LEGUMES IN SCHOOL MENUS
Idaho Child Nutrition Programs
Professional Standards

- **Nutrition 1320** – Understand general nutrition concepts that relate to school meals, such as whole grains, sodium, etc.
- **Food Production 2130** – Develop culinary skills necessary for school meal preparation
- **Communications and Marketing 4160** – Create an environment that engages students to select and consume healthy foods with minimum waste, including Smarter Lunchroom techniques.
Objectives

• Define legume component in school meals
• Identify the health benefits of legumes
• Understand how to purchase and store legumes
• Identify simple ways to incorporate legumes into lunch menus
• Implement Smarter Lunchroom techniques for promoting legumes
• Obtain standardized legume recipes
Legume (component) in Schools

Dry Beans

Soy Beans

Chickpea/Garbanzo Beans

Split Peas

Lentils
Not Legumes In Schools

- Some organizations recognize peanuts, green peas and green beans as legumes, schools do not

- **Peanuts** count as a Meat Alternate

- **Green Peas** count as a Starchy Vegetable

- **Green Beans** count as an Other Vegetable
# Legume Lunch Meal Pattern

<table>
<thead>
<tr>
<th>Amount of Legumes Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beans/Peas (Legumes)</strong></td>
</tr>
<tr>
<td>Grades K-5</td>
</tr>
<tr>
<td>½ cup</td>
</tr>
<tr>
<td>Grades 6-8</td>
</tr>
<tr>
<td>½ cup</td>
</tr>
<tr>
<td>Grades 9-12</td>
</tr>
<tr>
<td>½ cup</td>
</tr>
</tbody>
</table>
Legume Health Benefits

- High in protein, fiber, folate, potassium, iron and magnesium
- Low in fat
- No cholesterol
- Low cost
- Easy to cook
Purchasing Legumes

Frozen

Dry

Canned
Storing Legumes

- **Dry**
  - Bagged in dry storage

- **Canned**
  - In dry storage
  - If using in cold salads, cans may be stored in the refrigerator

- **Cooked and Frozen** – refrigerator or freeze
Soaking Beans and Whole Peas

Step 1: Sort

Step 2: Rinse

Step 3: Soak

Choose Soak Method:
Quick or Overnight
Overnight Soaking

https://www.youtube.com/watch?v=zd4RxbUYsTE
Quick Soaking

https://www.youtube.com/watch?v=-sfuQFC9Ars
Cooking Beans and Whole Peas

Add soaked beans or whole peas to a liquid according to the standardized recipe.

- Bring the liquid to a boil
- Reduce heat to a simmer (~45-60 minutes) until the beans are tender
  - When beans can easily be mushed by a fork they are done
Cooking Lentils and Split Peas

- No soaking required
- Sort to remove discolored or shriveled legumes and foreign matter
- Rinse well
- For every one cup of legume, cook with two cups of water

- Lentils
  - Cook at a slow boil for about 15-20 minutes

- Split Peas
  - Cook at a slow boil for about 30-40 minutes
Culinary Tips

• Use canned or frozen legumes to speed up preparation time

• When pureeing split peas to make a dip or spread, it is a good idea to soak them in cold water for up to 6 hours

• Do not add salt or acidic foods, such as tomatoes, until legumes are finished cooking
Legume Yields

- 1 pound dry beans yields ~ 5-6 cups cooked
- 1 pound dry beans measures 2 cups
- 1 cup dry peas or lentils yields ~ 2 – 2 ½ cups cooked
- Use the Food Buying Guide for School Meal Programs
Promoting with Kid Friendly Names

- Big Bad Bean Burrito
- Farmers Market Nachos
- Seven Layer Bean Dip and Veggie Sticks
- Turtle Tacos
- Garbanzo Firecracker Patties
- Three Bean Sriracha Chili
- Tostada Crunch
Trendy Legume Dishes

• Hummus
• Beans on Salad Bars
• Roasted Chickpeas Tossed with Spice Blends
  – “Your Mascot Name” Blend
  – Mexican Blend
  – Italian Blend
  – Indian Blend
• Bean Dips
• Chili
Meatless Monday’s

