# Supplementary information



Supplementary Figure 1. Correlation between iodine concentration (given as log10I) and fish length (cm) for the different fish species.



Supplementary Figure 2. Correlation between iodine concentration (given as log10I) and fish condition (K-factor = 100 x weight/length3) for the different fish species.

Supplementary Table 1. Iodine content (µg/100 g ww) of fillet, fish length (l), fish weight (w) and fish condition given as K-factor (100 x w/l3) for the different fish species categorized by sea area and month of capture.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | I  (µg/100 g) | Length  (cm) | Weight  (g) | K-factor  (100 x w/l3) |
| Species | Area | Month | N | Mean ± sd | Mean ± sd | Mean ± sd | Mean ± sd |
|  |  |  |  | Min - max | Min - max | Min - max | Min - max |
| Atlantic cod | Barents Sea | Jan | 22 | 272 ± 152 | 61.9 ± 6.9 | 2185 ± 756 | 0.883 ± 0.078 |
|  |  |  |  | 88 - 715 | 51 – 71 | 1075 - 3431 | 0.77 - 1.1 |
|  | Barents Sea | Feb | 22 | 222 ± 141 | 57.0 ± 2.7 | 1599 ± 249 | 0.862 ± 0.075 |
|  |  |  |  | 47 - 541 | 51 – 62 | 1146 - 2184 | 0.73 - 1.0 |
|  | Barents Sea | Mar | 11 | 255 ± 134 | 55.6 ± 3.6 | 1520 ± 254 | 0.878 ± 0.054 |
|  |  |  |  | 92 - 593 | 51 – 60 | 1150 - 1855 | 0.78 - 0.98 |
|  | Norw. Sea | Oct | 11 | 396 ± 188 | 69.5 ± 4.5 | 3292 ± 578 | 0.980 ± 0.119 |
|  |  |  |  | 103 - 705 | 62 – 76 | 2141 - 4275 | 0.83 - 1.2 |
|  | North Sea | Aug | 11 | 175 ± 171 | 62.0 ± 5.1 | 2977 ± 780 | 1.24 ± 0.20 |
|  |  |  |  | 77 - 684 | 51 – 72 | 1874 - 4270 | 0.89 - 1.5 |
|  | North Sea | Sep | 44 | 75.8 ± 60.0 | 69.9 ± 4.0 | 3747 ± 496 | 1.10 ± 0.12 |
|  |  |  |  | 22 - 261 | 62 – 77 | 2862 - 4834 | 0.89 - 1.4 |
| Haddock | Barents Sea | Jan | 12 | 224 ± 132 | 51.8 ± 5.6 | 1588 ± 509 | 1.10 ± 0.13 |
|  |  |  |  | 62 - 465 | 40.5 - 57.5 | 674 - 2154 | 0.89 - 1.3 |
|  | Barents Sea | Feb | 20 | 177 ± 195 | 46.8 ± 4.6 | 1038 ± 311 | 0.98 ± 0.08 |
|  |  |  |  | 35 - 825 | 41.5 - 52.5 | 676 - 1405 | 0.82 - 1.2 |
|  | Barents Sea | Mar | 11 | 152 ± 108 | 42.4 ± 2.0 | 800 ± 148 | 1.04 ± 0.11 |
|  |  |  |  | 41 - 382 | 40.5 - 46.5 | 623 - 1152 | 0.85 - 1.2 |
|  | Norw. Sea | Feb | 11 | 390 ± 252 | 56.0 ± 1.6 | 2400 ± 222 | 1.37 ± 0.13 |
|  |  |  |  | 151 - 866 | 54.5 - 58.5 | 2135 - 2831 | 1.1 - 1.6 |
|  | Norw. Sea | May | 11 | 1260 ± 644 | 56.6 ± 1.0 | 1733 ± 131 | 0.96 ± 0.10 |
|  |  |  |  | 361 - 2186 | 55.5 - 58.0 | 1450 - 1897 | 0.78 - 1.1 |
