**Supplementary Materials**

Effects of supplementation of diet with *Olea europaea* L. polyphenols on the animal welfare and milk quality in Italian Holstein-Friesian dairy cows

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| **Table S1.** Summary results Two-way Anova (Tukey test) of milk fatty acids | | | | | |
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| **Summary results Two-way ANOVA** | | | | | |
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| **Tukey's multiple comparisons test** | | | | | |  |
| **C 14:0** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | ns | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | ns | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | \*\*\* | T1 vs. T2 | ns |  |
| T1 vs. T3 | ns | T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* |  |
| T1 vs. T4 | ns | T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | \* | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | ns | T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* |  |
| T2 vs. T4 | ns | T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | ns | T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | ns | T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\*\* |  |
| T3 vs. T5 | ns | T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | ns | T4 vs. T5 | \*\* | T4 vs. T5 | \*\*\* |  |
|  |  |  |  |  |  |  |
| **C 16:0** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | ns | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | \*\*\* | T1 vs. T2 | ns |  |
| T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* |  |
| T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* |  |
| T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | \*\*\* | T3 vs. T4 | ns | T3 vs. T4 | \*\*\* |  |
| T3 vs. T5 | \*\*\* | T3 vs. T5 | \* | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | \* | T4 vs. T5 | ns | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **C 16:1 n7t** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | \*\*\* | T0 vs. T1 | ns | T0 vs. T1 | ns |  |
| T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\* | T0 vs. T2 | ns |  |
| T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | \*\*\* | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* |  |
| T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\* |  |
| T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | \*\* | T3 vs. T4 | \*\*\* | T3 vs. T4 | ns |  |
| T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | \*\*\* | T4 vs. T5 | ns | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **C 16:1 n7** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | \* | T0 vs. T1 | ns |  |
| T0 vs. T2 | \* | T0 vs. T2 | \*\*\* | T0 vs. T2 | ns |  |
| T0 vs. T3 | \*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | \*\*\* | T1 vs. T2 | ns |  |
| T1 vs. T3 | ns | T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* |  |
| T1 vs. T4 | ns | T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | \* | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | ns | T2 vs. T3 | \*\*\* | T2 vs. T3 | \* |  |
| T2 vs. T4 | ns | T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | ns | T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | ns | T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\* |  |
| T3 vs. T5 | ns | T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | ns | T4 vs. T5 | \*\*\* | T4 vs. T5 | \*\* |  |
|  |  |  |  |  |  |  |
| **C 18:0** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | \*\*\* | T1 vs. T2 | \*\* |  |
| T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* |  |
| T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* |  |
| T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\*\* |  |
| T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | \*\*\* | T4 vs. T5 | \*\*\* | T4 vs. T5 | \*\*\* |  |
|  |  |  |  |  |  |  |
| **C 18:1 n9** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | ns | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | \*\*\* | T1 vs. T2 | \*\* |  |
| T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* |  |
