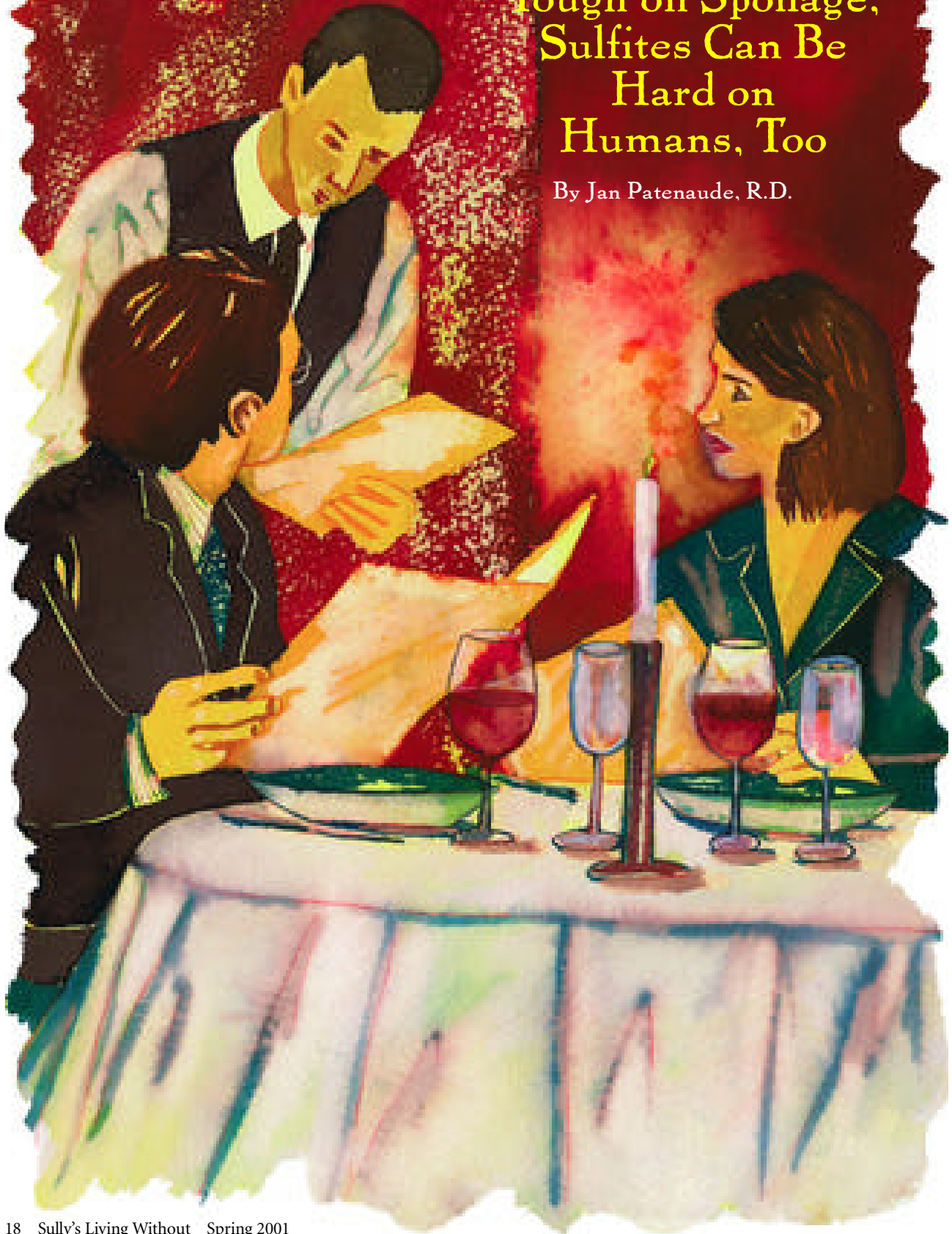


Friend or Foe?

Tough on Spoilage,
Sulfites Can Be
Hard on
Humans, Too

By Jan Patenaude, R.D.



For more than 2000 years, sulfites have been used to prevent food spoilage and discoloration. Perhaps for nearly as long, they've played a more sinister role — causing allergic-type reactions in some of the people who consume them.

Ellen Wiest is one such individual. She often suffered from headaches, severe nasal congestion, abdominal cramps and diarrhea after eating. But she didn't connect her symptoms to sulfites, until one June evening in 1995.

That night, Wiest was enjoying dinner with her husband at a favorite restaurant. Halfway through the meal, she developed symptoms typical of a food sensitivity. Only this time, they were accompanied by an increased heart rate, profuse vomiting and difficulty breathing. The restaurant staff called 911, and paramedics rushed her to the local emergency room.

Wiest learned that her meal contained a splash of wine, and sulfites in the wine sparked the anaphylactic reaction. Similar reactions to hidden sulfites have landed her in the ER twice since then.

"When we eat out, I make it clear to the waiter that I will have a life-threatening reaction if I eat anything that contains sulfites," she notes. "Most of the time, I need to explain what sulfites are and what foods usually contain them."

