

Overview of nutritional value of faba beans.

Grams per 100 grams of product¹

Product	Faba bean		Egg	
Energy	1427 KJ	341 kcal	598 KJ	143 kcal
Carbohydrates	58.00		0.72	
Sugars	5.70		0.37	
Dietary fibers	25.00		0.00	
Protein	26.00		12.56	
Alanine	1.07		0.74	
Arginine	2.41		0.82	
Aspartic acid	2.92		1.33	
Glutamic acid	4.44		1.67	
Cysteine	0.33		0.27	
Glycine	1.10		0.43	
Histidine*	0.66		0.31	
Isoleucine*	1.05		0.67	
Valine*	1.16		0.86	
Leucine*	1.96		1.09	
Lysine*	1.67		0.91	
Methionine*	0.21		0.38	
Phenylalanine*	1.10		0.68	
Proline	1.10		0.51	
Serine	1.20		0.97	
Threonine*	0.93		0.56	
Tryptophan	0.25		0.17	
Tyrosine	0.83		0.50	
Fat	1.53		9.51	
Saturated	0.25		3.13	
Monounsaturated	0.30		3.66	
Polyunsaturated	0.63		1.91	
Cholesterol	0.00		0.37	
Phytosterols	0.12		0.00	
Water	10.98		76.15	
Ash	3.08		1.06	

* = These are the essential amino acids

Milligrams per gram of product protein

Amino acid	Millar et al. ²	Khalil & Mansour ³	Kaldy & Kasting ⁴	Bhatty & Christison ⁵
Histidine	32	32	27	26
Isoleucine	36	33	43	34
Leucine	71	72	83	71
Lysine	55	73	66	65
Methionine + (cysteine)	9 (+11)	11 (+10)	8 (+ 17)	6
Phenylalanine	43	42	44	41
Threonine	34	41	33	35
Tryptophan	-	11	10	-
Valine	39	37	39	40

Sources used:

1. Mayer Labba, I.C., Frokiaer, H., Sandberg, A.S., (2021). Nutritional and antinutritional composition of fava bean cultivars, *Food Research International (Ottawa) 140*, 110038.
2. Millar, K.A., Gallagher, E., Burke, R., McCarthy, S., Barry-Ryana, C., (2019). Proximate composition and anti-nutritional factors of fava-bean, green-pea and yellow-pea flour, *Journal of Food Composition and Analysis 82*, 103233.
3. Khalil, A.H. & Mansour, E.H., (1995). The effect of cooking, autoclaving and germination on the nutritional quality of faba beans, *Food Chemistry 54*, 177-182.
4. Kaldy, M.S., & Kasting, R., (1974). Amino acid composition and protein quality of eight faba bean cultivars, *Canadian Journal of plant Science 54*, 869-871.
5. Bhatty, R.S., & Christison, G.I., (1984). Composition and nutritional quality of pea, faba beans and lentil meals, protein concentrates and isolates, *Plant Foods for Human Nutrition 34*, 41-51.