Legumes are a versatile and economical source of protein that is often overlooked and undervalued in our food supply. They also offer numerous health benefits and have the potential to improve the diet quality and long-term health of those who consume them regularly. The recently released 2020-2025 Dietary Guidelines for Americans recommended a shift in our food sources of protein from red and processed meats (hot dogs and sausage) to include more plant-based proteins such as beans, peas and lentils. Both the DASH and Mediterranean diet plans encourage regular consumption of legumes.

What are Legumes?
Legumes are plants from the Fabaceae or Leguminosae family. When they are dried, they are also referred to as pulses. They have a unique nutrient profile that fits into both the protein and vegetable food groups. Dried beans can be found in the grocery store in both dried and canned forms.

Nutritional Benefits
Beans are an excellent source of plant protein and rich in micronutrients such as B vitamins, selenium, potassium, zinc. Although it used to be thought that vegetarians and vegans had to pair legumes with grains at every meal to create a “complete” protein it is now understood that a variety of plant foods eaten throughout the day works just as well. Replacing animal proteins dried beans can lower intake of saturated fat and sodium while increasing intake of dietary fiber. One half cup of cooked dried beans contains approximately 115 calories and 8 grams of protein.

What about Antinutrients?
Some have raised concern that legumes contain “antinutrients” that reduce their nutritional value or cause harm if ingested. Raw legumes contain compounds such as lectins, phytates, and tannins that can interfere with digestion and absorption of some nutrients. Fortunately, soaking and cooking beans significantly reduces the levels of antinutrients as do processing treatments such as milling, germination and fermentation. As for potential harms of antinutrients, except for undercooked kidney beans antinutrients have not been shown to cause any ill effects in humans.

Preparing dried beans for use in meals and recipes
Dried beans are the most economical way to include beans in your diet. The cost of one ½ cup of dried beans is about 1/3 the cost of canned beans. Dried beans need to be soaked prior to cooking. There are three soaking methods you can use (see table next page). The Hot Soak method is the recommended method because it reduces cooking time and gas-producing compounds and produces consistently tender beans. The Traditional Soak method is best for pressure cooking beans.

Cooking the Beans
To cook soaked beans, add fresh cold water to fully cover the bean. Maintain water at a gentle simmer during cooking to prevent split skins. Keep beans covered with water during the cooking process. Add cold water periodically during cooking to ensure the beans are covered. When fully cooked the beans will be tender but not mush. To cook beans more quickly try using a pressure cooker using the manufactures instructions. One pound of dried beans (about 2 cups) is equal to 6 cups of cooked beans.

If short on time, beans in the canned form can be substituted in most recipes. While canned beans offer the most convenience, they will be higher in sodium than dried beans. If using canned beans, consider rinsing before adding to your favorite recipe to reduce the sodium content. One 15 oz can of beans is equivalent to 1 ¾ cups of cooked beans.
### Soaking Methods

<table>
<thead>
<tr>
<th>Hot Soak</th>
<th>Traditional Soak</th>
<th>Quick Soak</th>
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</thead>
<tbody>
<tr>
<td>Place beans in a large pot and cover with 10 cups water for every 2 cups beans.</td>
<td>Pour cold water over beans to cover.</td>
<td>Place beans in a large pot and cover with 6 cups water for every 2 cups beans.</td>
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<tr>
<td>Heat to boiling and boil for 2-3 minutes</td>
<td>Soak beans for 8 hours or overnight.</td>
<td>Heat to boiling and boil for 2-3 minutes.</td>
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<tr>
<td>Remove beans from heat, cover and let stand for 4 hours</td>
<td>Drain beans and discard soak water.</td>
<td>Remove beans from heat, cover and let stand for 1 hour.</td>
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<tr>
<td>Drain beans and discard soaking water</td>
<td>Rinse beans with fresh cool water.</td>
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### Adding Beans to Your Diet:
- **Appetizers:** Hummus or bean dips, salsa with beans.
- **Main Dishes:** Rice and beans, pasta with beans and veggies, chili with beans, bean-based burgers.
- **Sides:** Baked beans, pasta salad with beans, three bean salad.
- **Breakfast:** Bean and egg wraps.
- **Lunch:** Hummus wraps or sandwiches.

### References
- https://beaninstitute.com

### Corn and Black Bean Salsa

#### Ingredients

**Salsa**
- 1 can Ro-Tel® tomatoes, drained
- 1 can black beans, drained
- 1-2 sweet corn, drained
- 1-2 green onions, chopped
- 1 Tbsp. cilantro, chopped
- 1-2 jalapenos, finely chopped

**Dressing**
- ¼ cup canola oil
- 2 Tbsp. red wine vinegar
- 1 tsp. Italian seasoning
- ½ tsp. cumin
- 1 tsp. lime juice
- 1 tsp. salt
- 1 tsp. pepper

#### Directions

Combine Ro-Tel® tomatoes, beans, and corn in a colander and strain out any excess liquid.

Mix dressing ingredients together, whisk to combine and set aside.

In a large bowl, combine Ro-Tel tomatoes, beans, corn, green onions, cilantro, and jalapenos. Add dressing and adjust seasonings to taste.

Serve with tortilla chips or as a topping on burritos and tacos.

### Need a Dietitian?
Registered Dietitians are here to help you with your nutrition questions. To make an appointment call 412.692.4497 (Oakland location) or 412.623.2421 (Shadyside location).