While the severity of Wiest's reaction may be uncommon, sulfite sensitivity is not. The U.S. Food and Drug Administration estimates that up to one in 100 people may be sensitive to the chemicals. Among asthmatics, the ratio shoots to one in 10 and even higher among those who depend on corticosteroids.

Surrounded by Sulfites

In addition to their role as preservatives, sulfites are used to bleach food starches, such as corn, potato and sugar beet. Sulfites are also put to work as preventives against rust and scale in boiler water used in making steam that may come in contact with food.

Because sulfites inhibit fungal and bacterial growth, they are sprayed on both fresh grapes and those used in winemaking. Sulfites are a normal by-product of winemaking.

Sulfites lurk in many popular foods and beverages, under the names of sulfur dioxide, sodium sulfite, sodium bisulfite, potassium bisulfite, sodium metabisulfite and potassium metabisulfite.

Wine, bottled lemon and lime juices, and sulfur-dried fruits have the highest levels of sulfites.

The Labeling Nightmare

Avoiding sulfites can be difficult. "I've learned to carefully read labels," Wiest says. "But it's surprising how poorly many foods are labeled with regard to sulfites."

Current labeling laws were enacted in 1985, after sulfites were linked to 15 deaths. The Food and Drug Administration now says manufacturers

must identify the presence of sulfites on food labels, but only if concentrations exceed 10 parts per million. Test strips are available to test liquid foods. However, they detect sulfites only in levels greater than 10 parts per million — and many sulfite-sensitive individuals react to much lower levels.

Sulfites cannot be used on fruits or vegetables intended to be served or sold raw or to be presented to consumers as fresh. Nor can they be employed on fresh meats or foods recognized as a source of vitamin B1. The exceptions are fresh potatoes and grapes, as well as imported sausages, as long as sulfite levels are less than 10 parts per million.

Even medications — such as bronchodilators used to treat asthma, anesthetics and some topical ointments — may contain the offending ingredients.

Medication labels or bottles do not have to list sulfites at all. The only way to determine if a particular medication is safe is to check the fine print on the package insert, which the pharmacist can provide.

Become a Sulfite Sleuth

Sulfites can cause a wide range of symptoms, depending on an individual's sensitivity. They include difficulty breathing

IS ORGANIC PRODUCE SAFE?

Organic produce generally does not contain sulfites. However, cross-contamination may make organic foods unsafe.

For example, fresh grapes from Chile are shipped with a "sulfite packet" as a fumigant. The packets emit sulfite gases into the grapes. According to Dr. Chuck Warner, a Food and Drug Administration chemist, it's feasible that small amounts of the gases from these non-organic grapes could be emitted at low levels onto organic fruit stored next to the grapes.

The grapes' sulfite levels would definitely be lower than the 10 parts per million considered safe for the vast majority of the population. Would it be low enough for a highly sulfite sensitive person? No one really knows the answer. But it may be something to keep in mind or discuss with the produce manager at your local store if you are highly sensitive.

or shortness of breath, wheezing, dizziness, hives, flushing, severe headaches, increased heart rate, and swelling of the face, hands or eyelids. Gastrointestinal-related symptoms encompass nausea, vomiting, explosive diarrhea, gas and flatulence, abdominal pain and cramps. The sensitivity may even result in anaphylactic shock, as in Wiest's case, and possibly death.

Sulfite-sensitive patients with gastrointestinal complaints, flatulence and diarrhea often comment about the sulfur odor of their stools, described as the odor of burnt matches or rotten egg. In these individuals, explosive diarrhea may occur as soon as five to 20 minutes following consumption of the sulfite-containing item.

Individuals who suspect they are sensitive to sulfites should monitor their dietary intake and symptoms for a month or more. This involves keeping a comprehensive record of the type and severity of symptoms, the time of day reactions occur, foods and beverages consumed, and medications or supplements taken. Records should be detailed



STOCKING UP

Looking for sulfite-free staples and treats? We've done some sleuthing to help you stock up on safe alternatives to your favorites. Check out these resources.

Atwater Foods, Inc.

800-836-3972

www.atwaterfoods.com

Premium dried fruit products.

Crossings

800-209-6141

www.crossingsfrenchfood.com

Importer of Fruits Saveurs by Favols, vacuum-sealed, partially dehydrated fruits, that are free of preservatives, sulphites and artificial ingredients.

Golden Whisk

800-660-5222

www.goldenwhisk.com

Award-winning sauces and salsas, many sulphite-free. Available at Williams Sonoma and other gourmet food retailers.

Living Tree Community

800-260-5534

www.LivingTreeCommunity.com

Organic and sulphur-free foods, including raw nut butters, nuts, and tahini.

New England Natural Bakers

413-665-8599

www.nenb.com

Granolas, meuslis and trail mixes using fruit free of sulfites and coloring dyes. Some mixes are wheat- and dairy-free.

