



PATIENT & CAREGIVER EDUCATION

Low-Iodine Diet

This information describes a low-iodine diet.

A low-iodine diet contains less than 50 micrograms (mcg) of iodine per day.

Iodine is a mineral. It plays an important role in several processes that take place in your body. One role is the production of a hormone called thyroxine in the thyroid gland.

Iodine is found naturally in certain foods, but most of it comes from iodized salt, dairy products, and breads. Adults need 150 mcg of iodine a day.

You will need to follow a low-iodine diet to increase the effectiveness of your upcoming radioactive iodine therapy. If you have iodine in your diet, it can prevent your thyroid from taking up the radioactive iodine. Your doctor may put you on a low-iodine diet 1 or 2 weeks before you get your dose of radioactive iodine. Follow this diet until your test or treatment is complete.

This diet does not meet the suggested daily allowance for all nutrients. You will only be on it for a short time. Your doctor will tell you when to begin and when to stop this diet.

Foods, Beverages, and Other Items Containing Iodine

Read all food labels to check for iodine content. **Do not eat or use:**

- Iodized salt
- Sea salt in any form
- Seasoning mixes made with salt, such as adobo
- Onion salt
- Celery salt
- Garlic salt
- Seasoned salt
- Seaweed (kelp, nori, kombu, wakame)
- Any food that has
 - Iodates
 - Iodides
 - Algin
 - Alginates
 - Carrageen
 - Agar
- Commercial breads and bakery products
- Milk (except for 1 ounce a day) and milk products, such as cheese, yogurt, and cream
- Egg yolks
- Most seafood (except fresh-water fish)

- Vitamins and food supplements, if they have iodine. If you are not sure about the iodine content, do not take them.
- Food, pills, or capsules with food dyes that are orange, red, or brown in color. Examples include red or pink cereals or candies.
- Antiseptics, such as iodine (Betadine®) applied on a cut
- Cough medications (especially those with red coloring)
- Liquid nutritional supplements and commercial shakes, such as:
 - Ensure®
 - Boost®
 - Nutrament®
- Restaurant and processed foods
- Soy products, such as edamame, tofu, soy burgers (e.g., Boca®), etc.

If you are receiving tube feeding formula, ask your dietitian or doctor what to do.

Low-Iodine Diet Guidelines

Drink plenty of liquids

Unless your doctor gives you other instructions, you must drink at least 8 to 10 (8-ounce) cups of liquid a day. This includes the drinks listed in the diet guidelines below and as much water as you want.

Foods and beverages to include and avoid

Breads and Cereals	
Total number of servings per day: 4 to 6 (1 serving equals 1 slice of bread or 1/2 cup of cooked pasta or grains)	
Include <ul style="list-style-type: none"> • Plain cooked barley, oats, millet, buckwheat, bulgur wheat, and quinoa • Unsalted, unprocessed, preservative-free boxed cereals, such as puffed rice and shredded wheat • Rice, plain macaroni, spaghetti, and noodles • Unsalted grits and Cream of Rice® or Cream of Wheat™ hot cereals • Unsalted rice cakes, unsalted plain matzah, Thomas' Original English Muffins®, plain unsalted popcorn • Homemade breads prepared without commercial dough, milk, or eggs 	Avoid <ul style="list-style-type: none"> • All commercial breads, rolls, bagels, and bialys • Processed boxed cereals • All commercial crackers, potato chips, pretzels, and Melba toast • Packaged rice, pasta mixes, and egg noodles

