Vegetarian Options for School Lunch Programs

• Advantages for Children’s Health
• Meeting USDA Requirements
• Menu Makeovers
• Introducing New Options
• Advice for Parents
• Vegetarian Product Vendors
• Vegetarian Commodities
• Additional Resources

PHYSICIANS COMMITTEE FOR RESPONSIBLE MEDICINE
It can be challenging to keep healthful foods on our children’s plates. Yet there has never been a time when good eating habits were as important as they are today.

More and more children are gaining excess weight, paving the way for health problems, such as diabetes, heart disease, high blood pressure, and even some forms of cancer, in later life. Twenty-five percent of children ages 5 to 10 years have high cholesterol levels, high blood pressure, or other early warning signs of heart disease.¹

Health authorities would like to see more vegetables, fruits, and other healthful, high-fiber foods in children’s diets. A great way to do this is to include vegetarian meals in school lunch programs. These meals are typically high in fiber and important nutrients and low in saturated fat. More and more children are looking for vegetarian options, too. Providing these foods can help everyone eat more healthfully.
2. Meeting USDA National School Lunch Program Requirements

Meeting USDA National School Lunch Program requirements is easy with vegetarian foods. Schools using the Traditional Food-Based Menu Planning approach or the Enhanced Food-Based Menu Planning approach have several USDA approved options for using plant protein products as meat alternatives. These include nut and seed butters, cooked beans and peas, and soy protein foods that meet the USDA requirements for alternate protein products.

### USDA Requirements for the Traditional Food-Based Menu Planning Approach: Vegetarian Protein Sources

<table>
<thead>
<tr>
<th>Food Component</th>
<th>Minimum Quantities</th>
<th>Recommended Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Protein Products¹</td>
<td>1 ½ ounces</td>
<td>2 ounces</td>
</tr>
<tr>
<td>Cooked Dry Beans or Peas</td>
<td>⅝ cup</td>
<td>⅜ cup</td>
</tr>
<tr>
<td>Peanut or Other Nut or Seed Butters</td>
<td>2 tablespoons</td>
<td>4 tablespoons</td>
</tr>
<tr>
<td>Peanuts, Soy Nuts, Tree Nuts, or Seeds²</td>
<td>⅝ ounce = 50%</td>
<td>1 ounce = 50%</td>
</tr>
</tbody>
</table>

¹ Must meet USDA Requirements for Alternate Protein Products.
² These items may not be used to meet more than 50% of the requirement and must be used in combination with any of the above listed items.

### USDA Requirements for the Enhanced Food-Based Menu Planning Approach: Vegetarian Protein Sources

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Schools using the newer Nutrient Standard Menu Planning are allowed even more creativity and flexibility in menu planning and can easily put vegetarian meals on their menus as long as they meet established nutrient levels.

Including more vegetarian menu options can be an advantage in meeting National School Lunch Program nutrient requirements. According to the School Nutrition Dietary Assessment Study-III, approximately 80 percent of elementary and secondary schools exceeded the limits for both total fat and saturated fat in school lunches. Most vegetarian foods are exceptionally low in saturated fat, and most are also low in total fat.

3. Making Over the Menu: New Products and Food Ideas

Making over your menu is now easier than ever. Whether your school focuses mainly on heat- and-serve food items or you are able to prepare foods from scratch, you’ll find plenty of options.

Meatless Favorites

Here are five popular main dishes that are easy to make meatless:

- **Spaghetti** goes well with marinara sauce and chunky vegetables, using textured vegetable protein, if desired, to make a “meaty” sauce.
- **Tacos and burritos** can be filled with beans or soy protein crumbles, rice, and salsa.
- **Chicken fingers** are available in meatless varieties that can be served with barbecue sauce, on salads, or in a variety of other dishes.
- **Burgers**, made of vegetables and beans or soy protein, are easy to serve on a bun with lettuce and tomato.
- **Pizza** can be served without cheese (or with nondairy cheese substitutes), along with vegetables such as tomato slices, broccoli, or mushrooms. Though this version won’t qualify for Federal meal reimbursement, it makes a healthy, low-fat, and cholesterol-free ala carte option.

