

Low Tyramine Diet - The James

Tyramine is a natural substance found in some plants and animals and produced in some foods and drinks. If you take certain medicines, called monoamine oxidase inhibitors (MAOIs) and eat a diet high in tyramine, serious health problems can happen. When you take MAOIs, your body is unable to break down tyramine. This causes tyramine to build up in your body and can lead to very high blood pressure and other health problems.

MAOIs include:

- Isocarboxazid (Marplan)
- Phenzelzine (Nardil)
- Rasagiline (Azilect)
- Selegiline (Eldepyrl, Zelapar orally disintegrating tablet, Emsam patch)
- Tranylcypramine (Parnate)

Some supplements and other medicines have similar effects as MAOIs when you eat a high tyramine diet, including:

- Linezolid (Zyvox)
- Procarbazine (Matulane)
- St. John's Wort
- Ginseng
- Phenylalanine
- Tyrosine

You may have serious side effects if you eat a high tyramine diet while you take these medicines or supplements. Side effects may include:

- Very high blood pressure (hypertensive crisis)
- Severe headache
- Abnormal or fast heartbeat

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

- Severe chest pain, with or without shortness of breath
- Changes in your vision
- Dizziness or confusion
- Nausea and vomiting

If you take any of the medicines or supplements listed above:

- Talk with your doctor or pharmacist about all medicines you take, including prescription and over-the-counter medicines, vitamins and herbal products. **Do not** take appetite suppressants, nasal decongestants or other cold medicines or remedies.
- Talk to your doctor or pharmacist before you take any over-the-counter medicine or supplement.
- Tell other members of your health care team that you take MAOIs before other medicines are ordered.
- Follow a low tyramine diet while you take MAOIs and for at least 2 weeks after you stop MAOIs, unless your doctor tells you otherwise.

Low Tyramine Diet

It is important to know how much tyramine is in the food and beverages you eat and drink. The amount of tyramine in food can vary and depends on the way the food is made and stored. Tyramine is most often in foods that are fermented, aged or spoiled. Use the guidelines below to follow a low tyramine diet.

- Choose foods and beverages that are as fresh as possible. Fresh food is less likely to have high levels of tyramine. **Do not** eat foods that are at or near the expiration date.
- **Do not** eat or drink foods and beverages that are aged, fermented or unpasteurized.
- **Do not** eat or drink items that are spoiled or have not been handled or stored correctly. Eat food the same day it is cooked. **Do not** eat cooked foods that have been stored in the refrigerator for more than 48 hours.
 - ▶ For more information about food safety, ask for the patient education handout, **How to Keep Your Food Safe**.
- Be careful when going to restaurants or shopping for groceries. It is important to only eat and buy the freshest foods.
- Talk with your doctor about your alcohol use. Alcohol can be high in tyramine and it may not be safe for you to drink.

Food Group	Safe to Eat These foods have very little or no tyramine and can be eaten often.	Limit the Amount That You Eat These foods have some tyramine. Do not eat these foods often. You may eat up to 1 of these foods each day.	Do Not Eat These foods are high in tyramine and are not safe to eat.
Milk and Dairy Products	<p>Whole, 2%, 1%, skim (fat free), dried, sweetened condensed and evaporated milks, eggnog, milkshakes (vanilla), soy milk, non-dairy milk alternatives</p> <p>Cottage cheese, cream cheese, ricotta cheese, mozzarella, processed cheese (slices, American, Velveeta)</p> <p>Sour cream, yogurt</p> <p>Ice cream, frozen yogurt, sherbet</p>	Farmers, Havarti, and Boursin cheeses	<p>Aged cheese spreads, all aged cheeses (blue, brie, cheddar, Feta, Gouda, Gorgonzola, Gruyere, Parmesan, Muenster, provolone, Romano, Roquefort, Swiss, Camembert, Stilton) and all casseroles, lasagnas, breads, crackers or pizzas made with these cheeses</p> <p>Fermented dairy products, including buttermilk</p> <p>Any outdated or non-pasteurized dairy products</p> <p>Do not eat any aged cheeses. Tyramine content increases as the cheese ages. Tyramine content is higher near the rind and closer to fermentation holes.</p>

