Nutrition for Cancer Survivors

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Disclosure: This event is intended as a support service in an educational format. This event does not establish a patient-provider relationship and is not meant to provide patient-specific clinical direction.

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This discussion contains evidence based nutrition information that is generalized

For a personalized consultation with an oncology dietitian:

- Contact your oncology provider at University of Colorado Cancer Center
- Ask them to place a nutrition referral
- A scheduler will contact you to schedule an appointment with an oncology RD
- No cost to you
- Oncology RDs located at UCHealth locations:
  - Anschutz campus
  - Highlands Ranch
  - Lone Tree
  - Memorial
  - Yampa
  - Harmony

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Objectives

- Define cancer survivorship
- Identify cancer risk factors
- Discuss current recommendations by the American Institute for Cancer Research (AICR) for cancer survivors
- Provide resources for survivorship nutrition

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Survivorship in Cancer

Cancer Survivor

- Any individual with cancer from the time of diagnosis throughout life

Cancer Survivorship

- Encompasses individuals in active treatment and recovery, as well as those with advanced disease

- Includes navigating a new normal, follow-up medical care, late side effects of treatment, reducing the risk of a secondary cancer, and improving quality of life

- Includes family members, friends, and caregivers who support individuals diagnosed with cancer

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Post Treatment Side Effects are Gone: Now What?

Post Treatment Goals:

- Health Promotion
- Cancer prevention
- Control modifiable risk factors to decrease risk of chronic disease and cancer reoccurrence; for example, maintaining a healthy weight

weight gain → ↑ risk for chronic disease > ↑ risk for cancer recurrence

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Cancer Risk Factors

Factors we can control:

- Diet
- Alcohol Intake
- Tobacco Use (chewed, smoked, sucked and inhaled)
- Physical Activity
- Ultraviolet (UV) Radiation Exposure

Factors we cannot control:

- Genetics
- Age
- Exposure to Viruses
- Environment

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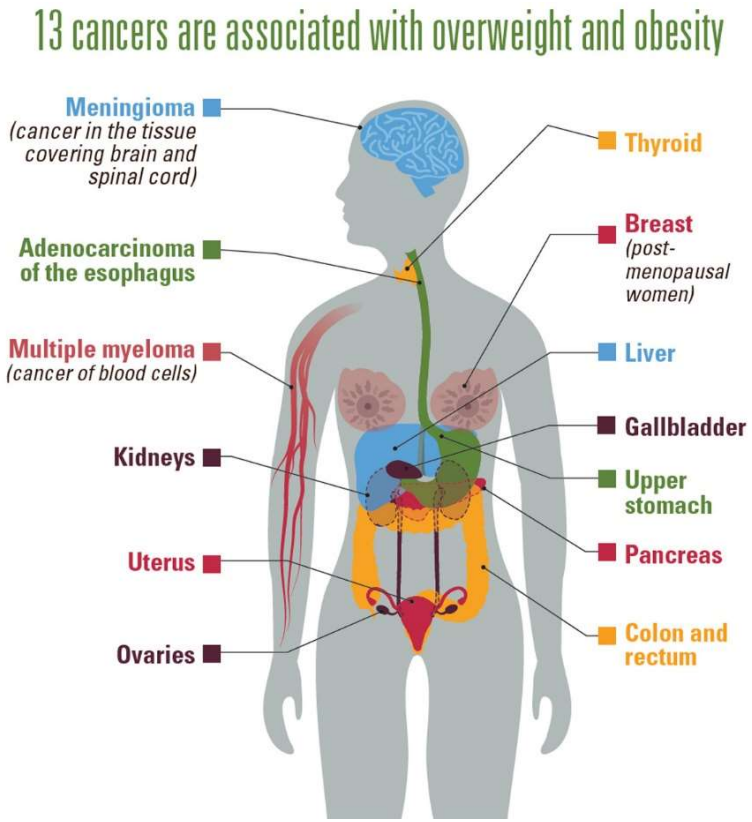
Relationship Between Lifestyle and Cancer



20% of all cancers diagnosed in the US are related to excess body weight, physical inactivity, excessive alcohol consumption, and/or poor nutrition

