

PEAR FRUIT AND CHEMICAL COMPOSITION

I.R. ASQAROV

Inventor and rationalist, doctor of chemical sciences, professor who served Uzbekistan

O.Q. Qayumjonov

Master's student of Andijan State University

Abstract: The article provides information on the chemical composition of the pear, which contains a number of useful substances and how much it contains.

Keywords: Pear, chemical composition of pear.

Pear fruit contains many beneficial substances that promote health. Pear fruit contains proteins, carbohydrates (glucose, fructose, sucrose, pectin, starch, clechatka, hemicellulose), arbutin, tannins, and essential oils. It contains 0.4% protein, up to 9% sugar, 2.9% polysaccharides, 0.5% organic acids, up to 0.16% additives and dyes, up to 0.25% arbutin, 0.03-0.07% contains up to chlorogenic acid. In addition, a number of important vitamins (A, B₁, B₂, B₆, B₉, E, C, P), carotene, sodium, potassium, calcium, magnesium, silicon, phosphorus, sulfur, chlorine, cobalt, vanadium from trace elements, contains iron, iodine, nickel, rubidium, zinc and other various elements, aromatic substances, enzymes, phytoncides.

Unprocessed pears (nutritional amount per 100g)			
Water: 83.71 g	Inorganic substances: 0.33 g	Dietary fiber: 3.1 g	Energy value: 58 kcal
Monosaccharides: 9.80	Carbohydrates: 15.46 g	Oxyls: 0.38 mg	Fats: 0.12 g
Micronutrients			
Potassium: 119 mg	Phosphorus: 11 mg	Calcium: 9 mg	Magnesium: 7 mg
Sodium: 1 mg	Iron: 170 mg	Copper: 82 mg	Zinc: 100 mg
Vitamins			
Vitamin C: 4.2 mg	Vitamin V1: 12 mg	Vitamin B2: 25 mg	Vitamin V3: 157 mg
Vitamin V5: 48 mg	Vitamin V6: 28 mg	Vitamin V9: 0 mg	Vitamin V12: 0 mg
Vitamin A: 23 mg	Retinol: 0 mg	Vitamin E: 0.12 mg	Vitamin K: 4.5 mg
Fatty acids			
Saturated: 6 mg	Mono-unsaturated: 26 mg	Semi-saturated: 29 mg	Cholesterol: 0 mg

The nutritional value is based on the US Department of Agriculture's measurement of 100 grams of pears, according to information published on the pages of the "Nutrition And You" resource:

- energy value — 58 kilocalories (3 percent);
- carbohydrates — 13.81 grams (11 percent);
- protein — 0.38 grams (1 percent);
- fat — 0.12 grams (0.5 percent);

- fiber in food (food fiber) — 3.10 grams (8 percent).

Vitamins:

- folic acid (vitamin B₉) — 7 micrograms (2 percent);
- nicotine acid (vitamin B₃) — 0.157 milligrams (1 percent);
- pantothenic acid — 0.048 milligrams (1 percent);
- pyridoxine (vitamin B₆) — 0.028 milligrams (2 percent);
- riboflavin (vitamin B₂) — 0.025 milligrams (2 percent);
- thiamine (vitamin B₁) — 0.012 milligrams (1 percent);
- vitamin A — 23 international unit (ME, IU) — 1 percent;
- vitamin C — 4.2 milligrams (7 percent);
- vitamin E — 0.12 milligrams (1 percent);
- vitamin K — 4.5 micrograms (4 percent).

Electrolytes:

- sodium — 1 milligram (0 percent);
- potassium — 119 milligrams (2.5 percent).

Minerals:

- calcium — 9 milligrams (1 percent);
- copper — 0.082 milligrams (9 percent);
- iron — 0.17 milligrams (2 percent);
- magnesium — 7 milligrams (2 percent);
- phosphorus — 11 milligrams (2 percent);
- zinc — 0.10 milligrams (1 percent).

Phytonutrients:

- beta-carotene (β-carotene) — 12 micrograms;
- beta-cryptoxanthin (β-cryptoxanthin) — 2 micrograms;
- lutein-zeaxanthin — 45 micrograms.

Pear fruit contains 15.46 g carbohydrates, 83.71 g water 0.38 g proteins in 100 g, 58 kcal energy value.

