



NUTRITION DURING **CANCER TREATMENT**

Managing side effects of treatment
through nutrition interventions



About this booklet

Nutrition is an important part of all phases of cancer, from diagnosis to survivorship. In this booklet you can find:

- Eating tips for managing common side effects
- Grocery lists and recipes specific to each side effect
- Shopping lists of foods to keep in your pantry and fridge

Our goal is to provide you with answers to common questions, in order to make your treatment and recovery as easy as possible.

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Preparing for cancer treatment

Preparation is the key to nutritional success both before and during cancer treatment. Before cancer treatment begins, it is important to eat well, especially if you have lost weight or are underweight. A healthy diet with enough calories and protein may help you maintain energy levels and tolerate treatment better.

To prepare yourself and your home, consider the following:

- Talk to your family and friends. Let them know that your appetite may not be great during treatment, but that you will let them know what you need from them.
- Choose helpful family members and friends you can call on for a quick run to the grocery store to pick up food when you are too tired to do so yourself.
- Cook or ask friends and family to cook in advance and freeze foods in meal-sized portions.
- Think about the types of foods you want to eat when you don't feel well.

Stock your home with these foods.

Consider simple, non-spicy foods, such as oatmeal, cream of wheat, applesauce, yogurt, soup, teas, ginger ale, watermelon and other fruits, dry cereals, ice pops, sports drinks, crackers, and toast.

- Buy foods that are easy to prepare, like peanut butter, cereals, soup, cheese, and eggs for times when you feel too tired to cook.
- Think outside of the box! Foods that you don't normally enjoy may be just what you want during treatment. Keep a wide variety of snacks around that work best for you so you can continue to eat well during treatment.

Eating well during treatment

When you are undergoing treatment, your body may need more calories as it fights against cancer because it is burning energy faster. Good nutrition can prevent deficiencies or breakdown of muscles and can help decrease side effects of treatment. It will also help you to maintain your weight, keep your strength, and maximize quality of life.

Here are some ways to help you eat well throughout treatment:

- Have snacks close by, near your bedside, car, or office for when you are hungry and don't have time to cook. Consider having cereal, cheese and crackers, nuts, dried fruit, and commercially prepared or homemade nutritional shakes.
- Do not wait until you are hungry to eat. Instead eat several small meals throughout the day.
- Eat high protein foods like dairy, nuts, beans, poultry, eggs and meats at meals and snack times.

- Have fluids in between meals to prevent getting full too fast at mealtime.
- Eat your biggest meal when your appetite is strongest.
- Don't be afraid to try new foods that you would not have eaten before! They may taste completely different during treatment.

Fluids and Hydration

It is important to stay hydrated during treatment. Many chemotherapy, radiation, and pain medications cause dehydration. Dehydration can lead to feeling tired, which can make it hard to prepare and eat nourishing meals. Symptoms of dehydration include thirst, dry mouth, dizziness, weakness, fever, weight loss, and muscle cramps. If you have vomiting or diarrhea, you will need to replace those extra fluids on top of the normal amount you should be consuming.

Try the following foods and liquids to increase fluid intake:

- Popsicles and flavored ice pops
- Flavored gelatin
- Clear fruit juices
- Caffeine-free drinks and teas
- Sports drinks to help replace electrolytes (if having diarrhea and/or vomiting)
- Broth-based soups
- Watermelon
- Seltzer
- Coconut water
- Ginger ale or ginger tea
- If water doesn't taste right, try squeezing in lemon, lime, orange, grapefruit, or any combination of these fruits

Common side effects

Treatment plans can include surgery, radiation therapy, chemotherapy, hormone therapy, and biologic therapy (immunotherapy) or some combination of these treatments. These treatments target fast growing cancer cells in your body, but damage some healthy cells in the process. This damage of healthy cells, such as cells of the GI tract, is what leads to side effects that can impact your ability to eat well.

Side effects from treatment can include:

- Changes in appetite/weight loss
- Changes in sense of taste or smell
- Constipation
- Diarrhea
- Dry mouth
- Fatigue
- Nausea
- Sore mouth
- Sore throat or trouble swallowing
- Vomiting

Not everyone will have the same side effects. Side effects and the severity of them depend on the type of cancer you have, the area of your body being treated and your specific treatment plan. In addition to your medical care, many side effects can be reduced with changes to your diet. Good nutrition is essential to keeping you strong during cancer treatment. The following pages provide you with tips to ease these side effects. Talk to your doctor, nurse or dietitian for further help to manage side effects or to discuss other concerns you may have during treatment. (Please note that any mention of product names in this publication does not constitute endorsement by the hospital, authors, or contributors and is for educational purposes only.)

Changes in appetite/Weight loss

Losing your appetite is very common during cancer treatment. When you don't feel hungry, you eat less, which leads to unwanted weight loss. A change in appetite may occur because of tiredness, pain, stress or anxiety. It also may occur because of nausea, vomiting, constipation, or diarrhea. It can also happen just because of the disease itself.

Nutritional tips for managing changes in appetite/weight loss:

- Try to have 5–6 small meals or snacks throughout the day instead of 3 large meals. Take your time eating and chew well.
- Eat on a schedule rather than waiting to feel hungry.
- Make eating more enjoyable by eating with other people or with TV/music in background.
- Drink commercially prepared nutrition shakes or homemade high calorie and protein smoothies in between meals or as meal replacements if you are having trouble eating a full meal. For recipes to make your own nutritional shakes, see pages 45–51.
- Increase how much protein you eat by including chicken, fish, eggs, dairy, tofu, nuts and beans.
- Add extra calories to meals with foods like cream, butter, cheese, olive oil, canola oil, nut butter, and avocado.
- Eat your biggest meal when your appetite is strongest.
- Keep shelf-stable snacks like nuts, granola bars, and dried fruit by your bedside.
- Sometimes you can feel too full if you eat and drink at the same time. Have beverages at least 30 minutes or more before or after meals instead of with meals.
- Drink 100% fruit juice, milk, almond milk, soy milk, or vegetable juice to increase calorie intake.

Foods that can help maintain appetite/prevent weight loss

Grains	Oatmeal or farina made with milk, soy or almond milk instead of water Cereal Pancakes, French toast, Waffles Pasta/Rice Casseroles Bread
Fruits/ Vegetables	Canned/dried fruit Vegetable soup Mashed potatoes or mashed squash Well-cooked vegetables Vegetables dipped in hummus/guacamole Salad with creamy dressing 100% fruit juices Smoothies
Protein	Fish, Poultry Meatloaf, meatballs, meat based stew Cooked eggs or egg salad Quiche Tofu, Beans/lentils, hummus Nuts/nut butter
Dairy/Non-Dairy	Regular, Soy or Almond milk Cheese Cottage cheese/Sour cream Yogurt Nonfat instant dry milk
Fats	Butter/heart healthy margarine Olive oil, canola oil, grapeseed oil, flax seed oil*, walnut oil*, hazelnut oil* (*do not heat these oils) Tahini (sesame seed paste) Avocado
Desserts/Snacks	Flan/pudding/custard Ice cream/frozen yogurt/sherbet Flavored gelatin Applesauce Granola bars Trail mix/dried fruit and nuts Crackers with peanut butter, cheese, hummus, or tuna salad
Nutritional Shakes	Commercially prepared instant breakfast drinks (i.e. Carnation Instant Breakfast®), nutritional shakes (i.e. Ensure®), clear nutritional drinks (i.e. Ensure Clear®, Boost Breeze®), protein powder (i.e. Beneprotein®) or homemade shakes (see pgs. 45–51)

Changes in sense of taste or smell

During treatment, your sense of taste and smell may change. You may notice that certain foods taste different. Some people find foods bland, bitter or with a metallic taste. Your sense of smell may become more sensitive, so certain food odors may make you feel nauseous.