Obesity may worsen several aspects of cancer survivorship including quality of life, cancer recurrence, cancer progression, and prognosis

Greater levels of leisure-time physical activity were associated with a lower risk of developing 13 different types of cancer

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Nutrition for Cancer Survivors

From the American Institute of Cancer Research (AICR)

1. Be a healthy weight
2. Be physically active
3. Eat a diet rich in whole grains, vegetables, fruits, and beans
4. Limit consumption of “fast foods” and other processed foods that are high in fats, starches, or sugars
5. Limit consumption of red and processed meat
6. Limit consumption of sugar-sweetened drinks
7. Limit alcohol consumption
8. Do not use supplements for cancer prevention

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1. Be a Healthy Weight

Be lean without being underweight

- Higher amounts of body fat are associated with increased risk of a number of cancers
- Maintaining a healthy weight may help cancer from returning as well as reduce the risk of several types of cancer
- If overweight, aim for 1-2 lbs of weight loss per week

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2. Be Physically Active

Increase activity

- Being physically active and exercising can lower your cancer risk
- Recommendation: 30 minutes per day, 5 days per week
- Choose an activity you like!
- Make a plan: for example, start with a 15 minute session per day 5 days per week, and add 5 minutes to each session over the next several weeks
- Important for re-building lean body mass during recovery
- Community programs: Bfit Bwell, Silver Sneakers

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3. Eat a diet rich in whole grains, vegetables, fruits, and beans

Benefits:

- Eating mostly plant-based foods play a big role in preventing cancer
- Plant based foods are high in fiber, nutrients, and phytochemicals
- Strengthen our immune system and keep our bodies strong
- Lower calorie content helps maintain healthy weight, high in fiber which helps you feel full for longer

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How to Build a Plant-Based Plate

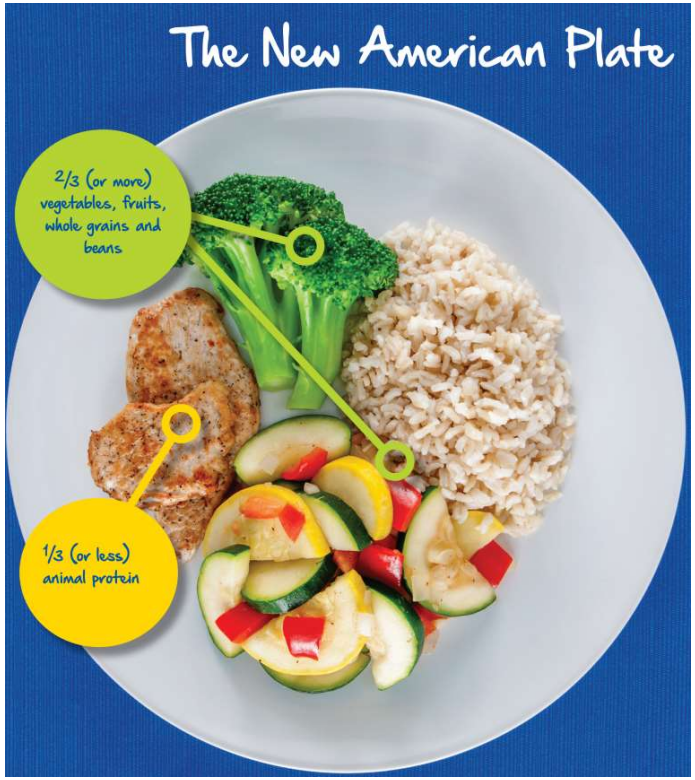
Build your plate using the New American Plate Model:

2/3 of the plate: plant foods

- Whole grains
- Fruits and vegetables
- Beans

1/3 of the plate: animal-based lean protein sources

- Seafood, poultry, eggs, dairy
- Occasionally lean red meat
- Avoid processed meat



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Incorporating Plant-Based Foods into Your Diet:

- Eat the rainbow!
- Try to make 50% of your grains whole grains: oats, brown rice, buckwheat, quinoa, barley, bulgur, whole wheat pasta
- Choose plant-based proteins over animal-based proteins:
  - Beans (black, kidney, white, pinto, fava, garbanzo)
  - Lentils (red, yellow, green, brown; also split peas)
  - Nuts and nut butters (almond, brazil nuts, cashews, pistachios, walnuts, peanuts)
  - Seeds (chia, flax, hemp, pumpkin, sesame, sunflower)
  - Soy (tofu, edamame, tempeh), seitan

