

The following health plan contains information about common triggers for gout attacks, and how you can minimize frequency of gout attaches with specific nutrition and lifestyle habits. If you have questions about the Gout Health Plan, please use the "CONTACT US" form on the HOME page to ask for an appointment with a Lifestyle & Nutrition Consultant.

FACTORS THAT CAN TRIGGER A GOUT ATTACK

Urate (uric acid) crystals are deposited into joints, tendon, kidneys, and other tissues. These crystals are like mini razor blades which damage the tissue they are deposited in. The tissue damage activates an inflammatory response. Both the mini razor blades and the inflammatory response cause pain and damage tissue. There are many different factors that can trigger the formation of urate crystals. As you read through the list below, highlight any of the factors that you think may be contributing to your gout attacks.

- 1. Alcohol consumption accelerates degeneration of DNA and RNA, therefore increasing the amount of purines that need to be broken down which increases uric acid levels; impairs kidney function which decreases excretion of uric acid; and beer contains yeast which is high in purines
- 2. High niacin intake (greater than 100 mg) niacin competes with uric acid excretion
- 3. Certain diuretics (Thiazides) decrease kidney function and decrease uric acid excretion
- 4. Consumption of high fructose corn syrup it increases the breakdown of purines which increases uric acid levels
- 5. Consumption of refined carbohydrates (i.e. sugar, white flour, white rice) it increases the breakdown of purines which increases uric acid levels
- 6. Kidney disease and/or impaired kidney function decrease excretion of uric acid which increases uric acid levels
- 7. Lead poisoning decreases kidney function which decrease excretion of uric acid
- 8. Low dose aspirin therapy decreases uric acid excretion
- Excessive exercise increases turnover of purines in the body; increases lactic acid levels –
 increases the acidity of the blood (decreases uric acid solubility) and lactic acid decreases
 kidney function

- 10. Ketoacidosis (high protein/low carb diet or starvation) increases acidity of blood (decreases uric acid solubility) and decreases kidney function
- 11. Excess protein intake (more than 0.8 grams per kilogram of body weight) increased breakdown of purines and decreases kidney function
- 12. Consumption of saturated fat inhibits utilization of purines in the body so there is more purines that need broke down, increases inflammation in the body
- 13. Consuming acid foods which lower pH of blood (increase blood acidity) decreases uric acid solubility, decreases kidney function, increases inflammation in the body
- 14. Over consumption of calories
- 15. Obesity increases insulin resistance which increases insulin levels excess insulin increases inflammation and decreases the kidney's ability to remove uric acid from blood stream
- 16. Consuming high purine foods increases purines levels that need to be broke down into uric acid
- 17. Tissue injury increases turnover of purines in the body
- 18. Low body temperature decreases uric acid solubility

NUTRITION AND LIFESTYLE HABITS THAT HELP MINIMIZE ATTACKS

Here is a list of nutrition and lifestyle habits that help minimize gout attacks. As you read through the list, highlight all the habits you are already doing. Then go back through the list and put a check mark by the habits that you would like to try to adopt.

	Avoid alcohol consumption
	Limit niacin intake to 100 mg per day – if you take a multivitamin, check for the dose on niacin
	If you need to diuretics (Thiazides), ask your doctor if you could take a medication that does not interfere with uric acid excretion
	Avoid consumption of high fructose corn syrup [HFCS] – read labels to identify foods and
	drinks that contain HFCS
	Limit consumption of refined carbohydrates (i.e. sugar, white flour, white rice)
	Ask your doctor if your kidney function has been tested and is it normal. If your kidney
	function is low, schedule an appointment with one of our Lifestyle & Nutrition Consultants
	and learn how you can improve your kidney function.
	Consider getting tested for lead poisoning. If you have an unacceptable level of lead in your
	body schedule an appointment with one of our Lifestyle & Nutrition Consultants and learn
	how you can naturally detox your body from lead. We can also teach you how to identify
	possible sources of lead in your environment. Please note – if your lead level is grossly toxic, you will need your doctor to prescribe a chelation treatment.
	If you are on low dose aspirin therapy, ask your doctor if there is something else you could do
_	that does not interfere with uric acid excretion
	Avoid excessive exercising
	Prevent ketoacidosis by not going on high protein/low carb diets and avoid starvation
	syndrome by eating something in the morning, mid-day, and in the evening
	Eat to meet your body's protein needs - 0.8 grams per kilogram of body weight
	Limit consumption of saturated fat (animal fats from meat and dairy)

