

Nutrition for the Ovarian Cancer Patient

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Eating Healthy with Ovarian Cancer

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Nutrition During Treatment

- Treatments for ovarian cancer can affect your body's needs for nutrients. They can affect your eating habits and how your body digests, absorbs, and uses food. Your main nutrition goals during this time are:
 - Make certain your body's nutrient & calorie goals are met
 - Maintain a healthy weight
 - Avoid losing muscle
 - Improve the quality of your life as you go through treatment
 - Assure that any nutrient-related side effects are being prevented or managed as best they can

Nutrition During Treatment

- Chemotherapy is often considered the standard of care.
 - Typically infused intravenously or through the abdominal cavity
- Common symptoms ovarian cancer patients often face that may impact nutrition:
 - Nausea & Vomiting
 - Anorexia
 - Mucositis & Stomatitis
 - Inflammation of the mouth
 - Occasionally, sores in the mouth
 - Diarrhea

Nutrition During Treatment

- Radiation Therapy is also a treatment option that your physician may have chosen
- Common symptoms that may impact nutrition
 - Diarrhea
 - Fatigue



Managing Symptoms

- Nausea and Vomiting
 - Eat 5-6 small meals per day
 - Limit exposure to food smells by avoiding food preparation areas
 - Choose cool, light foods with little odor
 - Avoid greasy, high fat foods
 - Consume liquids between meals, rather than with meals
 - Avoid/limit strong smelling lotions, soaps, perfumes, air fresheners
 - Rest with head elevated for 30 minutes after eating
 - Take nausea medications as prescribed – eat when they are working their best!
 - Take pain medications with crackers or light foods

Managing Symptoms

- Anorexia – the loss of appetite or desire to eat
 - Eat small, frequent meals of calorie dense foods and liquids
 - Eat in pleasant surroundings
 - Eat by the clock rather than waiting for hunger cues
 - View eating as a medication
 - Nutrition supplements are an option!
 - Engage in light physical activity to stimulate appetite
 - Use easy to prepare and serve foods to preserve energy

Managing Symptoms

- Mucositis
 - Choose foods lower in acidity and avoid tomato products, citrus juices and pickled foods
 - Choose foods that are less spicy and avoid chili, chili powder, curry, cloves, black pepper and hot sauces
 - Choose foods softer in texture with added moistness, sauce or gravy
 - Choose cream soups, mashed potatoes, yogurt, eggs, tofu and pudding
 - Serve foods at cool or room temperature
 - Prepare smoothies with low acid fruits
 - Melons, bananas, peaches
 - Add yogurt, milk or silken tofu!
 - Avoid alcohol and alcohol containing mouthwashes and tobacco

Managing Symptoms

- Diarrhea
 - Identify problem foods or eating habits
 - Encourage a low fat, low fiber, and possibly a low lactose diet
 - Avoid gas producing foods, caffeine and alcohol
 - Encouraged small, frequent meals
 - Avoid sorbitol or other sugar-alcohol containing products
 - Avoid gas forming vegetables
 - Onions, cruciferous vegetables
 - Take 1-2 servings of psyllium husk daily or use Benefiber
 - Mix scoop into warm water – drink before it cools!

Vitamin and Mineral Supplements During Treatment

- Check with your health care provider before taking any vitamin or mineral supplement while on treatments
- Some supplements can be useful if you have a specific deficiency, but most studies have found that the risks of high-dose supplements usually outweigh the benefits.
- Do not take a supplement that contains higher amounts than 100% Daily Value (DV).
- The best way to get vitamins and minerals is from whole foods, nutrient rich sources!

Diet During Treatment

- In general, a specific diet does not need to be followed.
- An overall healthy diet is best during treatments
- Include plenty of fruits and vegetables in your diet
- Include a source of lean protein at each meal
- If nutrition issues or side effects arise you can make changes to your diet at that time



Transitioning

- If you have been following a strict diet during treatments to help manage your symptoms but are done and wanting to return to your regular diet, start slow
- Slowly add foods back into your diet
- Watch for signs/symptoms of distress
- Effects of your treatments do not stop the day of your final treatment

Nutrition After Treatments

- Get to and stay at a healthy weight
 - You can work with professionals to achieve this goal
- Be active
- Eat a variety of healthy foods from plant sources
 - Limit processed meat and red meat
 - Eat 2 ½ cups or more of vegetables and fruit per day
 - Choose whole grains rather than refined grains

