**Effect of dietary fish oil on selected inflammatory markers in pigs**

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**Supplementary Table S1** *Composition of the diets*

|  |  |  |  |
| --- | --- | --- | --- |
| Composition | | Diet | |
| F | P |
| Component (g/kg) | basic feed mixture1 | 975 | 975 |
| fish oil2 | 25 | / |
| palm oil3 | / | 25 |
| Nutrients (g/kg) | crude protein4 | 138 | 137 |
| fat5 | 56 | 58 |
| crude fibre6 | 48 | 48 |
| nitrogen-free extractives7 | 758 | 757 |
| Metabolizable energy8 (MJ/kg) |  | 13.56 | 13.64 |
| Fatty acid content9 (g/kg) | 14:0 | 0.92 | 0.96 |
| 16:0 | 6.79 | 14.78 |
| 18:0 | 1.30 | 1.73 |
| 18:1n-9 | 9.56 | 13.97 |
| 18:2n-6 | 11.55 | 10.61 |
| 18:3n-3 | 0.88 | 0.77 |
| 20:5n-3 | 2.83 | 0.05 |
| 22:5n-3 | 0.58 | 0.04 |
| 22:6n-3 | 4.34 | 0.05 |

1 Basic pelletized complete feed mixture for pig fattening (De Heus, Marefy, Czech Republic); composition (the producer refused to communicate percentages of particular components due to the trade secret): wheat, barley, wheat bran, wheat middlings, dark distillery stillages, rapeseed expellers, vinas, sodium carbonate, animal fat, salt; premix of vitamins + minerals: vitamin A 6432 IU/kg, vitamin D3 1286 IU/kg, vitamin E (all-rac-α-tocopheryl acetate) 80 mg/kg, Cu (CuSO4 · 5 H2O) 13 mg/kg, Zn (ZnSO4 · H2O) 96 mg/kg, Mn (MnO) 32 mg/kg, Fe (FeSO4 ·7 H2O) 64 mg/kg, Se (Na2SeO3) 0.3 mg/kg, I (Ca[IO3]2) 1 mg/kg; phytase 1005 FTU/kg.

2 *Oleum jecoris aselli*; Fagron, Olomouc, Czech Republic; fatty acid composition (% of the sum of determined fatty acids): 14:0 5.5, 16:0 15.3, 16:1n-7 11.7, 17:0 0.4, 18:0 2.5, 18:1n-9 25.1, 18:2n-6 3.8, 18:3n-3 0.3, 18:3n-6 1.3, 20:2n-6 0.6; 20:3n-6 0.1, 20:4n-6 0.6, 20:5n-3 11.8, 22:4n-6 0.2, 22:5n-3 2.1, 22:6n-3 18.7.

3 Master Martini CE, Prague, Czech Republic; fatty acid composition (% of the sum of determined fatty acids): 14:0 1.6, 16:0 40.3, 16:1n-7 0.2, 17:0 0.2, 18:0 1.6, 18:1n-9 43.8, 18:2n-6 11.3, 18:3n-3 0.0, 18:3n-6 0.3, 20:2n-6 0.1; 20:3n-6 0.0, 20:4n-6 0.1, 20:5n-3 0.2, 22:4n-6 0.1, 22:5n-3 0.1, 22:6n-3 0.1.

