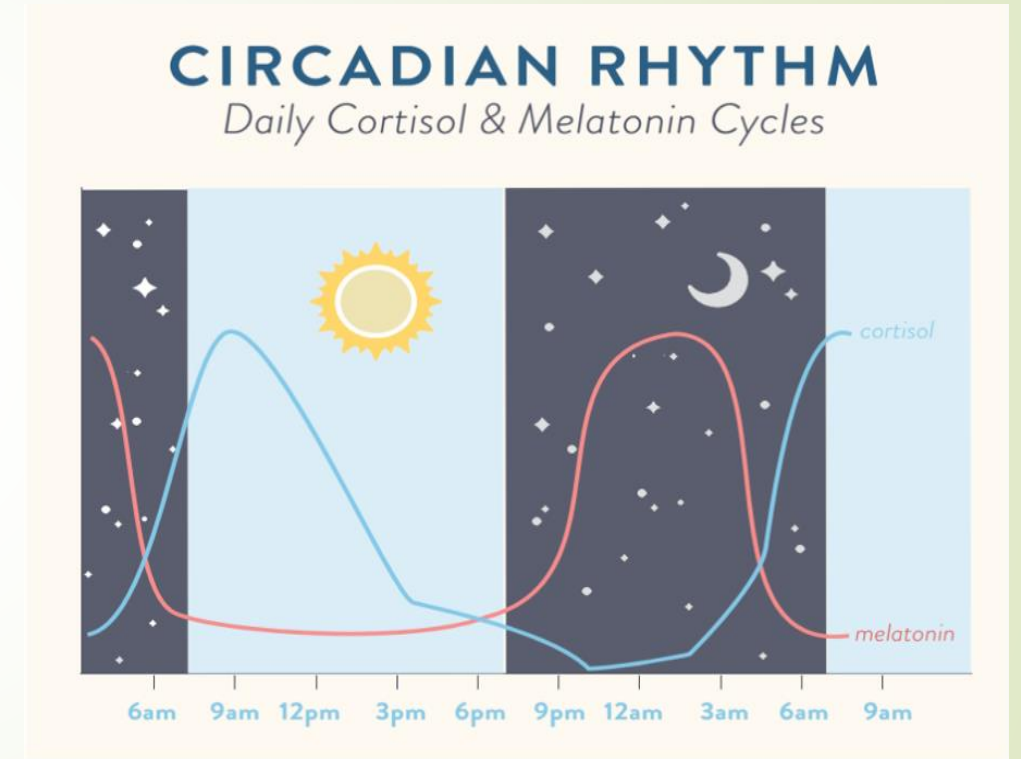


**Cancer and the Body Clock-Scientific American, July/August 2023**

<https://www.everydayhealth.com/sleep/everything-you-need-know-about-your-circadian-rhythm/>

# Normalize Circadian Rhythm

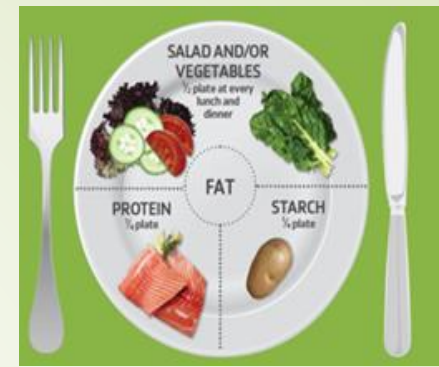
- Follow a routine
  - wake-sleep, meals, exercise
- Get sunlight in the morning
- Avoid light at night
- Avoid late night meals
  - Dinner by 7pm
- Melatonin, if appropriate



**Roles of circadian clocks in cancer pathogenesis and treatment**

*Experimental & Molecular Medicine* volume 53, pages1529–1538 (2021)

# Be Nutritionally Strong



- Be hydrated
  - Filtered water and hydrating liquids
- Enjoy regular meals at regular times
  - balance blood sugar & energy
- Enjoy appropriate portions
  - optimize blood sugar/insulin & energy
- Eat mostly plants
  - veggies, whole grains, fruit, beans, nuts, seeds, herbs, spices
- Enjoy animal foods in smaller amounts
  - organic, as is possible
- Cook/make more of your meals



# Hydrate

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Journal of Biological Chemistry:

- ▶ About 60 % of the adult body is water
- ▶ Brain and heart are composed of 73% water
- ▶ Lungs are about 83% water
- ▶ Skin contains 64% water
- ▶ Muscles and kidneys are 79%
- ▶ Even the bones are watery: 31%

The Water in You: Water and the Human Body

[https://www.usgs.gov/special-topic/water-science-school/science/water-you-water-and-human-body?qt-science\\_center\\_objects=0#qt-science\\_center\\_objects](https://www.usgs.gov/special-topic/water-science-school/science/water-you-water-and-human-body?qt-science_center_objects=0#qt-science_center_objects)



# What's Good To Drink?

- Filtered water
  - Add lemon or pom juice
- Herb tea
- Green tea
- Black tea
  - Oolong
  - Pu ehr
- Ginger tea
- Chai ginger tea
- Chamomile tea
- Green juice
- Broth



*“Peace  
Happiness and Joy  
Is Possible  
During the Time  
I Drink my Tea.”*

*-Thich Nhat Thanh*

# Plant Focused Diet Enjoy an Abundance & Diversity of Plant Foods



The Benefits of Dietary Fiber Intake on Reducing the Risk of Cancer:  
An Umbrella Review of Meta-analyses

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6112064>

# Fighting Cancer with Food



## **Bioactive food compounds**

- Vitamins
- Minerals
- Phytonutrients
  - polyphenols
  - flavonoids
  - carotenoids
  - glucosinolates
  - many more....

<https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/bioactive-compound>

- Cellular nourishment
- Cellular regulation
- DNA stability

## *Genomic Instability*

- *Hallmark of Cancer*

<https://www.nature.com/articles/nrm2858>

[Genomic Instability and Cancer - PubMed \(nih.gov\)](#)

# Nutrigenomics



Food is  
Information

- Junction between environmental factors-diet, lifestyle and genetics  
*“Molecular nutrition”*
- Food Talks to Your Cells
  - Modifies gene expression  
*“Epigenetics”*
  - Prevents and repairs cellular damage
    - cellular regulation
  - Induces apoptosis
    - cancer cell death

Cancer Prevention and Treatment by Wholistic Nutrition

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5646698/>

# Focus Food - Cabbage

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- Salads
- Soups
- Stir fries
- Wraps
- Sauerkraut



Brassica (Crucifer)  
Family

- High in glucosinolates
- Cell regulating
- Estrogen clearing
- Cancer fighting

The Epigenetic  
Impact of Cruciferous  
Vegetables on Cancer  
Prevention

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4354933/>

# Nutrients Act On Cancer Stem Cells

- Flavonoids, carotenoids (leafy greens, squash)
- Polyphenols (pomegranate, green tea)
- Apigenin (parsley, celery, chamomile)
- Lycopene (tomatoes, watermelon)
- Luteolin (celery, peppers, chamomile)
- Resveratrol (grapes)
- Curcumin (turmeric)
- Gingerol (ginger)
- Quercetin (onions, apples)



*The use of plant-derived bioactive compounds to target cancer stem cells and modulate tumor microenvironment*

<https://pubmed.ncbi.nlm.nih.gov/25445513/>

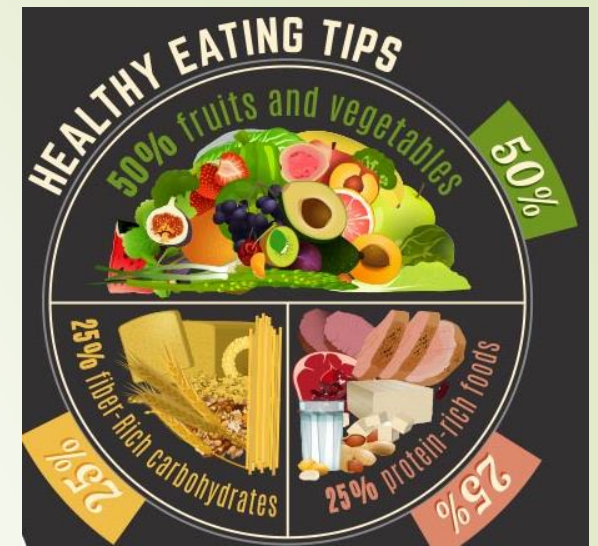
*Cancer as an ecomolecular disease and a neoplastic consortium*