Try eating 8 oz (half pound) of cherries and/or other dark red or blue fruit daily. Science has
discovered there are 7 different ways that dark red/blue fruit help prevent a gout attacks
Consume more alkaline producing foods and limit consumption of acid producing foods [For
more information about an alkaline diet, go to https://positivepatterns4life.com/thrive and
see Eat Healthy]
Eat to meet your body's caloric needs
If you are obese – loss weight slowly with a healthy nutrition plan
Avoid high purine foods and limit the intake of moderate purine foods (see the Purine Content
List below)
Avoid tissue injury which can raise uric acid levels
Avoid becoming chilled to the extent that it drops your body temperature (shivering is the
body's response to a lowered body temperature)
Drink lots of sugar-free fluids (gallon a day for most adults) – increases uric acid excretion

Purine Content List

High-purine foods	Moderate-Purine Foods	Low-Purine Foods
Anchovies	Asparagus	Eggs
Consomme	Large species of fish (i.e. tuna)	Fruit
Meat extracts	Legumes	Most vegetables
Organ meats	Meat	Whole grains
Fish eggs	Mushrooms	Milk
Small fish like sardines	Dried Peas	Nuts
Yeast and yeast containing foods	Poultry	Olives
(i.e. bread, beer)	Shellfish	
	Spinach	
	'	

SUPPLEMENTS THAT HELP REDUCE ATTACKS

Here is a list of supplements that help reduce risk of gout attacks. As you read through the list, highlight all the supplements you are already taking. Then go back through the list and put a check mark by the supplements that you would like to try.

Take fish oil (1000 to 3000 mg per day)
Meet your daily need for folic acid (400 mcg) (see the Foods High in Folic Acid on the next
page)
* Take EMIQ (Enzymatically Modified Isoquerctrin is a highly absorbable form of Quercitin)
Avoid mega doses of vitamin C – mega doses can increase uric acid levels (500 mg to 1000 mg
meets most individuals need for vitamin C)
Celery seed extract with 85% 3nB content at a dose of 75 mg taken 2 to 3 times a day

PLEASE NOTE – Before taking any herbal supplement, seek information from a reliable source as to whether the herb may react with any medications you are taking. Reliable sources may include your pharmacist, a prescription drug book, or your can use the "CONTACT US" form on the website to seek guidance from our Nutrition Consultant. An asterisk in front of a supplement will indicate that is an

herbal products.

Foods High in Folic Acid – 3.5 oz servings of the following foods the following mcg (micrograms) of folic acid:

Food	mcg	Food	mcg	Food	mcg
Brewer's Yeast	2,022	Black Eyed Peas	440	Rice Germ	430
Soy Flour	425	Wheat Germ	305	Beef Liver	295
Soy Beans	225	Wheat Bran	195	Kidney Beans	180
Mung Beans	145	Lima Beans	130	Navy Beans	125
Garbanzo Beans	125	Asparagus	110	Lentils	105
Walnuts	77	Spinach, fresh	75	Kale	70
Various greens	60	Roasted peanuts or butter	56	Barley	50
Broccoli	53	Whole Wheat Cereal	49	Brussels Sprouts	49

HELP WITH CHANGING HEALTH HABITS

After reading through the Gout Health Plan, did you identify nutrition and/or lifestyle habits that you need to change in order to better manage gout? If you did, Positive Patterns for Life is here to help you. We know changing health habits can be challenging. *Positive Patterns for Life* offers a variety of methods, skills and tools to help support you during your habit change journey. One of the most helpful tools found on the website is the *Positive Patterns for Life Goals Chart*. It has blank spaces for you to write in your new habits that you want to work on adopting. It has instructions to guide you on how to best use the goals chart and encouraging quotes to help you stay motived during your health improvement journey. Make sure to check out all the resources in the *Changing Health Habits* section at the bottom of the THRIVE page at https://positivepatterns4life.com/thrive.

If you don't find the help you need in the *Changing Health Habits* section, schedule an appointment with a Lifestyle & Nutrition Consultant by using the "Contact Us."

REFERENCES

- 1. Murry, Michael, Pizzorno, Joseph. (2012) *The Encyclopedia of Natural Medicine*. (Third Edition). New York, NY: Atria Paperback.
- 2. Rakel, David. (2013) Integrative Medicine. (Fourth Edition). Philadelphia, PA: Elsevier.
- 3. Murry, Michael. (1996) *The Encyclopedia of Natural Supplements*. New York, NY: Three Rivers Press.
- 4. Haas, Elson, Levin, Buck. (2006) *Staying Healthy with Nutrition the Complete Guide to Diet and Nutritional Medicine*. Toronto Canada: Celestial Arts.