Nutritional tips for managing changes in sense of taste or smell:

- Add extra flavors to foods! Season foods with herbs and spices or add hot sauce or acidic ingredients like lemon juice, vinegar, or pickled foods to enhance the flavor of meals. You can also add sugar or salt if you find foods bland. (Avoid spicy/acidic ingredients if you have a sore mouth or throat.)
- Brush your teeth or try using a mouth rinse prior to eating so that you have a fresh, clean taste in your mouth.
- Suck on tart candies or fruits to get rid of any bitter flavor in your mouth.
- If you find that meat has a metallic taste, try marinating it with different sauces, lemon or orange juice, or switch to a different protein, like chicken, fish, or tofu.
- Use plastic utensils instead of metal silverware.
- Eat food cold or at room temperature. Hot food often has a strong odor, which can make you feel nauseous if you are sensitive to smell.
- When cooking, lift lids away from you to avoid smells that may bother you.
- Be open minded to trying new foods or food you previously did not like.
- Don't be afraid to try odd combinations. If a specific taste is strong, try foods of opposite flavor. For example, if everything tastes too salty, try adding sweetener, like cranberry sauce, apricot jam, or honey mustard to turkey sandwich.

Foods that can help with changes in sense of taste or smell

Grains	Cold cereal Cold or room temperature rice/pasta Bread/crackers
Fruits/ Vegetables	Lemon/Lime Oranges Pineapple Grapefruit Fresh vegetables
Protein	Fish, poultry, meat that has been marinated with herbs/citrus Cold cuts (avoid if you are neutropenic) Quiche Nuts/nut butter
Dairy/Non-Dairy	Milk Cheese Yogurt with fruit or lemon flavored Soy or almond milk
Desserts/Snacks	Lemon desserts Flan Pudding Ice cream/frozen yogurt Popsicles Tart hard candies Lemonade or cranberry juice

Constipation

Constipation can be a side effect of many medications including chemotherapy, anti-nausea, and pain medications. It also may occur because of changes in the type or amount of food that you eat or changes in your activity level. For example, eating foods low in fiber, not drinking enough fluids, or not being physically active can increase constipation. Lack of bowel movements can lead to feelings of fullness, bloating and discomfort. If you have no bowel movement for three days and experience gas and/or bloating, stomach pain or cramps, please tell your doctor.

Nutritional tips for managing constipation:

- Increase the amount of high fiber foods, such as whole grain breads and cereals, fruits and vegetables (fresh or cooked), popcorn, and dried beans. Increase these foods slowly in your diet to prevent bloating and gas.
- Drink 8–12 cups of liquids during the day to prevent dehydration. Be sure to drink plenty of fluids when increasing daily fiber intake or your constipation could worsen.
- If you have bloating, limit beverages and foods that cause excessive gas (such as broccoli, cabbage, onions, beans, asparagus, and spicy foods).
- To decrease the amount of air swallowed while eating, try not to talk while chewing, eat in a relaxed environment, drink without using a straw, and avoid carbonated drinks or chewing gum.
- Eat a breakfast that includes a hot drink and high fiber foods.
- Have a moderate amount of caffeine to stimulate bowel function.
- Try taking a walk for some physical activity. If medically appropriate, speak with your doctor about beginning a new exercise routine.

Foods that can help with constipation

Grains	Whole wheat or multigrain pasta Whole wheat or multigrain bread Cereals with a minimum of 3 grams of fiber per serving Popcorn Brown rice Oatmeal Quinoa Barley
Fruits/ Vegetables	Broccoli Carrots Corn Green leafy vegetables Green peas Potato with skin Apple with peel Banana Berries Pear with skin Prunes Orange Raisins *All fruits and vegetables are beneficial. Avoid any vegetable that may cause gas
Protein	All nuts Beans (unless experiencing gas) Lentils Nut butters
Liquids	Water (hot or cold) Prune juice Warmed juices Hot lemonade Coffee or tea

Diarrhea

Diarrhea has many causes including chemotherapy, radiation therapy and surgery to the abdomen and pelvis, infections, medications, and anxiety. Diarrhea is defined as three or more loose, watery stools a day. Diarrhea causes food to pass too quickly through your body, before the body has time to absorb all of the vitamins, minerals, and water. This may cause dehydration, weight loss, poor appetite, and weakness. If diarrhea persists for more than a couple days, talk to your doctor.

Nutritional tips for managing diarrhea:

- Drink 8-12 cups of non-caffeinated liquids during the day to prevent dehydration and replace fluids lost. Liquids at room temperature may be better tolerated.
- Instead of 3 meals per day, eat smaller meals more often throughout the day.
- Increase soluble fiber foods such as oatmeal, natural unsweetened applesauce, bananas, lentils, pears, finely ground flaxseeds, barley, and white rice.
- Eat foods and liquids that contain sodium and potassium, two important minerals that are lost while having diarrhea. These minerals help the body work properly. Salt, soups, pretzels, most condiments and processed foods are high in sodium. Bananas, tomato, potato, dried fruits, cantaloupe, nuts and dairy are high in potassium.

- Avoid greasy, fatty, or fried foods because they may make diarrhea worse.
- You may need to limit milk and milk products. They contain lactose which can worsen diarrhea. If you have diarrhea while drinking commercially prepared nutrition shakes that are creamy, switch to the clear version (i.e. Ensure Clear®).
- Avoid high fiber, gas-producing or raw vegetables or fruits such as broccoli, corn, cauliflower, beans, and onions, and whole grain products including bran.
- Avoid caffeinated fluids and food including coffee, tea and chocolate as caffeine can stimulate bowel movements and worsen diarrhea.
- Avoid sugar-free candies and gums that contain sugar alcohols including sorbitol (a sugar replacement that can cause a mild laxative effect).
- Once diarrhea has resolved, slowly increase fiber intake into diet to prevent further discomfort.

Foods that can help with diarrhea

Grains	Farina or oatmeal Cream of wheat White bread Rice congee Chicken noodle or matzo ball soup White rice and pasta Pretzels Crackers
Fruits/ Vegetables	Canned and peeled fruits (i.e. pears and peaches) Bananas Well-cooked and soft vegetables as tolerated Pureed fruits or vegetables Mashed potatoes/mashed squash
Protein	Well-cooked eggs Smooth peanut butter Chicken without skin or turkey Fish
Dairy/Non-Dairy	Yogurt Lactose free milk, soy or almond milk
Liquids	Water Decaffeinated Teas Room temperature juices Sports drinks (i.e. Gatorade®, PowerAde®) Soup broths Coconut water
Desserts/Snacks	Applesauce Graham crackers Flavored gelatin Sherbet or sorbet Cake Popsicles

Dry mouth

Pain medications, radiation and chemotherapy to the head and neck can injure the glands that produce saliva. A lack of saliva leads to dry mouth which can make it harder to chew and swallow foods. Dry mouth can even change the flavor of foods and increase the risk of oral cavities or mouth infections. Dry mouth is also a sign of dehydration, so make sure that you are drinking enough fluids throughout the day.

Nutritional tips for managing dry mouth:

- Drink plenty of fluids (8–10 cups) throughout the day. Take a water bottle when you leave home to have fluids always available. Drinking lots of fluids throughout the day helps loosen sticky secretions.
- Suck on sugarless candy or chew on sugarless gum to stimulate saliva.
- To thin thick saliva secretions, try very sour or very sweet foods and beverages to increase saliva flow. Try lemonade, cranberry, or pomegranate juice, lemon ices or lemon yogurt. Avoid these foods and beverages if you have a sore or tender mouth.
- Take small bites and chew food well. Avoid foods that are salty, or are dry or stick to the roof of your mouth.
- Cold foods and beverages can be soothing. Try eating frozen pieces of fruit or smoothies.

