

Supplementary Table S1: Total and free EPA and DHA concentrations in plasma at baseline, after 2 days and 4 weeks of supplementation presented by study groups. Mean \pm 95% CI. Differences in mean changes between SynΩ3 and placebo as well as SynΩ3 and Fish oil are shown.

| <i>n</i> -3 PUFA | Assessment points | Placebo (n=24) Mean (95% CI) | | SynΩ3 (n=23) Mean (95% CI) | | Fish oil (n=25) Mean (95% CI) | | Difference in mean change SynΩ3 vs. Placebo | p-value [§] | Difference in mean change SynΩ3 vs. Fish oil | p-value [#] |
|-----------------------------|-------------------|---------------------------------|----------------|-------------------------------|----------------|----------------------------------|----------------|--|----------------------|---|----------------------|
| total EPA [μg/mL] | Baseline | 21.9 | (18.5, 25.4) | 25.0 | (21.3, 28.7) | 24.3 | (20.4, 28.3) | | | | |
| | 2 days | 21.5 | (18.2, 24.8) | 26.3 | (22.3, 30.2) | 30.1 | (25.8, 34.3) | 1.7 | 0.0445 | -4.5 | <0.0001 |
| | 4 weeks | 26.4 | (20.7, 32.1) | 30.3 | (25.4, 35.2) | 37.9 | (33.6, 42.3) | 0.8 | 0.4187* | -8.4 | 0.0055 |
| total DHA [μg/mL] | Baseline | 45.3 | (40.2, 50.5) | 51.8 | (44.4, 59.2) | 45.7 | (40.9, 50.5) | | | | |
| | 2 days | 45.9 | (40.7, 51.1) | 52.4 | (45.3, 59.5) | 47.4 | (43.0, 51.7) | 0.0 | 0.7073 | -1.1 | 0.4535 |
| | 4 weeks | 48.0 | (41.1, 54.9) | 54.9 | (47.6, 62.1) | 55.6 | (50.0, 61.2) | 0.5 | 0.8315* | -6.8 | 0.0173 |
| free EPA [ng/mL] | Baseline | 621.7 | (452.7, 790.7) | 593.3 | (479.4, 707.2) | 646.6 | (546.9, 746.3) | | | | |
| | 2 days | 640.9 | (481.6, 800.2) | 748.9 | (609.3, 888.5) | 742.7 | (633.6, 851.8) | 136.4 | 0.0698 | 59.5 | 0.3968 |
| | 4 weeks | 670.6 | (547.6, 793.7) | 810.3 | (661.3, 959.2) | 844.4 | (703.4, 985.3) | 168.0 | 0.0676 | 19.2 | 0.7988 |
| free DHA [ng/mL] | Baseline | 1307.0 | (1083, 1531) | 1384.0 | (1177, 1591) | 1315.0 | (1144, 1486) | | | | |
| | 2 days | 1227.0 | (1033, 1420) | 1406.0 | (1178, 1633) | 1377.0 | (1169, 1584) | 102.0 | 0.2069 | -40.0 | 0.6535 |
| | 4 weeks | 1374.0 | (1149, 1598) | 1452.0 | (1245, 1660) | 1499.0 | (1206, 1791) | 1.0 | 0.7530 | -116.0 | 0.4390* |

* Wilcoxon rank sum test; without *: [§] ANCOVA, [#] unpaired t-test