CHECK YOUR PANTRY

People who are sensitive to sulfites should be cautious about consuming the following foods and beverages. Although many items listed will rarely contain sulfites (depending on the grower, supplier and food manufacturer), others may contain sulfites at various levels. Imported foods often contain more sulfites than locally grown and processed foods. Remember, labeling of sulfites is required only if the concentration is 10 parts per million or greater.

Bakery and Grain Products

Breads containing dough conditioners
Breeding batters
Cookies
Cheese-filled crackers
Cornmeal
Cornstarch
Crackers
Frozen dough
Gravy mixes
Hominy
Modified food starch
Noodle and rice mixes
Pie and pizza crusts
Potato chips
Spinach paste
Tortillas
Tortilla chips
Waffles

Beverages

Beverages containing sugar or corn syrup
Beer

Cider
Cordials
Dried citrus fruit beverages
Fruit juices (canned, bottled or frozen)
Instant tea
Wine
Wine coolers

Fish and Shellfish

Clams
Crabs
Dried fish
Lobsters
Oysters
Scallops
Shrimp
Shellfish (fresh, frozen, canned or dried)

Fruits and Vegetables

Coconut
Coleslaw and sauerkraut
Fruit (bottled, canned, dried, frozen or glazed)
Grapes (fresh)
Guacamole

Lettuce
Maraschino cherries
Mushrooms (canned or dried)
Peppers (bottled, pickled or canned)
Potato chips
Potatoes ("fresh cut," frozen, fries, deli potato salad or mashed)
Tomatoes
Vegetables (dehydrated, pickled or canned)
Vegetable juices

Prepared Foods

Frosting (canned and mixes)
Horseradish
Olives
Processed cheese
Relishes
Salad dressings
Vinegar

Protein Products

Infant formula
Imported sausages

Soy products
Textured vegetable protein
Tofu

Sweets and Sugars

Beet sugar or corn sweetener (in low concentrations)
Gelatin, flavored and unflavored
Hard candies
Jams and jellies
Pectin
Sugar (brown, white, powdered and raw)

Miscellaneous Foods and Ingredients

Caramel color
Dried herbs and spices
Grape juice concentrate
High-fructose corn syrup/sweeteners
Maltodextrin
Polydextrose
Trail mixes

about how food was prepared and where it was eaten.

In time, a pattern may be seen. Some reactions are immediate; others may not occur for up to 24 hours, which is more common with flatulence and headaches. If a pattern is identified, or problem foods are noted, the individual should highlight the area of concern.

Seek Expert Advice

Other foods, chemicals, additives, colors and substances can create the same symptoms caused by a sulfite sensitivity,

which is why it is important to consult with a doctor who is familiar with the affliction. After reviewing a patient's records, the physician may perform oral provocative testing to confirm suspicions.

Observations as simple as "wine gives me gas" make elimination of the offending item fairly easy. However, eliminating large groups of foods may compromise the nutritional adequacy of an individual's diet. If the diagnosis is confirmed, the patient should work with a dietitian experienced in allergies and sulfite sensi-

tivities to help plan a diet that is adequate, while avoiding foods that increase symptoms.

Dietary changes are the best way to treat a sulfite sensitivity. However, there is some scientific evidence that vitamins can help treat or prevent the sensitivity, as well.

Very high amounts of vitamin B-12 supplements — 1,500 to 5,000 micrograms or 1 to 5 milligrams per day — reduce the tendency of asthmatics to react to sulfites if taken before ingesting the sulfites. Vitamin B-12 is very safe,

REPORTING ADVERSE REACTIONS

The Food and Drug Administration keeps tabs on our food and drug supply using reports of adverse reactions. The agency's Adverse Reaction Monitoring System collects and acts on complaints concerning all food ingredients, including preservatives.

If you experience an adverse reaction from eating a food that contains sulfites, describe the circumstances and your reaction to the Food and Drug Administration district consumer complaint coordinator in your area, whose num-

ber can be found in your local phone directory, or go to www.fda.gov/opacom/backgrounders/problem.html.

If the problem involves meat or poultry, which are regulated by the U.S. Department of Agriculture, call the USDA hotline at 800-535-4555.

Any adverse reactions to medications or supplements should be reported to the FDA's MEDWATCH Program at 800-FDA-1088 or write to MEDWATCH, HF-2, FDA 5600 Fishers Lane, Rockville, MD 20852-9787.

with no upper limits established. Due to the low level of risk involved, it may be worth trying prior to restaurant meals — but only with a doctor's approval.

Asthma sufferers should always carry an inhaler when dining out. If a reaction to sulfites has occurred before, always carry an antihistamine and self-administering injectable epinephrine.

Diagnosis Difficulties

Sulfite sensitivity is frequently overlooked in persons with asthma, colitis or headaches because their symptoms are often the same as those produced by sulfites. These medical problems may be significantly reduced or eliminated by

uncovering and treating an underlying sulfite sensitivity.

Sulfite sensitivity is still a highly unidentified disorder. Many healthcare professionals are unfamiliar with it. Feel free to share this information with them. It could save a life. **SLW**