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The Center for Science in the Public Interest (CSPI), founded in 1971, is a non-profit health-advocacy organization that conducts innovative research and advocacy programs on nutrition and food safety. CSPI is supported by subscribers to its *Nutrition Action Healthletter* and foundation grants.

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## Executive Summary

Companies are increasingly responding to consumer demands for products free of artificial, and potentially unsafe ingredients by offering “clean-label” products. CSPI evaluated the clean-label programs of four major chain restaurants and nine major chain supermarkets. These companies are industry leaders on the issue, having committed to eliminating, or continuing not to use, long lists of ingredients, including some that pose health risks. Those companies are:

**Restaurants:** Chipotle Mexican Grill, Noodles & Company, Panera Bread, and Papa John’s

**Supermarkets:** Ahold Delhaize (Food Lion, Giant Food, Stop and Shop), Aldi, H-E-B, Kroger, Meijer, Supervalu, Target, Wakefern (ShopRite), and Whole Foods

### Main findings:

- All the companies have committed to excluding the use of most, but not all, of the riskiest additives, such as synthetic food dyes and artificial sweeteners like aspartame. The supermarkets, except Whole Foods, limit their commitments to one or more lines of their house-brand products.
- None of the companies’ clean-label lists limit the amounts of sodium or added sugars, which cause far more harm than all other additives combined.
- All companies exclude the use of many artificial ingredients that CSPI considers safe.
- The restaurants’ clean-label policies don’t apply to beverages, the major source of some of the riskiest additives (added sugars, artificial sweeteners, and synthetic food colors).
- Clean-label products are not necessarily healthful.
- Some companies include different names for the same chemical, or chemicals that have been banned, or never approved by the government, on their lists of prohibited ingredients.

## Recommendations:

1. More food companies should adopt clean-label programs and prioritize public health by addressing all ingredients listed on pages 8-9 of this report. Companies should make their policies publicly available.
2. Restaurants should provide ingredient and nutrition information for all items, both on-site and online. Clean-label programs should apply to all products a restaurant makes and sells, including beverages.
3. Supermarkets should provide ingredient and nutrition information online, at least for their private brand clean-label products, and ideally for all products they sell. Clean-label programs should be expanded to as many products as possible, including all private-label brands.



## Introduction

It's been called "the largest shift in American food habits since World War II"<sup>1</sup> and "Trend of the Year" by Food Business News.<sup>2</sup> Retailers and manufacturers are responding to it by creating new product lines. One restaurant has reportedly spent \$100 million each year trying to achieve it.<sup>3</sup> Schools are reformulating their menus to obtain it.<sup>4</sup> Researchers are studying the food safety implications of it.<sup>5</sup> It is driven by consumers, yet many consumers don't know what it means.<sup>6</sup> What is it? Many call it the "clean-label" trend. Consumers want clean labels, and major food manufacturers, restaurants, and supermarkets are scrambling to provide them. But exactly what are they, and are they good for consumers and their health? Do they have downsides? Do clean labels result in meaningful changes, or are they just another marketing fad?

This report attempts to answer those questions. After examining various approaches to clean labels and evaluating clean-label decisions made by restaurants and supermarkets that have taken a more comprehensive approach, the report makes recommendations on using clean labels to promote health—even for companies that don't develop long lists of ingredients they won't use.

## What are Clean Labels?

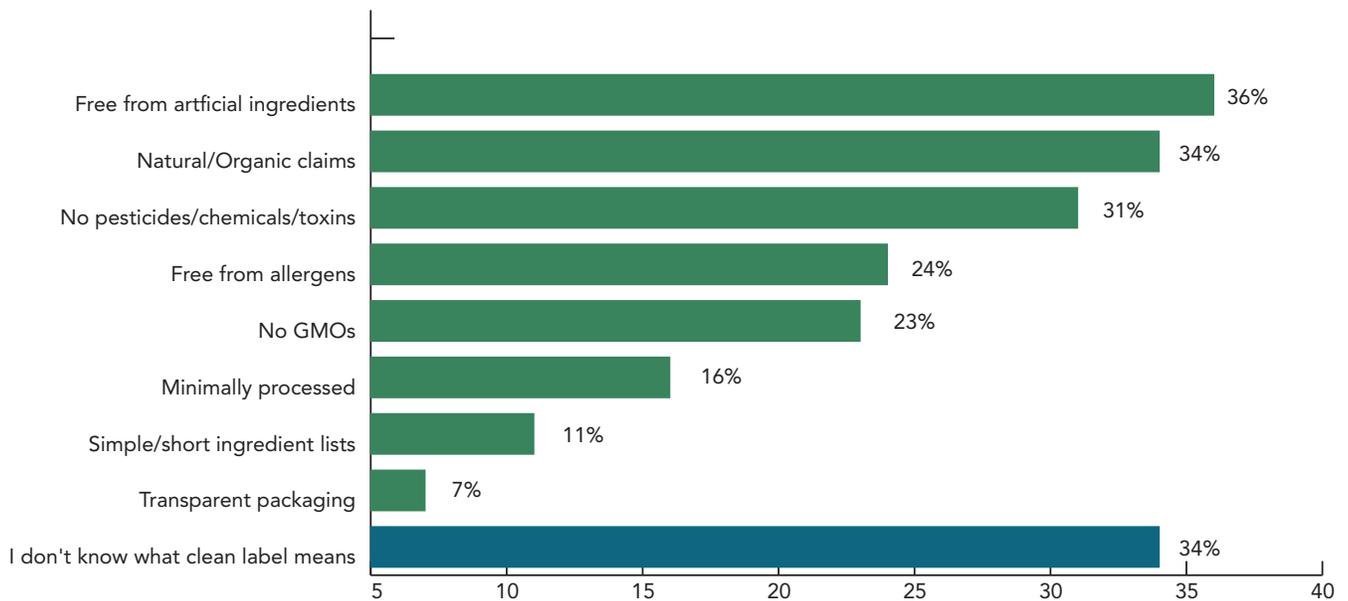
There is no official definition of "clean labels", but the term is generally interpreted to mean food formulations with shorter ingredient lists *without* artificial (synthetic) chemicals, and *with* familiar ingredients. Author Michael Pollan's advice to avoid food products containing unfamiliar, unpronounceable, or more than five ingredients helped shape the concept of clean labels.<sup>7</sup> "Free from artificial colors and flavors," "no preservatives," and "only natural ingredients" are the kinds of claims made by companies promoting clean labels.