Check Out the New Products

In response to increasing demand, many food manufacturers provide competitively priced vegetarian foods for schools. Many of these meet the Alternate Protein Product requirements, and even carry Child Nutrition (CN) labels to specify the number of meat alternative equivalents they satisfy. These vegetarian options are both healthful and appealing to children. For example:

- Veggie burgers or hot dogs
- Meatless “chicken” tenders
- Soy burger patties
- Ready-made burritos
- Vegetarian soups
- Veggie barbeque riblets
- Soy pudding

While heat-and-serve vegetarian products taste great on their own, you can get more mileage out of them and build more variety in your menu by being creative. Here are some ideas for embellishing two of the most commonly used meat analogs:

**Meatless “chicken” tenders or nuggets:**

- Buffalo “Chicken” Tenders – Toss tenders in hot sauce.
- Teriyaki “Chicken” Wrap – Toss tenders in pre-made teriyaki sauce and serve with shredded lettuce, carrots, and extra sauce in a whole grain tortilla.
- “Chicken” Sandwich – Serve on a bun with lettuce and tomato.
- Asian “Chicken” Skewers – Toss tenders in teriyaki sauce and skewer with cooked chunks of onions, peppers, and pineapple.

**Soy burger patties:**

- “Beef” Fajitas – Slice burgers into strips and serve with salsa, guacamole, and tortillas.
- Tex-Mex Burgers – Top with barbeque sauce, lettuce, tomato, some corn chips for extra crunch, and serve on a bun.
- Pasta with Meat Sauce – Crumble burger patties, cook in pre-made marinara sauce and serve over pasta.
- Veggie Joes – Crumble burger patties, cook in homemade or pre-made sloppy joe sauce, and serve on a bun.

Success in Florida

In 2008, Florida’s Broward County Public Schools added Gardenburger’s Classic Flame Grilled Burger and several other vegetarian options to their menus. The individual items sold very well. But the program had a second benefit: The new items increased the average total lunch sales in participating schools. So not only are more children having healthful choices; thanks to the new menu items, more children are participating in the school lunch program overall.
Adapting Existing Recipes

Many popular recipes that you already serve can be made vegetarian. Sometimes, this is as simple as using vegetable stock instead of chicken stock in soups, or replacing meat with one of the many meat alternatives listed below:

- **Beans or other legumes** are highly nutritious and substitute well for meat in chili, soups, and burritos.
- **Seitan** is a meat substitute made of wheat gluten. It is available in frozen or refrigerated chunks and is well suited for replacing meat in dishes such as fajitas and stir-fries.
- **Tempeh** is made from fermented soybeans. It can be crumbled and used in place of ground meat or sliced for use in curries and stir-fries.
- **Textured Vegetable Protein (TVP)** is a soy product available in dry flakes or chunks. After rehydrating, it makes a great substitute for ground meat in recipes such as chili, spaghetti sauce, or burritos.

- **Tofu** is very mild in taste and easily absorbs the flavor of any recipe. Firm varieties are excellent in stir-fries or as a salad bar option. Softer varieties are easily blended into soups, sauces, and desserts.

*These meat alternatives meet the USDA guidelines for vegetarian protein sources for schools using the Traditional Food-Based and Enhanced Food-Based Menu Planning systems. Schools using the newer Nutrient Standard Menu Planning system have greater flexibility and can take advantage of all the meat alternatives listed.

More Vegetarian Menu Ideas

**Sandwiches**
- Hummus with sliced tomatoes, cucumbers, and shredded carrots in pita bread or in a wrap.
- Vegan deli slices that look and taste like bologna, ham, and turkey on whole-grain bread with soy cheese, mustard, lettuce, and tomato.
- Peanut butter (or other nut butter) and jelly or sliced banana on whole wheat bread.
- Falafel, a seasoned chickpea patty, in pita bread with a variety of veggie toppings.

**Hot Meals**
- Vegetarian soups such as lentil, minestrone, or black bean.
- Red beans and rice.
- Baked potatoes with veggie chili or salsa.
- Stir-fry vegetables with tofu or veggie chicken strips over brown rice.
- Pasta fagioli with Italian herbs, white beans, and tomatoes.
- Meat analogs, such as barbecue veggie riblets or sloppy joes with soy crumbles.
Success in Georgia

Grady High School in Atlanta offers a vegetarian-only lunch line that includes menu items such as veggie egg rolls, vegetarian pizza, and sloppy joes made with tofu. The cafeteria serves vegetarian main dishes to as many as 500 students daily.