Food Group	Safe to Eat These foods have very little or no tyramine and can be eaten often.	Limit the Amount That You Eat These foods have some tyramine. Do not eat these foods often. You may eat up to 1 of these foods each day.	Do Not Eat These foods are high in tyramine and are not safe to eat.
Meat and Meat Substitutes	<p>Fresh or frozen chicken, Cornish hen, turkey, duck, capon, goose</p> <p>Fresh or frozen fish, smoked fish, salmon, carp, smoked anchovies, pickled fish (herring), tuna or canned shellfish (clams, lobster, crabs, oysters, scallops, shrimp, squid)</p> <p>Beef, lamb, pork (including ham), veal</p> <p>Fresh meats (except game meats) and smoked meats</p> <p>All fresh packaged or processed meats (breakfast sausage, hot dogs, bologna, liverwurst, lunch meat) Pepperoni produced in the U.S.</p> <p>Eggs</p> <p>Peanut butter</p>		<p>Fermented meat products such as chorizo, salchichon, and other fermented sausages</p> <p>Fermented/dry sausage, pastrami, imported pepperoni, salami, Mortadella sausage, Chinese dried duck</p> <p>Corned beef</p> <p>Chicken livers</p> <p>Caviar</p> <p>All casseroles, lasagnas, pizza or bread made with these meats</p> <p>Any leftover foods over 48 hours old</p> <p>Meat products near or beyond the expiration date or improperly stored meat, fish, or poultry</p> <p>Meats tenderizer</p>

Food Group	Safe to Eat These foods have very little or no tyramine and can be eaten often.	Limit the Amount That You Eat These foods have some tyramine. Do not eat these foods often. You may eat up to 1 of these foods each day.	Do Not Eat These foods are high in tyramine and are not safe to eat.
Fruits and Vegetables	All fresh, canned, frozen and dried fruits and vegetables are safe except those listed to avoid	Avocado - limit to ½ cup or less of fresh avocado a day	Fermented, overripe, spoiled or moldy Broad bean pods (Fava, snowpeas) Pickles, olives Sauerkraut, kimchi Banana peel, brown banana Over-ripe or brown avocado
Yeast Extract	Plain yeast (used for baking) Brewer's yeast (vitamin supplement)		Concentrated yeast extracts (marmite, vegemite)

Food Group	Safe to Eat These foods have very little or no tyramine and can be eaten often.	Limit the Amount That You Eat These foods have some tyramine. Do not eat these foods often. You may eat up to 1 of these foods each day.	Do Not Eat These foods are high in tyramine and are not safe to eat.
Other Foods	Beef and chicken bouillon Chocolate Fresh gravy Monosodium Glutamate Curry powder Salad dressings Tomato Sauce Worcestershire sauce		Ginseng (herbal) Fermented soy products such as soy sauce, fermented soya bean, and soybean curd (fermented bean curd) The following soybean products: soya bean, paste, tofu, soy condiments, miso soup Dressing made with blue cheese or olives

Food Group	Safe to Eat These foods have very little or no tyramine and can be eaten often.	Limit the Amount That You Eat These foods have some tyramine. Do not eat these foods often. You may eat up to 1 of these foods each day.	Do Not Eat These foods are high in tyramine and are not safe to eat.
Non-alcoholic Beverages	Lemonade Fruit juice	Coffee, cola and other caffeinated beverages – drink no more than 2 cups (16 ounces) each day.	
Alcoholic beverages	* Talk with your doctor about alcohol use. Your doctor may recommend that you do not drink alcohol.	No more than 12 ounces domestic, canned, or alcohol-free beer or 4 ounces red or white wine per day	All tap (draft) beers

When to Call Your Doctor:

Call your doctor right away if you have any of the following symptoms:

- Severe headache
- Abnormal or fast heartbeat
- Severe chest pain
- Shortness of breath
- Changes in your vision
- Dizziness or confusion
- Nausea and vomiting

Talk with your doctor, pharmacist or dietitian about questions you have about the low tyramine diet when you take MAOIs.