**SUPPLEMENTAL TABLE 2**

Group sizes (n) and age and BMI means for the analysis of EPA, DPA and DHA absolute (%) concentrations in the four lipid fractions

|  |  |  |  |
| --- | --- | --- | --- |
|  | All | Male | Female |
|  | PC | NEFAs | CEs | TGs | PC | NEFAs | CEs | TGs | PC | NEFAs | CEs | TGs |
|   | (n, 306) | (n, 303) | (n, 301) | (n, 305) | (n, 148) | (n, 146) | (n, 145) | (n, 147) | (n, 158) | (n, 157)  | (n, 156)  | (n, 158) |
| Oily fish intake |  |  |  |  |  |  |  |  |  |  |  |  |
| 0/wk | 64 | 63 | 62 | 64 | 33 | 32 | 32 | 33 | 31 | 31 | 30 | 31 |
| 0.1-0.99/wk | 141 | 139 | 140 | 140 | 70 | 68 | 68 | 69 | 71 | 71 | 72 | 71 |
| 1-1.99/wk | 63 | 63 | 62 | 63 | 28 | 28 | 28 | 28 | 35 | 35 | 34 | 35 |
| 2+/wk | 38 | 38 | 37 | 38 | 17 | 18 | 17 | 17 | 21 | 20 | 20 | 21 |
| mean / wk | 1.02 | 1.02 | 1.03 | 1.03 | 0.94 | 0.93 | 0.96 | 0.93 | 1.10 | 1.10 | 1.10 | 1.10 |
| + | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Age group |  |  |  |  |  |  |  |  |  |  |  |  |
| 20-29y | 45 | 44 | 42 | 44 | 18 | 17 | 15 | 17 | 27 | 27 | 27 | 27 |
| 30-39y | 65 | 64 | 65 | 65 | 35 | 34 | 35 | 35 | 30 | 30 | 30 | 30 |
| 40-49y | 68 | 68 | 68 | 68 | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 34 |
| 50-59y | 80 | 79 | 78 | 80 | 39 | 36 | 39 | 39 | 41 | 40 | 39 | 41 |
| 60+y | 48 | 48 | 48 | 48 | 22 | 22 | 22 | 22 | 26 | 26 | 26 | 26 |
| mean age (y) | 45.10 | 45.10 | 45.20 | 45.10 | 45.00 | 45.10 | 45.30 | 45.10 | 45.20 | 45.20 | 45.10 | 45.20 |
| + | 0.70 | 0.70 | 0.70 | 0.70 | 1.10 | 1.00 | 1.00 | 1.00 | 1.00 | 1.10 | 1.10 | 1.10 |
| BMI group (n)1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Normal weight | 146 | 145 | 144 | 145 | 44 | 43 | 43 | 43 | 102 | 102 | 101 | 102 |
| Overweight | 131 | 130 | 129 | 131 | 86 | 85 | 84 | 86 | 45 | 45 | 45 | 45 |
| Obese | 29 | 28 | 28 | 29 | 18 | 18 | 18 | 18 | 11 | 10 | 10 | 11 |
| mean BMI (kg/m2) | 25.20 | 25.20 | 25.20 | 25.20 | 26.20 | 26.20 | 26.20 | 26.20 | 24.30 | 24.20 | 24.20 | 24.30 |
| + | 0.20 | 0.20 | 0.20 | 0.20 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 |
| *APOE* genotype (n)2 |  |  |  |  |  |  |  |  |  |  |  |  |
| *E2* | 85 | 84 | 83 | 84 | 37 | 36 | 36 | 36 | 48 | 48 | 48 | 48 |
| *E3* | 107 | 105 | 104 | 107 | 55 | 54 | 54 | 55 | 52 | 51 | 50 | 52 |
| *E4* | 114 | 114 | 114 | 114 | 56 | 56 | 55 | 56 | 58 | 58 | 58 | 58 |

PC, Phosphatidylcholine; NEFAs, non-esterified fatty acids; CEs, cholesteryl esters; TGs, triacyglycerol; E2, E2/E2 + E2/E3; E3, E3/E3; E4, E3/E4 + E4/E4.

There was no significant difference between the age of male and female participants, however, males had a significantly higher average BMI than females (*P* <0.001 in all lipid fraction cohorts; obtained using a Mann- Whitney U test in SPSS statistics version 21 software (SPSS Inc.).

1 Normal weight, 18-25kg/m2; Overweight, 25.1-30.0kg/m2; Obese, 30.1-46.0kg/m2.

2 PC: E2/E2 n = 5, E2/E3 n = 80, E3/E3 n = 107, E3/E4 n = 102, and E4/E4 n = 12. NEFA: E2/E2 n = 5, E2/E3 n = 79, E3/E3 n = 105, E3/E4 n = 102, and E4/E4 n = 12. CE: E2/E2 n = 5, E2/E3 n = 78, E3/E3 n = 105, E3/E4 n = 102, E4/E4 n = 12. TG: E2/E2 n = 5, E2/E3 n = 79, E3/E3 n = 107, E3/E4 n = 102, and E4/E4 n = 12.