<table>
<thead>
<tr>
<th>Side Dishes &amp; Snacks</th>
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<tbody>
<tr>
<td>• Chopped raw vegetables or side salad with low-fat dressing</td>
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<tr>
<td>• Baked beans</td>
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<tr>
<td>• Whole-grain breads or crackers</td>
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<tr>
<td>• Baked sweet potato “fries”</td>
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<tr>
<td>• Pita, breadsticks, and raw vegetables with hummus</td>
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Create a Salad Bar

Salad bars are simple, effective ways to provide healthful foods. And here’s a tip: Variety is key. The mere presence of a salad bar does not encourage children to boost their fruit and vegetable intake, but salad bars with more items and varied selections succeed very well. So, you’ll want to offer a variety of healthy choices every day to help increase traffic to the salad bar. Try these:

<table>
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<tr>
<td>• Fresh produce</td>
</tr>
<tr>
<td>• Hummus or other bean dips</td>
</tr>
<tr>
<td>• Chickpeas, black beans</td>
</tr>
<tr>
<td>• Nuts/seeds (sunflower seeds, pumpkins seeds, almonds)</td>
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Many schools have implemented wonderful salad bars in their cafeterias. A team at the University of California at Los Angeles developed a step-by-step guide for launching a successful salad bar, available at: http://socialmarketing-nutrition.ucdavis.edu/Downloads/SaladBarDev.PDF.

Popular farm-to-school programs can be very helpful as you implement your salad bar. These programs link schools with local farmers to bring produce into cafeterias. To find a farm near you, contact your state’s Cooperative Extension. For more information visit: www.farmtoschool.org/index.htm.

Offer Nondairy Beverages at Every Meal

Serving nondairy beverages and foods will help meet the needs of all children, including those who are lactose intolerant or allergic to milk and those who prefer not to consume dairy products. Here are some easy choices:

• Water
• Juice
• Soy milk
• Rice milk
• Almond milk

For more great menu ideas, check out the winners of the Physicians Committee for Responsible Medicine’s annual Golden Carrot Award: www.healthyschoollunches.org/carrot/index.html.
4. Introducing New Options

A Minnesota study showed that overall lunch sales increased after new and healthful items were introduced. However, promotion and student involvement are essential. Here are some methods that other schools have found helpful:

- Ask students for ideas about what they would like to see on the menu.
- Hold a meeting with school faculty to make them aware of new menu options and the benefits of including more vegetarian foods. Encourage them to spread the word to students.
- Announce your menu improvements to the community press. If parents are aware of the new menu items you are offering, they can help encourage children to choose these options.
- Introduce new foods through a taste-testing event. Make it fun for students by letting them vote for their favorites, or create a competition between grade levels for which group has highest participation in the taste-test.
- Let students sample new items as they go through the lunch line.
- Take advantage of special days to try new foods. Whether it is for World Vegetarian Day (October 1) or several days in March for National Nutrition Month, special days can highlight health and nutrition.
- Think creatively about what to call your new menu items. For example, “Zesty Bean Bowl” sounds much more appealing than “Rice and Beans.”
- Market and advertise your new menu items in as many ways as possible, using colorful signs and posters, a spot on the morning announcements, or a feature in the school newspaper.

5. Advice for Parents Seeking Vegetarian Foods for Their Children

Many parents are looking for healthful choices, particularly vegetarian meals, for their children, but are unsure where to start. Here are a few pointers.

You’ll want to get involved with your PTA, your school’s local wellness committee, or the cafeteria food service. You can work with other parents, teachers, and food service staffers to bring new foods onto the menu. The greater the demand, the more confidence everyone will have that new offerings will be successful.

Don’t have time to devote to the PTA or other committees? Make an individual appointment with your school food service director and discuss your children’s desire for new offerings. Bring this guide with you as an information resource. You may wish to enlist the involvement of others who share your interests. Your pediatrician, nurse, or dietitian can help by providing further information regarding the benefits of vegetarian foods.

It helps to recognize that schools are affected by federal guidelines. You’ll want to be in touch with your congressional representatives and encourage them to support positive changes in school nutrition regulations.

Help Your Children Make Healthful Choices

Healthful eating starts at home. Simple tasks, such as letting your children be involved in choosing fruits and vegetables at the grocery store or helping you cook healthful meals at home, can be great teaching tools. This hands-on experience will help make them more likely to choose healthier items elsewhere.
6. Vegetarian Nutrition

The health advantages to consuming a plant-based diet are many. Vegetarians are less likely to become overweight and have lower risk of diabetes, heart disease, hypertension, and even some cancers later in life. Overall, vegetarian and vegan children have a high intake of many essential vitamins and minerals, thanks to the vegetables, fruits, beans, and whole grains in their diets. Even so, it’s important to think about the full range of essential nutrients. Whether a child chooses an occasional vegetarian meal or follows a vegetarian or vegan diet full-time, experts agree that plant-based foods are healthful choices.

