

Table S1. Chemical Composition of SAP and QF materials (% on dry weight basis).

Samples	Moisture	Protein	Fat	Ash	Fiber	Carbohydrates
SAP	5.16 ^b ± 0.17	62.50 ^a ± 1.23	5.92 ^a ± 0.73	12.90 ^a ± 0.04	4.52 ^a ± 0.03	14.16 ^b
QF	8.69 ^a ± 0.23	15.79 ^b ± 0.11	4.09 ^b ± 0.82	2.04 ^b ± 0.05	2.21 ^b ± 0.08	75.87 ^a
LSD at 0.05	1.16	2.35	1.03	3.02	1.13	2.37

SAP = spirulina algae powder; QF = quinoa flour. The values are the mean ± SD of three replicates. The values in the same column followed by different letters are significantly different ($p < 0.05$). * by difference.

Table S2. Minerals content of SAP and QF (mg/100 gm).

Samples	Calcium	Phosphorus	Potassium	Sodium	Iron	Zinc
SAP	161.2 ^a ±	797.34 ^a ± 4.11	167.1 ^b ± 0.31	767 ^b ± 2.36	58.8 ^a ± 0.87	4.8 ^b ± 0.42
QF	85.7 ^b ± 2.01	517.0 ^b ± 1.26	686 ^a ± 1.24	1430.36 ^a ± 2.62	34.0 ^b ± 0.77	6.5 ^a ± 0.31
LSD at 0.05	4.33502	8.74641	5.57132	4.84519	1.76893	0.18712

SAP = spirulina algae powder; QF = quinoa flour. The values are the mean ± SD of three replicates. The values in the same column followed by different letters are significantly different ($p < 0.05$).

Table S3. Amino acids content of SAP and QF.

Amino Acids (g/100g protein)	SAP	QF
Essential amino acids		
Isoleucine	6.02	0.82
Leucine	6.67	2.48
Lysine	1.36	2.35
Methionine	7.18	0.31
Phenylalanine	1.47	1.54
Threonine	3.77	5.71
Valine	5.63	3.7
Histidine	1.34	2.17
Nonessential amino acids		
Tyrosine	8.97	1.20
Arginine	0.75	3.02
Alanine	1.76	2.22
Aspartic	2.99	3.69
Cysteine	1.72	0.13
Glutamic acid	1.49	8.75
Glycine	1.045	3.00
Proline	2.98	1.82
Serine	1.09	1.66

SAP = spirulina algae powder; QF = quinoa flour.

Table S4. Total phenolic content and antioxidant capacity using DPPH and reducing power of SAP and QF.

Samples	TPC (mg/g)	Antioxidant capacity	
		DPPH ($\mu\text{mol/g}$)	Reducing power ($\mu\text{mol/g}$)
SAP	13.65 $\pm$ 0.12 ^a	80.20 $\pm$ 0.09 ^a	64.8 $\pm$ 0.15 ^a
QF	1.40 $\pm$ 0.08 ^b	35.69 $\pm$ 0.07 ^b	32.25 $\pm$ 0.11 ^b

SAP = spirulina algae powder; QF = quinoa flour. The values are the mean $\pm$ SD of three replicates. The values in the same column followed by different letters are significantly different ($p < 0.05$).