

Lunchtime Safety

Tips for Kids Who Bring Lunch to School

By Jessica Schulman, PhD, MPH, RD

Though this article focuses on children's school lunches, its guidelines pertain to anyone concerned about maintaining the food safety of a packed lunch.



The alarm has gone off, they've finished breakfast and somehow your kids are dressed and ready for school. But they need one more thing from you—their lunches. And, because you think of yourself as a responsible, caring parent, you naturally want those lunches to be tasty, nutritionally balanced and safe. Easy, right?

In fact, sending children to school with a lunch that meets all of these criteria is not simple at all. You understand that proper nutrition is critical for a child's health, growth, psychological development and school performance, but eating well while keeping food safe is not always easy in a school setting—and it can be a significant challenge for those who live with certain chronic diseases. What can parents and caregivers do to ensure that their children have a healthy and safe lunch when the bell rings? This article offers some tips. ➤

Food Safety First

From the time your little ones grab their lunches on the way out the door to the time they open those lunches some four hours later, a lot can happen to the food you have so lovingly prepared. No matter how carefully you clean your kitchen, food products carry microbes and bacteria. The Partnership for Food Safety Education points out that those microbes and bacteria reproduce best in food that is sitting in the “danger zone,” i.e., between 40° F and 140° F (www.fightbac.org). As a general rule, the site cautions that food sitting at room temperature for more than two hours (and less than one hour in warmer weather) should not be consumed.

Your child’s classroom is a potential danger zone, and the foods you send to school, if not refrigerated, may sit at room temperature for a lot longer than two hours. What can you do to make sure the foods you prepared are still safe to eat at noon?

1 Include frozen foods (or a frozen gel pack) to keep lunches cool.

- Freeze finger fruits: strawberries, grapes, banana slices, mandarin oranges, pineapples, papaya and mango.
- Freeze dairy: traditional yogurt cups such as Yoplait Kids™ or tubes such as Stonyfield Farm’s Squeezers™ (Organic Portable Lowfat Yogurt). Watch for



brands that have lower sugar and are fortified with vitamin D.

- Freeze healthy box drinks: Look for calcium and vitamin D fortified juice, soy milk and rice milk. These tend not to perish at room temperature.
- Separate perishables: Keep meats and animal byproducts away from the rest of the meal. Purchase small packets of creamy food or salad toppings (e.g., ranch dressing, mayonnaise, soft cheeses, etc.) that may be frozen or keep them cold. This may involve putting deli meat in a separate container over a cold pack or asking school administration if the lunch may be placed in a refrigerator at or below 40° F.

2

Start with cold foods cold and hot foods hot.

- Check your home refrigerator temperature. It should be between 35°F and 40°F. The colder the food is kept, the fewer opportunities microbes will have to gather. (Note: If you store medicine such as immune globulin [IG] in the same location, follow the product-insert instructions. Some IG products must be stored at 36°F to 46°F). If you plan on sending leftovers for lunch, place a serving of the food into the refrigerator immediately after cooking. Avoid letting it sit out on the table and then wrapping it up. Do not send children to school with leftover foods that have been sitting out at a restaurant.
- Start off as hot as possible. Fill a thermal container with boiling water and let it stand a few minutes. Then, empty the container and pour in piping hot soup, stew or pasta, etc. Soups or dishes that are put in an insulated container should bubble for at least two minutes before they are packed.

3

Keep surfaces clean.

- Make sure the lunch box and containers are as clean as possible before placing foods inside.
- Follow instructions about how to care for your containers.
- Paper bags and disposable containers may be a safer alternative for those who have little time for meticulous cleaning and food preparation.

4

Wash your hands well before preparing any food and remind children to wash their hands before digging into lunch.



5

Choose foods that will not support microbial growth.