| T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* |  |
| T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | \*\* | T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\*\* |  |
| T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | ns | T4 vs. T5 | ns | T4 vs. T5 | \*\*\* |  |
|  |  |  |  |  |  |  |
| **C 18:2 n6** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | ns | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | \*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | ns | T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* |  |
| T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | ns | T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* |  |
| T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\* |  |
| T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | ns | T4 vs. T5 | \*\*\* | T4 vs. T5 | \*\*\* |  |
|  |  |  |  |  |  |  |
| **C 18:3 n6** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | ns | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | ns | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | ns | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | ns | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | ns | T1 vs. T3 | ns | T1 vs. T3 | ns |  |
| T1 vs. T4 | ns | T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | ns | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | ns | T2 vs. T3 | ns | T2 vs. T3 | ns |  |
| T2 vs. T4 | ns | T2 vs. T4 | \*\* | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | ns | T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | ns | T3 vs. T4 | \* | T3 vs. T4 | \*\*\* |  |
| T3 vs. T5 | ns | T3 vs. T5 | \*\* | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | ns | T4 vs. T5 | ns | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **C 20:1 n9** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | ns | T0 vs. T1 | ns |  |
| T0 vs. T2 | ns | T0 vs. T2 | ns | T0 vs. T2 | ns |  |
| T0 vs. T3 | \*\*\* | T0 vs. T3 | ns | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | ns | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | ns | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | \*\*\* | T1 vs. T3 | ns | T1 vs. T3 | \*\*\* |  |
| T1 vs. T4 | \*\*\* | T1 vs. T4 | ns | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | \*\*\* | T1 vs. T5 | ns | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | \*\*\* | T2 vs. T3 | ns | T2 vs. T3 | \*\*\* |  |
| T2 vs. T4 | \*\*\* | T2 vs. T4 | ns | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | \*\*\* | T2 vs. T5 | ns | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | ns | T3 vs. T4 | ns | T3 vs. T4 | ns |  |
| T3 vs. T5 | \*\*\* | T3 vs. T5 | ns | T3 vs. T5 | \*\* |  |
| T4 vs. T5 | ns | T4 vs. T5 | ns | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **C 18:3 n3** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | ns | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | ns | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | ns | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | ns | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | ns | T1 vs. T3 | ns | T1 vs. T3 | ns |  |
| T1 vs. T4 | ns | T1 vs. T4 | ns | T1 vs. T4 | ns |  |
| T1 vs. T5 | ns | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\* |  |
| T2 vs. T3 | ns | T2 vs. T3 | ns | T2 vs. T3 | ns |  |
| T2 vs. T4 | ns | T2 vs. T4 | ns | T2 vs. T4 | ns |  |
| T2 vs. T5 | ns | T2 vs. T5 | \*\*\* | T2 vs. T5 | \* |  |
| T3 vs. T4 | ns | T3 vs. T4 | ns | T3 vs. T4 | ns |  |
| T3 vs. T5 | ns | T3 vs. T5 | \*\*\* | T3 vs. T5 | \* |  |
| T4 vs. T5 | ns | T4 vs. T5 | \* | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **C 20:2 n6** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | \*\* | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | \*\* | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | ns | T1 vs. T3 | ns | T1 vs. T3 | ns |  |
| T1 vs. T4 | ns | T1 vs. T4 | ns | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | ns | T1 vs. T5 | ns | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | ns | T2 vs. T3 | ns | T2 vs. T3 | ns |  |