Protein: Vegetarian and vegan diets provide more than enough protein. While it was once thought that vegetarians had to combine foods in specific ways to get adequate protein, we now know that this is unnecessary. The normal variety of grains, beans, vegetables, and fruits in vegetarian diets provides plenty of protein.

According to the American Dietetic Association (ADA), ”Research indicates that an assortment of plant foods eaten over the course of a day can provide all essential amino acids and ensure adequate nitrogen retention and use in healthy adults, thus complementary proteins do not need to be consumed at the same meal.” Particularly good protein sources include beans, tofu, and other soy-based products, nuts, seeds, and whole grains, like oats, barley, and quinoa.

The ADA also points out that athletes can meet their protein needs on plant-based diets. Because of their naturally higher food intake, athletes consume more protein, as well as more calories.

Calcium: Dairy milk is the leading source of saturated fat in children’s diets. Calcium is also found in beans, fortified breads and cereals, raisins, broccoli, and dark leafy greens. Other good calcium sources are fortified soy or rice milk, fortified juices, and tofu.

Vitamin D: Vitamin D is activated by the body after exposure to sunlight. If children do not get regular sun exposure, fortified foods such as cereals and rice or soy milks and supplements are available. Vitamin D is also found in all common multiple vitamins.

Iron: Diets consisting of vegetables, fruits, grains, legumes, and nuts provide adequate iron. In fact, the ADA notes that ”Studies typically show iron intake by vegans to be higher than that of lacto-ovo-vegetarians and of nonvegetarians, and most studies show iron intake by lacto-ovo-vegetarians to be higher than that of nonvegetarians.”

Vegetarian sources of iron include dark green leafy vegetables, broccoli, pasta, rice, soybeans, and chickpeas. Consuming foods rich in vitamin C, such as orange juice, along with iron-rich foods, enhances absorption of iron.

Vitamin B12: Unfortified plant foods contain little or no B12. However, all common multiple vitamins contain vitamin B12. The vitamin can also be easily found in fortified cereals, fortified soy and rice milks, and fortified meat analogs.

As the ADA points out, ”Well-planned vegan and other types of vegetarian diets are appropriate for all stages of the life cycle, including during pregnancy, lactation, infancy, childhood, and adolescence.”
7. Vegetarian Product Vendors

Many manufacturers produce meat alternatives or vegetarian prepared foods. The following list is divided into products that use Child Nutrition (CN) labeling and those that do not.

### CN Labeled Products:

- **Advance Pierre Foods**
  - Brand: Pierre
  - Product Type: Frozen meat analogs
  - Web: www.PierreFoods.com
  - Phone: 800-969-2747

- **Alle Processing**
  - Brand: Mon Cuisine
  - Product Type: Frozen meat analogs and prepared foods
  - Web: www.AlleProcessing.com/Alle/

- **Kellogg's**
  - Brand: Gardenberger
  - Product Type: Frozen meat analogs
  - Web: http://www.FAFH.com/Home/Recommendations
  - Phone: See website for your region's telephone number

- **Legacy Foods**
  - Brand: Ultra Soy/Imagic
  - Product Type: Shelf stable meat analogs, dry mixes
  - Web: www.LegacyFoods.com
  - Phone: 620-663-5711 or 800-245-5620

- **VeggieLand**
  - Brand: VeggieLand
  - Product Type: Frozen meat analogs
  - Web: www.VeggieLand.com/
  - Phone: 973-808-1540

### Non-CN Labeled Products:

- **Amy's**
  - Product Type: Soups and veggie burgers
  - Web: www.Amys.com
  - Phone: 707-568-4500

- **Atlantic Natural Foods**
  - Product Type: Shelf stable meat analogs
  - Web: www.AtlanticNaturalFoods.com
  - Phone: 252-212-9000

- **Basic American Foods**
  - Brand: Santiago
  - Product Type: Legumes and chili
  - Web: www.BAF.com
  - Phone: 800-722-2084

- **Beyond Meat**
  - Product Type: Frozen meat analogs
  - Web: www.BeyondMeat.com
  - Phone: 866-756-4112

- **Eco-Cuisine**
  - Brand: Eco-Cuisine
  - Product Type: Dry mixes
  - Web: www.Eco-Cuisine.com
  - Phone: 303-402-0289

- **Fantastic World Food**
  - Product Type: Dry mixes
  - Web: www.FantasticFoods.com
  - Phone: None

- **JTM**
  - Product Type: Soups and taco filling
  - Web: www.JTMFoodGroup.com
  - Phone: 800-626-2308

- **Kellogg's**
  - Brand: Morningstar Farms
  - Product Type: Frozen meat analogs
  - Web: www.FAFH.com/Home/Recommendations
  - Phone: See website for your region's telephone number