- Moisten foods with broth, soup, sauces, gravy, yogurt, milk or creams to make them easier to swallow. Dip breads and pastries in liquid to moisten.
- Avoid commercial mouthwashes, alcoholic, acidic, and caffeinated drinks which increase dryness.
- Keep mouth and lips moist. Use a soft toothbrush and alcohol free mouthwashes (Biotene®) or make your own with baking soda, salt and water.
- If your dry mouth is very severe, speak to your doctor. Add moisture to your mouth with saliva substitutes. These substitutes are helpful if your salivary glands have been removed by surgery or damaged by radiation therapy.

Foods that can help with dry mouth

Grains	Hot or cold cereal with adequate milk Risotto or pastina Cold or room temperature rice/pasta Grains dressed with sauces, gravy or broth
Fruits/ Vegetables	Blenderized fruits and vegetables Canned fruits such as pears or peaches Well cooked vegetables in sauces Frozen fruits: Grapes Melon balls Banana pieces Watermelon cubes
Protein	Casseroles Stewed beef or chicken, soft flaky fish in a sauce Well cooked/moistened beef, chicken, pork, lamb, and fish Soft tofu
Dairy/Non-Dairy	Yogurt Cream Sour cream Milk Soy milk Almond milk
Desserts/Snacks	Milkshakes Pudding Applesauce Popsicles Fruit ices or slushies Lemon or tart hard sugar-free candies Lemonade or cranberry juice Ice chips Peppermints

Nausea

During treatment and days after treatment, you may experience nausea, with or without vomiting. If nausea is constant and affects your food and fluid intake, speak to your doctor and consider taking anti-nausea medications.

Nutritional tips for managing nausea:

- If nausea is a problem first thing in the morning, try having snacks that do not upset the stomach like crackers or ginger ale and keep them close to your bedside.
- Eat foods and drinks at room temperature or served cold because hot foods may increase nausea.
- Keep rooms open and airy as stuffy rooms or rooms with strong odors might upset your stomach.
- Eat small amounts slowly and often. It's important to eat before you're hungry because hunger can intensify feelings of nausea.
- Eat foods that are bland and do not upset your stomach. Avoid foods that are greasy, fatty, spicy, hot or strong smelling.
- Sip fluids in-between meals rather than with meals to prevent getting too full.
- Do not force yourself to eat foods you really enjoy when feeling nauseous as this can create taste aversions and keep you from eating those foods in the future.

- Rinse your mouth before and after meals to reduce any lasting tastes.
- Suck on mints or other tart candies if you have a bad taste.
- Eat light meals before chemotherapy and easily digested foods during chemotherapy. Try plain toast, saltine crackers, pretzels, watermelon, chicken noodle soup or other broth-based light soups, plain noodles, ginger ale and ginger teas, dry cereals, or small sandwich.
- "Anticipatory nausea" can occur before treatment starts because the brain remembers how you felt from the last session. Try to distract yourself and relax.

Foods that can help with nausea

Grains	Toast Saltines Crackers Dry cereal Oatmeal Cream of wheat Pretzels
Fruits/ Vegetables	Canned fruits such as pears and peaches Boiled potatoes Apple Ginger Watermelon Vegetables
Protein	Plain chicken Mild fish Eggs Nut butter
Dairy/Non-Dairy	Cottage cheese Cheese Soy or almond milk
Liquids	Ginger ale Water Broth Cranberry juice Lemonade Carbonated drinks (may increase nausea for some) Chicken noodle or rice soup
Desserts/Snacks	Candied dried ginger Popsicles Flavored gelatin Lemon drops Peppermints Fruit ices or slushies

Sore mouth

Mouth pain may occur due to painful ulcers that occur inside the mouth or may be due to inflammation (also called mucositis). This may be caused by certain types of chemotherapy, a decrease in your body's ability to fight infections, radiation treatment to the head and neck area, or graft-versus-host disease (GVHD). If your mouth pain gets worse or does not improve, please discuss with your physician.

Nutritional tips for managing sore mouth:

- Avoid foods that are acidic, spicy, salty, dry, or crunchy. Choose foods that are bland or sweet, and have a smooth or mushy texture.
- Drink beverages through a straw and puree or cut foods into small pieces. Eat foods that are already soft and mostly liquid like soups and smoothies/shakes.

- Have food at room temperature or served cold. Hot foods can be irritating.
- Suck on ice chips or popsicles.
- If you are taking pain medication, try to take it at least 30 minutes before your meal.
- Rinse your mouth frequently with alcohol-free mouth rinse.
- Avoid alcohol and caffeine containing beverages.
- Drink commercially prepared nutritional shakes in between meals or as meal replacements if you are having trouble eating a full meal. You can also make your own shakes at home, see pages 45–51.

Foods that can help with sore mouth

Grains	Oatmeal Farina Pancakes, waffles, French toast soaked in milk to soften Pasta/pastina Rice/risotto Casseroles, macaroni and cheese Soft bread or breads soaked in soups
Fruits/ Vegetables	Bananas Pureed fruits and fruit smoothies Well-cooked vegetables Mashed potatoes and mashed squash (avoid acidic fruits and vegetables like pineapple, citrus, and tomato products)
Protein	Well-cooked, moistened, flaky fish, poultry, beef in a sauce Stewed beef or poultry Eggs Quiche Tofu
Dairy/Non-Dairy	Cheese Cottage cheese Yogurt Soy or almond milk Butter/heart-healthy margarine
Desserts/Snacks	Flan Pudding Sherbert Custard Ice cream/frozen yogurt Popsicles Flavored gelatin Applesauce
Nutritional Shakes	Nutritional Shakes Commercially prepared instant breakfast drinks (i.e. Carnation Instant Breakfast®), nutritional shakes (i.e. Ensure®), clear nutritional drinks (i.e. Ensure Clear®, Boost Breeze®), protein powder (i.e. Beneprotein®) or homemade shakes (see pages 45–51)

Sore throat/Trouble swallowing

Patients who are receiving chemotherapy or radiation therapy to the head and neck area may experience swelling of the throat (also called esophagitis). This may make it painful to swallow or it may feel like you have a lump in your throat. Sometimes the natural mechanism of swallowing is slowed. You may also have pain with swallowing due to sores in your throat. If swallowing becomes more difficult, or you feel like you are choking or coughing when eating or drinking, tell your doctor or nurse immediately.

Nutritional tips for managing sore throat/trouble swallowing:

- Try to have 5–6 small meals or snacks throughout the day instead of 3 large meals. Take your time with eating and chew well.
- Choose foods that are soft and easy to swallow.
- Drink commercially prepared nutritional shakes in between meals or as meal replacements if you are having trouble eating a full meal. You can also make your own shakes at home, see pages 45–51.

- Drink beverages through a straw and puree or cut foods into small pieces.
- Add sauce, gravy, or syrup to moisten foods.
- Avoid hot, spicy, acidic, dry, or crunchy foods. Avoid alcohol and caffeine.
- When eating or drinking, sit upright and bend your head slightly forward. Do not lie down immediately after eating to avoid heartburn.
- Have food at room temperature or cold. Hot foods can be irritating.

Foods that can help with sore throat/trouble swallowing

Grains	Oatmeal Farina Pancakes Waffles Pasta Rice Casseroles Soft bread
Fruits/ Vegetables	Bananas Well-cooked vegetables Mashed potatoes Applesauce
Protein	Well-cooked beef, poultry, or fish with gravy or sauce Eggs Quiche Tofu
Dairy/Non-Dairy	Milk Cheese Cottage cheese Yogurt Soy or almond milk Butter/heart-healthy margarine
Desserts/snacks	Flan Pudding Ice cream/frozen yogurt Popsicles Flavored gelatin Applesauce
Nutritional Shakes	Commercially prepared instant breakfast drinks (i.e. Carnation Instant Breakfast®), nutritional shakes (i.e. Ensure®), clear nutritional drinks (i.e. Ensure Clear®, Boost Breeze®), protein powder (i.e. Beneprotein®) or homemade shakes (see pages 45–51)

Vomiting

Vomiting may follow nausea or occur alone because of treatment, food odors, an upset stomach, gas, or sudden motion changes. Similar to nausea, you may have this side effect right after treatment or several days after treatment. Frequent vomiting can lead to dehydration and poor nutrition. If your vomiting lasts more than 24 hours, contact your doctor.