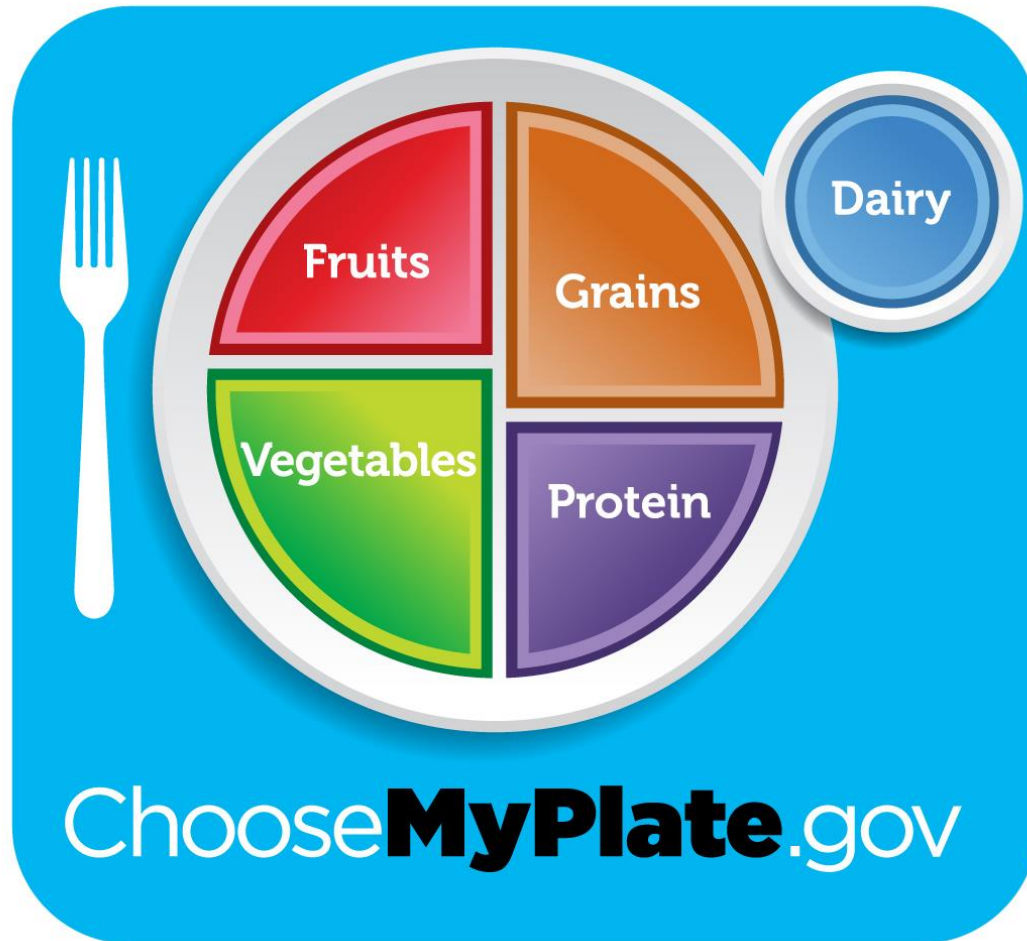
A Healthy Weight

- Your Body Mass Index (BMI) can tell you if your weight is appropriate for your height
- You can find your BMI by using a chart at www.cancer.org (search for BMI)
- BMI for adults age 20 and older
 - Underweight: BMI is less than 18.5
 - Normal weight: BMI is 18.5 to 24.9
 - Overweight: BMI is 25 to 29.9
 - Obese: BMI is 30 or more

Get to a healthy weight

- General, healthy ways to control weight:
 - Limit high calorie foods
 - Drink fewer beverages high in fat and/or added sugar
 - Eat more low-calorie foods like fruits and vegetables
 - Add more physical activity throughout the day
 - Try this quiz from AICR:
 - http://www.aicr.org/reduce-your-cancer-risk/diet/how-healthy-is-your-diet.html?utm_source=mmenu

A Healthy Plate



Fruits

- In general, women should get 1 ½ to 2 cups of fruit per day
- Eat a variety of fruits
- Eating the whole fruit is better than drinking fruit juice



Vegetables

- In general, women should get 3 servings of non-starchy vegetables per day
- Eat a variety of vegetables
- Fresh or frozen vegetables are preferred over canned vegetables