Nourishing	amount	The norm	% of 100g norm	% of norm in 100kcal	100% normal
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Calorie value	57 kCal	1684 kCal	3.4%	6%	2954 g
Proteins	0.36 g	76 g	0.5%	0.9%	21111 g
Fat	0.14 g	56 g	0.3%	0.5%	40000 g
Carbohydrates	12.13 g	219 g	5.5%	9.6%	1805 g
Dietary fiber	3.1 g	20 g	15.5%	27.2%	645 g
Water	83.96 g	2273 g	3.7%	6.5%	2707 g
Karakuya	0.32 g	~			
Vitamins					
Vitamin A	1 mg	900 mg	0.1%	0.2%	90000 g
Alpha carotene	1 mg	~			
Beta-carotene	0.014 mg	5 mg	0.3%	0.5%	35714 g
Beta cryptoxanthin	2 mg	~			
Lutein + Zeaxanthin	44 mg	~			
Vitamin V ₁ , thiamin	0.012 mg	1.5 mg	0.8%	1.4%	12500 g
Vitamin B ₂ , riboflavin	0.026 mg	1.8 mg	1.4%	2.5%	6923 g
Vitamin B ₄ , choline	5.1 mg	500 mg	1%	1.8%	9804 g
Vitamin B ₅ , pantothenic	0.049 mg	5 mg	1%	1.8%	10204 g
Vitamin B ₆ , pyridoxine	0.029 mg	2 mg	1.5%	2.6%	6897 g
Vitamin B ₉ , folate	7 mg	400 mg	1.8%	3.2%	5714 g
Vitamin C, ascorbyn	4.3 mg	90 mg	4.8%	8.4%	2093 g
Vitamin E, alpha tocopherol	0.12 mg	15 mg	0.8%	1.4%	12500 g
gamma tocopherol	0.03 mg	~			
Vitamin K, phylloquinone	4.4 mg	120 mg	3.7%	6.5%	2727 g
Vitamin PP	0.161 mg	20 mg	0.8%	1.4%	12422 g
Betaine	0.2 mg	~			
Macroelements					
Potassium, K	116 mg	2500 mg	4.6%	8.1%	2155 g
Calcium, Ca	9 mg	1000 mg	0.9%	1.6%	11111 g
Magnesium, Mg	7 mg	400 mg	1.8%	3.2%	5714 g
Sodium, Na	1 mg	1300 mg	0.1%	0.2%	130000 g
Sulfur, S	3.6 mg	1000 mg	0.4%	0.7%	27778 g
Phosphorus, P	12 mg	800 mg	1.5%	2.6%	6667 g
Iron, Fe	0.18 mg	18 mg	1%	1.8%	10000 g
Manganese, Mn	0.048 mg	2 mg	2.4%	4.2%	4167 g
Copper, Cu	82 mg	1000 mg	8.2%	14.4%	1220 g
Selenium, Se	0.1 mg	55 mg	0.2%	0.4%	55000 g
Fluoride, F	2.2 mg	4000 mg	0.1%	0.2%	181818 g
Zinc, Zn	0.1 mg	12 mg	0.8%	1.4%	12000 g
Monosaccharides (sugar)	9.75 g	maximum 100 g			
Glucose (dextrose)	2.6 g	~			
Sucrose	0.71 g	~			

Fructose	6.42 g	~			
Essential amino acids					
Arginine	0.01 g	~			
Valin	0.017 g	~			
Histidine	0.002 g	~			
Isolocin	0.011 g	~			
Leucine	0.019 g	~			
Lysine	0.017 g	~			
Methionine	0.002 g	~			
Tryptophan	0.002 g	~			
Phenylalanine	0.011 g	~			
Alanine	0.014 g	~			
Aspartic acid	0.105 g	~			
Glycine	0.013 g	~			
Glutamic acid	0.03 g	~			
Proline	0.021 g	~			
Cool	0.015 g	~			
Tyrosine	0.002 g	~			
System	0.002 g	~			
Sterols					
Phytosterols	8 mg	~			
Saturated fatty acids	0.022 g	maximum 18.7 g			
Palmitic	0.017 g	~			
Stearin	0.003 g	~			
Monounsaturated fatty acids	0.084 g		0.5%	0.9%	
Palmitoleic	0.002 g	~			
Olein (omega-9)	0.081 g	~			
Gadoleic (omega-9)	0.001 g	~			
Polyunsaturated fatty acids	0.094 g		0.8%	1.4%	
Linoleic	0.093 g	~			
Linolenic	0.001 g	~			
Omega-3 fatty acids	0.001 g		0.1%	0.2%	
Omega-6 fatty acids	0.093 g		2%	3.5%	

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