

MAOI CONTRAINDICATIONS

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aYAHUASCA and its analogs are aqueous solutions traditionally made in the Amazon from the vine of *Banisteriopsis* and the leaves of *Psychotria viridis*. The orally inactive tryptamines are orally activated in the presence of monoamine oxidase inhibitors (MAOI) extracted from the *Banisteriopsis* vine. The mechanism of MAOI can be used to potentiate most classes of tryptamines as well as many other classes of drugs.

There is current worldwide interest in Ayahuasca for entheogenic exploration. Moreover, its analysis as a natural MAOI has caused attention to be directed towards the more potent, synthetic MAOIs.¹ We aim to reduce harm and promote safety by expounding on potential contraindications of MAOIs with foods and pharmaceuticals.

The prescription of MAOI antidepressants in the medical profession has led to a detailed review of common medications, drugs of abuse, and foods to avoid.^{2,3}

Entheogenic tryptamines are orally activated by MAOI's inhibition of the enzyme monoamine oxidase in the gut. However, there are adverse drug interactions secondary to MAOI intake (Table 1). Of particular note, using MAOI's within five weeks of discontinuing the serotonin selective reuptake inhibitor (SSRI) fluoxetine (Prozac) could lead to coma and death.⁴ Discontinuation of the other SSRI antidepressants also require a two to three week washout prior to MAOI intake.

The goal of a dietary regimen compatible with the use of MAOI's is to avoid tyramine-containing foods which in general are fermented, desiccated, aged, or overripe (Table 2). Foods not listed in Table 2 could be of danger as well: when not fresh, tyrosine and other aromatic amino acids naturally present are degraded by bacteria with tyramine as a resultant byproduct. Tyramine stimulates the release of norepinephrine in the bloodstream and its absorption is blocked by MAOI. Sufficient exposure can therefore cause a norepinephrine surge resulting in hypertension. Symptoms include nausea, occipital headache, and even intracranial hemorrhage.

Increased norepinephrine release is also compounded by stimulants, including amphetamines and other amines. Due to the amphetamine properties of the phenethylamine

entheogens, mescaline and MDMA ("Ecstasy"), a hypertensive crisis could ensue as a result of their combination with an MAOI. Such an interaction has been reported in the literature.⁵

Contraindications to the use of MAOI's include severe liver and kidney impairment, severe or frequent headache, uncontrolled hypertension, cardiovascular diseases, and cerebrovascular diseases.⁶ Of course, those with psychiatric preconditions, especially prior psychotic breaks, should avoid entheogens, except when mediated by a professional.

Those considering self-induced exploration should be aware of its complications and make an informed decision. The restrictions here delineated are not meant to be all-encompassing but, rather, are meant to provide general guidelines. Further questions should be directed to your physician.

Table 1. Contraindicated Drugs

(Partial list): amphetamines, cocaine, MDMA, opiates, barbiturates, decongestants & allergy medications, cold medications, diet pills, methylphenidate, asthma inhalers, meperidine, levodopa, dopamine, carbamazepine, certain antihypertensive medications, sympathomimetic amines (direct & indirect acting) including pseudoephedrine & ephedrine.

Table 2. Contraindicated Foods

cheese	L-tyrosine	liver
broad beans	dry sausage	beer & ale
chocolate	sauerkraut	ripe avocado
yeast extracts	caffeine	raspberry jam
certain nuts	dried fruit	banana peel
soy bean products		vermouth
cognac	sherry	chianti
smoked meat, poultry & fish		
protein dietary supplements		
meat extracts & tenderizers		

¹ Ott J (1993). Pharmacothoeon: Entheogenic drugs, their plant sources and history. Kennewick, WA: Natural Products Co. 253-254.

² McCabe BJ (1986). Dietary tyramine and other pressor amines in MAOI regimes: A review. *Journal of The American Dietetic Association*. 86:8:1059-64.

³ Hales RE, Yudofsky SC, Talbott JA (Editors) (1994). *American Psychiatric Press Textbook of Psychiatry*. Washington, D.C.: American Psychiatric Press, Inc. 940-3.

⁴ Sternbach H (1991). The Serotonin Syndrome. *American Journal of Psychiatry*. 148:705-13.

⁵ Kasky GB (1992). Possible Interaction Between an MAOI and "Ecstasy" (Letter to the Editor). *American Journal of Psychiatry*. 149:3:411-2.

⁶ *Physicians' Desk Reference* (48th edition, 1994). Montvale, NJ: Medical Economics Data.