

## Quinoa: nutritional value

(per 100g dry weight)

Description	Quinoa	%DV	Maize	Rice	Wheat
<b>Macro-nutrient contents</b>					
Energy (Kcal/100g)	399,0		408,0	372,0	392,0
Protein (g/100g)	16,5		10,2	7,6	14,3
Fat (g/100g)	6,3		4,7	2,2	2,3
Mono-unsaturated fat	1,6		1,3	0,2	0,2
Carbohydrates	69,0		81,1	80,4	78,4
Dietary fibre	7,0		7,3	2,8	12,2
<b>Vitamins</b>					
B-1 (thiamine) (mg)	0,4	31%	0,4	0,2	0,4
B-2 (riboflavine) (mg)	0,3	27%	0,2	0,1	0,1
B-3 (niacine) (mg)	1,5	10%	3,6	2,2	4,4
B-6 (mg)	0,5	38%	0,6	0,1	0,4
B-9 (folate) (µg)	184,0	46%	0,0	7,0	38,0
A (IU)	14,0		0,0	0,0	9,0
E (mg)	2,4	16%	0,0	0,0	1,0
<b>Minerals (mg/100g)</b>					
Calcium	47,0	5%	7,0	11,0	29,0
Iron	4,6	35%	2,7	1,6	3,2
Magnesium	197,0	55%	127,0	23,0	126,0
Manganese	2,0	95%	0,5	1,1	4,0
Phosphorus	457,0	65%	210,0	71,0	288,0
Potassium	563,0	12%	287,0	77,0	363,0
Sodium	5,0	0%	35,0	7,0	2,0
Zinc	3,1	33%	2,2	1,2	2,7
<b>Essential amino acids (g/100g protein)</b>					
Histidine	3,2		2,6	-	2,0
Isoleucine	4,4		4,0	-	4,2
Leucine	6,6		12,5	-	6,8
Lysine	6,1		2,9	-	2,6
Methionine + Cysteine	4,8		4,0	-	3,7
Phenylalanine + Tyroine	7,3		8,6	-	8,2
Threonine	3,8		3,8	-	2,8
Tryptophan	1,1		0,7	-	1,2
Valine	4,5		5,0	-	4,4

Quinoa is a rich source of protein, several vitamins (e.g. B2, B9 and E) and the dietary minerals magnesium, phosphorus and iron.

Quinoa is gluten-free.

All essential amino acids are present, in an almost perfect balance.

## Quinoa: water footprint

Description	Quinoa	Maize	Rice	Wheat
water footprint (l/kg)	500	1.222	2.497	1.227
water efficiency (% proteins x 1.000 l water)	27,8	7,7	2,7	10,3

Sources: FAO, 2013; ILVO, 2017; USDA Nutrient Database