• Lentil Tacos
• Chili
• Minestrone
• Lentils of the Southwest
• Breakfast and Lunch Bean Burritos
• Spaghetti sauce
• Lasagna
• Turtle Sloppy Joes
• Nachos

Lentils of the Southwest

Photo Compliments of Recipe from *Recipes for Healthy Kids Cookbook*, Team Nutrition
Idaho USDA Legume Foods

- Black Beans (Turtle), Canned
- Pinto Beans, Canned
- Refried Beans, Canned
- Vegetarian Beans, Canned
Legumes Grown in Idaho

- Lentils
- Garbanzo Beans (chickpeas)
- Split Peas
- Pinto Beans
- Small Red Beans
- Dark Kidney Beans
- Small White Beans
- Cranberry Beans
- Navy Beans
- Great Northern Beans
- Black Beans (Turtle)
- Pink Beans
- Light Kidney Beans
Smarter Lunchrooms and Legumes

• https://www.youtube.com/watch?v=BFKf5QiTqqg
LEGSUME RECIPES FOR SCHOOLS
# Bean Burrito

**Main Dish**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>St Servings</th>
<th>100 Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Refried beans</em>, diced</td>
<td>0 oz</td>
<td>0 oz</td>
</tr>
<tr>
<td>Dry beans</td>
<td>1 lb</td>
<td>10 lbs</td>
</tr>
<tr>
<td>Beans, canned</td>
<td>1 cup</td>
<td>2 cups</td>
</tr>
<tr>
<td>Green pepper</td>
<td>1 Tbsp</td>
<td>2 Tbsp</td>
</tr>
<tr>
<td>Red bell pepper</td>
<td>1 Tbsp</td>
<td>2 Tbsp</td>
</tr>
<tr>
<td>Corn, fresh</td>
<td>1 cup</td>
<td>2 cups</td>
</tr>
<tr>
<td>Mozzarella cheese</td>
<td>1 cup</td>
<td>2 cups</td>
</tr>
<tr>
<td>Black olives</td>
<td>1 Tbsp</td>
<td>2 Tbsp</td>
</tr>
<tr>
<td>Salsa</td>
<td>1 cup</td>
<td>2 cups</td>
</tr>
</tbody>
</table>

**Directions**

1. Preheat oven to 350°F.
2. Place beans in oven-safe dish.
3. Cover dish with foil.
4. Bake for 2 hours.
5. Remove foil and continue baking for an additional hour.
6. Remove from oven and let cool.
7. Proceed with filling as desired.

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**Yeild:**

- 50 Servings: 15 lb
- 100 Servings: 1.5 tons

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**Marketing Guide for Selected Items**

- **Serve:**
  - Tostadas, 6 per serving
  - Salad, 1 cup
- **Volume:**
  - 6 lb
  - 1.5 tons

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**Preparation Notes:**

- **Servings:**
  - 50 Servings: 5 lb
  - 100 Servings: 5 lb

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**Special Tips:**

- **Soaking:**
  - Cover with water and let soak overnight.
  - Drain and rinse dry beans.

- **Cooking:**
  - Add beans to a pressure cooker.
  - Let the beans cook for 3 hours.
  - Let the beans cool before using.

- **Storage:**
  - Freeze beans uncovered in storage bags.
  - Defrost beans in the refrigerator.

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*Bean Burrito* is a delicious and nutritious meal option. The use of dried beans, referring to *Dry beans* and *Beans, canned*, provides a high protein content, making it a great choice for a Meat Alternative option. The inclusion of fresh vegetables such as bell peppers and corn adds color and flavor to the dish, while the use of mozzarella cheese and salsa provides a nice contrast in texture and taste. This dish is perfect for gatherings, family meals, or as a healthy alternative to traditional burrito fillings. Enjoy the goodness of this bean burrito!
Volcanic Meatloaf


**Volcanic Meatloaf**

**Number of Portions:** 100
**Portion Size:** Ounces <12, 1 mea/1/2 roll

**Ingredients:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight (oz)</th>
<th>Calories</th>
<th>Fat (g)</th>
<th>Saturated Fat (g)</th>
<th>Trans Fat (g)</th>
<th>Carbohydrates (g)</th>
<th>Fiber (g)</th>
<th>Sodium (mg)</th>
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<tbody>
<tr>
<td>Salad</td>
<td>6.5</td>
<td>66</td>
<td>1.5</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Meat</td>
<td>6.15</td>
<td>74</td>
<td>4.5</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Broccoli</td>
<td>4.65</td>
<td>94</td>
<td>6.5</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Carrots</td>
<td>1</td>
<td>26</td>
<td>1.5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cheese</td>
<td>1.5</td>
<td>25</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mayonnaise</td>
<td>1.5</td>
<td>50</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Directions:**

Preheat oven to 400°F.