Nutritional tips for managing vomiting:

- Once vomiting is under control, introduce clear liquids such as apple juice, broth, and flavored gelatin.
- If you tolerate clear liquids, try eating small amounts of soft, low fiber foods. Once you begin to feel better, slowly return to your normal diet.
- Sit upright after vomiting and bend forward.
- Eat simple, non-spicy/fatty foods such as crackers when you wake up and

every few hours.

- Eat foods with minimal odors and avoid greasy, fatty foods that can worsen vomiting.
- Replace fluids lost by drinking enough (8–12 cups of fluids).
- Rinse your mouth with baking soda and salt mouthwash to get rid of bad taste before and after eating and episodes of vomiting.

Foods that can help reduce vomiting

Grains	Toast Crackers Rice
Fruits/ Vegetables	Potatoes Canned fruits Apples Vegetables as tolerated
Protein	Baked chicken or fish Cold chicken or fish or meat Eggs
Dairy/Non-Dairy	Cold cream soups Yogurt
Liquids	Apple juice Ginger ale
Desserts/Snacks	Popsicles Sports drinks (i.e. Gatorade®, PowerAde®) Fruit ices or slushies Broth based soups Flavored gelatin

Importance of food safety

During treatment, your immune system may not be functioning at its best. Because you may be more at risk for infections, special care should be taken when your food is prepared.

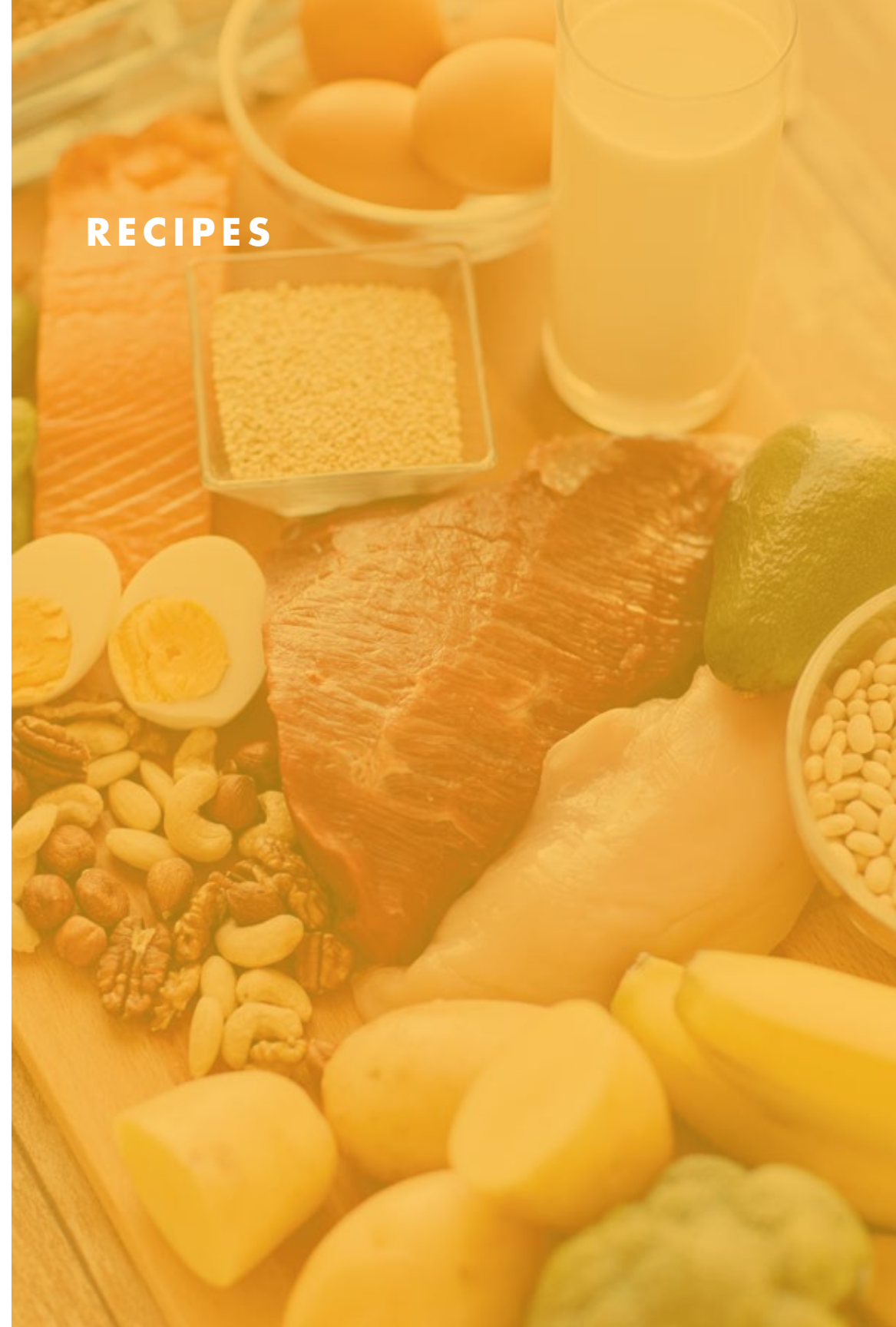
Here are some ways you can avoid foodborne illness:

- Always make sure that hot foods remain hot and that cold foods remain cold. Bacteria that can make you sick grow in foods left in the danger zone (40°F–140°F) no longer than 2 hours.
- Always be sure to put leftovers in the fridge when you are done cooking or eating.
- Wash and scrub all fruits and vegetables that you eat. Produce that cannot be washed well (like berries) should not be eaten. Always scrub the outsides, even if you don't eat it, like the rind of a melon.
- Always work on a clean surface and use utensils and cutting boards that are very clean. Sanitize cutting boards between each use. Use a separate cutting board for produce and for meat.

- Cook animal protein very well; eggs should not be runny and meat should not have a pink center. Avoid raw animal proteins like sushi or raw oysters.
- Never leave food out to defrost. Instead, thaw foods in the fridge or microwave. Cook right away if using the microwave.
- All juices, milk products, and honey should be pasteurized.
- Do not consume foods from buffets or salad bars. Foods are not always held at the proper temperatures.
- Avoid any food that has passed its "sell by" date or have any signs of spoilage.
- Reheat leftovers to 165°F. Portion out leftovers into individual containers to avoid reheating leftovers over and over again.

Your doctor or dietitian may give you further food safety guidelines if you are neutropenic.

RECIPES



Breakfast Frittata



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 4

Nonstick vegetable oil cooking spray
8 large eggs
1/3 cup milk
1/8 teaspoon freshly ground black pepper (optional)
1/2 teaspoon salt
1/2 cup of chopped vegetables
(spinach and mushrooms work great)
1/4 cup freshly grated Parmesan, mozzarella,
or any other type of cheese
2 tablespoons chopped fresh Italian parsley leaves
Non-stick vegetable oil spray

Directions

1. Preheat the oven to 375 degrees F.
2. Spray a muffin tin (with 12 cups) with nonstick spray. Whisk the eggs, milk, pepper, and salt in a large bowl to blend well. Stir in the veggies, cheese, and parsley. Fill prepared muffin cups almost to the top with the egg mixture. Bake until the egg mixture puffs and is just set in the center, about 8 to 10 minutes. Using a rubber spatula, loosen the frittatas from the muffin cups and serve immediately.