Clean labels are the food industry's response to consumer demand for foods without questionable ingredients such as artificial dyes, aspartame, brominated vegetable oil, and caramel color.<sup>8</sup>

## Is Certified Organic a Clean Label?

Certified organic foods are not only clean-label, but much more. While certified organic foods must meet strict standards, there are no standards for clean-label foods. Certified organic products are generally produced only with natural substances (i.e., not synthetic pesticides, fertilizers, and animal feed ingredients), with specific exceptions spelled out in the standards. In contrast, clean-label foods often contain ingredients from farms using synthetic substances, unless they are also organic or make other verified claims. The standards for certified organic foods also identify non-organic substances, both natural and synthetic, that may be used in or on processed organic products. Rarely, those include additives that some clean programs exclude, such as sodium phosphate.

## Global: What does the term "clean label" mean to you?



Source: Canadean's Q4 global consumer survey, 2015

Source: Schroeder J. Study finds consumers don't understand 'clean labels.' Food Safety Quality & Safety, March 15, 2016. <http://www.foodqualityandsafety.com/article/15947/>

## Concerns over Additives and Other Substances Added to Food

Most substances added to food—even ones with long chemical names—*are* safe, in CSPI’s view. But some are not, and many have been poorly tested. Indeed, the system intended to ensure the safety of ingredients added to food is deeply flawed and has led to consumer confusion and distrust of “chemicals.” While clean labels may cater to consumers who falsely equate “chemical” with “dangerous,” several legitimate concerns over food ingredients do exist.

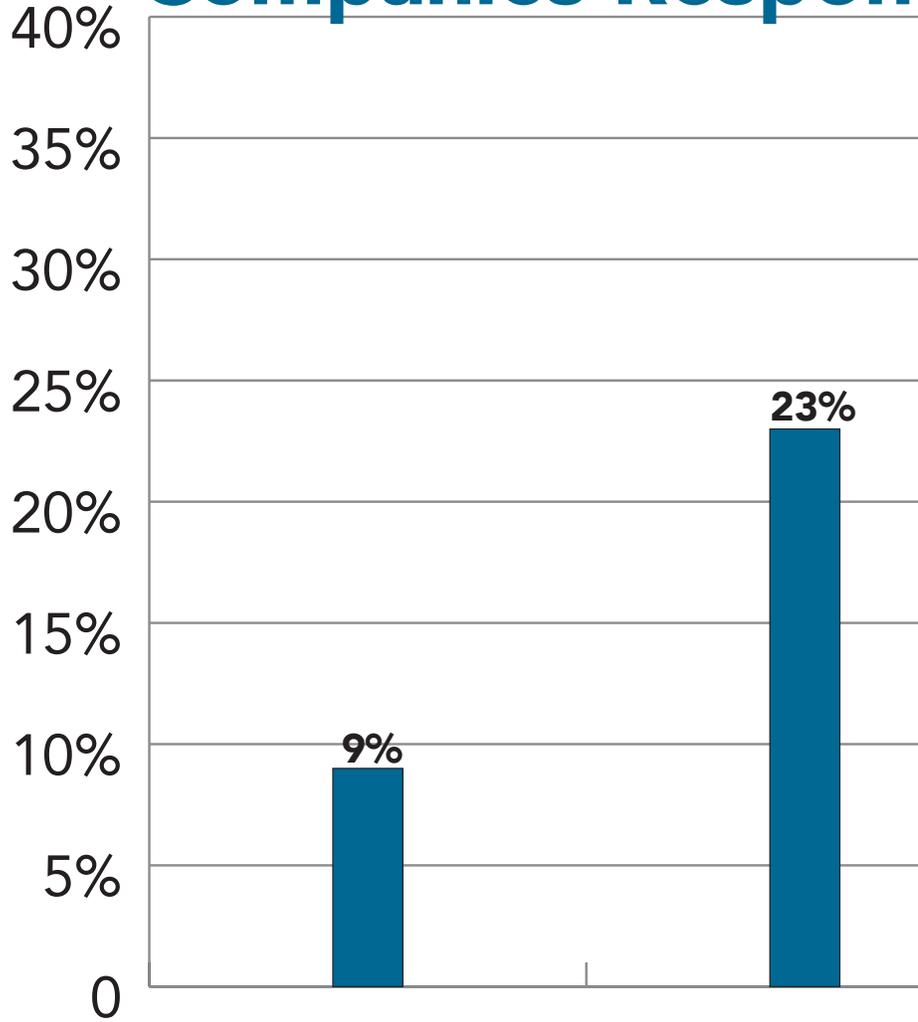
**Some foods contain substances that have been determined by the U.S. government or international authorities to cause cancer.** For example, the U.S. Food and Drug Administration (FDA) in 1990 concluded that Red 3 dye caused cancer in rats, but never banned the dye from foods and beverages.<sup>9</sup> Similarly, the preservative butylated hydroxyanisole (BHA) is listed as “reasonably anticipated to be a human carcinogen” by the U.S. National Toxicology Program.<sup>10</sup> While the risks are small, consumers do not want to be exposed, and should not be exposed, to carcinogens added to food, and the clear language of the law prohibits such ingredients.

