**Supplementary Material 2**: Methodology for mathematical lipid correction applied to the ẟ13C values of fish samples that had C:N ratios higher than 3.0 (Kiljunen et al., 2006), and crustaceans with C:N higher than 4.0 (El-Sabaawi et al., 2009). No lipid correction was carried out in squid samples, as we analysed only the mantle tissue which had low lipid content (C:N = 3.6 ± 0.4). Additionally, due to their low lipid content (Kariotoglou and Mastronicolis, 2001; Lucas, 2009) no lipid correction was applied to jellyfish samples. The equations used to correct the different taxonomic groups are shown in Table 1.

Table 1 Equations applied for mathematical lipid correction of ẟ13C values in the different taxonomic groups

|  |  |  |  |
| --- | --- | --- | --- |
| **Group** | **Equation** | **Reference** | |
| Zooplankton | ẟ13Ccorrected = ẟ13CBulk + (3.388 - (3.388 x 3.314)/C:NBulk) | Logan et al., 2008 1 | |
| Euphausiids | ẟ13Ccorrected = ẟ13CBulk + (6.941 - (6.941 x 3.346)/C:NBulk) | Logan et al., 2008 2 | |
| Copepods | ẟ13Ccorrected = ẟ13CBulk + (-1.85 + (0.38 x C:NBulk)) | El-Sabaawi et al., 2009 | |
| Fish | ẟ13Ccorrected = ẟ13CBulk + *D* x (*I* + (3.90 / (1 + (287/*L*)))) | Kiljunen et al., 2006 3 | |
| Myctophids | ẟ13Ccorrected = ẟ13CBulk + (-6.39 x (3.76 - C:NBulk))/C:Nbulk | Hoffman and Sutton, 2010 | |
| 1Equation 2 from Logan et al. (2008), modified from Fry (2002), with parameters for aquatic invertebrates (different species) | | | |
| 2Equation 2 from Logan et al. (2008), modified from Fry (2002), with parameters for krill (Euphausiidae) | | |  |
| 3Equation from Kiljunen et al. (2006), modified from McConnaughey and McRoy (1979), with parameters for fish tissue: *L* = 93 / (1 + (0.246 x (C:NBulk) – 0.775)-1; *D* = 7.018; *I* = 0.048. | | | |

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