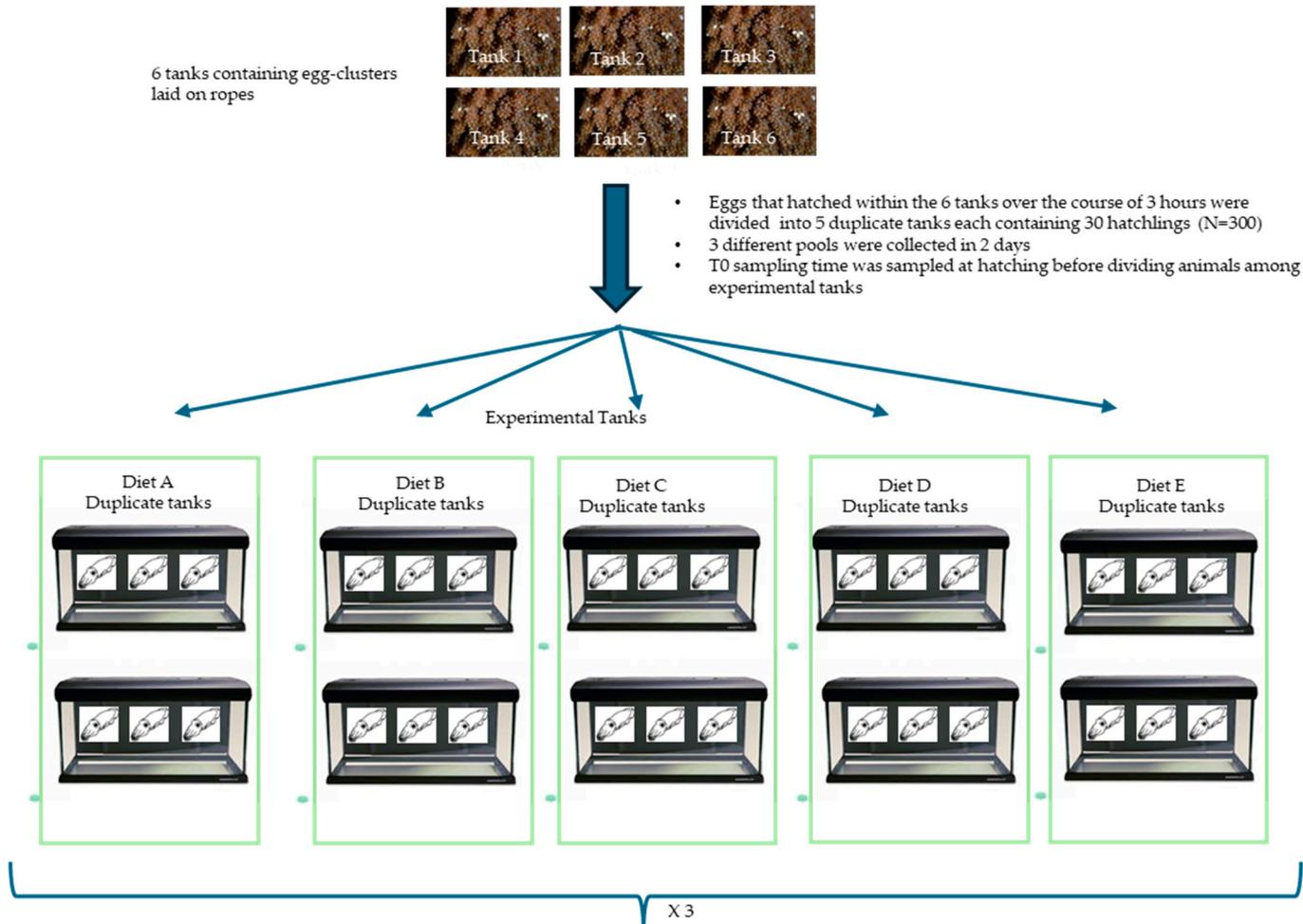


## Supplementary Materials

	Diet B	Diet C	Diet D	Diet E
Size	300-500 µm	powder	0.5-1 cm	1 cm
Krill %	6	2	100	
Gammarus %	0	0	0	100
Crude Protein	50	59	62	41
Crude oils and fats	14	15	4	3
Humidity	/	/	6	9
Crude cellulose	/	/	4	8
Crude ash	12	13		25
Ash insoluble in HCl	2	4.2		
Ca	1	1.7		
P	196	1.5		
Na	0.9	0.9		
Crude fibre (mg/g dwt)	0.5	1		
DHA	22.5	22		
EPA	7.5	10		
<b>Additive Vitamins IU/kg</b>				
Vit. A (3a672b)	5000	25000		
Vit. D3 (3a671)	10	5000		
<b>Additive Vitamins mg/kg</b>				
Vit. E	700	600		
Vit. C	500	5000		
<b>Additive Trace Elements mg/kg</b>				
Fe (ferric oxide) E1	560	0		
I (calcium iodate, anhydrous, E2)	5	5		
Cu (Cu chelate of glycine, hydrate, E4)	6	5		
Mn (Mn chelate of glycine, hydrate, E5)	50	20		
Zn (Zn chelate of glycine, hydrate, E6)	50	30		
Se (selenomethionine produced by Saccharomyces cerevisiae NCYC R646, 3b8.13)	0.3	0.3		
<b>Additive Antioxidants mg/kg</b>				
Ethoxyquin (E324)	100	120		
BHA (E320)	25	20		
Propyl gallate (E310)	25	10		
<b>Additive Colourants mg/kg</b>				
Astaxanthin (2a161j)	0	20		

Supplementary Table S1 Composition of commercially available diets as reported by producers. Diet B (Natura 3/5, Inve technologies, Dendermonde, Belgium), Diet C (Fish breed-M, Inve technologies, Dendermonde, Belgium), 4) Diet D (Tetra, Melle, Germany), 5) Diet E (Naturalpet, Melicucco, RC, Italy).



5 cuttlefish were randomly sampled from the two duplicate tanks set up for each experimental diet T1 and T2, for each of the analyses described in M&M

- In details, 5 cuttlefish for morphometric analysis,
- ✓ 5 for histology,
  - ✓ 5 for enzymatic activity assay
  - ✓ 5 for molecular biology

Supplementary Figure S1 Representation of the experimental design