

Supplementary material

**Prey amino acid composition affects rates of protein synthesis and N wastage
of a freshwater carnivore**

Georgia K. Dwyer^{A,B,E}, Rick J. Stoffels^{C,D}, Ewen Silvester^B and Gavin N. Rees^C

^ACentre for Regional and Rural Futures, Deakin University, Locked Bag 20000,
Geelong, Vic. 3220, Australia.

^BDepartment of Ecology, Environment and Evolution, La Trobe University, PO Box 821,
Wodonga, Vic. 3690, Australia.

^CCSIRO Land and Water, PO Box 821, Wodonga, Vic. 3690, Australia.

^DNational Institute of Water and Atmospheric Research, PO Box 8602, Riccarton,
Christchurch, 8440, New Zealand.

^ECorresponding author. Email: g.dwyer@deakin.edu.au

Table S1. Ingredients used to produce experimental diets

The vitamin mixture was sourced from Sigma–Aldrich and contained: α -tocopherol (8 g kg⁻¹), asorbic acid (270 g kg⁻¹), biotin (0.020 g kg⁻¹), calcium pantothenate (1 g kg⁻¹), choline chloride (50 g kg⁻¹), folic acid (0.025 g kg⁻¹), inositol (20 g kg⁻¹), niacinamide (1 g kg⁻¹), pyridoxine HCl (0.025 g kg⁻¹), riboflavin (0.50 g kg⁻¹), thiamine HCl (0.025 g kg⁻¹), cyanocobalamin in mannitol (2 g kg⁻¹). The mineral mixture contained: CaCO₄ (336 g kg⁻¹), KH₂PO₄ (502 g kg⁻¹), and MgSO₄•7H₂O (162 g kg⁻¹) (Meyer 1989)

	Fish diet (g)	Shrimp diet (g)
L-Alanine	1.29	1.62
L-Glutamine	3.65	4.39
L-Isoleucine	1.55	1.34
L-Lysine HCl	2.37	2.69
L-Valine	1.69	1.50
L-Leucine	2.58	2.28
L-Aspartic acid	2.46	3.94
L-Proline	0.54	0.68
Glycine	1.61	2.42
L-Serine	1.65	1.34
L-Arginine	2.20	1.78
L-Threonine	1.79	1.39
L-Phenylalanine	2.08	1.78
L-Tyrosine	1.18	1.49
L-Methionine	1.18	0.89
L-Histidine	1.45	1.02
L-Cysteine	2.67	0.12
L-tryptophan	0.64	0.64
Gelatine	6.00	6.00
Chironomids	43.33	43.33
Fish oil	3.75	3.75
Wheat germ oil	3.75	3.75
Vitamin mixture	0.75	0.75
Mineral mixture	0.75	0.75
Water	9.17	9.17

References

- Meyer, E. (1989). The relationship between body length parameters and dry mass in running water invertebrates. *Archiv für Hydrobiologie* **117**(2), 191–203.