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Break for Questions

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4. Limit Consumption of "Fast Foods" & Other Processed Foods High in Fats, Starches, or Sugars

- Limit common processed foods such as chips, cookies, candy bars, desserts, processed baked good, sugary cereals, and fried foods
- Limit sodium intake to less than 2300 mg per day
  - 1 teaspoon salt = 2300 mg sodium
  - More than 70% of the sodium we consume comes from packaged, prepared and restaurant foods
- Learn where salt is hiding
  - Processed foods, seasoning blends, canned foods (soups, broths), processed meats, condiments (soy sauce, marinades), frozen meals

- Limit saturated fats; avoid trans fats as much as possible
  - <u>Saturated fat sources:</u> fatty red meat, lamb, pork, poultry with skin, butter, cheese, dairy products from whole or 2% milk, lard, cream, baked goods, fried foods
  - <u>Trans fat sources:</u> fried foods, baked goods (cakes, pie crusts, biscuits), frozen pizza, cookies, crackers, stick margarines and other spreads

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Set Yourself up for Success

- Plan in advance!
  - Carrots/celery and hummus or peanut butter
  - Whole grain crackers with part-skim, low sodium cheese
  - Low sugar granola bars
  - Raw nuts or seeds with a piece of fruit or dried fru
  - Popcorn
  - Roasted chickpeas
  - Plain low fat yogurt with berries

Old Label:

Nutrition Facts

Serving Size 2/3 cup (55g)
Servings Per Container About 8

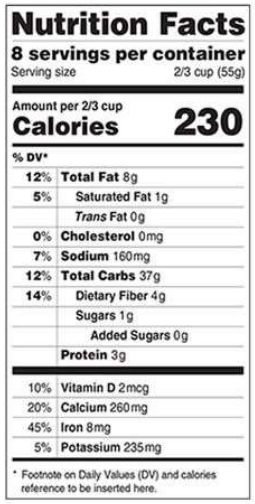
Amount Per Serving

Calories 230	Calories from Fat 40
	% Daily Value*
Total Fat 8g	**12%**
Saturated Fat 1g	**5%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 160mg	**7%**
Total Carbohydrate 37g	**12%**
Dietary Fiber 4g	**16%**
Sugars 1g	
Protein 3g	
Vitamin A	10%
Vitamin C	8%
Calcium	20%
Iron	45%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

New Label:



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8 servings per container
Serving size 2/3 cup (55g)

Amount per 2/3 cup
Calories **230**

% DV*	
12%	**Total Fat** 8g
5%	Saturated Fat 1g
	Trans Fat 0g
0%	**Cholesterol** 0mg
7%	**Sodium** 160mg
12%	**Total Carbs** 37g
14%	Dietary Fiber 4g
	Sugars 1g
	Added Sugars 0g
	Protein 3g
10%	**Vitamin D** 2mcg
20%	**Calcium** 260mg
45%	**Iron** 8mg
5%	**Potassium** 235mg

* Footnote on Daily Values (DV) and calories reference to be inserted here.

- Read food packages
  - Limit the amounts of added sugars (new food label), sodium, saturated fat, and trans fat
  - Spot trans fats in ingredients list by looking for “partially hydrogenated oils”
  - When choosing foods, compare labels and pick the product with less of these nutrients noted above

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5. Limit Consumption of Red & Processed Meats

Red meat (beef, pork, lamb)

- Red meat may increase cancer risk/ recurrence by creating chronic low grade inflammation
- Cooking red meat at high temperatures (and smoking or grilling meat) can produce other cancer-causing compounds

Processed meats (ham, salami, deli meat, bacon, sausages, frankfurters, chorizo)

- Preserved by smoking, salting, curing or adding chemical preservatives
- Contain high amounts of saturated fat and salt
- Eating small amounts of cold cuts or processed meat on a regular basis increases the risk of colorectal cancer

