MAOI Food & Drug Interactions



Overview

The monoamine oxidase inhibitors are commonly referred to as M-A-O inhibitors or M-A-O-Is. The more commonly used MAOIs include phenelzine (Nardil®) and tranylcypromine (Parnate®).

These medications are used to treat a number of conditions such as depression, anxiety, and certain types of phobia.

Although these drugs work well, there are specific foods and medications that must be avoided. They are listed below. Not following these precautions could lead to one of two severe, even life-threatening reactions called

hypertensive crisis and serotonin syndrome.

However, observing these precautions allows for their safe and effective use.

Be sure to always inform and remind your health providers (e.g., physicians, pharmacists) that you are on MAOI therapy.

It is recommended that you wear a Medic-Alert bracelet or pendant indicating "MAOI therapy" in case you require emergency medical treatment.

Food Interactions

Some foods contain a substance called tyramine. Large amounts of tyramine combined with an MAOI can lead to a hypertensive crisis.

Foods that must be avoided:

- Aged cheeses¹ (cheddar, stilton, parmesan, Swiss, & many others)
- · Aged, cured, smoked, or pickled foods, especially meats, poultry, and fish
- Potentially spoiled, out-dated or over-ripened foods
- Expired or damaged dairy or meat products
- Fermented vegetable dishes like sauerkraut and kim chee
- Yeast extracts (e.g., Marmite, Vegemite)
- Broad bean pods
- Fava beans
- Concentrated soy products (soy sauce, bean curd, soy paste)
- · Fish sauce
- Energy and protein bars and drinks (containing soy beans)
- Banana peel
- · Tap beer

Foods to be consumed in moderation:

• Alcohol (1-2 4 oz. glasses of wine, 1-2 bottles of bottled beer per day)

Selected foods that are safe:

- Fresh meat, poultry, fish, dairy, vegetables and fruit (unless excluded above)
- Non-aged cheeses (cream cheese, cottage cheese, curd, processed cheese slices, mascarpone, ricotta, fromage frais, bocconcini)
- · Sour cream, and yogurt
- · Soy milk
- Chocolate
- Coffee

If you have any questions regarding this food list, ask your pharmacist or physician.

¹ To determine if a specific type of cheese is aged or not, refer to Wikipedia to learn more about how that cheese is made.

Drug Interactions

Life threatening drug interactions (hypertensive crisis or serotonin syndrome):

- Anesthetics²
- Antidepressants (esp. SSRIs, SNRIs, imipramine, clomipramine) 2
- Appetite suppressants²
- Brompheniramine & chlorpheniramine ³
- Buspirone (BuSpar®)
- Carbamazepine (Tegretol®)
- Cough and cold medications containing dextromethorphan (DM)
- Cyclobenzaprine (Flexeril®)
- Dextroamphetamine (Dexedrine®, Vyvanse®, etc.)
- Epinephrine (administered by physicians or dentists)
- Levodopa (for Parkinson's disease)
- Meperidine (Demerol®), pentazocine (Talwin®), propoxyphene4
- Methylphenidate (Ritalin[®], Concerta[®], etc.)
- Pseudoephedrine and other decongestants (pills or nasal spray)
- Sibutramine (Meridia[®])
- St. John's wort
- Tramadol (Ultram®)
- Tryptophan
- Weight loss products or medications containing stimulants

Non-life-threatening drug interactions:

Consult your pharmacist or physician if you are taking any of the following medications:

- Blood pressure medications
- Diabetes medications (pills to lower blood sugars or insulin injections)
 - ² Certain medicines within this class may be combined with MAOIs safely. However, this should be done under the close supervision of an experienced specialist.
 - ³ These two antihistamines, but not others, demonstrate a weak serotonin reuptake inhibiting effect.
 - ⁴ Selected opioid analgesics (listed above) have serotonergic effects and are to be avoided. Codeine and morphine are safe narcotic analgesics for people taking MAOIs.

Signs and Symptoms

Hypertensive Crisis:

Symptoms of rapidly increasing blood pressure often begin shortly after eating food high in tyramine or taking an interacting medication (less than 30 minutes). Symptoms can include a pounding heart, slowed heart rate, chest tightness, pronounced headache, and sometimes sweating, nausea, neck pain, paleness (pallor), vision problems, and confusion.

Serotonin Syndrome:

Serotonin syndrome can start with mild symptoms of restlessness, tremor, and excitement/jitteriness, and rapidly progress to potentially lifethreatening toxicity over a few hours. Important signs include confusion, incoordination, agitation, fever, sweating, abnormal muscle contractions, diarrhea, and fluctuations in blood pressure. Please refer to the Medication InfoShare pamphlet on Serotonin Syndrome for more details

If you experience any of these symptoms, seek immediate medical assistance.

What to do

Avoid a hypertensive crisis or serotonin syndrome by closely following the precautions in this pamphlet. Always check with your pharmacist or physician before taking any other medications, supplements, or natural health products, including ones that you can purchase without a prescription. If you are undergoing surgery requiring general or local anesthesia, you must inform the doctor that you are taking an MAOI before the procedure.

If concerned about a **hypertensive crisis** (e.g., rapid onset headache), have your blood pressure measured right away. If this can't be done or you measure an unusually high blood pressure, seek immediate emergency medical care. If you suspect **serotonin syndrome**, get emergency medical care immediately.

MAOIs affect your body for some time after you have stopped taking the medication. It is important to follow the advice on diet and interacting medicines for a minimum of two weeks **after stopping** the medication. Talk to your pharmacist of physician about how to do this safely.

Other MAOI information resources

Internet search: "Menu ideas for MAOIs" to find:

Kathrynne Holden's "Meal Ideas and Menus: Avoiding High-tyramine foods Made Easv"

Spectrum Health's: "Tyramine Restricted (MAOI) Meal Plan"

Journal article: Gardner DM, et al. The making of a user-friendly MAOI diet. J Clin Psychiatry 1996;57:99-104.

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What you should know about food and drug interactions with the

MAO Inhibitors

phenelzine (Nardil®) & tranylcypromine (Parnate®)

Clinic/Pharmacy Information: