

# Plant-Based School Lunches: Macronutrient Breakdown

## Protein

There's a common misconception that a plant-based diet is inherently lacking in protein because in nutrition we often describe meat as "protein" rather than recognizing that protein is a macronutrient available in many of the foods we eat.

Children need about .5g protein per pound, so for that we go by weight. For example, if your child is 40lbs, aim for about 20g of protein per day.

## Calcium

When kids get enough calcium and physical activity during childhood and the teen years, they can start out their adult lives with the strongest bones possible. For optimal bone health, the Institute of Medicine (IOM) recommends:

- 1 to 3 years old — 700 milligrams of calcium daily
- 4 to 8 years old — 1,000 milligrams of calcium daily
- 9 to 18 years old — 1,300 milligrams of calcium daily

While many people think that milk (which is high in protein) is the optimal way to get calcium, the China Study found that,

"We do know that high protein intakes result in calcium loss through the urine. High-protein diets – especially protein of animal foods – can cause the body to excrete more calcium than it gets. For example, a person eating 142 grams of protein a day – which some Americans do – will excrete twice as much calcium in the urine as a person taking in a more moderate 47 grams."

- from [NutritionStudies.org](http://NutritionStudies.org) "China Report: Osteoporosis"

## Iron

- Kids ages 4-8 years need 10 milligrams while older kids ages 9-13 years need 8 milligrams of iron each day.
- Adolescent boys should be getting 11 milligrams of iron a day and adolescent girls should be getting 15 milligrams. (Adolescence is a time of rapid growth and teen girls need additional iron to replace what they lose monthly when they begin menstruating.)

Via, [www.kidshealth.org](http://www.kidshealth.org) (not a vegan website or biased toward plant-based diets for any ethical standpoints),

"Drinking a lot of cow's milk (more than 24 fluid ounces [710 milliliters] every day) can also put a toddler at risk of developing iron deficiency. Here's why:

- Cow's milk is low in iron.
- Kids, especially toddlers, who drink a lot of cow's milk may be less hungry and less likely to eat iron-rich foods.
- Milk decreases the absorption of iron and can also irritate the lining of the intestine, causing small amounts of bleeding and the gradual loss of iron in the stool (poop)."

## **Common Lunch Foods with Nutritional Breakdown**

Wheat Bread (varies by brand, numbers based on Nature's Own 100% Whole Wheat bread)

Serving Size: 1 slice

- Calories 60
- Protein 4g
- Iron .72mg
- Calcium 60mg

Whole Wheat Tortilla

Serving Size: 1 tortilla

- Calories 120
- Protein 4g
- Iron 1.08mg
- Calcium 80mg

Peanut Butter (based on JIF Natural)

Serving Size: 2 Tablespoons

- Calories 190
- Protein 7g
- Iron .72mg
- Calcium 20mg

Sunbutter (an allergen-free peanut butter alternative safe for peanut-free or nut-free schools)

Serving Size: 2 Tablespoons

- Calories 200
- Protein 7g
- Iron 1.44mg
- Calcium 20mg

Hummus (based on Sabra Classic Hummus)

Serving Size: 2 Tablespoons

- Calories 70
- Protein 2g
- Iron .72mg
- Calcium 20mg

Tofu

Serving Size: 100g (about 1/4 of the block of tofu)

- Calories 80
- Protein 9g
- Iron 1.3mg
- Calcium 180mg

Avocado

Serving Size: 1/2 an avocado

- Calories 113
- Protein 1.34g
- Iron (none)
- Calcium 9mg

**In a thermos:**

Lentil Soup (based on Amy's Lentil Soup)

Serving Size: 1 cup

- Calories 179
- Protein 8g
- Iron 2.7mg
- Calcium 20mg

Vegetable Soup (based on Amy's Organic Chunky Vegetable)

Serving Size: 1 cup

- Calories 59
- Protein 2.99mg
- Iron 1.08mg

Vegetarian Chili (based on Amy's Organic Chili)

Serving Size: 1 cup

- Calories 281
- Protein 15.99g
- Iron 3.59mg
- Calcium 60mg

Red Beans (based on Blue Runner Creole Cream Style Red Beans)

Serving Size: 1/2 cup

- Calories 130
- Protein 9g
- Calcium 81mg
- Iron 3.60mg

Brown Rice

Serving Size: 1 cup cooked

- Calories 218
- Protein 4.25g
- Iron 1.03mg
- Calcium 20mg

White Rice

Serving Size: 1 cup cooked

- Calories 242
- Protein 4.43g
- Iron .37mg
- Calcium 6mg

**Sides:**

Snap peas

Serving Size: 10

- Calories 14
- Protein .95g
- Iron .71mg
- Calcium 15mg

#### Mandarin Orange (small)

Serving Size: 1 small mandarin orange

- Calories 40
- Protein .62g
- Iron .11mg
- Calcium 28mg

#### Apple

Serving Size: 1 medium apple

- Calories 95
- Protein .47g
- Iron .22mg
- Calcium 11mg

#### Grapes

Serving Size: 10 grapes

- Calories 34
- Protein .35g
- Iron .18mg
- Calcium 5mg

#### Blueberries

Serving Size: 20 berries

- Calories 16
- Protein .20g
- Iron .08mg
- Calcium 2mg

#### Edamame

Serving Size: 1/2 cup

- Calories 64
- Protein 6.62g
- Iron 1.24mg
- Calcium 35mg

#### Carrots

Serving Size: 1/2 cup strips or slices

- Calories 25
- Protein .57g
- Iron .18mg
- Calcium 20mg

#### Celery

Serving Size: 1 large stalk

- Calories 10
- Protein .44g
- Iron .13mg
- Calcium 26mg

### Cherry Tomatoes

Serving Size: 10 cherry tomatoes

- Calories 31
- Protein 1.60g
- Iron .49mg
- Calcium 18mg

### Dates

Serving Size 3 Medjool dates

- Calories 199
- Protein 1.30g
- Iron .65mg
- Calcium 46mg

### Soy Yogurt (based on Silk Vanilla)

Serving Size: 1 container of yogurt

- Calories 150
- Protein 5g
- Iron 1.44mg
- Calcium 299mg

### Coconut Yogurt (based on So Delicious Vanilla)

Serving Size: 1 container of yogurt

- Calories 80
- Protein 0g
- Iron .48mg
- Calcium 233mg

### Drinks

#### Soy Milk (based on Silk Vanilla)

Serving Size: 1 cup

- Calories 100
- Protein 6g
- Iron 1.07mg
- Calcium 299mg

#### Almond Milk (based on sweetened vanilla flavor)

Serving Size: 1 cup

- Calories 91
- Protein 1.01g
- Iron .72mg
- Calcium 451mg

Visit [www.KitchenGadgetVegan.com](http://www.KitchenGadgetVegan.com) for more vegan school lunch ideas

*Values from USDA Department of Agriculture National Nutrition Database for Standard Reference Release.*