



Methanol: Where Is It Found? How Can It Be Avoided?

AVOID the following, ranked in order of greatest danger:

1. Cigarettes.
2. Diet foods and drinks with aspartame.
3. Fruit and vegetable products and their juices in bottles, cans, or pouches.
4. Jellies, jams, and marmalades not made fresh and kept refrigerated.
5. Black currant and tomato juice products, fresh or processed.
6. Tomato sauces, unless first simmered at least 3 hours with an open lid.
7. Smoked food of any kind, particularly fish and meat.
8. Chewing gum, all chewing gum in the USA contains aspartame.
9. Slivovitz: et al
10. Overly ripe or near rotting fruits or vegetables.

Cigarette and cigar smoke: Cigarette smoke, a major source of methanol, has been conclusively identified as a direct cause of multiple sclerosis.

Methanol in the food supply: Absent in all but a handful of foods, methanol does not appear in the primitive diet of the Pleistocene and is almost unheard of in the diet of present-day foragers. Its presence is insignificant in most major human food staples such as milk, cheese, fish, meat, eggs, fresh vegetables, beans, and any of the many grains or grain products. The few foods listed below contain methanol and should be avoided.

Canned, bottled, jarred, and aseptically packaged fruits, vegetables, and their juices:

Canning fruits and vegetables increases methanol by staggering amounts. While there is probably nothing better than consuming a glass of fresh squeezed juice, canned or bottled versions of juice destroy its original nutritional benefits. This warning about any canned fruit or vegetable holds true for home-canned products as well as those commercially produced. Fresh fruit juice is juice you make yourself or watch someone else make. With its live native yeast and bacteria, and little or no methanol, it is the only healthy option. Juice that is bottled or aseptically packaged in a box or pouch, typically with a straw, is a bad choice. Any container, including jars, can be used for freezing, the best way to preserve fresh fruits, vegetables, or juice until consumed, although refrigeration for a week is permitted. If your only choice is a glass of water or a processed fruit juice in a bottle, box, pouch, or can, water is the far more prudent selection.

Bad news about black currants and tomatoes: In only two fresh fruits is the methanol content high enough to warrant avoidance. Black currant juice is dangerously high in methanol, and abstaining would probably not present any great hardship. The tomato is also naturally high in methanol. The next section explains some European culinary means of removing methanol from tomatoes, thus restoring tomato sauce as a safe choice on your menu. There is no reason not to indulge in the occasional slice of uncooked tomato in a salad or on a cheeseburger, since it takes two full-size tomatoes to produce the methanol in a can of diet soda. Let moderation be your guide.

The Italian and French exception: Long, slow cooking with the lid ajar:

“What about canned tomatoes? How can I live without pasta sauce?” you ask with dismay. Before the introduction of diet soda twenty-five years ago, Italy had an extremely low incidence of MS, even though Italians consume per capita more canned tomatoes than any other world population. The explanation for this is enlightening. Even though canned tomatoes have enough methanol to raise serious concern, you can make them safe by doing exactly what the Italians have been doing ever since Columbus introduced them to tomatoes from the New World---simmer the hell---or, in this case, the hellish methanol---out of the sauce. Italian moms typically empty cans of crushed and diced tomatoes in the saucepan early in the morning, simmering the sauce for at least three hours as it develops flavor and thickness. Hours of simmering with the cover

slightly ajar leaves methanol, an alcohol whose boiling point is much lower than water, undetectable in tomato sauce.

Aspartame---a very big no! Every molecule of the artificial sweetener NutraSweet, a.k.a. Equal, or Canderel, 951, or aspartame, turns into a molecule of methanol. Aspartame is 11% methanol by weight and has been the civilized world's most significant source of dietary methanol since the late 1980s. Consume **no** diet soda or any other diet food.

Smoked foods: Fish and meats are traditionally smoked by long, slow exposure to the condensation products of heated wood or wood chips in the exact manner one would manufacture methanol, also called wood alcohol. A fire purposely set to produce smoke simultaneously liberates large amounts of methanol. The way food is conventionally smoked in countries like Scotland and Ireland produces excellent flavor but extremely high methanol, particularly if peat is used to generate the cooking heat, since peat smoke contains up to three times more methanol than wood smoke. It is, therefore, no coincidence that in countries where you find the highest incidence of multiple sclerosis, you also find these traditional methods of food processing that can result in large methanol dosing. Scotland, where traditionally smoked food is often consumed at every meal, has the highest incidence of MS anywhere in the world. The Faroe Islands were settled by the same basic stock of people, but because there is little wood and no peat in this location, air drying is used to preserve fish and meat. This may help explain why multiple sclerosis was never recorded there until the English navy introduced cigarettes and canned fruits and vegetables during the Second World War.

Liquor: Slivovitz or schnapps made from rotting fruit: Frugal European farmers often retrieve the fruit that falls to the ground, storing it in vats until the end of the season when it is processed into a strong distilled alcoholic liquor that goes by many names. The problem here is that spoiled fruit is often contaminated by bacteria that release methanol from pectin.

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