Writing Prompt

Read the two texts relating to food additives:

- "Pros and Cons of Food Additives" by Shelia Globus
- "Food Additives: Are they Safe?" by David Feder

Write an argumentative essay that supports or opposes using food additives in foods or food products. Be sure to cite evidence from both texts to support your argument. Follow the conventions of standard written English. Write your essay in the space provided.

TEXT ONE

Pros and Cons of Food Additives

by Sheila Globus

Chances are you eat a lot of additives every year. But do you know what they are or whether they're safe? Read on.

- Ben poured himself a bowl of cereal, picked up the box, and started reading down the list of ingredients. "Geez," he said to himself between mouthfuls. "I can't even pronounce half these things. I thought this stuff was made from corn, not chemicals."
- Are you like Ben—confused about food additives and what they do? Actually, additives are responsible for many of the qualities of food that we take for granted, such as the smoothness of ice cream and the brown color of colas. "People who say they don't like chemicals in their food had better get used to it," says Fergus Clydesdale, Ph.D., professor and head of the department of food science at the University of Massachusetts. "Every food is made up of thousands of chemicals. More than 90 percent of food additives come from compounds that were originally found in nature." The tart or tangy taste of soft drinks, for example, is produced by adding acids from lemons, limes, and apples.

Additives 101

- The Food and Drug Administration (FDA) defines an additive as any substance directly added to food that affects that food's characteristics. In other words, additives aren't foods themselves, but they do things such as improve the taste of foods, keep them from drying out, and protect us from food poisoning. Sometimes, vitamins and minerals are used as additives to make foods more nutritious.
- Without additives, many foods would be green with mold even before they got to the store shelves. Salt would clump, peanut butter would separate, and marshmallows would be hard as rocks.
- But additives also have a downside. Consumer groups warn that many additives haven't been tested well enough to be sure they're safe. Others argue that certain additives are unnecessary and shouldn't be eaten at all. Take BHT and BHA. These "antioxidants¹" prevent oil in foods such as potato chips from going bad. They're also used to preserve many breakfast cereals. Yet some studies have shown that BHT and BHA may increase the risk of cancer. Some artificial sweeteners have also been linked to cancer in animals. The good news is that most of the nearly 3,000 additives in the food supply are safe. Many—including salt, sugar, and spices—come from a group of substances called "generally recognized as safe" (GRAS). "GRAS 28 substances have a history of use for thousands of years," says Clydesdale. "Testing of food additives is rigorous. If you add something to a food, it

¹ antioxidant: a substance that prevents or makes difficult reactions made easier by oxygen

has to be GRAS, or approved by the FDA." Food additives are continually monitored. Those found to cause cancer in animals or humans usually are banned.

