Diet to Manage High Uric Acid Levels and Gout in Kidney Disease BCRenal

What is Gout?

Gout is a type of arthritis caused by uric acid crystals building up in the body's joints. Often people experience painful joints and inflammation. Gout can be triggered by foods that are high in purine and by foods that increase uric acid levels in the blood. Purines are organic compounds found in foods that can break down into uric acid in the body.

What is Uric Acid?

Uric acid is a natural waste product from the digestion of foods that contain purines. To help keep uric acid levels down in the body, it is important to pay attention to what you eat. High uric acid levels may result from conditions such as kidney disease because the kidneys remove less uric acid. Other reasons for high uric acid levels are high blood pressure, high cholesterol, diabetes, being overweight, and some medications.





fraser health

) Interior Health

*Providence

How you want to be t

Vancouver-

CoastalHealth

₹(•

northern health

island health

BC Renal • BCRenal.ca

Which Foods Should I Limit? Which Foods Should I Include?*

Using the table below:

- Limit or avoid **VERY HIGH** and **HIGH** gout risk foods.
- Include **MODERATE** gout risk foods in small amounts.
- Choose LOW gout risk foods more often.

Food Item	Gout Risk
Alcohol	VERY HIGH
Dried fishAnchovies, Sardines, Shrimp	VERY HIGH
Organ meats Liver, Heart, Sweetbreads 	VERY HIGH
FishFresh Tuna, Trout, Herring, Anchovies	HIGH
Shellfish Shrimp, Squid 	HIGH
Deli MeatsSalami, Ham, Sausages, Bacon	HIGH
 Fish Canned Tuna, Fresh/canned Salmon, Sardines, Mackerel, Cod, Halibut, Haddock 	MODERATE
ShellfishOysters, Clams, Crab, Lobster, Scallops	MODERATE
Game Meats Venison, Grouse 	MODERATE
Poultry	MODERATE
Pork	MODERATE
Beef	MODERATE
Beans, Legumes, Tofu	LOW
Eggs	LOW
Low Fat Dairy Products	LOW
Nuts and Seeds	LOW
Vegetables	LOW
Whole Grains	LOW

* Please speak to your dietitian about your specific dietary needs.

What Other Dietary Steps Can I Take?

- Limit high sugar foods and drinks such as donuts, cakes, pastries, candy, pop, fruit drinks, and sweetened coffees/teas. Even though sugar does not have purines, sugar-sweetened products increase your risk for gout.
- Limit alcohol intake. Even 1-2 drinks can increase your risk of gout, especially beer. Beer can significantly raise uric acid levels. Note that one drink equals a 12-oz beer/cider/cooler, a 5-oz glass of 12% wine OR 1.5-oz of 40% spirits.
- 3. Limit high fat meals as these are linked to gout flares.
- 4. Stay hydrated, and speak with your dietitian about your personal fluid needs.
- 5. Include fruits and vegetables in your meals and snacks, aiming for 1/2 plate vegetables, 1/4 plate protein, and 1/4 plate whole grains per meal.
- Limit servings of meat to 2 ½ oz (75 grams) per meal. Choose plant proteins more often. Speak to your dietitian about your specific protein needs.
- If weight loss is a goal for you, speak to your dietitian. They can help you develop a plan to achieve weight loss safely through meal planning and regular physical activity.
- Ask your doctor or pharmacist about supplements or medications to manage your uric acid levels or gout symptoms. Dietary modifications may not be enough to treat your gout but they may help decrease the number of attacks and limit the severity.





Sample Menu Plan for Gout and Kidney Disease

Breakfast	 Whole grain toast with 1-2 eggs 1 cup fresh berries Coffee or tea with low fat milk or unenriched almond or rice beverage Water
Lunch	 Roasted chicken breast (1-2 ounces) on a whole-grain roll with mustard and mayo Half a plate of mixed green salad with ¼ cup drained and rinsed chickpeas, balsamic vinegar and olive oil ½ cup low fat milk, or unenriched almond or rice beverage Water
Snack	 1 small apple with ¼ cup almonds Water or tea
Dinner	 Grilled salmon (limit to 2.5 ounces), or 3/4 -1 cup firm tofu Sauteed vegetables (half a plate) 1/2- 3/4 cup rice with lemon pepper (unsalted) Water 1 cup fresh watermelon

*This menu is low in potassium, phosphorous and sodium.

*Please note portions of animal proteins including chicken and salmon in the sample menu may differ for your individualized diet. Speak with your dietitian regarding your specific needs and how a meal plan can work for you.

References

- 1. Dietitians of Canada PEN. Food Sources of Purines. (Restricted access)
- 2. Dietitians of Canada PEN. Eating Guidelines for Gout. (Restricted access)
- 3. HealthLink BC. Eating Guidelines for Gout. <u>https://www.healthlinkbc.ca/hlbc/files/</u> healthyeating/pdf/eating-guidelines-for-gout.pdf
- 4. Mayo Clinic. Healthy Lifestyle: Nutrition and healthy eating. Starting a gout diet? Understand which foods are OK and which to avoid. <u>https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/gout-diet/art-20048524</u>
- 5. Kaneko, K., Aoyagi, Y., Fukuuchi, T., Inazawa, K., Yamaoka, N., 2014. Total purine and purine base content of common foodstuffs for facilitating nutritional therapy for gout and hyperuricemia. Biol. Pharm. Bull. 37, 709–721. <u>https://www.jstage.jst.go.jp/article/bpb/37/5/37_b13-00967/_html/-char/en</u>
- 6. GOUT by Prof. R. Grahame, Dr. A. Simmonds and Dr. E. Carrey <u>https://www.acumedico.</u> <u>com/purine.htm</u>