| Pollock | Norw. Sea | Apr | 6 | 259 ± 108 | 56.7 ± 5.0 | 3744 ± 731 | 2.09 ± 0.45 |
|  |  |  |  | 100 - 416 | 50 – 65 | 2717 - 4885 | 1.2 - 2.4 |
|  | Norw. Sea | Aug | 11 | 708 ± 455 | 55.9 ± 1.5 | 1585 ± 545 | 0.901 ± 0.299 |
|  |  |  |  | 270 - 1965 | 53.5 - 58.0 | 55 - 2088 | 0.03 - 1.2 |
|  | North Sea, w of | Jun | 6 | 208 ± 156 | 66.7 ± 5.1 | 2722 ± 675 | 0.902 ± 0.061 |
|  | Shetland |  |  | 48 - 500 | 60 – 74 | 1736 - 3656 | 0.80 - 0.97 |
|  | Fjord in sw Norway | Apr | 2 | 2349 ± 850 | 53.5 ± 0.7 | 1186 ± 61 | 0.774 ± 0.009 |
|  |  |  |  | 1748 - 2950 | 53 - 54 | 1143 - 1229 | 0.77 - 0.78 |
|  | Fjord in sw Norway | Oct | 5 | 1806 ± 713 | 57.2 ± 2.3 | 1260 ± 77 | 0.678 ± 0.086 |
|  |  |  |  | 1355 - 3015 | 54 – 60 | 1183 - 1381 | 0.59 - 0.79 |
|  | Fjord in sw Norway | Nov | 11 | 738 ± 194 | 60.3 ± 2.7 | 1995 ± 225 | 0.914 ± 0.103 |
|  |  |  |  | 497 - 1082 | 57.0 - 63.0 | 1704 - 2404 | 0.74 - 1.1 |
| Saithe | Barents Sea | Jun | 10 | 256 ± 108 | 56.6 ± 1.3 | 1996 ± 197 | 1.10 ± 0.06 |
|  |  |  |  | 92 - 389 | 54 - 58.5 | 1660 - 2371 | 1.0 - 1.2 |
|  | Barents Sea | Jul | 10 | 561 ± 136 | 40.3 ± 1.3 | 738 ± 61 | 1.13 ± 0.07 |
|  |  |  |  | 326 - 824 | 38 – 42 | 625 - 826 | 0.98 - 1.2 |
|  | Norw. Sea | Mar | 10 | 291 ± 164 | 62.4 ± 4.6 | 2444 ± 580 | 0.990 ± 0.078 |
|  |  |  |  | 93 - 617 | 57 - 68 | 1586 - 3292 | 0.86 - 1.1 |
|  | Norw. Sea | Apr | 10 | 136 ± 80 | 70.7 ± 2.1 | 3627 ± 335 | 1.03 ± 0.10 |
|  |  |  |  | 35 - 283 | 68 – 74 | 3141 - 4305 | 0.89 - 1.2 |
|  | North Sea/ Skagerrak | Mar | 11 | 85.7 ± 26 | 44.3 ± 1.3 | 780 ± 119 | 0.894 ± 0.084 |
|  |  |  |  | 46 - 133 | 42 – 46 | 574 - 909 | 0.72 - 1.0 |
|  | North Sea/ Skagerrak | May | 10 | 365 ± 120 | 42.6 ± 0.5 | 815 ± 62 | 1.05 ± 0.07 |
|  |  |  |  | 218 - 558 | 42 – 43 | 703 - 893 | 0.95 - 1.15 |
| Atlantic halibut | Barents Sea | Sep | 2 | 13.8 ± 1.3 | 119 ± 2 | 21750 ± 3606 | 1.30 ± 0.15 |
|  |  |  |  | 13 - 15 | 117 – 120 | 19200 - 24300 | 1.2 - 1.4 |
|  | Barents Sea | Oct | 8 | 25.6 ± 13.6 | 123 ± 18 | 24434± 9990 | 1.26 ± 0.09 |
|  |  |  |  | 13 - 45 | 94 – 141 | 11100 - 39400 | 1.2 - 1.4 |
|  | Norw. Sea | Aug | 5 | 14.0 ± 4.7 | 109 ± 11 | 16837 ± 5465 | 1.26 ± 0.05 |
|  |  |  |  | 010 - 22 | 98 – 125 | 11180 - 24860 | 1.2 - 1.3 |
|  | Norw. Sea | Sep | 1 | 37 | 100 | 11300 | 1.1 |
|  | Norw. Sea | Oct | 4 | 18.0 ± 7.3 | 111 ± 14 | 19823 ± 10953 | 1.35 ± 0.22 |
|  |  |  |  | 12 - 29 | 99 – 131 | 12460 - 36030 | 1.1 - 1.6 |
|  | Farmed | Farmed | 8 | 7.8 ± 2.3 |  |  |  |
|  |  |  |  | 4.4 - 11 |  |  |  |