

**Supplementary Table 1.** The results (means $\pm$ SD) of the nutritional analysis on the different items fed to octopus. Protein was analysed for using the Kjeldahl method, fats were assessed via the Soxhlet method, energy was analysed using bomb calorimetry and total ash was calculated by furnacing the samples at 500°C. Values (except dry matter) expressed on a dry matter basis.

Food Item	Dry Matter %	Crude Protein % (6.25)	Adjusted crude protein % (5.71 or 5.45)	Fat %	Total Ash %	Gross energy kJ/kg
Clam	38.7 ( $\pm$ 8.1)	69.4 ( $\pm$ 1.1)	60.5 ( $\pm$ 0.9)	3.2 ( $\pm$ 0.2)	20.9 ( $\pm$ 2.9)	17,639
Crabs	35.9 ( $\pm$ 4.1)	45.9 ( $\pm$ 4.4)	40.0 ( $\pm$ 3.8)	6.5 ( $\pm$ 0.3)	32.5 ( $\pm$ 3.82)	14,011
Haddock	28.3 ( $\pm$ 3.2)	72.9 ( $\pm$ 3.4)	66.6 ( $\pm$ 2.9)	2.1 ( $\pm$ 0.2)	14.9 ( $\pm$ 4.2)	16,302
Herring	35.8 ( $\pm$ 1.5)	51.3 ( $\pm$ 5.4)	46.9 ( $\pm$ 4.6)	8.9 ( $\pm$ 2.4)	11.6 ( $\pm$ 3.0)	17,054
Mackerel	21.4 ( $\pm$ 2.8)	51.6 ( $\pm$ 1.7)	47.1 ( $\pm$ 1.5)	38.4 ( $\pm$ 0.8)	9.0 ( $\pm$ 2.8)	28,716
Mussels	22.7 ( $\pm$ 1.0)	60.2 ( $\pm$ 6.1)	56.6 ( $\pm$ 5.2)	9.6 ( $\pm$ 1.2)	13.92 ( $\pm$ 0.7)	21,611
Prawns	12.1 ( $\pm$ 2.6)	68.6 ( $\pm$ 5.5)	64.0 ( $\pm$ 4.7)	3.2 ( $\pm$ 0.3)	27.7 ( $\pm$ 2.2)	20,566
Shrimp	17.1 ( $\pm$ 1.6)	78.2 ( $\pm$ 4.2)	72.8 ( $\pm$ 3.7)	7.1 ( $\pm$ 1.3)	13.5 ( $\pm$ 2.1)	20,649
Sprat	26.3 ( $\pm$ 3.8)	55.9 ( $\pm$ 3.7)	51.1 ( $\pm$ 3.3)	29.6 ( $\pm$ 3.5)	8.1 ( $\pm$ 1.0)	25,582
Squid	22.6 ( $\pm$ 6.1)	69.8 ( $\pm$ 3.2)	60.8 ( $\pm$ 2.7)	7.2 ( $\pm$ 1.2)	11.4 ( $\pm$ 2.1)	21,903
Whiting	26.3 ( $\pm$ 2.7)	74.8 ( $\pm$ 3.1)	65.2 ( $\pm$ 2.7)	4.8 ( $\pm$ 0.9)	7.2 ( $\pm$ 1.6)	14,296