*if you have nausea, consume this cold

Nutritional facts per serving: 180 calories, 12g fat, 380mg cholesterol, 490mg sodium, 2g carbohydrates, 1g fiber, 1g sugar and 15g protein.

Banana-Chocolate Chip Protein Muffins



Try this recipe if you are experiencing:

Appetite/weight loss
Sore mouth

Ingredients

Makes 16 muffins

For muffin:

2 cups flour
1 cup sugar
3/4 teaspoon baking soda
1/2 teaspoon salt
1/4 cup canola oil
2 large eggs
1 1/2 cups mashed bananas
(about 3 bananas)
1 (7 oz) container 2% fat Greek yogurt
1 teaspoon vanilla extract
1/4 cup water
1 cup chocolate chips
8 packets or scoops of Beneprotein
(or other whey protein)

For frosting:

8 oz. cream cheese
1/4 cup butter
1 cup confectioners sugar
1/2 teaspoon vanilla extract

Garnish:

1 banana, sliced

Directions

1. Preheat oven to 350°F.
2. Combine flour, sugar, baking soda and salt in a bowl. In another bowl, mix together oil, eggs, bananas, yogurt, water and vanilla. Mix together the wet and dry ingredients. Fold in Beneprotein and chocolate chips gently. Line two muffin tins with 16 paper liners and scoop batter in evenly so that each is filled about 3/4 of the way. Bake at 350° for 20 to 22 minutes or until a wooden pick inserted in center comes out clean. Cool 10 minutes in pan on a wire rack; remove from pan. Cool completely on wire rack.
3. In a medium bowl, cream together the cream cheese and butter using a hand blender or standing mixer, until creamy. Mix in the vanilla, then gradually stir in the confectioners' sugar. Once fully cooled, frost each muffin with a spoonful of frosting, top each with a slice of banana and enjoy!

Nutritional facts per serving: 260 calories, 9g fat, 25mg cholesterol, 160mg sodium, 39g carbohydrates, 1g fiber, 24g sugar and 8g protein.

Honey Bran Prune Muffin



Try this recipe if you are experiencing:
Constipation

Ingredients

Makes 18 muffins

- 2 cups wheat bran
- 2 cups all-purpose flour
- 1/8 teaspoon salt
- 1 teaspoon baking soda
- 1/2 cup light brown sugar
- 3 large eggs
- 1 cup prune juice
- 1/2 cup canola oil or applesauce
- 1/2 cup honey
- 1 cup raisins

Directions

1. Preheat the oven to 400 degrees F.
2. In a bowl, combine bran, flour, salt, baking soda, and brown sugar. Add eggs, prune juice, oil/applesauce, and honey, mixing well. Stir in raisins. Pour batter into paper lined muffin tins. Bake for 20 minutes.

Nutritional facts per serving: 220 calories, 7g fat, 4mg cholesterol, 35mg sodium, 38g carbohydrates, 1g fiber, 24g sugar and 4g protein.

Edamame Guacamole



Try this recipe if you are experiencing:
Appetite/weight loss
Changes in taste and smell
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 3

- 1 cup shelled frozen edamame, thawed
- 1 avocado, halved and pitted
- 2 tablespoons Greek yogurt
- 1/4 cup red onion, finely diced
- 1/2 jalapeno, seeds removed and minced (optional)
- 1 small tomato, diced
- 1/4 cup finely chopped cilantro
- juice of 2 limes
- 1/4 teaspoon of salt

Directions

1. Place edamame in the bowl of a food processor and process to a paste, stopping to scrape down the sides as necessary. This should take less than a minute.
2. Scrape avocado flesh into a large bowl and mash until smooth. Add the edamame paste, Greek yogurt, onion, optional jalapeno, tomato, cilantro, and stir to combine. Add lime juice and salt to taste.
3. If you have time, refrigerate for 30 minutes to allow the guacamole to firm up, otherwise dig in! Serve with chips or vegetables.

Nutritional facts per serving: 190 calories, 12g fat, 210mg sodium, 15g carbohydrates, 8g fiber, 4g sugar and 9g protein.

Garlicky Kale Hummus



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 6

1 (15.5 oz) can low-sodium chickpeas, rinsed
1 cup chopped kale, stems removed
1 large garlic clove, minced
1/3 cup water
1/4 cup sesame paste (tahini)
2 tablespoons lemon juice
2 tablespoons extra virgin olive oil
1/2 teaspoon sea salt

Directions

1. Place all ingredients into a food processor and blend until smooth.

Nutritional facts per serving: 180 calories, 10g fat, 6g protein, 16g carbohydrates, 3g fiber, and 220 mg sodium.

Carrot-Ginger Soup



Try this recipe if you are experiencing:

Change in sense of taste or smell
Constipation
Dry mouth
Nausea

Ingredients

Serves 6

1 tablespoon olive oil
2 tablespoons heart-healthy margarine
1 tablespoon minced ginger
1 large shallot, finely chopped
8-10 large carrots, chopped
3 cups low sodium vegetable broth
1 cup canned coconut milk
1 teaspoon curry powder (optional)
1/2 teaspoon salt

Directions

1. Heat oil and margarine in a medium-sized soup pot or Dutch oven for about 2 minutes.
2. Add ginger and shallot and sauté for about 3 minutes. Add carrots and sauté for another 3 minutes. Add stock, curry powder, cayenne, and salt, and stir well and cover with lid.
3. Once soup has been brought to a boil, lower heat to simmer for 15 minutes, or until carrots are very tender. Let cool for at least 5 minutes. Carefully, use an immersion blender (aka stick blender) to puree the soup until you have reached the desired consistency, add more salt if desired, and serve immediately.

Nutritional facts per serving: 170 calories, 14g fat, 0mg cholesterol, 350mg sodium, 11g carbohydrates, 3g fiber, 4g sugar and 2g protein.

Potato-Leek Soup



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Constipation
Diarrhea
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 6

1 tablespoon extra virgin olive oil
1 tablespoon butter or heart-healthy margarine
2 leeks, white and light green parts washed and diced into 1/4-inch pieces
2 cups yellow onions
1/2 teaspoon salt
3 cloves garlic, minced
1 1/2 pounds Yukon gold potatoes, peeled and cubed into 1/2-inch pieces
3 cups low sodium vegetable or chicken broth
1 cup milk
1 tablespoon fresh rosemary leaves, finely chopped

Directions

1. Heat a large pot over medium-high heat and add the oil and butter/margarine. Add the leeks, onion, and salt and sauté for about 5 minutes, stirring often, until the onion begins to turn translucent.
2. Add the garlic and stir well. Cook for 1 more minute.
3. Add the potatoes, 1/2 of the vegetable stock, and rosemary, cover with lid, and bring to a boil. Reduce heat to a simmer and then add the remaining 2 cups of vegetable stock. Cook for about 20 minutes, until the potatoes are soft.
4. Remove the soup from the heat, stir in milk, and let cool for 5 minutes. Carefully use an immersion/stick blender to blend the soup in the pot until smooth. Serve immediately.

Nutritional facts per serving: 210 calories, 5g fat, 10mg cholesterol, 310mg sodium, 36g carbohydrates, 4g fiber, 7g sugar and 5g protein.

The Valero's Sopa de Elote



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Constipation
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 6

1/2 stick of butter
1/4 small onion, sliced
1-2 garlic cloves, minced
18 ounces frozen corn (1 1/2 bags)
1/2 green bell pepper, sliced
1 cup of whipping cream
1 cup of water
1/4 cup canned tomato sauce
2 tablespoons low sodium chicken bouillon
3 cilantro sprigs

Directions

1. Melt butter in pan over medium heat. Add garlic and onions and cook until soft.
2. Next add corn and cook for about 5 minutes stirring continuously. Add in the sliced bell peppers and continue to cook for about 8 minutes.
3. Once corn has defrosted, stir in the whipping cream, water, tomato sauce and chicken bouillon. Add in the cilantro once the soup has thickened a bit. Stir and continue to cook for about 10 minutes. Taste and adjust seasoning if needed.