<p>Meat and Meat Substitutes Total number of servings per day: 2 to 3 (1 serving equals 3 ounces of meat or poultry)</p>	
<p>Include</p> <ul style="list-style-type: none"> • Fresh beef and veal • Fresh lamb • Fresh pork • Fresh chicken and turkey • Fresh-water fish, such as carp, river bass, lake trout, and river perch • Fresh egg whites • Unsalted nuts and unsalted nut butters (e.g., peanut butter, almond butter, cashew butter) 	<p>Avoid</p> <ul style="list-style-type: none"> • All processed, canned, dried, salted, or cured meats • Egg yolks, whole eggs, and any foods made with eggs • All canned fish, such as salmon and tuna • Most seafood, including fish from brackish or seawater, all shellfish (clams, crabs, oysters, lobsters), or any food made with fish stock • Liver and all other organ meats • Bacon, sausage, ham, frankfurters, chipped beef • Deli meats (salami, bologna, pastrami) • Spicy meats, such as chili, beef jerky, and liverwurst • All canned or processed poultry, such as turkey or chicken • Turkey or chicken with injected broth • Tofu and soy products, such as soy burgers (e.g., Boca®) • Salted nuts and nut butters
<p>Milk and Milk Products Total number of servings per day: 0 (none)</p>	
<p>Include</p> <ul style="list-style-type: none"> • None allowed, except 1 ounce of milk a day in your coffee or tea 	<p>Avoid</p> <ul style="list-style-type: none"> • All milk (except for 1 ounce daily) and milk products, such as condensed or evaporated milk, nondairy creamer, cheeses, yogurts, puddings, ice creams, and custards • Any cream, such as heavy or light cream, whipped cream, or sour cream • Any foods made with cream, milk, or cheese, such as soup, pizza, and macaroni and cheese • All milk substitutes including almond milk, coconut milk, and rice milk
<p>Fruits Total number of servings per day: No restrictions (1 serving equals 1 small piece of fruit or ¾ cup of juice)</p>	
<p>Include</p> <ul style="list-style-type: none"> • Fresh fruits • Fresh homemade apple sauce • Frozen fruits • Fresh fruit juices (including bottles or cartons of fruit juice without artificial coloring or preservatives) 	<p>Avoid</p> <ul style="list-style-type: none"> • Cranberries • Strawberries • All dried fruits • All canned fruits and canned fruit juices • Jarred applesauce • Cranberry and grape juice • Canned or bottled cherries • Rhubarb

<p>Vegetables Total number of servings per day: No restrictions (1 serving equals ½ cup of cooked or 1 cup of raw vegetable)</p>	
<p>Include</p> <ul style="list-style-type: none"> • Fresh vegetables • Fresh white and sweet potatoes without skin • All plain frozen vegetables without added salt • Fresh or dried lentils and peas 	<p>Avoid</p> <ul style="list-style-type: none"> • Spinach • Broccoli • Celery • All canned vegetables and all canned vegetable juices • Fresh or dried beans, such as red kidney beans, lima beans, navy beans, pinto beans, and cowpeas • Canned legumes, such as beans, peas, and lentils • Canned soups • Sauerkraut • Commercially prepared potatoes (e.g., instant mashed potatoes) • Frozen vegetables with added salt
<p>Fats Total number of servings per day: 4 to 6 (1 serving equals 1 teaspoon of butter or oil)</p>	
<p>Include</p> <ul style="list-style-type: none"> • Unsalted margarine or sweet butter (no more than 1 teaspoon of each per day) • Oils • Vegetable shortening • Plain oil and white vinegar dressing 	<p>Avoid</p> <ul style="list-style-type: none"> • Salted nuts and nut butters • Salted seeds • Mayonnaise • Commercial salad dressings • Lard
<p>Beverages Total number of servings per day: No restrictions; unless your doctor gives you other instructions, drink at least 8 to 10 servings per day (1 serving equals 12 ounces of a carbonated beverage or 1 cup [8 ounces] of any of the other beverages listed below)</p>	
<p>Include</p> <ul style="list-style-type: none"> • Water • Bottled carbonated beverages without added coloring (regular or diet versions, such as Sprite®, 7-Up®, and sodium-free seltzer) • Brewed coffee • Tea steeped from tea leaves or white-colored tea bags • Fresh lemonade or orangeade 	<p>Avoid</p> <ul style="list-style-type: none"> • Mineral water containing sodium • All bottled, canned, or powdered iced teas, lemonade, instant coffee, instant teas, instant iced-teas, fruit punch, and other powdered or commercial drinks, such as Hi-C® and Kool-Aid® • Tea steeped from colored tea bags • Soy milk and rice milk • Ginger ale, Coke®, Pepsi® or any other carbonated beverages with added coloring