**The FDA rarely reviews the safety of additives after they are approved; additionally, it rarely takes action to limit their use, even when there is evidence that they are not safe.** For example, nine recent reviews concluded that synthetic food dyes (e.g., Yellow 5) trigger hyperactivity or other adverse behaviors in some children, but the FDA has not banned those unnecessary chemicals or warned parents.<sup>11</sup> Also, the artificial sweetener aspartame caused cancer in three different animal studies published in the last decade,<sup>12</sup> but the FDA has not prohibited or limited its use.

**Some substances added to the food supply are deemed “generally recognized as safe,” or GRAS, by food companies, without even a quick review by the FDA.** Many of the thousand or more artificial flavorings fall into this category.

# Companies Respon

Percent of consumers citing chemicals in food as top food safety concern.\*



"Early Adopters" of Clean Labels

2000's

2011

2014

\*Source: International Food Information Council. Food and Health Surveys 2011, 2014, 2015, 2016.

# Food to Consumer Concern

36%

38%

Chemicals in food are now consumers' top food safety concern.

2015

2016



\*The "free from 100+ artificial ingredients" list for Nature's Place was developed in 2015, although the Nature's Place logo has been used since 2001.

## Baby Foods: Pioneers of Clean Labels

Manufacturers used to make baby food using a combination of water, sugar, and modified starches to replace nutritious fruit, meat, or vegetables. Some were also made with sodium nitrite and salt. In 1985, Beech-Nut announced that it was reformulating its products without any added starches, resulting in 25 percent more vegetables and 50 percent more meat in some foods, according to the company. In 1995, the Center for Science in the Public Interest published a report revealing that many Gerber and Heinz baby foods were adulterated, because they contained as little as 30 percent real food (such as strained bananas), and the following year petitioned the Federal Trade Commission to stop Gerber from running false and misleading advertisements about its baby foods. Huge publicity about that adulteration forced the whole industry to clean up its act by getting rid of artificial preservatives, modified starches, and other unsavory substances. A recent report by the Rudd Center at the University of Connecticut confirms that all of the fruit, vegetable, and meat products offered by all baby and toddler brands qualify as nutritious. Unfortunately, companies are heavily advertising products not recommended for young children, including sugar-sweetened toddler drinks and nutritionally poor snack foods, according to the report.<sup>1</sup>

Ironically, “clean-label starches” are being marketed to companies that still want to use fillers and thickeners, but are eager to cleanse their labels of the artificial-sounding “modified starch.” (CSPI rates starches, whether modified or not, as safe.)

**Many substances added to foods have not been thoroughly tested.** The FDA only recommends, but does not require, that companies perform specific safety tests. The agency’s testing recommendations are out of date and frequently ignored. And the vast majority of safety testing of food additives is done by food manufacturers (or by people or companies hired by manufacturers), not the government or independent laboratories.

## Putting Clean Labels in Perspective

Consumer interest in clean labels is driven by health concerns. A recent survey found that healthfulness, along with taste and price, are the biggest drivers of food-purchasing decisions for most Americans. That survey also found that “limited or no artificial preservatives” is one of the top ways Americans define healthy eating.<sup>13</sup>

To the extent that clean label products are healthier than their non-clean label counterparts, because they are made with actual foods instead of cheap chemical imitations, they deserve praise. Still, the absence of artificial ingredients does not make a food healthy, since it could still be loaded with saturated fat, salt, or added sugars and be largely devoid of dietary fiber and nutrients.

## CSPI's Recommended Priorities for Addressing Food Ingredients in Clean-Label Programs<sup>†</sup>

	Ingredient					
<b>Tier 1</b> Major Health Concerns Due to the Excessive Amounts Consumed and Number of People Affected	<b>Added Sugars</b> (including agave, dextrose, evaporated cane juice, fructose, high-fructose corn syrup, sugar, etc.)					
	<b>Added Salt (sodium)</b> (including sea salt)					
<b>Tier 2</b> Small Risk of Serious Adverse Effects (e.g., Cancer) Considering Usage	<b>Artificial Colorings (Synthetic Dyes)</b> Blue 1, Blue 2, Green 3, Red 3, Red 40, Yellow 5, Yellow 6					
	<b>Artificial Flavorings (Identified as Carcinogens)<sup>‡</sup></b> Benzophenone/diphenyl ketone, ethyl acrylate, eugenyl methyl ether/methyl eugenol, myrcene, pulegone, pyridine, styrene					
	<b>Artificial Sweeteners</b> Acesulfame potassium, aspartame, saccharin, sucralose					
	<b>Artificial Preservatives</b> BHA, nitrate/nitrite (natural or artificial, used in cured meats), propyl gallate, TBHQ					
	<b>Fat/Oil</b> Partially hydrogenated vegetable oil					
	<b>Meat Substitute</b> Mycoprotein (Quorn)					
<b>Tier 3</b> Slight or Possible Risk of Serious Adverse Effects (e.g., Cancer) Considering Usage	<b>Artificial &amp; Natural Flavorings<sup>§</sup></b>					
	<b>Artificial Colorings (other than synthetic dyes)</b> Caramel coloring <sup>¶</sup>					
	<b>Artificial Preservative</b> BHT					

<sup>†</sup> For more information on food additives and CSPI's safety ratings, go to [cspinet.org/chemical-cuisine](http://cspinet.org/chemical-cuisine). CSPI has not evaluated all additives prohibited in clean-label programs.