- **Kikkoman**
  - Brand: Pearl
  - Product Type: Single serving soy milk
  - Web: www.PearlSoymilk.com
  - Phone: 415-956-7750

- **Kraft Foods**
  - Brand: Boca
  - Product Type: Frozen meat analogs and prepared foods
  - Web: www.KraftFoodservice.com
  - Phone: 800-537-9338

- **Lightlife Foods**
  - Brand: Lightlife
  - Product Type: Frozen meat analogs and prepared foods
  - Web: www.Lightlife.com
  - Phone: 800-SOY-EASY

- **Tabatchnick Fine Foods, Inc.**
  - Product type: Soups, vegetarian chili
  - Web: www.Tabatchnick.com
  - Phone: 732-247-6668

- **Turtle Island Foods**
  - Brand: Tofurky
  - Product Type: Frozen meat analogs
  - Web: www.Tofurkey.com
  - Phone: 800-508-8100

- **US Foods**
  - Brand: Chef's Line
  - Product Type: Frozen meat analogs
  - Web: www.USFoodservice.com
  - Phone: 847-720-8000

- **Van's Natural Foods**
  - Product Type: Frozen waffles
  - Web: www.VansFoodservice.com
  - Phone: 323-585-8923

- **White Wave Foods**
  - Brand: Silk
  - Product Type: Aseptic or refrigerated soy milk
  - Web: www.WhiteWave.com
  - Phone: 303-635-4636
8. Additional Resources

Citizens for Healthy Options in Children’s Education (CHOICE) ([www.choiceusa.net/index.htm](http://www.choiceusa.net/index.htm)) is a nonprofit organization promoting plant-based diets for children with information for parents, teachers, food service staff, administrators, and students. Contact: 877-6CHOICE or e-mail info@choiceusa.net.

Food is Elementary ([www.healthylunches.org/foodre.htm](http://www.healthylunches.org/foodre.htm)) has many low-cost, regional recipes that use USDA commodities as well as a complimentary set of nutrition lessons for students.

New York Coalition for Healthy School Food ([www.healthyschoolfood.org/](http://www.healthyschoolfood.org/)) provides information on efforts in New York state to promote plant-based diets and provides guidelines for school foods and vegetarian recipes. Contact: 607-272-1154 or e-mail info@healthyschoolfood.org.

Physicians Committee for Responsible Medicine ([www.healthyschoollunches.org](http://www.healthyschoollunches.org)) offers a wealth of information including institutional-size recipes and tips for food service directors and parents. Contact: 202-686-2210 or e-mail info@healthyschoollunches.org.


VegAdvantage ([www.vegadvantage.com](http://www.vegadvantage.com)) provides free assistance in adding healthy vegetarian foods to your menu. VegAdvantage can help you gain access to many vegetarian products through popular distributors, as well as help you with creative recipe ideas. Contact: 1-800-760-8570 or e-mail Info@vegadvantage.com.


Vegetarian Resource Group ([www.vrg.org](http://www.vrg.org)) offers many tips and recipes for school food service. VRG’s quarterly journal has a “Foodservice Update” section which is also available online. Contact: 410-366-8343 or e-mail vrg@vrg.org.

9. Vegetarian Commodities

Many plant-based foods are available through the commodity food program and can be used to create healthful menu items. Availability may depend on demand, so it pays to work with other schools in your area.

You might be surprised at the variety of products available, including: canned, dried, and frozen fruits and vegetables; canned and dried beans; fresh white russet or sweet potatoes; pasta; rice; and peanut butter. For a complete list of vegetarian USDA commodity foods available for the current school year, visit: [http://www.fns.usda.gov/fdd/programs/schcnp/default.htm](http://www.fns.usda.gov/fdd/programs/schcnp/default.htm).

Fresh fruits and vegetables for schools may also be available through the USDA’s Department of Defense Fresh Program and USDA Fruits and Vegetable Snack Program. For more information, visit: [www.fns.usda.gov/fdd/programs/dod/default.htm](http://www.fns.usda.gov/fdd/programs/dod/default.htm) and [www.5aday.org/pdfs/research/78-0503hires.pdf](http://www.5aday.org/pdfs/research/78-0503hires.pdf).
References


17. Fraser GE. Associations between diet and cancer, ischemic heart disease, and all-cause mortality in non-Hispanic white California Seventh-day Adventists. *Am J Clin Nutr.* 1999;70:532S.


For more information about vegetarian options for school lunches, please visit: www.HealthySchoolLunches.org