<https://pubmed.ncbi.nlm.nih.gov/28947238/>

# Make A Healthy Meal

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- Abundant **veggies**, non starchy
  - ▶ about 50% of the plate
- Some **starch**
  - ▶ about 25% of the plate
  - ▶ potato, sweet potato, wild rice, brown rice/lentils, quinoa, bread, tortilla
- Some **protein-**
  - ▶ about 25% of the plate
  - ▶ Fish, organic animal foods, eggs, beans, mushrooms
- Some **healthy fat**
  - ▶ oils-olive/coconut oil, olives, avocado, nuts, seeds, fish, organic animal foods
- Boosters**
  - ▶ spices, sauerkraut/kim chi, whey, flax, nutritional yeast



# Make a Simple, Anytime Meal

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- Oatmeal or granola
  - add berries, flax, cinnamon
- Scrambled eggs
  - add veggies, mushrooms, spices
- Simple soup
  - box soup, add beans, cabbage
- Quickie salad
  - add arugula, radish, olives
- Nourish bowl
- Colorful wrap
- Sizzling Stir Fry
- Anytime toast
  - avocado, egg, tomato, sprouts
- Smoothie



# Include Nutrition Super Stars

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- Seasonal veggies
- Crucifer veggies
- Crucifer sprouts
- Whole grains
- Beans, legumes
- Seasonal fruit
- Cultured foods-dairy, sauerkraut, kim chi
- Spices



- Nuts/Seeds
- Cold water fish
- Pastured eggs
- Organic poultry, beef/bison/lamb
- Booster Foods
  - flax, whey, spirulina, sea veggies, bee pollen
- Beverages
  - water, green tea, herb tea, broth



# Some Anti Cancer Super Stars

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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC526387/>

# The Basics-Where to Start

- Relax. Take a deep breath.
- “*Do the best that you can.*”
- Follow a schedule for “3 Square Meals.”
- Or break up into smaller meals.
- ***Make it simple.***
- Keep portions small if appetite is weak.
- Keep portions small if weight loss is a goal.
- ***Write out a 3 day plan*** and a shopping list.
- Keep staples on hand.
- Ask for and accept help.



# Arugula Pear Pomegranate Salad



# Immune Boosting Butternut Squash

## Benefits

- Fiber
- Vitamin A
- Vitamin C
- Minerals
- Carotenoids



## How to Cook Squash

- In soups
- Baked
- Roasted



# Mushrooms as Super Food

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- Soups, Stir Fries, Main or Side Dish
- Mix with other foods
- Great meat substitute
- Add powder to tea, coffee, smoothies
- Highly nutritious super food
  - Protein –(esp oyster, shiitake)
  - Fiber
  - B vitamins
  - Vitamin D-esp, if exposed to sun
  - Minerals, including cancer fighting selenium
  - Beta glucan-immune regulating
  - *Always cooked, Always organic*



Book: Medicinal Mushrooms  
[Medicinal Mushrooms – Dr. Christopher Hobbs](#)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9504980/>

# Beans- "Undervalued Super Food"

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- Beans provide **protein**, iron and zinc which makes their nutritional value similar to that of meat.
- Beans are also like a vegetable because they contain starch, fiber, calcium, potassium and folate among other vitamins and minerals.
- Starch feeds gut bacteria

## Quick side of beans

- Drain a can of any kind of beans
- Rinse and strain
- In a pot, add beans
- Add about ½ c broth
- Add spices
- Add lemon juice
- Opt: add chopped tomatoes, other veggies
- Simmer until warm



# Easy Meals with a Can of Beans



- *Quick soup*
  - broth, chopped cabbage, spices, rinsed can of beans
- *Nourish bowl*
  - cooked quinoa, artichoke hearts, tomato, cucumber, cooked lentils, spices, dressing
- *Tasty bean salad*
  - rinsed beans, cilantro, orange bell pepper, red onion, sliced radishes, opt: frozen (thawed) corn
- *Bean burger on a bun, lettuce & tomato*
- *Protein smoothie*
  - add rinsed beans -add protein, fiber, nutrients

# Nourish Your Microbes

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*“Many beneficial compounds produced and metabolized by gut microbiota have been demonstrated to play an essential role in suppressing carcinogenesis.”*



- Plant fiber rich diet
- Cultured foods
- Avoid processed foods, sugar, artificial sweeteners

Current Microbiology (2019) 76:939–949

4-019-01679-8

[\(PDF\) Probiotic Bacteria: A Promising Tool in Cancer Prevention and Therapy \(researchgate.net\)](#)

# Gut Microbiota and Cancer

- Gut microbiota has been implicated in cancer
- Gut microbiota modulate anticancer drug efficacy.
- Altered gut microbiota is associated with resistance to chemo drugs or immune checkpoint inhibitors (ICIs), whereas supplementation of distinct bacterial species restores responses to the anticancer drugs.

