

1 **Supplementary Material**

2 Fatty acid concentrations in plasma (mg/100g of total fatty acids) for the 3 geographical
3 groups*

| | Northwest | | Northeast | | Southwest | |
|------------------------------|--------------------|------|--------------------|------|---------------------|------|
| | Mean | SD | Mean | SD | Mean | SD |
| 14 : 0 | 2698 ^{bc} | 1211 | 1962 ^a | 683 | 1606 ^a | 584 |
| 16 : 0 | 26460 | 3755 | 27409 | 2466 | 26666 | 2906 |
| 16 : 1[†] | 2010 ^c | 1596 | 1815 ^c | 805 | 1254 ^{ab} | 784 |
| 18 : 0 | 1679 ^{bc} | 532 | 3003 ^a | 469 | 3007 ^a | 844 |
| 18 : 1 | 25001 ^c | 4005 | 25825 ^c | 4083 | 27777 ^{ab} | 4619 |
| 18 : 2n-6 | 28961 | 5819 | 29119 | 5562 | 27490 | 6367 |
| 18 : 3n-6[†] | 31 ^{bc} | 21 | 21 ^{ac} | 19 | 56 ^{ab} | 67 |
| 18 : 4n-3[†] | 65 ^{bc} | 70 | 14 ^{ac} | 12 | 20 ^{ab} | 28 |
| 20 : 1[†] | 390 ^{bc} | 440 | 165 ^{ac} | 98 | 217 ^{ab} | 125 |
| 20 : 3n-6 | 303 ^{bc} | 129 | 573 ^{ac} | 188 | 718 ^{ab} | 339 |
| 20 : 4n-6 | 8318 ^b | 2026 | 5777 ^{bc} | 1392 | 7185 ^b | 1761 |
| 20 : 4n-3[†] | 123 ^{bc} | 119 | 21 ^a | 24 | 19 ^a | 21 |
| 20 : 5n-3[†] | 865 ^{bc} | 676 | 1547 ^{ac} | 1105 | 490 ^{ab} | 464 |
| 22 : 4n-6[†] | 415 ^{bc} | 255 | 78 ^a | 36 | 96 ^a | 45 |
| 22 : 5n-3 | 881 ^{bc} | 577 | 356 ^a | 181 | 498 ^a | 205 |
| 22 : 6n-3 | 1799 ^{bc} | 973 | 2313 ^a | 889 | 2271 ^a | 987 |

4 * Differences between groups were assessed using ANOVA controlling for gender with
5 Scheffe post hoc tests on the variable showing significance

6 [†]Statistics performed on logged data where data were not normally distributed

7 ^{abc} Mean values within a row were significantly different (P = 0.015): ^asignificantly different
8 from NW, ^bsignificantly different from NE and ^csignificantly different from SW

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