

2016 IS THE INTERNATIONAL YEAR OF THE PULSE!

Celebrate pulses in your classroom by
learning about them and hosting a ration meal!

DID YOU KNOW?

**Pulses help to improve food
security and alleviate hunger**



**Pulses are an important source
of nutrition and health**



**Pulses are a form of
sustainable agriculture**



**Canadian Foodgrains Bank is encouraging
you to bring pulses to your classroom or group this year!**

Visit:

foodgrainsbank.ca/education
foodgrainsbank.ca/ration-meal

For Background Information for Educators
and the Ration Meal Activity



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INTERNATIONAL YEAR OF PULSES (IYP)

The Food and Agriculture Organization of the United Nations has declared 2016 the International Year of Pulses (IYP).

What are Pulses and Why Celebrate Them?

Pulses are part of the legume family, but the term “pulse” refers only to the dried seed. Dried peas, edible beans, lentils and chickpeas are the most common varieties of pulses. The IYP recognizes and celebrates pulses’ important role to the global agri-food system. Some of the key ways pulses contribute are by:

Improving Food Security and Alleviating

Hunger: Pulses make up over 75% of the share of food use in developing countries, but only 25% in developed countries. Pulses are locally adapted, good for consumption or sale, and they store well. Pulses are also used as feed for livestock, improving the nutrition of the animals and thereby increasing food security.

DYK? Pulses are an important addition to food assistance given to people in emergency situations which are often brought on by conflict, natural disasters, or chronic poverty.

Providing Nutrition and Health: Pulses are a low fat source of protein, with a high fibre content and low glycemic index. They provide important amounts of vitamins and minerals including B vitamins, iron, potassium, magnesium and zinc. Pulses have also been shown to have an impor-

tant role in preventing illnesses such as cancer, diabetes and heart disease.

DYK? Many traditional diets partner a pulse with a cereal grain, such as beans and corn, lentils and rice, and hummus and pita to provide sufficient protein for healthy active lifestyles.

Demonstrating Sustainable Agriculture (in a changing climate):

Pulses do not require much water or fertilizer to grow well and emit relatively low emissions of carbon as compared to other protein sources. Pulses are an important part of crop rotations and growing pulses is good for the soil, as they “fix” nitrogen that provides valuable soil nutrients for subsequent crops.

DYK? Here in Canada, pulses are a remarkable success story. The growth of Canada’s pulse industry began in the 1970’s, and Canada is now the world’s largest producer and exporter of dry peas and lentils and a major supplier of other pulses to over 150 countries. Canada’s biggest export markets are India, China and Turkey. Pooled together, pulses are Canada’s fifth largest crop, after wheat, canola, corn and barley.

RATION MEAL ACTIVITY

Why hold a ration meal?

Holding a ration meal highlights the importance of food assistance in ending global hunger, the significance of pulses as part of ration meals, and the global interconnectedness of agriculture, farmers and food.

Rations are often distributed by aid groups or government agencies at refugee or internally displaced persons camps or to communities who are facing severe food shortages. Food aid groups generally distribute dry rations which people cook on their own, with enough quantity to cover a period of time, though wet or already-cooked rations are given when appropriate. The World Health Organization sets out that a typical daily ration should provide about 2100 calories and consist of 450 grams of cereal (flour, rice, etc.), 50 grams of pulses (beans, lentils, etc.), 50 grams of oil, and 5 grams of iodized salt per person. Often these are fortified with vitamins and other micronutrients.

Host a ration meal at lunch hour or another time. This activity can be as simple or as creative as you wish. You could have a ration meal for your class or invite the whole community to an evening event. This activity is suitable for all age groups. Ration meals can be made in advance and eaten together, or food preparation can be done collectively with the use of a stove or hotplate for the beans and an electric griddle for the flatbread. Each person should receive approximately 3/4 cup of beans, 1/2 cup rice (optional) and 1 small flat bread (optional). (Note: both the rice and flatbread are optional, but at least one should be served with the beans.)

Tweet your ration meal to [@foodgrains](https://twitter.com/foodgrains)

RECIPES

Beans (serves 5-6)

Don't forget to soak your beans overnight before cooking them!

- 2 cups dried red beans
- 4 cups of water
- 1 large onion, chopped (optional)
- 1 bay leaf
- Pepper, to taste
- Salt, to taste
- 1 tablespoon of vegetable oil
- 3 cups rice, plus water for soaking

Method:

- Soak the beans overnight in cold water; drain.
- Heat the beans in about 4 cups of water, add all ingredients except salt, and boil for min 2 hrs. When beans are tender, mash them up with a tablespoon of oil and the salt.
- Serve on boiled rice or with flat bread.

Flat Bread (makes 12)

- 2 cups whole-wheat flour
- 2 tablespoons oil
- 3/4 to 1 cup warm water
- 1/2 teaspoon salt

Method:

- Mix the flour and oil together using your hands.
- Stir the salt into the water and add the water to the flour a little at a time, until you have a soft, kneadable ball.
- Move to a floured surface and knead for 8-10 minutes, or until smooth and elastic.
- Remove the dough to a lightly greased bowl, cover, and rest for at least 30 min (or up to 2 hrs).
- Return the dough to a floured work surface. Roll the dough into a long piece and cut it into 12 separate balls.
- Dust the dough balls with a little flour and roll each one out into a very thin round about 6 inches in diameter.
- Heat an ungreased, heavy skillet over medium heat. Add a dough round and press down gently with a spatula or the back of a spoon.
- Cook until lightly browned, flip and brown on the second side. Repeat with all rounds.

COMPARING PRICES

Determine the approximate price per ration. Talk to the class/group about the cost of the meal. You can compare it with the cost of other foods that the students eat for lunch.

A few points to keep in mind during the discussion are:

- The nutritional content of the foods
- Pre-packaged & processed vs. whole foods
- The season (certain products will cost higher in certain seasons)
- How international and local markets affect prices

DISCUSSION QUESTIONS:

- What did you think of the meal? The food?
- Do you think that you would appreciate food more if it was not readily available?
- Do you think that two meals a day like this would be enough to sustain you for a month, or longer? Do you think that rations are a good solution to the problem of hunger?
- Do you think about the nutritional value of the foods that you eat? Or the people that grew it? Do you believe that it is important to consider these things? Why or why not?



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