Nutritional facts per serving: 300 calories, 24g fat, 75mg cholesterol, 100mg sodium, 22g carbohydrates, 2g fiber, 3g sugar and 4g protein.

Healthy Mac & Cheese



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Sore mouth*
Sore throat/trouble swallowing*

Ingredients

Serves 8

Cooking spray

1 pound whole grain elbow or other shaped pasta
2 (10 ounce) packages frozen pureed winter squash
2 cups milk
4 ounces sharp Cheddar, grated (about 1 1/3 cups)
1/2 teaspoon salt
2 tablespoons unseasoned breadcrumbs
2 tablespoons grated Parmesan
1 teaspoon olive oil

Directions

1. Preheat the oven to 375 degrees. Coat a 9 by 13-inch baking pan with cooking spray.
2. Bring a large pot of water to a boil. Add the macaroni and cook until tender but firm about 5-8 minutes. Drain and transfer to a large bowl.
3. Defrost the frozen squash. Add to milk in a large saucepan and heat through. Turn the heat up to medium and cook until the mixture starts to simmer. Remove the pan and add the cheddar cheese and salt. Pour cheese mixture over the macaroni and stir to combine. Transfer the macaroni and cheese to the baking dish.
4. Combine breadcrumbs, Parmesan cheese, and oil in a small bowl. Sprinkle over the top of the macaroni and cheese. Bake for 20 minutes.

*omit breadcrumbs if experiencing these symptoms

Nutritional facts per serving: 320 calories, 7g fat, 15mg cholesterol, 320mg sodium, 53g carbohydrates, 3g fiber, 5g sugar and 14g protein.

Congee (Japanese rice porridge with fish)



Try this recipe if you are experiencing:

Appetite/weight loss
Sore throat/trouble swallowing
Diarrhea

Ingredients

Serves 6

5 cups water (or vegetable stock)
1 cup short grain brown rice
3/4 pound flounder or sole
1 1/2 tablespoons toasted sesame oil
1 1/2 tablespoons light soy sauce
1/4 teaspoon salt (optional)
3 scallions, thinly sliced

Directions

1. Combine water (or stock) in large pot with rice. Cover pot and bring to boil on medium; reduce to simmer and cook for 30-40 minutes (rice will look like a porridge).
2. Add to fish pot (you can leave whole) and cook covered for another 15 minutes. Once done, stir to break fish apart.
3. Add remaining ingredients to flavor and serve warm.

Nutritional facts per serving: 210 calories, 6g fat, 25mg cholesterol, 420mg sodium, 30g carbohydrates, 3g fiber, 2g sugar and 10g protein.

Salmon with Asian Marinade



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste

Ingredients

Serves 6

1/2 cup orange juice
1/4 cup light soy sauce
2 tablespoons fresh ginger, finely chopped
2 tablespoons honey
1 teaspoon toasted sesame oil
2 pounds of salmon, skin on, cut into 6 equal pieces
2 tablespoons extra-virgin olive oil

Directions

1. In a small saucepan, bring orange juice, soy sauce, ginger, honey, and sesame oil to a simmer over high heat. Reduce to medium-low; cook 5 minutes. Pour half of marinade into a shallow dish large enough to hold fish in a single layer; cool 10 minutes. Add fish; coat with marinade. Turn skin side up. Cover with plastic; set aside 10 minutes.
2. In large frying pan, heat olive oil over medium-high heat. Place fish in pan skin side down; cover and cook until skin is crisp, about 3 minutes. Flip and cook just until opaque throughout, 2 to 3 minutes more.

Tip: To make this dish vegetarian, use tofu instead of salmon. Follow the same directions. If you are sensitive to odor, serve the salmon or tofu cold.

Nutritional facts per serving: 310 calories, 15g fat, 85mg cholesterol, 400mg sodium, 10g carbohydrates, 0g fiber, 10g sugar and 31g protein.

Lemon Chicken



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Nausea

Ingredients

Serves 4

1/4 cup olive oil
1/4 cup butter or heart-healthy margarine
6 cloves minced garlic
1/2 cup finely chopped onion
1 pound boneless, skinless chicken breasts
1 cup chicken broth
1 cup white wine
1/4 cup mixed finely chopped fresh herbs (parsley, tarragon, sage, thyme)
1/4 cup lemon juice

Directions

1. Combine the olive oil and butter/margarine in a large pot, heat on medium-high until the butter/margarine is melted. Add the garlic and onion and sauté lightly. Add remaining ingredients except chicken. Cook for about 10 minutes over low heat. Cut chicken in cubes or thin strips, add to pot and cook until cooked through, about 10 minutes, stirring to make sure chicken is evenly cooked.
2. If the sauce seems thin, add a little cornstarch mixed with a tablespoon of cold water to thicken. Serve with pasta if desired.

Nutritional facts per serving: 420 calories, 28g fat, 105mg cholesterol, 150mg sodium, 6g carbohydrates, 1g fiber, 1g sugar and 26g protein.

Turkey Meatballs with Spinach and Pasta



Try this recipe if you are experiencing:

Appetite/weight loss
Sore throat/trouble swallowing
Constipation

Ingredients

Serves 4

1 box frozen spinach, defrosted	1 tablespoon extra-virgin olive oil for drizzling
1 pound (1 package) ground turkey	1 tablespoon butter
1/2 small onion, finely chopped, divided	1 tablespoon all-purpose flour
3 cloves garlic, chopped	1/2 cup chicken stock
1 large egg	1/2 cup shredded provolone, mozzarella, or blend of Italian cheeses
1 1/4 cups milk, divided	1/2 teaspoon freshly grated nutmeg
2/3 cup bread crumbs	4 cups cooked pasta
1/4 cup grated Parmesan cheese	1/4 cup parsley leaves, chopped
Coarse salt and black pepper	

Directions

1. Preheat oven to 350 degrees F.
2. Squeeze out as much water from the defrosted spinach as you can. Place turkey in a bowl and make a well in the middle of it. Add the spinach, all but 3 tablespoons of the onion, all of the garlic, 1 large egg, about 1/4 cup milk, bread crumbs, grated Parmesan, salt and pepper. Mix well. Form into 12 large balls and drizzle with extra-virgin olive oil. Arrange on a nonstick cookie sheet and roast 20 minutes, or until cooked through.
3. While balls are in the oven, heat a small sauce pot over medium heat. Add a drizzle of extra-virgin olive oil and 2 tablespoons butter. Melt butter, add remaining finely chopped onion and cook 2 minutes then whisk in flour. Cook flour for 1 minute, then whisk in 1 1/2 cups milk and 1 cup stock. Bring liquid up to a boil then stir in shredded cheese. Season the sauce with salt, pepper and nutmeg, turn heat to lowest setting.
4. Place 1 cup of pasta and 3 meatballs on each plate. Top with sauce, garnish with parsley.

Nutritional facts per serving: 680 calories, 26g fat, 155mg cholesterol, 510mg sodium, 67g carbohydrates, 6g fiber, 7g sugar and 45g protein.