Phytochemicals

- What are phytochemicals?
 - Phytochemicals naturally occur in plants – they provide color, odor and flavor.
 - Phytochemicals have potential to:
 - Stimulate the immune system
 - Block substances we eat, drink and breathe from becoming carcinogens
 - Reduce inflammation that makes cancer growth more likely
 - Prevent DNA damage and help with DNA repair
 - Reduce the kind of oxidative damage to cells that can spark cancer
 - Slow the growth rate of cancer cells
 - Trigger damaged cells to die before they can reproduce
 - Regulate hormones

Phytochemicals continued

- How to get these wonderful benefits:
 - Make sure your diet is full of a variety of vegetables, fruits, whole grains and beans
 - Choose brightly colored or strongly flavored vegetables and fruits
 - Get your phytochemicals from whole food sources
 - They are best absorbed in this form as opposed to supplement form

Starches

- Aim to get $\frac{1}{2}$ of your grains from whole grain source
 - Whole grains have more fiber, iron and B vitamins
- Many Americans need to decrease their intake of starches at each meal
- Whole grain sources would be: whole wheat flour, bulger, oatmeal, whole corn meal, and brown rice

Protein Foods

- Protein foods are: meat, poultry, seafood, beans and peas, eggs, processed soy products, nuts, and seeds
- Most healthy women aged 31+ only need about 5 ounces of protein foods per day
- Try to choose lean protein selections as often as possible
- Try to incorporate seafood rich in omega-3 fatty acids
 - Salmon, trout, sardines, anchovies, herring, Pacific oysters, Atlantic and Pacific mackerel
- Choose unsalted nuts and seeds to limit sodium intake

Dairy

- Good choices are: milk, yogurt, soy milk and cheeses
- Dairy is a good source of protein and calcium which are both important for your health
- Look at the fat content of dairy products and count this into your daily fat intake if needed



Oils


- Women aged 31+ years should limit oils to 5 teaspoons per day
- Healthy oil sources include
 - Olive Oil
 - Coconut Oil
 - Avocado Oil
 - Nut oils
 - Seed oils

Hydration

- In general, aim for 8 glasses of water per day
- Try to limit sugar sweetened beverages
- If you're tired of drinking plain water there are many options you could try!
 - Add fruits or cucumber to water
 - Try beverages like La Croix
 - Drink decaffeinated, unsweetened tea



Portion Sizes

FOOD	SERVING	LOOKS LIKE
Chopped Vegetables	1/2 cup	1/2 baseball
Raw Leafy Vegetables (such as lettuce)	1 cup	1 baseball or fist for average adult
Fresh Fruit	1 medium piece 1/2 cup chopped	1 baseball 1/2 baseball
Dried Fruit	1/4 cup	1 golf ball
Pasta, Rice, Cooked Cereal	1/2 cup	1/2 baseball
Ready-to-Eat Cereal	1 oz. varies from 1/4 cup to 1 1/4 cups	
Red Meat, Poultry, Seafood	3 oz. (boneless cooked weight from 4 oz. raw)	Deck of cards
Dried Beans	1/2 cup cooked	1/2 baseball
Nuts	1/3 cup	Level handful for average adult
Cheese	1 1/2 oz.	4 dice or 2 9volt batteries

Source: U.S. Department of Agriculture

Recipes!

- The American Institute for Cancer Research has many good recipes for you to try!
 - <http://www.aicr.org/healthyrecipes/>

Frequently Asked Questions

- Can I take antioxidant supplements during treatment?
 - During radiation and chemotherapy treatments most physicians advise against taking high doses of antioxidants. The supplements may interfere with or decrease the effectiveness of the treatment.
 - Cancer survivors should avoid taking dietary supplements that contain more than 100% of the Daily Value

Supplement Facts	
Serving Size 1 tablet	
Amount Per Tablet	% Daily Value
Vitamin A 3,000 I.U.	60%
Vitamin C 60 mg	100%
Vitamin D3 400 I.U.	100%
Vitamin E 30 I.U.	100%
Thiamin 1.5 mg	100%
Riboflavin 1.7 mg	100%
Niacin 20 mg	100%
Vitamin B6 2 mg	100%
Folic Acid 400 mcg	100%
Vitamin B12 6 mcg	100%
Pantothenic Acid 10 mg	100%
Calcium 450 mg	45%
Iron 18 mg	100%
Zinc 15 mg	100%