<sup>‡</sup> CSPI and other organizations have petitioned FDA to prohibit the use of flavorings identified as carcinogenic (<https://www.federalregister.gov/documents/2016/01/04/2015-33011/center-for-science-in-the-public-interest-natural-resources-defense-council-center-for-food-safety>).

<sup>§</sup> See page 13

<sup>¶</sup> Specifically, caramel coloring produced using ammonia (Classes III and IV), since the process results in the formation of carcinogenic contaminants. Class I and II caramel coloring and certified organic caramel coloring are produced without using ammonia.

	Ingredient					
<p><b>Tier 3</b> (continued)</p>	<p><b>Bread/Flour Additives</b> Azodicarbonamide, bromated flour, potassium (or calcium) bromate</p>					
	<p><b>Emulsifier</b> Brominated vegetable oil</p>					
	<p><b>Emulsifier</b> polysorbates</p>					
	<p><b>Fat Substitute</b> Olestra</p>					
	<p><b>Fillers or Thickeners</b> Carboxymethylcellulose (CMC), carrageenan</p>					
	<p><b>Substances with Multiple Uses</b> Phosphoric Acid/ Phosphates (e.g., sodium phosphate, sodium tripolyphosphate)</p>					
	<p><b>Plant Ingredients</b> Aloe vera (oral), Ginkgo biloba</p>					
<p><b>Tier 4</b> Poorly Tested Substances and Other Safety Issues, including Allergic or Hypersensitivity Reactions</p>	<p><b>Artificial Colorings (not synthetic)</b> Annatto, cochineal extract/carmine</p>					
	<p><b>Artificial Preservatives</b> Benzoic acid/sodium benzoate</p>					
	<p><b>Butter Flavoring</b> Diacetyl</p>					
	<p><b>Flavorings/Flavor Enhancers</b> Autolyzed yeast extract, hydrolyzed vegetable protein, monosodium glutamate (MSG), quinine</p>					
	<p><b>Natural High-Potency Sweetener</b> Monk fruit extract</p>					
	<p><b>Preservatives</b> Sulfites, sodium bisulfite, sulfur dioxide</p>					
	<p><b>Thickeners</b> Gums (arabic, guar, xanthan, others), propylene glycol</p>					

 Avoid	 Certain people should avoid, often because of allergenicity or hypersensitivity reactions
 Caution	
 Cut back	 May substitute for nutritious ingredients

## Evaluating Clean-Label Commitments

### Industry Approaches to Clean Labels

Clean-label programs vary widely in terms of the prohibited additives and ingredients covered, the food and beverage products covered, and the transparency of the program.

More and more companies, including Campbell's<sup>\*</sup>, General Mills, Kellogg, and Nestlé USA, are publicly committing to removing artificial colorings and flavorings from at least some of their products.

Some companies have published long lists of chemicals that they will not use. Sometimes those lists include specific names of substances, and other times they are non-specific and vague (e.g., "preservatives" or "artificial ingredients").

### Evaluation Criteria

This report's criteria for evaluating clean-label programs include:

**Ingredients:** Does the program exclude the most especially harmful additives from a public health perspective (see page 9)?

**Food and beverage products:** Are all products sold by the company covered or only a few? Are beverages, as well as food, included?

**Transparency:** Does the company make detailed information about its product and clean-label commitments publicly available?

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\* In addition to artificial colorings and artificial flavorings, Campbell's has also committed to removing the artificial sweeteners aspartame and sucralose, non-sustainable palm oil, and the artificial preservatives EDTA, potassium sorbate, sodium benzoate, sorbic acid, and sulfites. Source: <http://www.whatsinmyfood.com/real-food-index/>

## Ingredients Covered in Clean-Label Programs

### Some companies have long lists of substances that they have committed to not using.

They exclude many, but not all, of the most problematic additives.

Some companies have committed to excluding only one or two ingredients. For example, Dunkin' Donuts reformulated its powdered sugar donut to remove titanium dioxide,<sup>14</sup> and Coca-Cola stopped using brominated vegetable oil (BVO).<sup>15</sup> Other companies, such as Trader Joe's, have committed to excluding several ingredients.\*\* Others have committed to excluding, or do not use, many ingredients. Some of these companies are the following restaurants and supermarkets:

**Restaurants:** Chipotle Mexican Grill<sup>††16</sup>, Noodles & Company<sup>17</sup>, Panera Bread,<sup>18</sup> and Papa John's.<sup>19</sup>

**Supermarkets:**<sup>‡‡</sup> Ahold Delhaize<sup>§§</sup> (Food Lion Nature's Place,<sup>20</sup> Giant and Stop & Shop Nature's Promise Free from),<sup>21</sup> ALDI (SimplyNature),<sup>22</sup> H-E-B (Select Ingredients),<sup>23</sup> Kroger (Simple Truth),<sup>24</sup> Meijer (True Goodness),<sup>25</sup> Supervalu (Wild Harvest),<sup>26</sup> Target (Simply Balanced),<sup>27</sup> Wakefern (ShopRite's Wholesome Pantry),<sup>28</sup> and Whole Foods<sup>29</sup> (all foods and beverages).

