- Supplementary information

Two FAs, 18:1 (n-11) and 22:5 (n-3), were found in much higher levels in the two mammals

than in the prey organism, and this suggests that these FAs are products of endogenous

metabolism and not influenced in high degree by the diet. The 18:1(n-11) is a chain-

shortening product of 22:1(n-11), and 22:5(n-3) is an elongation product of 20:5(n-3). These

two FAs are removed from the CA analysis in Figure 2.



Figure S1. Proportion of the long-chained MUFA, 22:1 (n-11) and its metabolish chain-shortening products, 18:1 (n-11) for three age groups of harps seals (Pg), minke whales (Ba) and the seven prey organisms: Polar cod (Bs), cod (Gm), haddock (Ma), Meganyctiphanes

- 16 norvegica (Mn), capelin (Mv), Thysanoessa sp. (Th) and Themisto libellula (Tl). Species
- 17 codes refer to Table I.
- 18 19



20 21

Figure S2. Proportion of the long-chained PUFA, 20:5 (n-3) and its metabolish elongation product, 22:5 (n-3) for three age groups of harps seals (Pg), minke whales (Ba) and the seven prey organisms: Polar cod (Bs), cod (Gm), haddock (Ma), *Meganyctiphanes norvegica* (Mn), capelin (Mv), *Thysanoessa* sp. (Th) and *Themisto libellula* (Tl). Species codes refer to Table I.

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