

Supplementary info 2: Amino acid (AA) composition of PPI, PPC, LPI and LPC. Amino acid residues (AAR*) (g/100 g (d.m.)) were calculated by multiplying the quantity of AA (expressed in mol/100 g (d.m.)) by their anhydrous molecular weight (g/mol). The nitrogen content was calculated by multiplying the weight of AAR* by the amount of nitrogen per AAR*. Non-protein nitrogen stems from the difference between Dumas results and nitrogen content from the AA composition. The specific nitrogen to protein (N:P) conversion factor was calculated by dividing the total of weight of AAR* by the total nitrogen from the AA composition.

| Amino acids (g / 100g of powder (dry basis)) | PPI | PPC | LPI | LPC |
|---|--------------|--------------|--------------|--------------|
| Alanine | 3.28 | 2.00 | 2.76 | 1.62 |
| Cysteine | 0.76 | 0.59 | 1.14 | 0.47 |
| Aspartic acid | 3.66 | 2.16 | 3.70 | 2.06 |
| Glutamic acid | 8.53 | 5.13 | 11.57 | 6.25 |
| Phenylalanine | 4.41 | 2.45 | 3.71 | 1.98 |
| Glycine | 3.10 | 1.90 | 3.52 | 2.07 |
| Histidine | 1.88 | 1.18 | 2.10 | 1.17 |
| Isoleucine | 3.85 | 2.09 | 4.00 | 2.16 |
| Lysine | 6.00 | 3.63 | 3.91 | 2.34 |
| Leucine | 6.85 | 3.72 | 6.76 | 3.33 |
| Methionine | 0.83 | 0.43 | 0.48 | 0.27 |
| Asparagine | 5.72 | 3.38 | 5.35 | 2.98 |
| Proline | 3.38 | 2.00 | 3.52 | 1.98 |
| Glutamine | 4.60 | 2.77 | 8.44 | 4.56 |
| Arginine | 6.47 | 4.17 | 9.53 | 5.77 |
| Serine | 4.03 | 2.27 | 4.10 | 2.25 |
| Threonine | 2.91 | 1.81 | 2.86 | 1.62 |
| Valine | 4.13 | 2.27 | 3.43 | 1.89 |
| Tryptophan | 0.58 | 0.39 | 0.68 | 0.39 |
| Tyrosine | 3.10 | 1.81 | 3.24 | 2.07 |
| Total (g of AA for 100g of powder (dry basis)) | 78.07 | 46.12 | 84.78 | 47.26 |
| Sum of the weight of AAR* (g / 100g of powder (dry basis)) | 67.34 | 39.79 | 73.29 | 40.86 |
| Nitrogen content from AA composition (g / 100g of powder (dry basis)) | 11.91 | 7.14 | 13.41 | 7.58 |
| Nitrogen content from Dumas (g / 100g of powder (dry basis)) | 12.36 | 7.81 | 13.82 | 8.02 |
| Calculated non-protein nitrogen (g / 100g of powder (dry basis)) | 0.45 | 0.67 | 0.41 | 0.44 |
| Specific N:P factor | 5.66 | 5.57 | 5.46 | 5.39 |

The calculations were made by following the methodology published by the FAO (FAO/WHO, 2019).