**Prepare Ingredients:**

Two eggs, three slices of bread, cheese.

**Prepare Meatloaf:**

In a large mixing bowl, add ground beef, eggs, and bread crumbs. Mix the ingredients well and form into a loaf. Bake the meatloaf in the oven at 400°F for 40 minutes, or until done.

**Assemble Dish:**

Serve the meatloaf with a side of salad and a slice of bread. Enjoy your volcano-inspired lunch!

**Recipe Contributions**

<table>
<thead>
<tr>
<th>Category</th>
<th>Calories</th>
<th>Fat (g)</th>
<th>Saturated Fat (g)</th>
<th>Trans Fat (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains</td>
<td>256</td>
<td>9.5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vegetables</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Meats</td>
<td>425</td>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fats</td>
<td>462</td>
<td>25</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Nutritional Facts:**

- Calories: 256
- Fat: 9.5g
- Saturated Fat: 0g
- Trans Fat: 0g
- Carbohydrates: 0g
- Sodium: 25mg
- Calcium: 25mg
- Iron: 25mg

**Serving Size:** 1/2 of the recipe

**Calories per Serving:** 256

**Fat per Serving:** 9.5g
Eagle Pizza

Meal Components: Meat, Alternate-Legume, Vegetable-fred/Orange-Vegetable, Starchy Vegetable, Other Vegetable, Grains

Directions

1. Preheat oven to 350°F (175°C).
2. Place tortillas on a baking sheet and bake for 5 minutes.
3. Reduce oven temperature to 325°F (160°C).
4. Place shredded cheese and 1 Tbsp of the chili-base sauce on each tortilla.
5. Place the beans on top of the cheese and sauce.
6. Place the cooked chicken on top of the beans.
7. Place the peppers and onions on top of the chicken.
8. Place the tomatoes and olives on top of the peppers and onions.
9. Bake for 10 to 15 minutes or until the cheese is melted.

Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>0.5 Servings</th>
<th>1.0 Servings</th>
<th>Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinach, sliced</td>
<td>3 oz</td>
<td>0.5 qt</td>
<td>1. Combine spinach and water in a bowl. Set aside.</td>
</tr>
<tr>
<td>Lettuce, romaine, sliced</td>
<td>4 oz</td>
<td>1 qt</td>
<td>2. Mix the lettuce and linseed oil. Set aside.</td>
</tr>
<tr>
<td>Black beans, canned, rinsed and drained</td>
<td>7 oz</td>
<td>1 qt 1/2 cups</td>
<td>3. Spread the beans on the tortillas.</td>
</tr>
<tr>
<td>Green bell peppers, julienned</td>
<td>2 oz</td>
<td>1 qt</td>
<td>4. Bake the tortillas for 10 minutes.</td>
</tr>
<tr>
<td>Yellow onions, diced</td>
<td>2 oz</td>
<td>1 qt 1/2 cups</td>
<td>5. Add the cheese and sauce to the tortillas.</td>
</tr>
<tr>
<td>Canned red kidney beans</td>
<td>5 oz</td>
<td>1 qt 1/2 cups</td>
<td>6. Bake for an additional 5 minutes.</td>
</tr>
<tr>
<td>Fire roasted tomatoes and black olives</td>
<td>0.5 lb</td>
<td>2 oz</td>
<td>7. Serve hot.</td>
</tr>
<tr>
<td>Reduced fat Mexican cheese blend, shredded</td>
<td>1 b</td>
<td>1 qt</td>
<td>8. Store in an airtight container.</td>
</tr>
</tbody>
</table>

Cooking Time: 15 minutes

Serving Size: 1 tortilla
References


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