

guide to cooking

Beans, Chickpeas, Lentils and Peas

BUYING AND STORING PULSES

Dry beans, chickpeas, peas and lentils (known as pulses) can be found in most grocery stores, health food stores and ethnic food specialty stores. When buying dry pulses, look for bright color seeds, uniform size and smooth skins without chips or shriveled seed coats. Although dry pulses will keep almost indefinitely if stored in tightly covered containers in a cool, dark, dry place, it is best to use them within one year of purchase as the longer a pulse is stored, the drier it becomes which increases its cooking time.

Canned pulses are very convenient because they are pre-cooked and ready to use. Always drain and rinse canned beans before use. A 540 mL (19 oz) can of pulses is equal to about 500 mL (2 cups) of cooked pulses. A 398 mL (14 oz) can of pulses is equal to about 325 mL (1 ¼ cup) of cooked pulses.

Cooked pulses store well for 1-3 days in the refrigerator or for several months in the freezer. To freeze, let cooked pulses cool and store in plastic bags or containers in 250 to 500 mL (1 - 2 cup) portion sizes so they are ready to add to your favorite recipes.

SOAKING PULSES

Some dry pulses must be soaked prior to cooking as their skins do not readily absorb water. Water can only enter through the small end formerly attached to the plant's stem. Dry beans, whole peas and chickpeas must be soaked before cooking whereas dry lentils and split peas do not require soaking and only need to be rinsed before cooking. Before soaking or cooking, remove any shriveled or broken seeds or any foreign matter such as dried soil or pebbles, then place in a sieve and rinse under cold running water.



Regardless of the soaking method used, discard the soaking water afterwards, place pulses in strainer or sieve and rinse well under cold running water. This will wash away gas-producing complex carbohydrates or sugars responsible for flatulence and will aid digestibility.



Lentil Potato Spinach Soup



Black Bean, Tomato and Spinach Pizza

COOKING DRY PULSES

Pulses can be cooked on the stove top, in a slow cooker or pressure cooker, and for certain recipes such as baked beans, in the oven. Regardless of method used, acidic ingredients (such as tomatoes and vinegar) should be added only when the pulses are already tender, as acids and salt slow down the cooking process. However, seasonings such as garlic, onion and herbs may be added to the cooking water right from the beginning.

Some recipes suggest adding baking soda (sodium bicarbonate) to speed up the softening of pulses during cooking, especially if using hard water. This increases water absorption, however, baking soda destroys thiamin, affecting the nutritional status of the final product. It may also affect the texture of pulses, making them too soft. For these reasons, adding baking soda to pulse cooking water is not recommended. If hard water must be used and requires the addition of baking soda, the amount of baking soda should be regulated to 0.5 mL per 500 mL (1/8 tsp per 16 oz) of cooking water.

STOVE TOP COOKING

To cook dry pulses on top of the stove, combine pre-soaked pulses with water (5 mL or 1 tsp of oil to prevent foaming if desired) and seasonings in a heavy saucepan. Be sure to use a large enough saucepan, as pulses double or triple in volume during cooking. Bring to a boil, cover tightly, reduce heat and simmer until they are just tender and not mushy.

Always simmer pulses slowly as cooking too fast can break the seed coats. Cooking times will vary with the type, age and quality of the pulses, as well as with altitude and the hardness of the water. Approximate cooking times are provided below, but the best way to check if pulses are done is to taste them. Cooked pulses should be tender, free of any “raw” taste, and able to be crushed easily in your mouth. A 250 mL (1 cup) measure of dry pulses will yield approximately 500 to 750 ml (2 - 3 cups or 2 - 3 times the original amount) when cooked.

OTHER COOKING METHODS

Pressure cookers cut down cooking time significantly, making pulse-cooking more convenient. Slow cookers offer a real time advantage in that they cook without any attention. Follow the manufacturer’s instructions for operation.

PULSE PURÉE

Some recipes, including those for baked products or dips may call for a pulse purée. To make a purée from any type of pulse, place cooked pulses in a food processor

For more information and recipes, visit: www.pulse.ab.ca or www.pulsecanada.com

and blend with enough water to make a smooth purée with a consistency similar to that of canned pumpkin, or consistency required for the recipe. Purée can be frozen in plastic bags or containers and kept for up to several months in the freezer.

GENERAL TIPS FOR EATING MORE PULSES

The non-digestibility of some complex carbohydrates in pulses may produce gas and bloating for some individuals, similar to the effects produced by certain other foods (e.g. cabbage, broccoli, and many vegetables and fruits). Eating pulses regularly allows your digestive system to adapt to the increased fibre and complex carbohydrates, decreasing these effects over time. For those who find that pulses lead to some digestive discomfort, start with eating small amounts of pulses, drink lots of water and gradually increase your intake.

There are also a number of easy ways to significantly reduce the digestive discomfort that can occur from eating pulses:

- 1 Change the soaking water once or twice during the long cold soak.
- 2 Cook pulses thoroughly as undercooked starch is harder to digest.
- 3 When using canned pulses, or after dried pulses have been soaked, rinse thoroughly before cooking.
- 4 Do not use the soaking liquid to cook the pulses.
- 5 Take oral digestive enzymes to help eliminate gas. They are available in health food stores, pharmacies and most grocery stores.

SOAKING METHODS

Method	Instructions*
Long Cold Soak or Overnight	Let stand 12 hours or overnight in refrigerator
Quick Soak	Bring pulses and water to boil in a saucepan and boil gently for 2 minutes. Remove from heat, cover, and let stand for 1 hour.
Microwave Soak	Combine pulses and water in a suitable microwave casserole dish, cover and microwave on high for 10-15 minutes. Let stand for 1 hour.

*For all three soaking methods, add 750 mL (3 cups) of water for every 250 mL (1 cup) of pulses.

COOKING TIMES

Pulse	Soaking Requirement	Cooking Time
Beans	Yes	45 - 60 minutes
Peas		
Whole	Yes	1 - 1 ½ hours
Split	No	40 - 45 minutes
Lentils		
Whole Green	No	30 - 45 minutes
Split Red	No	10 - 15 minutes
Chickpeas	Yes	1 - 1 ½ hours



CHICKPEAS



BEANS



PEAS



LENTILS



Alberta Pulse Growers

220, 5904B - 50 Street
Leduc, AB. T9E 6J4
PH: 1-877-550-9398
Email: office@pulse.ab.ca



This material has been made possible through Canada's Agricultural Policy Framework, a Federal-Provincial Territorial initiative