

TYRAMINE-RESTRICTED DIET

(Sheet 1 of 2)

PURPOSE:

This diet is intended for use by patients who are taking monoamine oxidase (MAO) inhibitors. Its purpose is to prevent a hypertensive crisis.

DESCRIPTION:

This diet avoids the use of foods which contain large amounts of tyramine and other pressor amines. Failure to comply with dietary restrictions may result in symptoms such as headaches, nausea, tachycardia or bradycardia. Tyramine is present in many common foods. In the body, tyramine's pharmacologic action is to raise the blood pressure; however, enzymes present in many body tissues neutralize this action. Drugs that prevent this neutralizing process, such as the monoamine oxidase inhibitors, allow the tyramine to reenter the blood. As a result blood vessels are constricted causing the blood pressure to elevate.

BASIC INFORMATION:

- The tyramine content varies from product to product and even between samples of the same product. The portion of cheese closer to the rind has a much higher tyramine content than the portion farthest away. Consumption of 6 mg of tyramine may produce some degree of hypertension while 10-25 mg can lead to a more severe crisis. The amount a person eats will determine the total dose of tyramine consumed, e.g., as little as 1 oz of cheddar cheese yielding 15-45 mg could cause a moderate to severe hypertensive action.
- Use care when eating out: Choose plainer dishes rather than casseroles or dishes with sauces.
- Caffeine, a weak pressor agent, in excessive amounts could possibly produce symptoms unrelated to tyramine content.
- Patients have been known to eat tyramine-containing foods on occasion without adverse effect, but there is no guarantee that the same foods will not produce a severe reaction in the future.

NUTRITIONAL ADEQUACY: This diet should be adequate in all nutrients.

FOOD LIST

Foods To Avoid

Cheese—all aged/mature (except cottage and cream cheese)
Dry and fermented sausage (bologna, salami, pepperoni, corned beef and liverwurst, Italian sausage)
Pickled herring and salted, dry fish; lump fish
Anchovies
Broad beans and pods—lima, fava beans, lentils, snow peas and soy beans
Meat extracts
Yeast extract/brewer's yeast
Meat prepared with tenderizers
Red wine—Chianti, sherry, Burgundy and vermouth
White wine, port wines
Beer (including non-alcoholic beer)
Liqueurs
Sauerkraut
Caviar
Liver
Miso, oriental soup stock

Foods With Low or Moderate Tyramine Content (Use In Moderation With Caution)

Bananas or avocados (particularly if overripe)
Canned figs, raisins, red plums, raspberries
Cultured dairy products—buttermilk, yogurt, sour cream
Chocolate
Soy sauce
Peanuts
Coffee, tea and cola drinks

TYRAMINE-RESTRICTED DIET

(Sheet 2 of 2)

Suggested Meal Plan	Suggested Foods and Beverages
BREAKFAST Fruit Juice Cereal Meat/Meat Substitute Bread - Margarine Milk/Beverage	Orange Juice Oatmeal Soft Cooked Egg Toast - Butter or Margarine* Milk*/Decaffeinated Coffee or Tea
DINNER - NOON OR EVENING MEAL Meat/Meat Substitute Potato/Potato Substitute Vegetable and/or Salad Bread - Margarine Dessert Beverage	Broiled Beef Patty Mashed Potatoes Steamed Spinach Whole Wheat Bread with Margarine* Gelatin Cubes Decaffeinated Coffee or Tea
SUPPER - EVENING OR NOON MEAL Soup or Juice Meat/Meat Substitute Vegetable and/or Salad Bread - Margarine Dessert Milk/Beverage	Consommé Roast Chicken Peas, Creamy Coleslaw Biscuit with Margarine* Fresh Apple Milk*/Decaffeinated Coffee or Tea

*To reduce amount of fat in your diet, omit margarine or butter and use 1% or skim milk.

Nutrient Analysis

Calories	1700 Kcal	Riboflavin	1.9 mg
Protein	102 gm	Thiamin	1.3 mg
Carbohydrate	176 gm	Folate	3.37 mcg
Fat	68 gm	Calcium	952 mg
Cholesterol	443 mg	Phosphorus	1493 mg
Dietary Fiber	16 gm	Zinc	12 mg
Vitamin A	1371 IU	Iron	13 mg
Vitamin C	99 mg	Sodium	2373 mg
Niacin	25 mg	Potassium	3040 mg

Adapted from the Arizona Diet Manual (revised 1992)