Desserts and Sweets	
Total number of servings per day: 2 (See below for serving sizes)	
<p>Include</p> <p>Each of the following items equals 1 serving:</p> <ul style="list-style-type: none"> • 1 cup of Knox® clear gelatin • 2 tablespoons of sugar • 2 tablespoons of honey • 2 tablespoons of maple syrup • 2 regular size marshmallows • 1/2 cup of natural sorbets with no artificial coloring or added salt 	<p>Avoid</p> <ul style="list-style-type: none"> • All bakery products, such as pies, cakes, pastries, Danishes, muffins, donuts, and cookies • Graham crackers • Jell-O® and colored gelatins • Chocolate and chocolate desserts • Candy
Miscellaneous	
Total number of servings per day: No restrictions	
<p>Include</p> <ul style="list-style-type: none"> • Spices such as pepper, cinnamon, and nutmeg • Herbs such as oregano, basil, and thyme • White vinegar • Noniodized salt (contains small amounts of iodine; use sparingly) 	<p>Avoid</p> <p>All salted foods, such as:</p> <ul style="list-style-type: none"> • Nuts • All fast food, including Chinese food • Soy sauce, catsup, Worcestershire sauce, chili sauce, tomato sauce, and all commercial sauces • All gravies • Olives, pickles, and relish • Bouillon cubes, stock, broth, and other soup bases • Iodized salt, sea salt, onion salt, garlic salt, celery salt, and seasoned salt • All types of seaweed • Molasses • Any food containing food coloring, iodates, iodides, iodate dough conditioners or stabilizers, algin, alginate, carrageens, and agar • All sushi • Red wine vinegar and balsamic vinegar (with caramel coloring) • All additives, preservatives, or artificial colorings

Sample low-iodine menu

Breakfast	
1 serving of fruit	1/2 cup of orange juice
3 servings of breads or cereals	1/2 cup of oatmeal (made with water)
	1 plain, unsalted matzah
1 serving of meat substitute	1 egg-white omelet
Miscellaneous	2 teaspoons of sugar
1 beverage	1 cup of brewed coffee
Mid-morning snack	
1 serving of breads or cereals	2 unsalted rice cakes
1 serving of fat	1 teaspoon of unsalted butter
1 beverage	1 cup of water
Lunch	
1 serving of meat	3 ounces of unsalted turkey breast, cooked at home
2 servings of fat	2 teaspoons of oil
2 servings of breads or cereals	2 slices of homemade white bread
1 serving of vegetables	1 cup of romaine lettuce
1 beverage	1 cup of fresh lemonade
Mid-afternoon snack	
1 serving of fruit	1 fresh apple
1 serving of meat substitute	2 tablespoons of unsalted peanut butter
Dinner	
1 serving of meat	3 ounces of roast beef, cooked at home
2 servings of breads or cereals	1 baked potato (no skin)
2 servings of vegetables	1 cup of green beans
2 servings of fats	2 teaspoons of oil (used in cooking)
1 serving of fruit	1 orange
1 beverage	1 cup of white tea
Bedtime snack	
1 serving of fruit	1 small pear
1 beverage	1 cup of tea made from fresh tea leaves

Frequently Asked Questions

How do I know if a certain food has iodine?

The iodine content of many foods is not known, which can seem confusing. Remember, this is a low-iodine diet and not a noniodine diet. We encourage you to follow our list of recommended foods as a guide and to call your dietitian with any questions.

If a product label says it has sodium, does that mean it also has iodine?

Not necessarily. Sodium and iodine are not the same thing. However, avoid products that list salt as an ingredient because the salt may contain iodine.

I have read dietary guidelines for a low-iodine diet on the Internet that are different than what is discussed here. Which should I follow?

We encourage you to follow our list of recommended foods and foods to avoid. This is because the iodine content of many foods is not known and not all Internet sources are accurate.

Can I use kosher salt?

We recommend using only noniodized salt and only in small quantities because it may still contain a small amount of iodine. If you need salt, choose Morton's® Plain Table Salt and use sparingly.

My doctor told me to suck on hard candy for dry mouth but this diet says I can't have candy. Which instructions should I follow?

We encourage you to avoid candy because there are many ingredients that may contain iodine in unknown amounts. If you need candy, choose GoNaturally™ Organic Honey Lemon hard candies for dry mouth.

Should I stop taking any of my medications?

Do not stop taking any of your medications unless your doctor tells you to do so. Call your doctor or nurse if you have any questions about your medications.

Also, tell your doctor about any vitamins or supplements that you are taking. You will need to stop taking them if they contain iodine. If you are not sure about the iodine content, do not take them. Because vitamins and supplements are not regulated in the same way other medications are, it may be difficult to tell if they contain iodine.

Can I drink alcohol?

Ask your doctor or nurse about drinking alcohol.

Contact Information

If you would like to speak with one of the registered dietitians or nutritionists at Memorial Sloan Kettering Cancer Center, please (212) 639-7071 to schedule an appointment.