Mexican Rice and Beans



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Constipation
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 4

For the rice:

1/2 tablespoon olive oil
1 cup white rice
1 cup diced yellow onion
2 cups of water
1 cup diced tomato
1/2 cup chopped cilantro leaves
1 tsp low sodium chicken-flavored bouillon
1 small lime, juiced

For the beans:

1 15 ounce can low-sodium pinto or black beans, rinsed
1/4 cup diced yellow onion
2 tablespoons olive oil
Salt to taste

Directions

1. Heat 1/2 tablespoon of olive oil in small pot on medium heat. Add 1 cup of rice and cook until lightly brown, stirring constantly. Add diced onions and cook until soft. Next stir in water, tomatoes and cilantro.
2. Cook rice until water is partially absorbed. Once water has partially absorbed (10 minutes), add bouillon and lime juice and stir and cover until water is completely absorbed. Fluff with a fork and adjust seasoning as desired once rice is fully cooked.
3. To prepare the beans, heat the oil in a medium-sized saucepan and then add onions. Cook onion until translucent (about 5 minutes) and then add the beans to the remaining oil in the pan and cook for about 5-10 minutes and serve warm with the rice.

Tip: If you have a sore throat, dry mouth or difficulty swallowing, mash beans by hand or with electric hand blender or food processor for smooth consistency. Add 1/4 cup of water as needed if a more pureed consistency is desired.

Nutritional facts per serving: 240 calories, 9g fat, 0mg cholesterol, 180mg sodium, 33g carbohydrates, 7g fiber, 4g sugar and 8g protein.

Lemon Yogurt Pound Cake



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Nausea

Ingredients

Makes 1 loaf

1 1/2 cups all-purpose flour
2 teaspoons baking powder
1/2 teaspoon kosher salt
1 cup plain Greek yogurt
1 1/3 cups sugar, divided
3 extra large eggs
2 teaspoons grated lemon zest (2 lemons)
1/2 teaspoon pure vanilla extract
1/2 cup vegetable oil
1/3 cup freshly squeezed lemon juice

Directions

1. Preheat oven to 350 degrees F. Grease an 8 1/2 by 4 1/4 by 2 1/2-inch loaf pan. Line the bottom with parchment paper. Grease and flour the pan.
2. Sift together the flour, baking powder, and salt into 1 bowl. In another bowl, whisk together the yogurt, 1 cup sugar, the eggs, lemon zest, and vanilla. Slowly whisk the dry ingredients into the wet ingredients. With a rubber spatula, fold the vegetable oil into the batter, making sure it is all incorporated. Pour the batter into the prepared pan and bake for about 50 minutes, or until a cake tester placed in the center of the loaf comes out clean.
3. Meanwhile, cook the 1/3 cup lemon juice and remaining 1/3 cup sugar in a small pan until the sugar dissolves and the mixture is clear. Set aside.
4. When the cake is done, allow it to cool in the pan for 10 minutes. Carefully place on a baking rack over a sheet pan. While the cake is still warm, pour the lemon-sugar mixture over the cake and allow it to soak in. Cool then serve.

Nutritional facts per serving (1/12 of loaf): 260 calories, 11g fat, 55mg cholesterol, 200mg sodium, 36g carbohydrates, 0g fiber, 23g sugar and 5g protein.

Chocolate Protein Shake (with 3 variations)



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 1

1/4 cup milk, soy milk, or almond milk
1 cup chocolate ice cream or frozen yogurt
1 tablespoon hot cocoa mix or chocolate syrup
2 tablespoons whey protein powder (optional)

Directions

In a blender, combine all ingredients and blend until smooth. Pour into glasses and serve immediately.

Variations

Peppermint Patty: Add in 1/4 teaspoon of peppermint extract to the ingredients above and omit the hot cocoa mix/chocolate syrup.

Peanut Butter Bomb: Add in 3 tablespoons of smooth peanut butter to the ingredients above.

Cocoa Mocha: Add in 2 teaspoons of instant coffee to the ingredients above.

Nutritional facts per serving (not including additional ingredients from variations): 570 calories, 27g fat, 95mg cholesterol, 270mg sodium, 57g carbohydrates, 2g fiber, 47g sugar and 23g protein.

Vanilla Protein Shake (with 3 variations)



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 1

1/4 cup milk, soy milk, or almond milk
1 cup vanilla ice cream or frozen yogurt
1/2 teaspoon vanilla extract
2 tablespoons whey protein powder (optional)

Directions

In a blender, combine all ingredients and blend until smooth. Pour into glasses and serve immediately.

Variations

Tropical Fruit: Instead of milk, use 1/4 cup of coconut milk. Also add 1/2 banana, 1/4 cup of frozen sliced peaches, and 1/4 cup of frozen mango chunks.

Peanut Butter-Banana: Add in 3 tablespoons of smooth peanut butter (or other nut butter) and 1/2 of a ripe banana to the ingredients above.

Creamsicle: Add in 1/2 cup of orange sorbet to the ingredients above.

Nutritional facts per serving (not including additional ingredients from variations): 360 calories, 16g fat, 65mg cholesterol, 150mg sodium, 34g carbohydrates, 1g fiber, 31g sugar and 19g protein.

Avena Caliente



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Constipation
Dry mouth
Nausea
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 2

1/3 cup old-fashioned oats
2 cups 2% milk (or non-dairy milk)
1/4 almond butter
1 tablespoon brown sugar
1/2 teaspoon ground cinnamon
1/4 teaspoon ground nutmeg
pinch of cloves
pinch of salt

Directions

1. Add the oats to a bowl, stir in the milk, and let stand in the refrigerator for 1 hour or overnight.
2. Add the oats, milk, and all other ingredients to a blender and blend until smooth.
3. Pour the mixture into a saucepan and heat over medium heat until barely simmering, about 5 minutes. Pour into mugs and serve.

Nutritional facts per serving: 400 calories, 23 g fat, 20 mg cholesterol, 180 mg sodium, 34g carbohydrates, 5g fiber, 20g sugar and 17g protein.

Pumpkin Pie Smoothie



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Diarrhea
Dry mouth
Nausea
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 3

1 frozen banana, sliced
6 ounces vanilla Greek or Icelandic yogurt
1/2 teaspoon pumpkin pie spice
1/2 cup milk
3 tablespoons maple syrup
1 15 ounce can pumpkin puree
1 cup ice
Optional add-in: 1 scoop protein powder

Directions

Place all ingredients in a blender and blend until very smooth.
Add more ice if desired.

Nutritional facts per serving: 190 calories, 2.5 g fat, 5 mg cholesterol, 50 mg sodium, 38g carbohydrates, 5g fiber, 26g sugar and 8g protein.

Papaya & Banana Smoothie



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Diarrhea
Dry mouth
Nausea
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 3

1 cup milk or dairy free milk (rice, almond or soy)*
1/4 cup Greek yogurt
1 teaspoon pure vanilla extract
1 large ripe banana, peeled, sliced and frozen
1 medium, ripe papaya, peeled, seeded, cubed and frozen (4 cups)**
1 scoop whey protein powder (optional)

Directions

1. Combine the milk, yogurt, vanilla, banana, papaya and optional protein powder in a blender.
2. With the blender on the smoothie puree setting, blend until smooth.

*If you have thick mucous, use dairy free milk

**Two 15 ounce cans of tropical fruit salad may be used as a substitute. Drain fruit freeze, reserve juice to blend into the smoothie as desired.

Nutritional facts per serving: 200 calories, 5g fat, 5g protein, 35g carbohydrates, 25g sugar, 4g fiber, and 55mg sodium

Supergreen Smoothie



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Diarrhea
Dry mouth
Nausea
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 1

1 cup baby spinach
1 cup chopped kale
1/3 cup frozen mango
1/2 frozen banana, sliced
1 cup almond/rice/soy milk
1/2 cup Greek yogurt
1 cup ice

Optional add-ins: 1 tablespoon flax/chia/hemp seed
or 1/2 tablespoon honey/agave nectar

Directions

Place all ingredients in a blender and blend until smooth!