4 Determined using KD-310-A-1015 KjelROC Analyzer, Furulund, Sweden.

5 Quantified as hexane/2-propanol (3/2 v/v) extract.

6 Determined using ANCOM220 Fiber Analyzer, Ancom Technology, Macedon, USA.

7 Calculated as a remainder to 100 %.

8 Calculated from nutrient content.

9 Determined by the same procedure as in the tissue samples after hexane/2-propanol extraction.

**Supplementary Table S2** *Primers used for quantitative PCR*

|  |  |  |
| --- | --- | --- |
| Gene  Accession Number1 | 5´- Forward primer - 3´  5´- Reverse primer- 3´ | Reference  Product length1,2/E3/CT4 |
| *TNFα*  [NM\_214022.1](https://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=47522865) | CCCCCAGAAGGAAGAGTTTC CGGGCTTATCTGAGGTTTGA | DOI: [10.1111/j.1863-2378.2007.01064.x](https://www.ncbi.nlm.nih.gov/pubmed/?term=10.1111%2FJ.1863-2378.2007.01064.X)  92/1.982/26.138 |
| *IL1β*  [XM\_021085847.1](https://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=1191863703) | GGGACTTGAAGAGAGAAGTGG  CTTTCCCTTGATCCCTAAGGT | DOI: [10.1186/1297-9716-42-16](https://www.ncbi.nlm.nih.gov/pubmed/21314975)  95/1.942/24.356 |
| *IL4*  [NM\_214123.1](https://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=55742621) | TCGGCACATCTACAGACACC  CTTCTTGGCTTCATGCACAG | DOI: [10.1016/j.vetmic.2011.10.004](https://www.ncbi.nlm.nih.gov/pubmed/?term=10.1016%2FJ.VETMIC.2011.10.004)  109/1.953/31.605 |
| *IL6*  [NM\_001252429.1](https://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=356991257) | CACCGGTCTTGTGGAGTTTC  GTGGTGGCTTTG TCTGGATT | DOI: [10.1186/1297-9716-42-16](https://www.ncbi.nlm.nih.gov/pubmed/21314975)  150/1.987/23.891 |
| *IL10*  [NM\_214041.1](https://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=47524185) | TGAAGAGTGCCTTTAGCAAGCTC  CTCATCTTCATCGTCATGTAGGC | DOI: [10.1186/1746-6148-8-115](https://www.ncbi.nlm.nih.gov/pubmed/?term=10.1186%2F1746-6148-8-115)  106/1.993/25.723 |
| *IL12p40*  [NM\_214013.1](https://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=55742629) | CACTCCTGCTGCTTCACAAA  CGTCCGGAGTAATTCTTTGC | DOI: [10.1186/1297-9716-42-16](https://www.ncbi.nlm.nih.gov/pubmed/?term=10.1186%2F1297-9716-42-16)  118/1.990/29.905 |
| *TGFβ1*  [NM\_214015.2](https://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=1148291168) | TACGCCAAGGAGGTCACCC  CAGCTCTGCCCGAGAGAGC | DOI: [10.1203/01.PDR.0000106802.55721.8A](https://www.ncbi.nlm.nih.gov/pubmed/?term=10.1203%2F01.PDR.0000106802.55721.8A)  156/1.984/23.775 |
| *TBP1*  [XM\_021085497.1](https://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=1191804522) | AACAGTTCAGTAGTTATGAGCCAGA  AGATGTTCTCAAACGCTTCG | DOI: [10.1186/1471-2199-8-67](https://www.ncbi.nlm.nih.gov/pubmed/?term=10.1186%2F1471-2199-8-67)  153/2.095/23.940 |
| *HPRT1*  [XM\_021079503.1](https://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=1191912668) | GAGCTACTGTAATGACCAGTCAACG  CCAGTGTCAATTATATCTTCAACAATCAA | DOI: [10.1016/j.niox.2008.04.001](https://www.ncbi.nlm.nih.gov/pubmed/18456005)  111/2.003/26.081 |
| *HMBS2*  [NM\_001097412.1](https://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=148234671) | AGGATGGGCAACTCTACCTG  GATGGTGGCCTGCATAGTCT | DOI: [10.1186/1471-2199-8-67](https://www.ncbi.nlm.nih.gov/pubmed/17697375)  83/1.981/25.562 |
| *PPARγ* [NM\_214379.1](https://www.ncbi.nlm.nih.gov/nucleotide/47523813?report=gbwithparts) | ATTATTCTCAGTGGAGACCGCCC  AGGCTTGCAGCAAATTGTCTTGA | This study  79/2.050/25.510 |
| 1. *GPR120* 2. [NM\_001204766.1](http://www.ncbi.nlm.nih.gov/nucleotide/325652149?report=gbwithparts#_blank) | TCTCCTGGGATGTGTCGTTTGT  TCCTTGATGCCTTGGTGATCTGT | This study  102/2.000/27.805 |
| *Adipor1* [NM\_001007193.1](http://www.ncbi.nlm.nih.gov/nucleotide/55742863?report=gbwithparts#_blank) | GGCTCATCTACCTCTCCATCGTC  AGGAACACCCCTGCTCTTGTC | This study  112/2.044/25.696 |
| *Adipor2* [NM\_001007192.1](https://www.ncbi.nlm.nih.gov/nucleotide/55742865?report=gbwithparts) | GGCAAGTGTGACATCTGGTTTC  CCGATCATGAAGCGAAACTCCTG | This study  116/1.998/23.735 |
| 1. *LBP* 2. [NM\_001128435.1](https://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=nucleotide&id=190360654) | ACCGCTCCCCAGTTGGCTTC  AGCGCGGCGGACACATTAGT | [DOI: 10.1186/1751-0147-54-59](https://actavetscand.biomedcentral.com/articles/10.1186/1751-0147-54-59)  406/2.006/26.107 |
| 1. *ICAM1* 2. [NM\_213816.1](https://www.ncbi.nlm.nih.gov/nucleotide/55742637) | CGGTGGCAGCCGTGGCTATC  TTGATGCAGCCCCGCTCGTC | DOI: 10.[1186](https://actavetscand.biomedcentral.com/articles/10.1186/1751-0147-55-18)/1751-[0147](https://actavetscand.biomedcentral.com/articles/10.1186/1751-0147-55-18)-55-18  208/1.998/21.866 |

1 Accession numbers and size of the PCR product of adopted primers were derived using Primer BLAST on the basis of the current nucleotide sequences available in the NCBI GenBank (https://www.ncbi.nlm.nih.gov/tools/primer-blast/index.cgi?LINK\_LOC=BlastHome).

2 Number of nucleotides.

3 Primer efficiency.

4 Mean quantification cycle value.