

Foods high in tyramine may cause serious effects when combined with certain medications.

Low Tyramine Diet

The foods you eat can alter the way certain medications work in your body. Foods high in tyramine may cause serious effects when combined with certain medications such as monoamine oxidase inhibitors (MAOI) found in some antidepressants; specific antibiotics (Furoxone®); and drugs used to treat Parkinson's disease. Side-effects may include:

- High blood pressure
- Severe headaches
- Rapid heartbeat (palpitations)
- Chest pains

Continue a low tyramine diet for 2 weeks after stopping MAOI or other medications that react with tyramine.

To reduce tyramine in your diet:

- Eat fresh foods or newly prepared frozen and canned foods. Do not eat outdated or expired foods. Eat perishable refrigerated items within 48 hours of purchase. Freeze leftovers within 24 hours. Cooking does not destroy tyramine content.
- Avoid fermented or aged foods, such as cheese and aged meats.
- Read food labels carefully when shopping. Check the ingredients in foods, including canned and frozen products. Many convenience foods contain tyramine rich ingredients (marmite, yeast extracts). Be wary in health food stores. Weight control powders, diet supplements and pills may contain tyramine or yeast extracts.
- Do not eat foods if you are unsure of the ingredients.
- Caffeine does not contain tyramine. But large amounts may cause high blood pressure. Limit caffeine intake.

Food Group	Safe	Caution	Avoid
	<i>Foods contain very little or no tyramine and may be eaten as desired.</i>	<i>Eat these foods rarely. Select no more than one caution food each day.</i>	<i>Foods are high in tyramine and should not be eaten.</i>
Milk and Dairy	<p>Milk: Whole, 2%, skim, dried, sweetened condensed milk, evaporated milk, eggnog, milkshakes (vanilla)</p> <p>Cheese: Cottage, cream cheese, buttermilk, yogurt, cream, sour cream, ricotta, mozzarella, processed cheese (American, Velveeta®).</p>	<p>Cheese: Farmers, Havarti, Brie, Boursin. Parmesan/Romano as garnish or minor ingredient (2 tsp.).</p>	<p>Aged cheese spreads, all aged cheeses (blue, cheddar, Swiss, Stilton).</p> <p>Any outdated or nonpasteurized dairy products.</p> <p>All aged cheeses are to be avoided. Tyramine content increases as the cheese ages. Tyramine content is higher near the rind and closer to fermentation holes. Avoid imitation cheeses except cottage and ricotta.</p>

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Fruits and Vegetables	<p>Fresh, frozen, canned fruits and vegetables.</p> <p>All fruits and vegetables should be fresh and not overripe or spoiled.</p>	Avocado	<p>Fruits: overripe, dried fruit.</p> <p>Vegetables: snow pea pods, sauerkraut.</p>
Breads	<p>Commercial breads: white, wheat, rye, French, Italian, English muffin, melba toast, crackers, rye crisp, bagel.</p> <p>Hot and cold cereals: cream of wheat, wheatena, oatmeal, cornflakes, puffed wheat, rice, all bran, etc.</p> <p>Potatoes, rice, noodles, stuffing.</p>		<p>Fresh, homemade yeast breads, sourdough breads.</p> <p>Breads made with aged cheeses, aged meats, or yeast extracts.</p>

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<p>Meats and Other Protein Sources</p> <p>All meats, fish and poultry are safe if fresh or frozen. Vacuum packed are safe if eaten promptly or refrigerated.</p> <p>Avoid products if spoiled, decayed, fermented, overripe, old or aged. Avoid all dried, salted or smoked products. Chicken/beef livers are safe if fresh; avoid if canned or greater than five days old. Cooking does not destroy tyramine content. Read all labels and packages.</p>	<p>Beef, lamb, pork, veal, chicken, cornish hen, turkey, duck, capon, goose, all fresh fish, tuna or canned shellfish (clams, crabs, lobster, oysters, scallops, shrimp, squid).</p> <p>All fresh meat, sausage, poultry, and fish, cooked and eaten on day of purchase or stored in freezer. Canned meat, poultry, and fish eaten right after opening.</p> <p>Fresh processed meats (lunch meats, hot dogs, breakfast sausage, and cooked sliced ham).</p> <p>Legumes, eggs.</p>	<p>Game meat that has been hung.</p> <p>Foods that do not contain tyramine but may cause a reaction: fresh or canned tuna, fresh mackerel, smoked or canned sardines, fresh or canned bonito, fresh or canned anchovies, canned pilchards.</p>	<p>Air-dried meats. Aged, dried, fermented or pickled meats and sausage. Processed meats, including luncheon meats: bacon, sausage, liverwurst, pepperoni, salami, bologna, ham, hot dogs, corned beef. Dried, salted, smoked meats and fish (herring, lox, caviar). Meats prepared with tenderizer. Soybean products (tofu, miso soup, soy sauce), bean curd, tempeh.</p> <p>Any leftover foods (more than 48 hours) with meat, fish, or poultry.</p> <p>Protein dietary supplements.</p>
<p>Fats</p>	<p>Cream cheese, margarine, butter, mayonnaise, nuts, peanut butter, salad dressings without aged cheese, vegetable oils.</p>		<p>Dressings made with aged cheese (i.e., blue cheese dressing).</p> <p>Gravies and sauces containing meat extracts (marmite) or nonfresh meats.</p>

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<p>Alcohol and Other Beverages</p> <p>Tyramine content varies among wine and beer samples. Small amounts of alcohol may be tolerated – but first check with your doctor.</p>	<p>Beverages: juice, milk and carbonated beverages.</p> <p>Bottled or canned beer.</p>	<p>Caffeine containing products: coffee, tea and soft drinks. Limit to 2, 8-oz servings.</p>	<p>Tap or unpasteurized beer, ale, red and white wine, nonalcoholic beer, mixed drinks.</p>
<p>Desserts</p>	<p>Fruits previously listed, sherbets, ice cream, gelatin, cookies, cakes made without yeast.</p>	<p>Chocolate desserts</p>	
<p>Miscellaneous Products</p>	<p>Potato chips, popcorn, candy, sugar, salt, pepper, spices, herbs, commercial yeast leavened baked items (bread).</p> <p>Commercial chain-restaurant pizzas with low tyramine cheeses</p>	<p>Teriyaki or soy sauce – Limit to ¼ cup per day.</p> <p>Soups, gravies and stews prepared in large production or for commercial use may have meat or yeast extracts, but the amount of tyramine is usually low.</p>	<p>Yeast and meat extracts may be found in dry packed and canned soup mixes, instant soup powders and bases: beef, chicken and vegetable bouillon cubes. Yeast extracts in liquid and powdered dietary protein supplements. Meat tenderizers.</p> <p>Concentrated sauces prepared for individual use should be avoided.</p>

Important Reminder

If you do eat a restricted food and have no side-effects, do not assume you can eat that food again. Tyramine levels differ within the same food product and combining with other foods may also vary the effect.

Take note of side effects that may relate to your diet. Report any unusual side effect to your doctor.

Health Information Resources

For more information, visit one of Northwestern Memorial Hospital's Health Learning Centers. These state-of-the-art health libraries are located on the third floor of the Galter Pavilion and on the first floor of the Prentice Women's Hospital. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Centers by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nmh.org.

For additional information about Northwestern Memorial Hospital, please visit our Web site at www.nmh.org.

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Developed by: Registered Dietitians, Food and Nutrition Services

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