Safety First

- That doesn't mean additives are risk-free. For instance, nitrates and nitrites prevent food poisoning and enhance the flavor and color of processed meats, including hot dogs, ham, and bacon. Although they don't cause cancer themselves, they can create cancer-causing chemicals called nitrosamines as soon as they reach your stomach. Food companies add vitamin C (ascorbic acids) to bacon to keep nitrosamines from forming.
- Some artificial colors and flavors can trigger allergic reactions. Yellow dye number 5, found in cookies, chips, and soft drinks, must be listed on ingredient labels because it can cause hives, a stuffy nose, and shortness of breath in some people.
- Sulfites can also be troublesome. Sulfites are used to keep dried fruits and frozen potatoes from losing their color. Sulfite-sensitive people can have allergic reactions that include hives, wheezing, and even fatal shock.
 Although no longer used on fresh fruits and vegetables, sulfites may be found in baked goods and snack foods.
- 9 Most experts point out that reactions to additives are not common and that very few are severe. "Additives aren't a concern for most people. If you have a reaction to something, don't eat it," says Professor Clydesdale.
- To avoid a reaction to additives, choose fresh rather than processed foods, read labels, and avoid foods that contain "natural flavoring," hydrolyzed vegetable proteins, and yeast extract. Through allergy tests, a doctor can tell you if you are allergic to a substance in food, but not to additives.
- Here are some facts about common additives:
 - Aspartame: Unlike other sugar substitutes, aspartame, commonly known as NutraSweet and added to soft drinks and cookies, hasn't been shown to increase cancer risk. Some people complain that aspartame causes headaches, dizziness, and nausea.
 - "People shouldn't worry about whether or not their soda contains aspartame," says Keith Ayoob, Ed.D., a spokesperson for American Dietetic Association. "What they really need to be concerned about is whether diet sodas are replacing other drinks such as milk that you need for building strong bones."
 - MSG: Monosodium glutamate (MSG) brings out the flavor in everything from soup to nuts. For a few
 individuals, it can cause headaches, diarrhea, and sweating. People with asthma may be more
 sensitive. . . . MSG is common in Chinese food. "Less than 62 5 percent of the population is sensitive to
 MSG," says Ayoob.
 - Olestra: Olestra is a fat substitute used in potato chips and other snack foods. Because it isn't digested, olestra doesn't add calories, fat, or cholesterol to food. Unfortunately, as it speeds through your digestive system, it takes along some fat-soluble vitamins. In excess, it also can cause diarrhea and cramps.
- The biggest risk associated with food additives is that they tend to be in snacks and baked goods that have little nutritional value. "It's OK to eat these foods, but do so in moderation," says Ayoob. He recommends eating a variety of foods and making half your bread and cereal choices whole grain. That way, you can avoid eating too many potentially harmful additives and ensure you get all the nutrients you need to stay healthy.

Food Additives: Are They Safe?

by David Feder

- Farm-fresh, organic foods—pesticide- and preservative-free—are the preferred 1 choice for many of us. But when unsprayed, unprocessed and untreated foods aren't available, selecting among the alternatives requires careful thinking. There are dozens of additives in processed foods, and it's tough to know which ones are harmless and which ones to avoid. . . . The results of a British study suggested that the common preservative sodium benzoate and certain common artificial colorings warrant further investigation for their possible effects on increased hyperactivity in small children.
- In the British study, the children were put on a diet that eliminated the preservatives and additives. The study, published in the June 2004 issue of Archives of Disease in Childhood, found parents reported "significant reductions in hyperactive behavior during the withdrawal phase," although these results were not confirmed when the children were given objective, clinical tests. So, are these compounds, which have been approved by the U.S. Food and Drug Administration (FDA), truly safe, or should they be avoided?
- In the United States, nothing can be added to a food without the FDA's approval. For an additive to be included in a food, the FDA must determine it is "generally recognized as safe." But most testing involves limited periods of time under controlled conditions (the British test lasted one month) and, usually, the tests are on animals, not humans. In addition, testing doesn't account for individual sensitivities or the possible subtle impacts of a lifetime of ingesting chemical additives, especially in combination. . . . Also, testing doesn't always consider variations in body size and metabolism, such as with children.
- Several food dyes, additives and sweeteners have been banned long after passing FDA review, and the safety of a number of additives over long periods of usage also has been questioned by researchers. In fact, it's hard to find an additive that has not been investigated as a potential carcinogen². Scientific literature going back decades shows that for nearly every study implicating certain preservatives and additives in some adverse health effect, another study that showed the opposite results can be found.
- Not all additives are evil. A number of preservatives, used in foods to control spoilage and microbial growth, actually may increase their healthfulness. Take tocopherol, for example. Also known as vitamin E, it's added as an antioxidant to keep food from spoiling, but studies have found vitamin E may protect against cardiovascular disease and cancer. Some food colorings derived from vegetables—for example, beta carotene for yellow and orange; anthocyanins from grapes or beets for reds—are known to protect against cancer and heart disease, too.
- In the long run, it is unlikely that even the most suspect additives pose any immediate and significant danger, although the British study is a reminder that children's reactions can differ from adults'. The main question is whether you are willing to accept the possible risk, however remote, that future science will establish clear links between a particular additive and increased cancer or other disease risk. So, given the choice—with fresh, organic, high-quality foods now more available than ever—it just makes sense to opt for the fresh, organic, additive-free versions as often as you can.

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² carcinogen: any substance that can cause cancer