Frequently Asked Questions

- What are the food safety precautions I should be following during treatments?
 - Wash hands before eating or preparing foods
 - Wash fruits and vegetables well
 - Keep foods at the right temps
 - Hot foods above 140 degrees
 - Cold foods below 40 degrees
 - Keep raw meats, seafood, poultry and eggs away from ready to eat foods
 - Clean utensils, countertops, cutting boards and sponges that have contact with raw meat well
 - Cook foods to proper temperatures. Use a thermometer!
 - Avoid raw honey, milk and fruit juice – choose pasteurized versions instead!
 - When eating out – avoid salad bars, sushi and raw/undercooked meats, fish, poultry and eggs
 - If you are concerned about the safety (purity) of the water in your home, ask your public health department to check it for bacteria
 - Avoid getting food from the deli counter
 - Avoid roasted nuts

Frequently Asked Questions

- Should I avoid meats?
 - Limit red meats to less than 18 oz per week for prevention
 - Eat processed meats only occasionally for cancer prevention
 - Cooking high fat meats at a very high temperature can increase risk of cancers
 - No studies have looked at the effect of processed meat, meat cooked at high temps, or meat in general on cancer coming back or getting worse.
 - A more plant based diet is associated with decreased risk of cancers

Frequently Asked Questions

- What is the best thing I can do to prevent cancer returning or growing a new cancer?
 - Maintaining or achieving a healthy body weight is the best defense against cancer.
 - Increased body weight has been linked with higher death rates for all cancers combined.
 - Avoid tobacco and alcohol.
 - Eat a diet rich in fruits and vegetables.



Frequently Asked Questions

- Should I be eating Organic?
 - “Organic” is often used for foods grown with limited pesticides and genetic modifications/changes. It is also used for meat, poultry, eggs, and dairy products that come from animals that are not given antibiotics or growth hormones.
 - At this time, there are no studies in humans to show whether organic foods are better than other foods in reducing the risk of cancer, the risk of cancer coming back, or the risk of cancer progression.
 - You can make your decision on what is best for you and your family while this is continuing to be researched.

Frequently Asked Questions

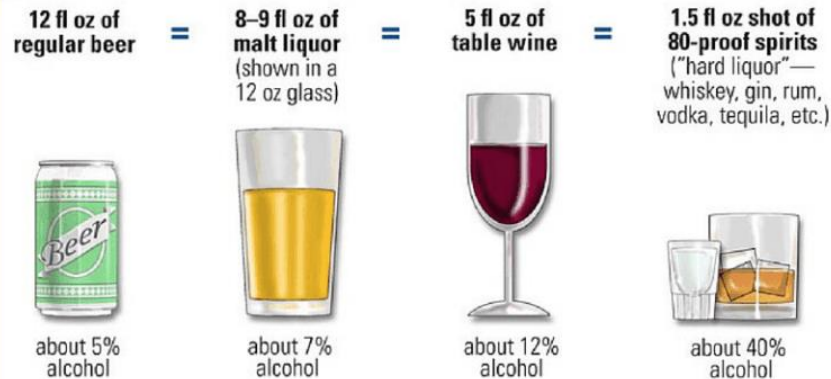
- Does Sugar Feed Cancer?
 - Sugar feeds ALL cells – cancerous and healthy
 - If we do not eat enough carbohydrates from food our bodies will make it in order to feed the cells.
 - Making sugar will cause a loss in muscle and weaken our immune system – both are bad things when going through treatment!!
 - Why do they feed you glucose to detect cancer on a PET scan?
 - The glucose is feeding all cells in your body. It's the hyperactivity of the cancer cell that is detected on the PET scan.
 - Eating excess sugar is associated with weight gain. Obesity is a risk factor for cancer development.

Frequently Asked Questions

- Can I drink alcohol

**For cancer prevention,
AICR recommends
not drinking alcohol.**

If you do drink alcohol, limit to
2 standard drinks for men, and 1 for women.



Source: National Institute on Alcohol Abuse and Alcoholism

Suggestions for Finding a Nutrition Professional

- Ask your health care team for a referral to see a registered dietitian (RD) if you have any nutrition-related challenges. It would be best if the RD is also a certified specialist in oncology (CSO).
- If an oncology dietitian is not available where you receive your cancer treatment and care, ask about an appointment with a dietitian at your primary care provider's office, a clinic, or in your community
- Visit the Academy of Nutrition and Dietetics' website (www.eatright.org), using the "Find a Nutrition Professional" feature, type "Oncology Nutrition" in the expertise/specialty tab, or call the academy at 1-800-877-1600 to ask about a private practice dietitian in your area

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