Supplementary data of the study published in Reference number [13] https://doi.org/10.1016/j.aqrep.2020.100430

Description of the trial

A batch of fish were fed during the on-growing period with sturgeon pre-grow and on-grow diets SteCo (Coppens International, The Netherlands) with pellet size adequate for the fish size (1 to 6 mm). Following the transfer to the broodstock chamber, fish were fed with the sturgeon broodstock diet, Coppens REPRO. According to the manufacturer's information, the proximate composition of the feed was as follows: 48% protein, 15% fat, 8.5% ash, 0.9% crude fibre, and 1.2% total phosphorus. Floating 8 mm pellets were supplied by hand at a daily rate of 0.8% of total biomass. In February 2017, freshly produced Coppens REPRO feed was obtained for the trial. An aliquot sample was taken for the analysis of the feed FA composition. In order to obtain an EPA/ARA ratio around 1, feed for the ARA group was enriched with 60 mg kg^{-1}ARA oil (ARASCO™, DSM Nutritional Products, Inc., Basel, Switzerland, AA content 38-42%). Feed enrichment was carried out on a laboratory scale when the oil blends were added to the extruded feed crumbles by vacuum infusion techniques. For vacuum inclusion of oils, the method of configuration of rotary evaporator was used (Rotavapor 215; BÜCHI, Basel, Switzerland). The feeding treatment started a day after the separation of fish into two groups and lasted six month. The feeding rate corresponded to the temperature. In that sense, from 22 to 18°C, fish were given 0.6% of total biomass per day; from 18-11°C, fish were given 0.3% of total biomass per day three days per week; at 10°C and lower, fish were given 0.3% of total biomass per day, two days per week. Prior to the injections, fish were not fed for seven days.

Feed enrichment was done on a monthly basis during the trial. Fatty acid composition analysis was carried out on samples from both ARA and CONTROL feed on three occasions: at the beginning of the trial, two months after the start of the trial, and four months after the start of the trial.

Results on oocyte fatty acid profile in the lipid fractions (w%)(n= number of fish)

Lipid fraction	**PL**		**NL**	
Fatty acids	**ARA (n=3)**	**CONTR (n=3)**	**ARA (n=3)**	**CONTR (n=3)**
14:0 (MyA)	0.88 ± 0.22	0.84 ± 0.08	0.24 ± 0.06	0.27 ± 0.02
16:0 (PA)	19.2 ± 2.53	19.47 ± 1.19	1.61 ± 0.60	1.73 ± 0.18
16:1ω9	2.43 ± 0.15	2.47 ± 0.13	0.92 ± 0.16	1.05 ± 0.05
16:1ω7 (POA)	2.12 ± 0.46	2.05 ± 0.45	4.19 ± 0.89	4.21 ± 0.50
17:0 (MA)	0.23 ± 0.13	0.22 ± 0.11	0.17 ± 0.01	0.18 ± 0.01
18:0 (SA)	3.10 ± 0.26	2.75 ± 0.44	0.22 ± 0.10	0.20 ± 0.07
18:1ω9 (OA)	9.02 ± 1.72	8.74 ± 1.11	14.68 ± 1.33	14.41 ± 0.20
18:1ω7 (VA)	2.63 ± 0.38	2.57 ± 0.07	1.81 ± 0.12	1.88 ± 0.07
18:2ω6 (LA)	4.53 ± 1.52	4.88 ± 1.46	15.78 ± 2.39	15.40 ± 0.80
18:3ω6 (GLA)	0.70 ± 0.89	0.65 ± 0.76	14.59 ± 2.39	14.23 ± 1.05
18:3ω3 (ALA)	0.09 ± 0.03	0.14 ± 0.13	0.31 ± 0.07	0.40 ± 0.11
20:0 (AA)	0.48 ± 0.20	0.43 ± 0.08	0.06 ± 0.03	0.05 ± 0.02
20:1ω9	1.22 ± 0.16	1.28 ± 0.07	0.37 ± 0.07	0.41 ± 0.07
20:2ω6 (EA)	0.57 ± 0.26	0.48 ± 0.09	0.21 ± 0.03	0.20 ± 0.01
20:3ω6 (DGLA)	0.60 ± 0.40	0.40 ± 0.19	0.91 ± 0.15	0.94 ± 0.05
20:4ω6 (ARA)	2.43 ± 0.83 *	0.72 ± 0.13	0.74 ± 0.19	0.38 ± 0.11

20:3ω3	0.0 ± 0.0	0.0 ±0.0	0.18 ± 0.02	0.17 ± 0.06
20:4ω3 (ETA)	0.53 ± 0.03	0.53 ± 0.27	0.32 ± 0.08	0.34 ± 0.07
20:5ω3 (EPA)	5.21 ± 0.49	5.87 ± 0.26	1.47 ± 0.30	1.53 ± 0.10
22:0	20.37 ± 2.67	19.10 ± 1.93	2.63 ± 0.83	2.54 ± 0.68
22:4ω6 (ADA)	0.69 ± 0.58	0.39 ± 0.11	0.19 ± 0.09	0.14 ± 0.03
22:5ω6	0.90 ± 0.49	0.92 ± 0.24	0.0 ± 0.	0.0 ± 0.0
22:5ω3	1.90 ± 0.53	1.78 ± 0.28	0.75 ± 0.13	0.78 ± 0.06
22:6ω3 (DHA)	33.71 ± 6.06	35.46 ± 5.09	7.89 ± 1.89	8.34 ± 1.71

* significant differences ($p<0.05$) between treatment ARA and CONTR