Recommendations

- Limit intake of red meat to <18 oz per week (~3 portions per week)
- Think of lean meat as a side dish to plant based meals
- Go meatless occasionally (“meatless Monday”)
- Eat little, if any, processed meats

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6. Limit Consumption of Sugar-Sweetened Drinks

- Consuming soda and other sugary drinks increases the risk of weight gain

- What comprises a sugar-sweetened beverage?
  - Regular soda, juice, sports drinks, energy drinks, tonic, fruit punch, lemonade, sweetened iced tea, sweetened coffee/tea

Healthy alternatives

- Still or sparkling water, flavored water or seltzer that do not contain added sugar, infused water with fruit, unsweetened tea (black, oolong, green, white)

*There is no strong research to suggest that artificially sweetened drinks with minimal calorie content are a cause of cancer

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Sugar and Cancer: What's the Connection?

- All carbohydrates (including fruits, vegetables, whole grains, dairy) are broken down to simple sugars (glucose) during digestion
- Every cell in the body uses glucose for fuel
- Glucose is key to cell function, especially brain function

*There is no clear evidence that the sugar in your diet preferentially feeds cancer cells over other cells

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Take Home Messages

- Limit consumption of sugar-sweetened beverages and processed foods with added sugars
- Incorporate nutrient dense carbohydrates
  - Whole grains, beans/legumes, whole fruits and vegetables, low fat dairy
- Fuel your body appropriately, don't restrict
- Be mindful in your choices

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7. Limit Alcohol

- The less alcohol you drink, the lower your risk for cancer
- If you are going to drink, consider drinking less
- Limit intake of alcoholic beverages to 2 per day for men and 1 per day for women
- 1 drink = 12 oz beer, 5 oz wine, 1.5 oz liquor

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8. Do Not Use Supplements for Cancer Prevention

Whole foods are best!

- Foods are complex - nutrients may work in synergy for better utilization/absorption
- Research indicates benefits of antioxidants and phytochemicals are due to these components when ***eaten***, not taken in supplement form
- Not thought to be beneficial when deficiency is not present
- **Research shows that supplements do not offer cancer protection or provide benefits to survivors worried about recurrence**

Beneficial for:

- Identified nutrient deficiency (ex. Vitamin D, Magnesium, Calcium)
- Malabsorption or restricted diets

Important information to consider:

- OTC supplements are not regulated by the FDA before they reach the marker
- More is not always better: high doses of some supplements may be harmful
- Some vitamins/herbals may enhance or weaken effects of pharmaceutical medications

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Survivorship is Not Created Equal

You may have a new normal and you may not fit in the survivorship box perfectly

Common nutrition implications after cancer treatment:

- Diarrhea
- Small bowel obstructions or partial bowel obstructions
- Abdominal surgeries
- Malabsorption

Difficulty with Mobility

*Work with your MD, RD, and rehab team (such as PT/OT) to make the appropriate individualized modifications to your survivorship plan

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Tips for Implementing Recommendations

- Swap-out the deli meat sandwich for lunch
- Participate in “Meatless Monday”
- Take your favorite meal and replace meat with a plant protein
- Choose low sodium options; skip the salt shaker
- Select unsweetened beverages
- Find a physical activity you enjoy

*Preparation makes any change in eating easier

*Ask about local fitness programs: Bfit Bwell, Oncology Rehab

*Integrative Medicine: Acupuncture, Yoga

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Summary

Long-term lifestyle changes in survivorship:

- Reduce intake of processed/refined foods
- Reduce intake of red/processed meats
- Reduce alcohol intake
- Avoid restrictive diets
- Increase intake of whole plant based foods
- Increase physical activity
- Do not smoke

Resources for getting started:

- American Institute for Cancer Research: aicr.org
- American Cancer Society: cancer.org
- Oncology Nutrition Dietetics Practice Group: oncologynutrition.org
- Cook For Your Life: www.cookforyourlife.org

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References

National Cancer Institute: www.cancer.gov

Center for Disease Control: www.CDC.org

American Cancer Society: www.cancer.org

American Institute for Cancer Research: www.AICR.org

Oncology Dietetic Practice Group: www.oncologynutrition.org

American Heart Association: www.heart.org

*If you would like these PowerPoint slides from todays presentation they will be posted on UCHSO.org

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Questions