- Go vegetarian. Animal products and deli meats tend to have higher levels of microbes even before you make it home from the supermarket. Time spent in a lunch box at temperatures higher than the fridge (above 60° F) will allow these little buggers to flourish. In just two hours, food is considered a safety hazard. What can you do? Start with a product that tends to be lower in microbes from the get-go. Most major supermarkets sell vegan deli slices that mimic bologna, roast beef and turkey. My exceptionally finicky second-grader (seriously, not even hot dogs or frozen pizza!) will not eat any deli meats except bologna by Yves® or Smart Deli®. With time and patience, eventually, you will find the right offerings for your child.
- You can pack these deli slices up on a whole grain bun with mustard and ketchup. Send the dressing or mayonnaise on the side (try using small single-use packets). If your child wants cheese on the sandwich, consider wrapping it separately and placing it against the frozen gel pack.
- Vegetarian versions of “franks and beans” (Lightlife Smart Dogs® or Tofu Pups®, Yves Veggie Weiners® or Tofu Weiners®) can be served from an insulated container. See above for food-safety information.
- Legumes or beans are an excellent source of nutrients and fiber. Try hummus or another bean spread. And sneak in some thinly sliced or shredded tomatoes, cucumbers or carrots.

- The old standby, PB&J. Peanut butter and jelly sandwiches can be a healthy choice for kids. Try using peanut or other nut-butter varieties that are pasteurized, not hydrogenated, and do not add sugar. Add fresh bananas, apples or a fruit spread. Aim for whole-wheat bread. (WARNING: Check with school officials! Due to the risks of those living with peanut allergies, peanut butter is not allowed in some grade levels or is banned altogether. If it is not allowed, save the PB&J for weekend trips or outings away from schoolmates.)
- Toss in dried foods: Look for “no sugar added” or “organic” products such as dried mangoes, apricots and pitted prunes, among others. Many supermarkets offer interesting varieties of banana chips, Bing cherries, dried white peaches, Bartlett pears and orange-flavored cranberries. Dried fruits are loaded with vitamins A and C and antioxidants (potential health-promoting compounds).

Note: Fresh-cut fruits or vegetables are considered perishable, as are meat and animal byproducts. Keep them cold and throw them away if they are not consumed by lunchtime.

6

Choose the best possible container.

- According to the Partnership for Food Safety Education (www.fightbac.org/content/view/78/10), insulated soft-sided lunch totes are good for keeping food cold, but metal or plastic lunch boxes and paper bags can also be used.
- Try double-layering paper bags to help insulate the food. A frozen gel pack must be packed with perishable food in any type of lunch box or bag. Look for carriers from reputable suppliers that are certified as lead-free.
- Limit exposure to bisphenol A (BPA). Researchers from the National Toxicology Program at the National Institutes of Health suggest that BPA is widely available in food and drink packaging and may pose health risks. BPA can leach into food from plastics (e.g., polycarbonate tableware, food-storage containers, water and baby bottles) and epoxy resins that coat metal products (e.g., food cans, bottle tops, dental sealants and water-supply pipes). Containers that contain BPA usually have a #7 on the bottom. When ➤

possible, opt for glass, porcelain, stainless steel or BPA-free containers. According to the company SC Johnson, BPA is not used in its plastic products (i.e., Ziploc® brand bags or Saran™ brand wraps).



Ask for Assistance

Trying to supervise meals at school does not necessarily require super powers. Fortunately, schools are usually willing to help, provided that parents communicate their needs and desires clearly and effectively.

- Learn about reasonable accommodations or special guidelines at the school. Some districts have general guidelines about what foods can be brought to school. However, each school has unique protections and policies for food concerns. Shawna, former PTA

Examples of Nutrition-Related Requests for School Personnel¹

- Staff will present instructions to the class on hand-washing procedures.
- Staff will encourage students to wipe down tables and clean hands before eating.
- Student will be allowed to carry or have easy access to waterless hand soap or hand sanitizer.
- Staff will assist student with opening his food containers and setting up the lunch as needed.
- Staff will encourage students to eat healthy foods that parents have sent to school.
- Student will go to designated staff when frequent meals or snacks are needed due to nutritional issues.
- Student will be allowed bathroom privileges as needed. He should never be denied access.
- Student should be allowed to carry a water bottle and drink from it as needed.
- Student will be encouraged to wipe the section of the table she is eating on prior to eating.
- Student will have access to a clean and secure refrigerator for lunch meals.
- Student will have a place to keep any meats or dairy products at or below 40° F.

president, explains that “every school is different in the way that they enforce certain rules about what to bring or won’t let you bring to school.” She says, “If the child has a special nutrition need, the parent should contact leadership at the school and see what they are willing to do to help. ... it really just depends on the school’s administration.”