Nutritional facts per serving: 260 calories, 3g fat, 15g protein, 46g carbohydrates, 6g fiber, and 260mg sodium

Mocha Banana Protein Smoothie



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Diarrhea
Dry mouth
Nausea
Sore mouth
Sore throat/trouble swallowing

Ingredients

Serves 2

1 cup unsweetened vanilla almond milk
6 ounce container 2% fat plain Greek yogurt
1 banana
2 teaspoons instant espresso powder
1 tablespoon hot coca mix (or cocoa powder)
1 tablespoon agave nectar/honey/maple syrup
2 teaspoons vanilla extract
1 scoop whey protein powder
1 cup ice

Directions

Place all ingredients into a blender and blend until smooth.
Add additional ice if desired for a frostier, thicker consistency.
Serve immediately.

Nutritional facts per serving: 240 calories, 4g fat, 5mg cholesterol, 190mg sodium, 39g carbohydrate, 3g fiber, 28g sugar, 12g protein.

No-Bake Energy Bites



Try this recipe if you are experiencing:

Appetite/weight loss
Change in sense of taste or smell
Constipation
Nausea

Ingredients

Makes 3 dozen

1 cup (dry) old-fashioned oats
2/3 cup toasted coconut flakes
1/2 cup peanut butter
1/2 cup ground flaxseed
1/2 cup chocolate chips
1/3 cup honey or maple syrup
1 teaspoon vanilla extract

Directions

1. Stir all ingredients together in a medium bowl until thoroughly mixed. Cover and let chill in the refrigerator for half an hour.
2. Once chilled, roll into balls of whatever size you would like (1 inch in diameter). Store in an airtight container and keep refrigerated for up to 1 week.

Nutritional facts (for 3 bites): 220 calories, 13g fat, 0mg cholesterol, 55mg sodium, 23g carbohydrate, 3g fiber, 14g sugar, 6g protein.

Shopping list of food that can help manage various side effects

PANTRY STAPLES

Applesauce/canned fruit
Bread
Canned tuna
Canned beans
Cereal
Crackers/pretzels
Couscous/quinoa
Dried fruit
Granola bars
Herbs & spices
Honey/maple syrup
Instant pudding
Jam/jelly
Broth
Canned soup
Commercially-made shakes
Sports drinks
Juice
Gingerale
Nuts/nut butter
Oatmeal/farina
Olive oil
Pancake mix
Pasta
Pasta sauce
Rice
Hard candies
Soy sauce
Vinegar

REFRIGERATOR STAPLES

Butter
Cheese
Chicken breasts
Cream cheese
Eggs
Fish
Fruits
Flavored gelatin
Hummus
Lemons/limes
Turkey slices*
Sour cream
Tofu
Vegetables
Yogurt

FOR THE FREEZER

Frozen fruit*
Frozen vegetables
Frozen waffles
Ice cream/frozen
Individually wrapped chicken breasts
Frozen meals
Vegetable burgers
Yogurt/popsicles

*If you are neutropenic, you may need to avoid this food.

Nutrition after Cancer Treatment Ends

After treatment is finished it is still very important to eat well as part of a healthy lifestyle. Good nutrition will help you regain your strength, rebuild tissue, and help you feel better overall. Sometimes side effects like poor appetite, dry mouth, change in taste or smell, trouble swallowing, or weight changes may last for some time or could be permanent. This could be related to damage from treatment (i.e. surgery to remove part of your stomach or intestines, or radiation to abdomen). If this affects you, talk to your health care team and work out a plan to manage the problem to ensure adequate nutrition. There is evidence that shows that following a healthy, well-balanced diet can reduce the risk of cancer recurrence. A healthy diet is made up of a variety of low fat protein (poultry, fish and lean meats), fresh vegetables and fruits, whole grains, and legumes. Maintaining a healthy weight is also important to reduce the risk of cancer which is achieved not only by diet but also physical activity. Consult your physician before starting a new exercise regimen.

Tips for healthy eating after cancer:

- Visualize your plate and aim for two-thirds of your meal being vegetables, fruits, whole grains or beans, and one-third or less should be lean meats or dairy.
- Eat many different kinds of foods. No single food has all the vitamins and nutrients you need. Eat a well-balanced diet with emphasis on plant sources.
- Eat whole wheat bread, oats, brown rice, or other whole grains and cereals such as shredded wheat, barley, bulgur and quinoa. These have needed complex carbohydrates, vitamins, minerals, and fiber. You can also add fresh or dried fruits and nuts to cereals.
- Choose 100% vegetable or fruit juices and whole grain or high fiber foods for breakfast. Avoid sugar sweetened, fruit cocktail or flavored drinks and soda.
- Try to eat at least 5 to 7 servings a day of different fruits and vegetables (either raw or cooked), including citrus fruits and dark-green and deep-yellow vegetables. These are great sources of vitamins, minerals, and fiber.

- Snack on bell peppers, baby carrots, broccoli or other vegetables dipped in hummus, or fresh fruit with low-fat or nonfat yogurt or cottage cheese.
- Choose low-fat milk and dairy products.
- Add beans, peas, and lentils to your diet and eat them often.
- In general, be cautious with foods high in fat, salt, sugar, alcohol, and smoked or pickled foods.
- Eat small portions (about 6 to 7 ounces each day) of lean meat and poultry without skin. Limit red meat to no more than three to four servings per week.
- Use low-fat cooking methods, such as broiling, steaming, grilling, and roasting.
- Try a new fruit, vegetable, low-fat food, or whole-grain product each time you shop for groceries.
- Choose portions that help you achieve and/or maintain an ideal body weight.

If you have any questions about these tips or guidelines talk to a dietitian or your doctor.

References and Additional Resources

A TASTE OF WELLBEING

Cooking demonstrations designed for our oncology patients that are led by Registered Dietitians. Learn easy-to-make, nutritious meals and snacks and how to better manage side effects. Handouts, recipes and samples provided; open to all inpatients and outpatients and their family members/caregivers.

Location: Weill Cornell, Greenberg Pavilion, 10 South Patient Lounge of the Greenberg Pavilion at Weill Cornell
Time: 2nd & 4th Wednesday of every month at 2pm

COOK FOR YOUR LIFE

Offers free cooking and nutrition classes to cancer patients, their caregivers, and cancer survivors. Register for classes online or by phone.

Website: www.cookforyourlife.org
Phone: 212-799-3894
Local Address: 32 Broadway Suite 1101, New York, NY 10004

AMERICAN CANCER SOCIETY (ACS)

A nationwide nonprofit organization dedicated to eliminating cancer as a major health crisis and reducing the impacts of cancer on people living with it, their families, and friends.

Website: www.cancer.org
Phone: 1-800-227-2345 (National Number); 212-586-8700 (Manhattan Office)
Local Address: 132 West 32nd Street, New York, NY 10001

THE LEUKEMIA AND LYMPHOMA SOCIETY (LLS)

LLS offers information, support and guidance to people living with leukemia, lymphoma, myeloma, myelodysplastic syndromes or myeloproliferative disorders.
Website: www.lls.org

EATING HINTS FOR CANCER PATIENTS

This booklet provides tips and recipes to help people living with cancer cope with common treatment-related nutrition problems. Free booklets can be ordered online, or by calling 1-800-4-CANCER. You can also download a copy online.
Website: www.cancer.gov/cancerinfo/eatinghints

AMERICAN INSTITUTE FOR CANCER RESEARCH (AICR)

AICR studies nutrition and cancer and provides information from research to the public. They publish a free newsletter, as well as many books and pamphlets. Order a free copy by calling 1-800-843-8114. You can also download a copy online.
Website: www.aicr.org

If you have further questions or need support with eating well during your treatment, you can schedule an appointment with a dietitian at the Nutrition Wellness Center by calling:

New York-Presbyterian Weill Cornell
212-746-0838
New York-Presbyterian Columbia
212-305-9969

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Recipe on page 30 is from *Eating Well Through Cancer*, by Holly Clegg & Gerald Miletello, MD

Recipes on pages 36, 40, and 42 are from FoodNetwork.com

Recipe on page 50 is from gimmesomeoven.com

Notes



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