

PROMOTING HEALTHY ENVIRONMENTS FOR CHILDREN

Food Safety



KEY POINTS

- Although the US food supply is among the safest in the world, foodborne illness is a common occurrence and many chemicals can be found in foods sold in the US.
- Pediatricians can help monitor the safety of the food supply by reporting incidents of foodborne illness to public health agencies.
- Organic foods are not shown to be more nutritious than conventionally grown foods but may have lower pesticide residue levels.
- A diet rich in a variety of fresh fruits, vegetables, whole grains, and lean protein is encouraged. Avoiding heavily processed foods and sugar sweetened beverages has multiple health benefits.
- All fruits and vegetables should be washed prior to consumption.

CLINICAL GUIDANCE

Infectious/Pathogenic Food-related Illness

- Pathogenic hazards are ubiquitous in the environment and can enter the food supply in many ways. Common examples include viruses (hepatitis A, norovirus), bacteria (Salmonella, Shigella, Campylobacter, Listeria, E. Coli) and parasites (Cyclospora, Toxoplasma).
- To reduce the risk of pathogen-related illness, remind families to:
 - Clean hands, surfaces, and utensils frequently and thoroughly.
 - Keep food groups separated during the cooking process.
 - Refrigerate perishable foods promptly after cooking.
 - Cook food to the appropriate temperature.
 - Dish towels and cutting boards have been shown to harbor bacteria. Clean cutting boards and dish towels frequently.
 - Wash produce before consuming.
 - Suggest families avoid processed meats, especially during pregnancy.

Pesticide Residues in Produce

- Pesticide residue can be widely found on fruits and vegetables because pesticides are applied extensively to food crops around the world.
- All produce should be thoroughly washed by scrubbing under running cold water to remove superficial residues.

- When possible, consider buying organic produce, especially for those items known to be highest in pesticide residues.
- The Environmental Working Group's "[Dirty Dozen](#)" and "[Clean 15](#)" lists provide a resource for information on pesticides in produce.
- Consuming fresh or frozen produce is of paramount importance. Families should not avoid consuming produce just because organics are not available or possible for the family to purchase.

Chemical Contaminants

- To reduce exposure to plastic-based chemicals (eg, bisphenol-A (BPA), phthalates):
 - Encourage families to reduce plastic containers for water, food (choosing glass or stainless steel when possible).
 - Look at the recycling code on plastic: Codes 1, 2, 4, and 5 tend to be safer alternatives; avoid codes 3 (phthalates), 6 (styrene), and 7 (bisphenols) when possible.
 - Advise families to avoid microwaving food in plastic containers (use glass instead) and avoid placing plastic food containers in the dishwasher.
 - Prioritize fresh or frozen fruits and vegetables (over packaged or processed foods), offering families a list of low-cost options.
- To reduce exposure to inorganic arsenic, which can be found in rice-based products and may also contaminate some private water wells:
 - **Rinse rice before cooking, and consider cooking in an excess of water, then pouring off when cooked. Sushi rice and basmati rice tend to have relatively lower arsenic content, while brown rice tends to be higher.**
 - Rice cereal fortified with iron is a good source of nutrients, but it should not be the only source, and does not need to be the first source. Other options for first foods include oat, barley, and multigrain cereals.
 - Reduce rice-based snacks in favor of fresh fruits and vegetables.
 - Families with water wells should test for arsenic (and other key parameters) as directed by the [US Environmental Protection Agency](#).

FOR MORE INFORMATION

The following resources offer additional information regarding food safety:

- [Food Additives and Child Health](#) – AAP Policy Statement
- [Pediatric Environmental Health, 4th Edition](#) – AAP Policy Manual
- [Food Additives: What Parents Should Know](#) – HealthyChildren.org
- [Food Safety](#) – US Department of Agriculture
- [Heavy Metals in Baby Foods and Fruit Juices](#) – PEHSU Resource