Panera Bread has made it a top priority to meet its clean-label commitments for items on its kid' menu.<sup>30</sup>

While this report critiques company clean-label commitments, we commend the four restaurant chains and nine supermarkets for eliminating unnecessary, and sometimes harmful, additives from some or all of the foods and beverages that they market. They are

\*\* Trader Joe's states that it excludes artificial flavors, artificial colors (synthetic), MSG, partially hydrogenated oils, and "artificial preservatives" with two exceptions: sulfur dioxide and potassium sorbate in dried fruit. It mentions EDTA and BHA as examples of artificial preservatives that it excludes.

†† Chipotle Mexican Grill focuses on which ingredients are used rather than which are not; it does not use most of the ingredients on the lists of the other restaurants.

‡‡ Walmart's Wild Oats brand also prohibits many ingredients, but the company is reportedly phasing it out, so it was not included in this report.

§§ Ahold and Delhaize have merged, but they have different clean-label programs. Hannaford also sells "Nature's Place," but unlike Food Lion, its website does not include a list of which specific ingredients are prohibited, which is why it is not included in this analysis.

the clean-label leaders, and have addressed many of the ingredients that CSPI considers a priority to exclude or limit, including synthetic food dyes, certain artificial sweeteners<sup>¶¶</sup> and artificial preservatives, as well as partially hydrogenated oil (see pages 8-9).<sup>\*\*\*</sup> Other companies should be encouraged to follow their lead.

At the same time, there are areas where these and other companies could improve:

- None of the companies limit added sodium or sugars.
- While all exclude high-fructose corn syrup, that ingredient is not significantly more harmful than sucrose (table sugar).

### What About Food Manufacturers?

Some large manufacturers have committed to removing artificial colors from their products, and sometimes artificial flavorings or certain other ingredients as well. Some smaller manufacturers, such as food-bar manufacturers Larabar and That's It, use only a few food ingredients (e.g., fruit, nuts) and no additives. This report does not include those efforts since it is focused on companies that have long lists of substances they have committed to not using.

One exception is Panera's Panera At Home line of products sold at grocery stores. Panera uses the same long "no-no list" of ingredients for those foods as for Panera Bread restaurants. The conclusions reached about Panera Bread in this report also apply to Panera At Home.

- In the quantities consumed by most Americans, added sugars and salt pose more of a risk than any other

¶¶ Saccharin is not on Papa John's list of prohibited ingredients, but it is not an ingredient listed on its website. However, the website ingredient information does not include beverages or tabletop sweeteners.

\*\*\* Wegmans states that its "Food You Feel Good About" brand also excludes artificial colors, artificial sweeteners, artificial preservatives, and trans fat from partially hydrogenated oils, as well as artificial flavors and high fructose corn syrup. It should also be considered a leader but was not included in this analysis since the specific ingredients it excludes were not clearly identified.

ingredient. However, Aldi has removed candy from checkout lines, the kids' menu at Panera Bread does not include sugar drinks,<sup>31</sup> and Noodles & Company identifies menu items that are 500 calories or less, "sodium conscious," and "watching sugar."

- All restaurant chains other than Chipotle Mexican Grill serve processed meats containing artificial or natural sources of nitrates/nitrites (see box, page 16).
- Whole Foods sells products (Quorn meat substitutes) made with mycoprotein,<sup>32</sup> which can cause very serious and sometimes fatal allergic reactions. It also sells *Aloe vera*<sup>33</sup> (for oral consumption), and *Ginkgo biloba*,<sup>34</sup> both of which showed "clear" evidence of cancer in government-conducted animal studies. Those ingredients are not used by the four restaurants examined, and there is no indication that they are used in the clean-label lines of the retailers examined.

### What's Wrong with "Natural Flavorings"?

"Natural flavorings," like artificial flavorings, are an unspecified group of ingredients that can displace real, nutritious ingredients. Paradoxically, both natural and artificial flavorings products can contain a wide range of synthetic non-flavoring ingredients, such as artificial preservatives, artificial colorings, and emulsifiers.<sup>11</sup> In addition, some companies use the catch-all term of "natural flavorings" to hide ingredients that consumers might not recognize or want. For example, Cargill has stated that companies can label its Zerose-brand erythritol as "Natural Flavor."<sup>13</sup> While CSPI considers erythritol to be one of the safest lower-calorie sweeteners, its use should be clearly disclosed. The use of the non-specific term "natural flavors" also is problematic for consumers who wish to avoid specific natural flavors, such as those derived from animals, because of their religious beliefs, vegetarian diet, or allergies.

- Except for Chipotle Mexican Grill, none of the companies listed above exclude natural flavorings, a category of unspecified ingredients (see box above).