- Young children may need assistance opening containers, packets or smearing sauce over foods. Parents ought to talk with the teacher to ensure that reasonable assistance or encouragement is being offered to their children.
- Children with disabilities or special circumstances (e.g., life-threatening food allergies) may establish a 504 Plan or an Individualized Education Plan (IEP) to guarantee that the child receives appropriate accommodations. It is crucial that proper nutrition is addressed for children with special medical needs. In addition, it is not uncommon for IVIG treatment, or gamma interferon (used to treat chronic granulomatous disease), to cause mild side effects that inhibit appetite. For suggestions on what you might want to include in a 504 or IEP plan, see the sidebar, “Examples of Nutrition-Related Requests for School Personnel.” (Refer to the Immune Deficiency Foundation’s publication, “A Guide for School Personnel” at www.primaryimmune.org/publications/school_guide.pdf)
- Amanda has three elementary-age children who live with a primary immune deficiency disease (PIDD). An ongoing concern was making sure the kids had access to foods they would eat (such as deli turkey) but that necessitated a refrigerator. The school staff was willing to place a small one in the classroom; it will follow the children to their grade classroom.



Make It Fun!

Kids (and adults) respond well to foods that are appealing and colorful. Use this to your advantage!

- Cut sandwiches into novel shapes. Make pocket sandwiches with pita bread. And place sandwich fixings on a whole wheat mini bagel or tortilla.

¹ “Where to Find BPA-Free Products,” U.S. News and World Reports, www.usnews.com/blogs/on-medicine/2008/5/2/where-to-find-bpa-free-products.html, May 2, 2008.



- Try multigrain rice salads or high-protein quinoa (pronounced “keen-wa”).
- Use rainbow or character pastas.
- Sometimes, if you want to make certain your child eats right, it’s safer and easier to have a “backwards” day. For breakfast, serve what would otherwise be a healthy balanced lunch (maybe last night’s dinner) and for school lunch, pack up pancakes or a bagel with cream cheese (on the side, frozen or next to a frozen gel pack) with fruit and yogurt.
- Plenty of shelf-stable products are fun to eat and also pack easily, such as unsweetened applesauce, fruit cups in light syrup or fruit bowls, or pretzels (Newmans Own® brand offers a protein-enriched version). If a lunch is balanced, don’t worry about a small sweetened yogurt or a granola bar. Children who live with certain chronic health problems may need the extra energy for healing and growth.



Involve Your Child

As your children begin to take more responsibility for their morning routine, let them participate in preparing their lunches as well. If their lunches are selected, rather than imposed, they are more likely to eat them even when you are not watching.

- Let your child pick out a favorite lunch box and thermos.
- Involve your child in developing the shopping list, grocery shopping or packing the lunch.

- If your child dislikes a particular food (such as soy milk or fortified juice), involve them in selecting a different flavor. Choose a few different options and have a taste-off. Make trying new foods a positive experience. Even if they do not like the food, return to it periodically.
- Try changing the texture of the food. For example, the child may not like cooked vegetables but may be willing to eat pureed tomato sauce with blended veggies (shredded or smooth consistency) mixed in. Consider investing in an immersion blender.
- Let your children know that you’re thinking of them with small notes offering love and encouragement.

Those with immune deficiencies or gastrointestinal absorption conditions, among other chronic illnesses, should discuss the best nutrition plan with their physician or nutrition specialist. Even with the best-made lunch, it may be necessary to include a certain type of supplemental tablet, food or drink. ■

This article is for informational purposes only. Individuals with medical conditions should consult their physician to determine what eating pattern is appropriate for them. The writer is a registered dietitian, holds a doctorate in health behavior and is an author of the book “Nutrition in Sickness and in Health.”

Resources

Food Safety: Home for the Holidays, *IG Living*, Dec-Jan 2007.

www.igliving.com/web_files/igl_D-J07_34-37.pdf

Partnership for Food Safety Education, BAC!® to School: Quick Tips to Packing a Safe Lunch, www.fightbac.org/content/view/78/10

The U.S. Department of Agriculture (USDA) Meat and Poultry Hotline at 888-MPHotline (888)674-6854. TTY number for hearing impaired (800)256-7072.

Center for Food Safety & Applied Nutrition
www.cfsan.fda.gov