



The Pulse Advantage

We know that cultural acceptability is a key factor in any successful food distribution program, and in the many locations where pulses are accepted, peas and lentils represent excellent value. Our comparison table looks at the current prices for various pulses, and also provides a comparison of the cost of delivering dietary protein using these pulses. One significant advantage of using lentils and split peas is the reduction in cooking time vs. beans and whole peas (see additional information pg 2). Shorter cooking times can be an important consideration in areas where fuel resources are scarce.

PRICE PER SERVING PRICE COMPARISON – US PULSE CROPS

		Whole Yellow Peas	Whole Green Peas	Split Yellow Peas	Split Green Peas	Richlea Lentils	Chickpeas 7 mm	Great Northern Beans	Pinto Beans	Wheat	Rice
Price per MT * 5/3/2022, FOB plant #1 grade, bid price, cleaned/bagged	US\$	\$284.84	\$220.46	\$505.30	\$440.92	\$374.79	\$418.88	\$617.29	\$518.09	\$227.74	\$242.51
How many cups (dry) to provide 100% of the protein RDA (55g) for an adult (154 lbs/70 kg)	cups	1.56	1.56	1.56	1.56	1.23	1.26	1.24	1.19	2.3	4.6
What is the cost to deliver 100% of the minimum protein RDA (55g) for an adult at these prices?	US\$	\$0.0755	\$0.0594	\$0.1985	\$0.1807	\$0.0829	\$0.0902	\$0.1384	\$0.1109	\$0.0942	\$0.2062
What is the cost of 365 servings providing 100% of the protein RDA for an adult?	US\$	\$27.55	\$21.70	\$72.44	\$65.97	\$30.26	\$32.91	\$50.52	\$40.47	\$34.38	\$75.26
How many single servings with 100% protein RDA could you buy for \$1000?	servings	13,250	16,822	5,039	5,533	12,062	11,090	7,224	9,019	10,616	4,850

Nutritional Content		Green and Yellow Peas, Whole and Split	Richlea Lentils	Chickpeas 7mm	Great Northern Beans	Pinto Beans	Wheat	Rice
Source: USDA Statistical Database (mature seeds, raw)	Units	1 cup 197 g	1 cup 192 g	1 cup 200 g	1 cup 183 g	1 cup 193 g	1 cup 192 g	1 cup 180 g
Energy	kcal	672	659	728	620.4	656.2	628	640
Protein	g	48.3	49.5	38.6	40.0	40.3	24.2	12
Total lipid (fat)	g	2.3	2.0	12.1	2.1	2.2	2.96	0
Carbohydrate, by difference	g	118.9	115.4	121.3	114.1	122.4	137	144
Fiber, total dietary	g	50.2	58.6	34.8	37.0	47.1	23.4	4

Note: prices do not include freight costs to US ports, which is included in the bid price on PL 480 tenders.

Freight costs depend on the port, and would be roughly the same for all pulses.

*Source: Bean Market News January 2025, USADPLC data, industry sources



The Pulse Advantage Food With A Familiar Face

Peas, lentils, and chickpeas are some of the world's oldest foods. These pulses have spread from ancient Middle East origins to become staples in many cultures, on the African continent, in Asia, and in Latin America.

Short (And Shorter) Cooking Periods

One of the great advantages of lentils and split peas is their short cooking period without overnight soaking, about 25 minutes depending on the mineral content of the water and geographical elevation. When cooking fuel is scarce, as is the case in many emergency relief situations and drought-stricken areas, cooking time can be cut in half by overnight soaking.

Cooking Time with Soaking	
Lentils	15 - 30 minutes
Split Peas	25 - 30 minutes

The Success Of Chickpeas

Chickpeas have achieved broad success and acceptance attributed to their nutritional richness, excellent flavor, and versatile functionality. Chickpeas are frequently utilized in dishes as a protein source, providing a nutritious and plant-based alternative to meat. Hummus, a creamy dip made from mashed chickpeas, has become a popular snack and appetizer.

The Superb Nutritional Profile Of Pulses

Pulses offer a balanced macronutrient profile and are packed with micronutrients as well. Pulses are a good source of protein, high in antioxidants, iron-rich, a good source of potassium, and an excellent source of folate and dietary fiber. Across the globe, diets in developing and developed countries commonly lack essential nutrients required for proper growth and prevention of chronic diseases.

- Pulses are a good source of **protein**, an essential nutrient for growth, development and disease resistance. Amino acids are the building blocks of a complete protein. Combining a pulse with a cereal in a meal (lentils and rice, hummus and crackers, etc.), ensures that all essential amino acids are available. Pulses and cereals create a complete protein that is readily absorbed. In one 1/2 cup serving of cooked pulses, there is 8 g of protein, which is equivalent to 2 ounces of meat, fish, or poultry.
- Pulses provide a considerable amount of **energy**. One cup cooked lentils, chickpeas, or split peas provide an average of 240 calories.

- Pulses are **iron-rich**. Diets in developing countries often lack animal products (meat, poultry, fish, and eggs) which are also excellent sources of iron, but pulses provide a good alternative source of this vital nutrient. One 1/2 cup of cooked pulses has about four times more iron than an average one ounce serving of red or white meat. To maximize iron absorption from plant-based sources, it is recommended to pair them with foods high in Vitamin C.
- Pulses are rich sources of **folate**, a B vitamin. One 1/2 cup of cooked lentils provides almost 45% of the amount recommended by the US Public Health Service for women of childbearing age. Folate has gained much attention for its role in preventing birth defects. Folate also reduces blood concentrations of homocysteine, which is associated with a higher risk of strokes and heart disease. Current research also shows a protective role for folate against colon cancer.
- Pulses are an excellent source of **fiber**. Fiber is essential for maintaining overall health and preventing various health issues, yet a significant number of individuals fall short of the recommended daily intake. Most Americans don't consume the amount of fiber recommended for good health. Pulses have four times more fiber per serving than brown rice and one cup of pulses provides more than half of the recommended daily intake.

Versatility And Innovation

The 'pulse advantage' has been incorporated into a range of pulse-based, shelf-stable, convenient ingredients and food products served in school meal programs to increase nutrient density. These include pasta, snacks, flour, bread-ing, pizza crust, dips, and others.

Shelf Life For Peas, Lentils, and Chickpeas

Most forms of pulses are shelf-stable and can be stored at room temperature for months or years while maintaining their nutritional value. Because of their long shelf-life, pulses can help alleviate food waste compared to fresh fruits, vegetables, and meats which are prone to spoilage.

Storage Temp:	Best if Used By:
40° F / 4°C	24 months
70° F / 21°C	12 months
90° F / 32°C	9 months