

description

The wheat varieties most commonly shipped by the Canadian Foodgrains Bank include Canadian Red Western Spring, Canadian Prairie Spring (both hard red spring wheats), Amber Durum, and Ontario Eastern (a soft winter wheat). Various grades are available. Often a Number 3 wheat is the grade of choice, given the expense and questionable value of higher grades in food aid situations. Wheat is shipped bulk or in 50kg bags.

The Foodgrains Bank also ships enriched white flour, which is produced from the starchy endosperm of the wheat kernel. Since it lacks the nutrient-rich germ and bran, white flour is required by Canadian law to be enriched with B-vitamins, iron, magnesium and calcium. Wheat flour is available in 25kg or 50kg bags.

uses

Wheat is a versatile commodity that is prepared in a wide variety of ways, depending on the local context. In Ethiopia or Eritrea, it may be used to make a spongy flat bread called *injera*; in India or Bangladesh, denser flat breads known as *chapati*, *roti* or *naan*; in West Africa wheat may be cracked and boiled as a porridge; in Latin America, wheat flour may be used in tortillas; in many areas, leavened bread is also commonly consumed.

limitations

Possible limitations to the use of wheat in a food aid project include:

- **acceptability:** Wheat has been widely used in food aid programs, but at times the choice has been based more on the availability of wheat on domestic markets in donor countries than on the acceptability of wheat to the beneficiaries. The possible effects of wheat distribution on local tastes and markets should be carefully considered in areas that do not traditionally consume wheat as a staple.
- **processing and preparation:** As with most dry grains, wheat must be processed and prepared before it is suitable for consumption. It is important to assess whether local milling facilities are accessible if required.

nutritional information

Wheat is higher in protein, and comparable in energy to corn and rice.

Nutritional content per 100g

source: USDA

variety	energy (kcal)	protein (g)	fat (g)	density (MT/container)	energy per \$ (kcal, approx)
Wheat – Red Spring	329	13	2	18-22	11,750
Wheat – Amber Durum	339	13	2.5	18-22	16,500
Wheat Flour – Enriched	364	10	1	15-19	10,300

cost

Grain prices vary, but wheat generally represents a fairly low cost source of energy. Spring 1999 prices for cleaned and bagged wheat were around CDN\$280/MT. Flour is more expensive (roughly 1¼ times the price of whole grain) due to the processing costs.

storage

Under ideal conditions (off the floor, away from excess heat, moisture and insects), wheat grain is very stable and may last indefinitely. Wheat should be tested for hot spots and spoilage regularly – especially in the less-than-ideal conditions common in food aid.

The preferred storage for wheat flour is at temperatures less than 20°C and less than 70% humidity. Flour may also absorb strong odours to which it is exposed. Under ideal conditions, the nutritional quality of wheat flour should last at least six months.

substitutes

Corn (maize) and rice are both nutritionally comparable to wheat. Commodity selection should consider cost, local tastes and ability to process and prepare the food. Where rice is a more appropriate commodity, a swap or local purchase may be necessary.