

Nutrition and Cancer Treatment

Nutrition is an important part of cancer treatment. Studies suggest that nutrition intervention during cancer treatment is associated with fewer treatment-related side effects, fewer hospitalizations and improved quality of life. Not everyone undergoing treatment has nutrition-related side effects, but this handout will help you address them if/when they come up.

Decreased appetite

- Try eating every 3-4 hours or 6-8 small meals per day; small meals may be better tolerated than larger meals
- Eat when your appetite is the best. If you have a good appetite in the morning, eat a large breakfast. Think of eating as a part of overall treatment
- Eat when you feel hungry and easy to prepare foods (keep ready-to-eat foods on hand)
- Sips of liquids with meals to prevent filling up on liquids. Drink the majority of your liquids between meals and hold liquids 20-30 minutes prior to meal times
- Ways to increase calories in the foods you are already eating:
 - add butter, oil, margarine, mayonnaise, sour cream, cheese, yogurt, cottage cheese, choose whole-fat dairy products, condensed soup (for example: cream of chicken and cream of mushroom) salad dressing, jam/jelly, honey and peanut butter

Fatigue

- Nap as needed, but try to avoid excessive daytime sleep to help improve nighttime sleep quality
- Try mild exercise/physical activity as tolerated; consider physical therapy for muscle strengthening
- Eat small, frequent meals and use oral nutrition supplements
- Keep nonperishable snacks at the bedside for convenience. Consider frozen/boxed meals and grocery pick-up services. Use easy-to-prepare meals, snacks, and prepared foods. Ask friends/family to help with grocery shopping and meal preparation
- Limit caffeine-containing beverages to two per day (or per your doctor) and consume them early in the day to prevent interference with nighttime sleep

Nausea and vomiting

- Eat small, frequent meals. Try dry foods (crackers, toast, dry cereal, bread sticks) when you wake up and every few hours during the day when you feel nauseous
- Choose bland, starchy foods and liquids at room temperature. Avoid greasy, high fat, and highly seasoned foods
- Drink liquids between meals rather than with meals (take sips of liquids with meals if needed). Drink liquids as often as possible after vomiting to prevent dehydration
- Do not eat your favorite foods when you feel nauseous to prevent creating food aversions

- Time meals when nausea medications are working their best. Take pain medications with crackers or light food
- Rest with the head elevated for 30 minutes after eating
- Limit exposure to cooking odors by avoiding food preparation areas. Avoid/limit strong smelling lotions, soaps, perfumes and air fresheners
- Keep your mouth fresh by sucking on hard candies or rinsing with $\frac{3}{4}$ tsp salt + 1 tsp baking soda + 4 cups water
- Try ginger chews, ginger lozenges (Tummy Drops) or ginger tea to help manage nausea
- Try wearing SeaBands during your chemo treatment

Diarrhea

- Drink plenty of fluids to prevent becoming dehydrated; add at least 1 cup (8 oz) of liquid after each loose bowel movement. Eliminate caffeine and alcohol
- Eat small, frequent meals
 - Choose foods that provide sodium and potassium (broths, soups, fruit juices, sport drinks, crackers, pretzels, potatoes without skin and ripe bananas) and foods that are high in pectin (applesauce and bananas)
 - Avoid greasy, fried, spicy, very sweet and high-fat content foods
- Increase soluble-fiber foods (oatmeal, rice, pasta, flour tortillas, potatoes, cooked carrots, squash, bananas, applesauce, peaches, oranges, pears, strawberries, avocados)
- If gaseous or bloated, limit gas-forming foods (apples, melons, broccoli, brussels sprouts, cabbage, cauliflower, corn, cucumbers, onions, peppers, beans and peas) and carbonated beverages; avoid use of straws and gum
- Avoid sorbitol, xylitol, mannitol or other products containing sugar-alcohol (sugar-free gum/candy)

Constipation

- Drink plenty of fluids and increase fluid intake if fiber supplements (like Metamucil) are used
- Increase your fiber intake slowly. Try incorporating foods like wheat bran, wheat bread/cereals, fruits and vegetables, popcorn, and beans
- Engage in light activity or stretching to improve bowel regularity
- Add a hot beverage or eat hot cereal in the morning to stimulate a bowel movement
- Ask your doctor about stimulant laxatives and stool softeners

Taste changes

- Little flavor or “off taste”:
 - Choose foods with fruity or salty flavors (think pickled foods); know that spicy seasonings/food may not make a difference, as heat is a sensation, not a flavor
 - Use marinades for meats; add herbs, spices, lemon, vinegar, pickles or strongly favored sauces/condiments to season foods
- Bitter, acidic, or metallic taste:
 - Choose sweet fruits (watermelon, cantaloupe) along with meals
 - Drink sweet or sour beverages (lemonade, apple juice, cranberry juice, sweet tea)
 - Use strong spices or seasonings (onion, garlic or chili powder)
 - Use sugar-free lemon drops, gums, or mints to improve mouth taste

- Choose alternative protein sources like chicken, eggs, tofu, dairy foods, nuts or beans
 - Use bamboo or plastic silverware and avoid foods in cans to reduce the sense of metal in the mouth
- Enhanced sweet taste:
 - Choose bland or sour flavors, vegetables rather than fruit, and dilute juices with water
- Use the cleansing rinse recipe: $\frac{3}{4}$ tsp salt + 1 tsp baking soda + 4 cups water

Changes with smell (smells are bothersome)

- Eat foods that are served cold/room temperature and avoid foods with strong odors
- Avoid cooking areas during meal preparation. Ventilate cooking areas by using exhaust fans or opening windows
- Avoid lengthy cooking processes
- Use a cup with a lid and straw for cold/room-temperature beverages and soups to reduce exposure to odors

Dry Mouth/thick saliva

- Eat small, frequent meals. Alternate bites and sips at meals
- Sip liquids throughout the day. Carry a water bottle with you, even when you are away from home. Limit drinks with caffeine (coffee, tea, sodas) and avoid alcoholic beverages and tobacco products
- Eat soft, bland foods. Add broth, gravies and sauces to meals, and moisten dry foods in liquid
- Suck on hard candy, frozen fruits, frozen fruit pops, ice chips and other cold foods
- Swish and spit using club soda, lemon-lime soda or carbonated water to loosen and remove dry/thick saliva
- Use a humidifier at home to moisten the air
- Practice good oral hygiene. Brush your teeth after each meal/snack and use alcohol-free mouthwashes
- Use the cleansing rinse recipe: $\frac{3}{4}$ tsp salt + 1 tsp baking soda + 4 cups water

Mouth sores

- Choose soft (cream soups, warm cereals, mashed potatoes, yogurt, eggs, pudding), bland (avoid strong seasonings and spices: chilis, black pepper, hot sauces), and moist foods (moisten foods with broth, soup, gravy, sauces, and butter. You can also dip/soak bread in soups to moisten)
- Choose foods in lower acidity and avoid foods in higher acidity. Avoid tomato products, citrus foods/juices, high-acidic fruits (kiwi, papaya, pineapple, strawberries) and pickled foods
- Soothe your mouth with cold foods and drinks (eat frozen fruit or suck on fruit pops, ice chips and other cold foods)
- Serve foods at cool or room temperature
- Limit carbonated beverages and avoid tobacco and alcohol-containing mouthwashes
- Drink through a straw to avoid irritated areas in the mouth
- Use the cleansing rinse recipe to remove food and germs: $\frac{3}{4}$ tsp salt + 1 tsp baking soda + 4 cups water

Please contact your medical oncologist's office and request an appointment with a Registered Dietitian Nutritionist for more tips and nutrition information.