- Artificial flavorings are used by Noodles & Company.<sup>35</sup>
- Caramel coloring is used by Noodles & Company restaurants and is not prohibited in the clean-label programs of supermarkets Aldi, Ahold Delhaize's Giant Food and Stop & Shop, Kroger, Meijer, Super Valu, Target, and Whole Foods. H-E-B Select Ingredients prohibits non-organic caramel coloring but allows organic caramel colorings (those do not contain the carcinogenic contaminant 4-methyl-imidazole).
- Panera Bread, Chipotle Mexican Grill, and Ahold Delhaize (Food Lion) Nature's Place prohibit and/or do not use polysorbates, a family of synthetic thickening agents, but they are used by Noodles & Company and Papa John's. They are not listed on either the list of acceptable or unacceptable ingredients for H-E-B Select Ingredients products. They also are not on the lists of prohibited ingredients for Aldi Simply Nature, Ahold Delhaize (Giant Food and Stop & Shop) Nature's Promise Free from, Kroger Simple Truth, Supervalu Wild Harvest, Target Simply Balanced, or Whole Foods.
- The thickener carrageenan is not used by Chipotle Mexican Grill or Papa John's, but Noodles & Company and Panera Bread fail to include it on their prohibited list of ingredients. It is not prohibited by Aldi Simply Nature, Ahold Delhaize (Giant Food and Stop & Shop) Nature's Promise Free from, Kroger Simple Truth, and Whole Foods. CSPI rates carrageenan as "caution" due to possible effects on the gastrointestinal system and possible (slight) cancer concerns.
- Most companies do not include any phosphate additives on their prohibited list, which CSPI advises consumers to "cut back." The exceptions are Panera Bread, Ahold Delhaize (Food Lion, Giant Food, Stop & Shop), and Kroger. Most people consume far more phosphorus than they need, which may have adverse effects on kidney, bone, and cardiovascular health in some people.

Ingredients in the fourth tier of priority (see page 13) include those that trigger allergic or hypersensitivity reactions for some individuals, and pose smaller or more speculative health risks for others. For example, only Chipotle Mexican Grill and Papa John's excludes annatto, a coloring derived from a seed that can trigger hives in some people; all the companies exclude cochineal/carmine, a coloring derived from an insect that also triggers hives in some people, and sometimes anaphylactic reactions. Diacetyl, which CSPI cautions against, since long-term exposure to workers has caused obstructive lung disease, is excluded by Chipotle Mexican Grill, H-E-B Select Ingredients, Panera, and Papa John's.

### **Companies exclude many ingredients that CSPI considers safe.**

All companies in our study included many additives or other ingredients that CSPI rates as "safe," such as modified food starch, calcium propionate, vanillin/ethyl vanillin, and calcium stearoyl lactylate. Some companies say they avoid anything unnecessary, while others may be accommodating consumers who are leery of anything that sounds unfamiliar. In most cases, there is no problem with eliminating unnecessary additives, especially if they are used to make unhealthy foods appealing.

### **Prohibiting ingredients can help sensitive consumers avoid them.**

All lists of prohibited ingredients examined for this report ensure that foods are free of some ingredients that can cause allergic or hypersensitivity reactions in small numbers of consumers. These ingredients include synthetic dyes, carmine and cochineal extract colorings (made from an insect), and MSG. Most lists also excluded artificial flavorings and benzoates/benzoic acid, and some excluded annatto, autolyzed yeast extract, propylene glycol, and sulfites/sulfur dioxide. Only Aldi Simply Nature excludes quinine, and only H-E-B Select Ingredients excludes hydrolyzed vegetable proteins, which are chemically similar to MSG.

## Some clean-label policies could result in negative health consequences.

Companies should consider potential negative health consequences of their policies to eliminate ingredients. For example, companies should not replace sodium nitrite or sodium nitrate with natural sources of nitrates if the swap results in more nitrites or nitrosamines for the consumer. And while limiting phosphorus-containing additives overall is desirable, sodium acid

### Nitrite and Nitrate: when natural isn't better than artificial

Papa John's uses sodium nitrite in its bacon, whereas Noodles & Company and Panera Bread do not. However, this does not necessarily mean that the bacon at Noodles & Company or Panera Bread is safer or healthier than Papa John's. Rather, Noodles & Company and Panera use natural sources of nitrates, such as celery powder, that get converted to nitrite, generally using a bacterial culture during processing. In 2011, the *New York Times* revealed that "natural" cured meats could have 10 times as much nitrite as meats cured with sodium nitrite. Processed meats such as bacon, sausage, and hot dogs are classified as carcinogenic to humans, based on many studies in humans that found that the consumption of processed meat causes colorectal cancer.<sup>14</sup> Your best bet? Choose something other than processed meats at restaurants or supermarkets.

pyrophosphate (SAPP) reduces levels of the carcinogen acrylamide in french fries.<sup>36</sup> Similarly, companies should not include folic acid on lists of prohibited ingredients since adding that (synthetic) vitamin to wheat flour or other foods consumed by pregnant women reduces an infant's risk of suffering a deadly neural tube defect. In fact, the FDA requires that folic acid be added to enriched flour, but is an optional ingredient in other foods.<sup>37</sup>

## Food and Beverage Products Covered

### Restaurant clean-label programs frequently exclude beverages, a major source of the highest priority additives.

All four restaurant chains surveyed do not apply their clean-label programs to all of the beverages they sell. Beverages are a leading source of synthetic dyes,<sup>38</sup> BVO, and artificial sweeteners on CSPI's "avoid" list. Moreover, sugar drinks have long been one of the leading single sources of calories and added sugars in both adults' and children's diets.<sup>39</sup>