| T2 vs. T4 | ns | T2 vs. T4 | ns | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | ns | T2 vs. T5 | ns | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | ns | T3 vs. T4 | ns | T3 vs. T4 | \*\* |  |
| T3 vs. T5 | ns | T3 vs. T5 | ns | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | ns | T4 vs. T5 | ns | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **C 20:3 n6** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | \* | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | \*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | ns | T1 vs. T3 | ns | T1 vs. T3 | ns |  |
| T1 vs. T4 | \* | T1 vs. T4 | ns | T1 vs. T4 | \* |  |
| T1 vs. T5 | \*\* | T1 vs. T5 | ns | T1 vs. T5 | \*\* |  |
| T2 vs. T3 | ns | T2 vs. T3 | ns | T2 vs. T3 | ns |  |
| T2 vs. T4 | \* | T2 vs. T4 | ns | T2 vs. T4 | \* |  |
| T2 vs. T5 | \* | T2 vs. T5 | ns | T2 vs. T5 | \* |  |
| T3 vs. T4 | ns | T3 vs. T4 | ns | T3 vs. T4 | ns |  |
| T3 vs. T5 | ns | T3 vs. T5 | ns | T3 vs. T5 | \* |  |
| T4 vs. T5 | ns | T4 vs. T5 | ns | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **C 20:4 n6** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | \* | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | \*\* | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | \*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | ns | T1 vs. T3 | ns | T1 vs. T3 | ns |  |
| T1 vs. T4 | ns | T1 vs. T4 | ns | T1 vs. T4 | ns |  |
| T1 vs. T5 | ns | T1 vs. T5 | ns | T1 vs. T5 | ns |  |
| T2 vs. T3 | ns | T2 vs. T3 | ns | T2 vs. T3 | ns |  |
| T2 vs. T4 | ns | T2 vs. T4 | ns | T2 vs. T4 | ns |  |
| T2 vs. T5 | ns | T2 vs. T5 | ns | T2 vs. T5 | ns |  |
| T3 vs. T4 | ns | T3 vs. T4 | ns | T3 vs. T4 | ns |  |
| T3 vs. T5 | ns | T3 vs. T5 | ns | T3 vs. T5 | ns |  |
| T4 vs. T5 | ns | T4 vs. T5 | ns | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **C 24:0** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | \*\*\* | T0 vs. T1 | ns | T0 vs. T1 | ns |  |
| T0 vs. T2 | \*\*\* | T0 vs. T2 | ns | T0 vs. T2 | ns |  |
| T0 vs. T3 | \*\*\* | T0 vs. T3 | ns | T0 vs. T3 | ns |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | ns | T0 vs. T4 | ns |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | ns | T0 vs. T5 | ns |  |
| T1 vs. T2 | \*\* | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | \*\*\* | T1 vs. T3 | ns | T1 vs. T3 | ns |  |
| T1 vs. T4 | \*\*\* | T1 vs. T4 | ns | T1 vs. T4 | ns |  |
| T1 vs. T5 | \*\*\* | T1 vs. T5 | ns | T1 vs. T5 | ns |  |
| T2 vs. T3 | \*\*\* | T2 vs. T3 | ns | T2 vs. T3 | ns |  |
| T2 vs. T4 | \*\*\* | T2 vs. T4 | ns | T2 vs. T4 | ns |  |
| T2 vs. T5 | \*\*\* | T2 vs. T5 | ns | T2 vs. T5 | ns |  |
| T3 vs. T4 | \*\*\* | T3 vs. T4 | ns | T3 vs. T4 | ns |  |
| T3 vs. T5 | \*\*\* | T3 vs. T5 | ns | T3 vs. T5 | ns |  |
| T4 vs. T5 | \*\* | T4 vs. T5 | ns | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **C 20:5 n3** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | ns | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | ns | T0 vs. T2 | ns | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | ns | T0 vs. T3 | ns | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | ns | T0 vs. T4 | ns | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | ns | T0 vs. T5 | \* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | ns | T1 vs. T3 | ns | T1 vs. T3 | ns |  |
| T1 vs. T4 | ns | T1 vs. T4 | ns | T1 vs. T4 | ns |  |
| T1 vs. T5 | ns | T1 vs. T5 | ns | T1 vs. T5 | \* |  |
| T2 vs. T3 | ns | T2 vs. T3 | ns | T2 vs. T3 | ns |  |
| T2 vs. T4 | ns | T2 vs. T4 | ns | T2 vs. T4 | ns |  |
| T2 vs. T5 | ns | T2 vs. T5 | ns | T2 vs. T5 | ns |  |
| T3 vs. T4 | ns | T3 vs. T4 | ns | T3 vs. T4 | ns |  |
| T3 vs. T5 | ns | T3 vs. T5 | ns | T3 vs. T5 | ns |  |
| T4 vs. T5 | ns | T4 vs. T5 | ns | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **C 24:1 n9** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | ns | T0 vs. T1 | ns |  |
| T0 vs. T2 | ns | T0 vs. T2 | \*\* | T0 vs. T2 | ns |  |
