

Supplementary sheet 1

| Fatty acid profile by gas chromatography analysis | Follicular fluid proportions (%) | | p-value |
|---|----------------------------------|------------------|--------------|
| | BSA | OA | |
| <i>Saturated fatty acids (SFAs)</i> | | | |
| C10:0 (Capric acid) | 0.10±0.07 | 0.09±0.03 | 0.926 |
| C11:0 (Undecylic acid) | 0.03±0.007 | 0.02±0.005 | 0.619 |
| C12:0 (Lauric acid) | 0.43±0.07 | 0.43±0.05 | 0.950 |
| C13:0 (Tridecyclic acid) | 0.13±0.02 | 0.15±0.02 | 0.539 |
| C14:0 (Myristic acid) | 2.34±0.18 | 2.41±0.44 | 0.885 |
| C15:0 (Pentadecyclic acid) | 1.76±0.35 | 1.53±0.14 | 0.598 |
| C16:0 (Palmitic acid) | 19.05±2.00 | 15.52±2.2 | 0.304 |
| C17:0 (Margaric acid) | 1.75±0.38 | 1.14±0.20 | 0.239 |
| C18:0 (Stearic acid) | 13.91±0.73 | 8.06±0.61 | 0.004 |
| C20:0 (Arachidic acid) | 0.59±0.12 | 0.49±0.08 | 0.525 |
| C22:0 (Behenic acid) | 1.53±0.07 | 1.44±0.05 | 0.388 |
| C23:0 (Tricosylic acid) | 0.61±0.05 | 0.36±0.17 | 0.238 |
| C24:0 (Lignoceric acid) | 2.49±0.12 | 1.92±0.27 | 0.135 |
| Total SFAs | 44.71±3.6 | 33.56±2.89 | 0.075 |
| <i>Monounsaturated fatty acids (MUFAs)</i> | | | |
| C16:1cis-9 (Palmitoleic acid) | 3.56±0.46 | 1.68±0.54 | 0.058 |
| C18:1trans-9 (Vaccenic acid) | 0.14±0.05 | 0.14±0.05 | 0.946 |
| C18:1trans-11 (Elaidic acid) | 0.35±0.07 | 0.12±0.02 | 0.047 |
| C18:1cis-9 (Oleic acid) | 13.59±2.5 | 46.51±5.8 | 0.007 |
| C18:1cis-11 (Gondoic acid) | 0.92±0.37 | 0.58±0.32 | 0.934 |
| Total MUFAs | 18.55±2.69 | 49.02±5.08 | 0.006 |
| <i>Polyunsaturated fatty acids (PUFAs)</i> | | | |
| C18:2n-6 (Linoleic acid) | 18.61±1.44 | 8.64±3.33 | 0.052 |
| C18:3n-6 (Gamma-linolenic acid) | 0.33±0.05 | 0.20±0.10 | 0.323 |
| C18:3n-3 (Alpha-linolenic acid) | 8.84±1.05 | 3.67±1.58 | 0.053 |
| C20:3n-6 (Dihomo-gamma-linolenic acid) | 2.23±0.27 | 0.75±0.30 | 0.024 |
| C20:4n-6 (Arachidonic acid) | 3.00±0.34 | 1.60±0.59 | 0.111 |
| C20:5n-3 (Eicosapentaenoic acid) | 1.53±0.37 | 0.68±0.40 | 0.199 |
| C22:5n-3 (Dicosapentaenoic acid) | 1.83±0.25 | 1.78±0.04 | 0.865 |
| C22:6n-3 (Docosahexaenoic acid) | 0.36±0.11 | 0.10±0.05 | 0.107 |
| Total PUFAs | 36.74±3.32 | 17.42±6.32 | 0.054 |
| Total ω -3 PUFAs | 12.57±1.74 | 6.23±1.99 | 0.075 |
| Total ω -6 PUFAs | 24.17±1.71 | 11.18±4.32 | 0.049 |

Proportional fatty acid profiles of follicular fluid samples obtained 48h post intrafollicular injection of BSA vehicle control (BSA) and BSA conjugated oleic acid (OA). Fatty acids were determined by gas chromatography. The data are shown as means±SEM, n=3. P-values are from unpaired *t*-test.