### Retailers often have clean-label commitments only for products in one house brand.

Of the nine supermarkets surveyed, only Whole Foods has a long list of prohibited ingredients applicable to all the products it sells; Trader Joe's program also applies store-wide. Aldi's has excluded food dyes, partially hydrogenated oils, and added MSG from all of its exclusive brand products, which comprise more than 90% of the products it sells, according to the company.<sup>40</sup>



### "Clean-label" does not equal "healthful."

Unfortunately, many clean-label foods are not healthy. For example, several of the soups offered at Panera Bread have excessive amounts of sodium, and more than half of what you should eat in a whole day. A bowl of the Bistro French Onion soup has 1,960 mg of sodium, 85 percent of the daily limit and nearly half of a day's

worth of saturated fat. Whole Foods' Coconut Curry Vegetable Soup and Whole Foods' Black Bean and Cheese Burrito have about two-thirds of the saturated fat you should have in a day. One Whole Foods' 365 Cola has a whopping 43 grams of sugar—more than the American Heart Association recommends adults consume in a day, and more than Coke or Pepsi. While few people consider

## Clean Labels: Not Always Simple, Short Ingredient Lists

For example, the Kroger Simple Truth Fudge Graham Nutrition Bar lists six forms of sugar alone, in a long list of ingredients (which includes some vitamins and minerals). It is hard to understand how this product can be considered "clean label."

**INGREDIENTS:** SOY CRISPS (SOY PROTEIN ISOLATE, TAPIOCA STARCH, SALT), SUGAR, CORN SYRUP, HIGH MALTOSE CORN SYRUP, MILK CHOCOLATE DROPS (SUGAR, WHOLE MILK POWDER, CHOCOLATE LIQUOR, COCOA BUTTER, MILK FAT, SOY, LECITHIN (EMULSIFIER), NATURAL VANILLA FLAVOR), PALM KERNAL OIL, MALTODEXTRIN, WHY PROTEIN CONCENTRATE, WATER, MARSHMALLOW PIECES (SUGAR, CORN STARCH, FRUCTOSE, SOYBEAN OIL, CORN SYRUP SOLIDS, NATURAL FLAVOR, SALT, SOY LECITHIN), COCOA POWDER, GLYCERIN, CRYSTALLINE FRUCTOSE, WHEY POWDER, NONFAT DRY MILK, SUNFLOWER OIL, NATURAL FLAVOR, VITAMIN AND MINERAL BLEND (TRICALCIUM PHOSPHATE, ASCORBIC ACID, FERROUS FUMARATE, D-ALPHA TOCOPHERYL ACETATE, NIACINAMIDE, ZINC OXIDE, COPPER GLUCONATE, D-CALCIUM PANTOTHENATE, VITAMIN A PALMITATE, PYRIDOXINE HYDROCHLORIDE, THIAMIN MONONITRATE, RIBOFLAVIN, FOLIC ACID, BIOTIN, POTASSIUM IODIDE, CYANOCOBALAMIN), SOY LECITHIN, XANTHAN GUM, MILK PROTEIN ISOLATE, WHEAT GERM, PEANUT FLOUR, ALMOND MEAL. **CONTAINS MILK, PEANUTS, SOY, ALMONDS, AND WHEAT. MAY CONTAIN EGG CASHEWS, COCONUT, MACADAMIA NUTS, PECANS, AND WALNUTS.**

macaroni and cheese a health food, the largest sizes of macaroni and cheese at Noodles & Company and Panera Bread have more saturated fat than you should eat in a day. A Kroger Simple Truth Fudge Graham Nutrition Bar is loaded with added sugars.

Rather than making the meaningless replacements of high-fructose corn syrup with fructose or raw sugar, or iodized salt with sea salt, **companies should instead reduce *total* added sugars and sodium.**

## Transparency

### Disclosing specific ingredient information is key.

Chipotle Mexican Grill, Noodles & Company, Panera Bread, and Papa John's provide complete ingredient information and nutrition information on their websites for each menu item. Although ingredient and nutrition information is required on product labels, supermarkets could help their customers by disclosing that

information on their websites for consumers who shop online or who wish to plan their purchases in advance. Among supermarket programs, Ahold Delhaize's Giant and Stop & Shop chains (via the Peapod website), H-E-B, Meijer, and Target provide ingredient and nutrition information online; Kroger and Whole Foods provide ingredient but not nutrition information on some of their products; and Aldi, Ahold Delhaize's Food Lion, ShopRite and Supervalu Wild Harvest do not provide any ingredient or nutrition information on their websites. Ahold Delhaize's Hannaford does not include the specific "free from" ingredients on its website for Nature's Place products, although Food Lion does.

Some companies provide additional information about their ingredients. For example, H-E-B provides lists of prohibited and allowed ingredients in its Select Ingredients line of foods. Panera Bread clearly indicates which ingredients on its "no-no list" have already been removed and which it plans to remove.

On the other hand, some companies use vague terms to describe what is and isn't permitted in their products. Safeway states that its Open Nature line of products contain "no artificial ingredients" and "no artificial preservatives," but these terms are not defined and are not necessarily meaningful.<sup>41</sup> For example, Safeway's Open Nature multigrain waffles contains sodium acid pyrophosphate, a synthetic substance<sup>42</sup> that is a Tier 3 ingredient (see Table).