"Fascinating. . . A beginner's  
guide to microbiota."  
—*Philadelphia Inquirer*

10%  
Human

HOW YOUR BODY'S  
MICROBES HOLD  
THE KEY TO HEALTH  
AND HAPPINESS

Alanna Collen



- The role of gut microbiota in cancer treatment: friend or foe

<https://gut.bmj.com/content/6/9/10/1867>

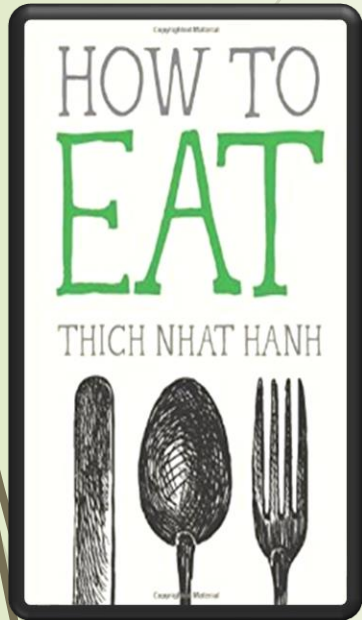
# Add In Cultured Foods

- Yogurt
- Kefir
- Sauerkraut
- Kim chi
- Fermented veggies
- Miso/Tempeh
- Apple cider vinegar
- Probiotic foods/drinks



[Diet and Microbes matter for immunotherapy response against cancer v 2.0.docx](#)  
[- Google Docs](#)

# How To Eat



Place food on a plate

Sit down

Light a candle

Pour a beverage

Take a few deep gratitude breaths

Chew slowly



## **Mindful Eating**

Peaceful brain

Activates the *calm* nervous system

Stimulates the flow of digestive juices

Questions?



**May the sun bring you  
new energy by day,**

**May the moon softly restore  
you by night,**

**May the rain wash away  
your worries,**

**May the breeze blow new  
strength into your being,**

**May you walk gently through  
the world and know it's  
beauty all the days  
of your life.**

**– Apache Blessing**



# Meal Ideas-Modify for You

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## ➤ Breakfast

- Oatmeal or granola, chopped apple, walnuts, cinnamon, yogurt or kefir, hemp hearts, ground flax, berries, prunes, opt: protein powder or drink, nut butter
- Scrambled or poached egg, toast, sautéed greens & mushrooms, sliced tomato
- Egg veggie muffin, salad greens, beet ginger sauerkraut
- Protein Smoothie
  - Almond milk, yogurt, protein powder, greens (spinach, baby kale, collards), berries, mango, ground flax, nuts or nut butter

## ➤ Lunch

- Butter lettuce wrap with tuna or sardine salad
- Nourish Bowl-with veggies, quinoa, black beans, sunflower seeds, avocado, tahini sauce, beet-ginger sauerkraut



# Meal Ideas-Modify For You

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## ➤ Dinner

- Three bean slow cooker chili, green salad, olive oil vinegar
- Black eye pea salad, baked salmon, kim chi
- Sautéed greens, cooked beans, sautéed oyster mushrooms baked sweet potato with butter
- Mushroom soup, arugula pear pecan pomegranate salad
- Kale white bean soup, crackers

## ➤ Snack

- Crunchy veggies, creamy hummus
- Cup of kefir, pomegranate juice, chia or flax seeds
- Cup of broth, opt: add miso or nutritional yeast
- Trail mix
- Apple or other fruit

# Some Resources

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- The Cancer Diet Cookbook, D. Detraz
- The Cancer Fighting Kitchen, R. Katz
- Eating on the Wild Side, Jo Robinson
- The Bare Bones Cookbook, K. & R. Harvey
- Bowls, Molly Watson
- Cancer Hates Tea, M. Uspenski
- Medicinal Mushrooms, C. Hobbs
- The Whole Foods Guide for Breast Cancer Survivors, E. Bauman, H. Waldman
- After Cancer Care, G. Lemole, P. Mehta, D. McKee