| T0 vs. T3 | ns | T0 vs. T3 | \*\*\* | T0 vs. T3 | ns |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | ns | T1 vs. T3 | \* | T1 vs. T3 | ns |  |
| T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* | T1 vs. T4 | \* |  |
| T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | ns | T2 vs. T3 | ns | T2 vs. T3 | ns |  |
| T2 vs. T4 | \* | T2 vs. T4 | \* | T2 vs. T4 | \* |  |
| T2 vs. T5 | \*\* | T2 vs. T5 | \*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | ns | T3 vs. T4 | ns | T3 vs. T4 | ns |  |
| T3 vs. T5 | ns | T3 vs. T5 | ns | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | ns | T4 vs. T5 | ns | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **C 22:6 n3** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | ns | T0 vs. T1 | \*\*\* | T0 vs. T1 | ns |  |
| T0 vs. T2 | ns | T0 vs. T2 | \*\*\* | T0 vs. T2 | ns |  |
| T0 vs. T3 | ns | T0 vs. T3 | \*\*\* | T0 vs. T3 | ns |  |
| T0 vs. T4 | \* | T0 vs. T4 | \*\*\* | T0 vs. T4 | ns |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \* |  |
| T1 vs. T2 | ns | T1 vs. T2 | ns | T1 vs. T2 | ns |  |
| T1 vs. T3 | ns | T1 vs. T3 | ns | T1 vs. T3 | ns |  |
| T1 vs. T4 | \* | T1 vs. T4 | ns | T1 vs. T4 | ns |  |
| T1 vs. T5 | \*\* | T1 vs. T5 | ns | T1 vs. T5 | ns |  |
| T2 vs. T3 | ns | T2 vs. T3 | ns | T2 vs. T3 | ns |  |
| T2 vs. T4 | \* | T2 vs. T4 | ns | T2 vs. T4 | ns |  |
| T2 vs. T5 | \*\* | T2 vs. T5 | ns | T2 vs. T5 | ns |  |
| T3 vs. T4 | ns | T3 vs. T4 | ns | T3 vs. T4 | ns |  |
| T3 vs. T5 | ns | T3 vs. T5 | ns | T3 vs. T5 | ns |  |
| T4 vs. T5 | ns | T4 vs. T5 | ns | T4 vs. T5 | ns |  |
|  |  |  |  |  |  |  |
| **SFA** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | \* | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | \*\*\* | T1 vs. T2 | ns |  |
| T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* |  |
| T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* |  |
| T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | \*\* | T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\*\* |  |
| T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | ns | T4 vs. T5 | ns | T4 vs. T5 | \*\*\* |  |
|  |  |  |  |  |  |  |
| **MUFA** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | \*\*\* | T1 vs. T2 | \*\*\* | T1 vs. T2 | \*\*\* |  |
| T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* |  |
| T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* |  |
| T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\*\* |  |
| T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | \*\*\* | T4 vs. T5 | \*\*\* | T4 vs. T5 | \*\*\* |  |
|  |  |  |  |  |  |  |
| **PUFA** |  |  |  |  |  |  |
| P | Statistical Significance | S | Statistical Significance | PL | Statistical Significance |  |
| T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* | T0 vs. T1 | \*\*\* |  |
| T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* | T0 vs. T2 | \*\*\* |  |
| T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* | T0 vs. T3 | \*\*\* |  |
| T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* | T0 vs. T4 | \*\*\* |  |
| T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* | T0 vs. T5 | \*\*\* |  |
| T1 vs. T2 | ns | T1 vs. T2 | ns | T1 vs. T2 | \*\*\* |  |
| T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* | T1 vs. T3 | \*\*\* |  |
| T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* | T1 vs. T4 | \*\*\* |  |
| T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* | T1 vs. T5 | \*\*\* |  |
| T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* | T2 vs. T3 | \*\*\* |  |
| T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* | T2 vs. T4 | \*\*\* |  |
| T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* | T2 vs. T5 | \*\*\* |  |
| T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\*\* | T3 vs. T4 | \*\*\* |  |
| T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* | T3 vs. T5 | \*\*\* |  |
| T4 vs. T5 | \* | T4 vs. T5 | \*\*\* | T4 vs. T5 | \*\*\* |  |

Abbreviations: P, Primiparous; S, Secondiparous; PL, Pluriparous.

Statisical significance \*\*\*p<0.001; \*\*p<0.01; \*p<0.05