### **Some clean-label programs may confuse or mislead consumers.**

Some companies list the same ingredient multiple ways without cross-referencing them, or include banned or unapproved additives on their list of prohibited ingredients without indicating this to the consumer. This may lead consumers to think that companies are prohibiting more additives than they really are. For example:

- Cyclamates are not legal in the United States, yet Aldi Simply Nature, Ahold Delhaize (Giant Food and Stop & Shop) Nature's Promise Free from and (Food Lion) Nature's Place, H-E-B Select Ingredients, Kroger Simple Truth, Meijer True Goodness, Noodles & Company, Target

Simply Balanced, and Whole Foods include them on their “prohibited” lists without noting this. Similarly, H-E-B Select Ingredients lists artificial colors not approved in the United States, including Quinoline Yellow, Red 2, and Red 4 without indicating that these artificial colors are not approved for food in the United States.

- Artificial (synthetic) colorings are listed multiple ways by Ahold Delhaize (Food Lion) Nature’s Place, H-E-B Select Ingredients, Kroger Simple Truth, Meijer True Goodness, Noodles & Company, Panera Bread, Supervalu Wild Harvest, and Whole Foods.<sup>†††</sup>
- Kroger Simple Truth advertises “Free from 101” but the list is actually “free from 79” after removing banned cyclamates, duplicates such as monosodium glutamate (MSG)/sodium glutamate, and near-duplicates such as benzoates in food/potassium benzoate/sodium benzoate and ethyl vanillin/vanillin.

Noodles & Company’s practice of listing BVO “except in beverages” is misleading, since BVO’s primary use is in beverages. The company should simply list BVO on its prohibited list without qualification and not sell any beverages with BVO.

Claims that companies have eliminated sodium nitrate, sodium nitrite or nitrates/nitrites in bacon and other processed meats are inherently misleading, since there is no reason to think that the natural sources of nitrates used result in a safer product (see sidebar). The approach taken by Chipotle Mexican Grill, of avoiding cured meats altogether, is preferable.

### **Some clean-label programs address production issues.**

Some clean-label programs incorporate production claims. For example, Aldi’s Simply Nature products are organic or non-GMO verified, in addition to excluding prohibited ingredients. Kroger has Simple Truth Organic in addition to Simple Truth. The Supervalu Wild Harvest “free from” line includes many organic

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<sup>†††</sup> Papa John’s also listed artificial colors multiple ways and duplicated names of other ingredients on its 2015 list of prohibited ingredients, but this no longer appears on its website.

items. Chipotle Mexican Grill, Noodles & Company, Panera Bread, and Papa John's make other production claims (e.g., antibiotic-free, grass-fed, free-range, or cage-free). Evaluating these and other production claims are outside the scope of this report.

## Performance of Leading Clean-Label Programs

	Ingredients	Product Coverage	Transparency
Chipotle Mexican Grill	★★★★	★★	★★★★
Noodles & Company	★★	★	★★
Panera Bread	★★	★★	★★★★
Papa John's	★★	★	★★★★
Aldi	★★	★★	★
Food Lion	★★	★	★
Giant Food, Stop and Shop	★★	★	★★★★
H-E-B	★★	★	★★★★
Kroger	★★	★	★★
Meijer	★★	★	★★★★
ShopRite	★★	★	★
Supervalu	★★	★	★
Target	★★	★	★★★★
Whole Foods	★★★	★★★★	★★

### Ingredients

- ★★★★ all priority ingredients covered (see page 8)
- ★★ most priority ingredients covered
- ★ some priority ingredients covered

### Product Coverage

#### *Restaurants*

- ★★★★ all products covered
- ★★ all products covered except for some beverages
- ★ all products covered except for most beverages and/or some foods

#### *Supermarkets*

- ★★★★ store-wide
- ★★ most products covered
- ★ some products covered (e.g., one product line only)

### Transparency

- ★★★★ clear, specific, comprehensive online information on clean-label program, nutrition and ingredients (all products)
- ★★ online information falls a bit short of being clear, specific and comprehensive (e.g., only provide ingredient or nutrition information, but not both; only provide information on some products; identity of specific ingredients in clean-label program not identified)
- ★ does not provide ingredient or nutrition information online but does provide specific information on ingredients prohibited in clean-label products

## Recommendations

Consumers increasingly want food to be healthful, ingredients lists to be short, and ingredients familiar. We applaud companies that are working to address those concerns through clean-label commitments. The best corporate policies prioritize public health, are comprehensive, and transparent.

### Prioritize public health

- Companies should eliminate additives that are unsafe, poorly tested, or that substitute for nutritious ingredients.
- Companies should limit sodium and added sugars.
- Clean-label commitments should be accompanied by meaningful improvements to the **nutritional quality** of the foods and beverages sold.
- Companies should not market sugar drinks or foods high in sugar, salt, or saturated fat to children.
- Companies should ensure that the majority of the products in their portfolio meet reasonable limits on calories, added sugars, sodium, and saturated fat, and include fruits, vegetables, or whole grains.

### Comprehensive policies

- Company policies should be **comprehensive**; lists of prohibited ingredients should apply to all products a restaurant makes or sells, including beverages.
- Supermarkets should expand the products covered by clean label policies to all of their private-label brands.

### Transparency

- Restaurants should provide complete ingredient and nutrition information for all menu items, both on-site and on their website, and supermarkets should provide this information on their websites.
- Companies should disclose which ingredients they do not permit in the foods and beverages they sell (or, for supermarkets, in their private-label brands).
- Companies that use non-specific terms such as “artificial preservatives” or “natural flavors” should list which substances fall into those categories.

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