

Fatty acid stable isotope signatures of molluscs exposed to finfish farming outputs

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Table S1. Fatty acid stable isotopes values (‰) with distance from salmon cage sites for mussels

Fatty acid	75 m	92 m	200 m	300 m	306 m	400 m	500 m	727 m	775 m	1483 m	1686 m	1950 m	2358 m	p-value
14:0	-24.2	-24.9	-30.4	-28.1	-27.6	-30.9	-27.4	-27.6	-23.8	-24.8	-26.2	-23.4	-26.1	0.116
16:0	-22.7	-24.9	-24.9	-27.3	-27.4	-29.4	-24.6	-27.2	-24.2	-24.6	-27.5	-24.3	-26.7	0.891
16:1n-7	-21.5	-24.6	-23.8	-25.5	-26.4	-26.6	-24.4	-26.9	-24.0	-24.3	-25.4	-23.1	-25.6	0.920
16:2n-4	-24.1	-24.4	-25.9	-29.6	-	-26.1	-22.5	-	-22.7	-22.8	-	-20.9	-	0.044
18:0	-24.3	-23.0	-21.3	-27.0	-25.2	-25.3	-23.3	-25.3	-22.2	-23.1	-23.8	-22.8	-24.4	0.590
18:1n-9	-25.3	-24.1	-26.6	-27.8	-27.3	-25.2	-26.9	-27.2	-23.5	-23.8	-24.5	-23.9	-26.5	0.147
18:1n-7	-24.4	-24.1	-22.7	-27.6	-26.7	-23.6	-24.2	-26.1	-23.5	-24.3	-23.9	-23.8	-24.9	0.542
18:2n-6	-24.5	-26.4	-29.7	-30.9	-28.6	-	-29.8	-28.5	-25.2	-27.2	-26.9	-24.9	-27.3	0.061
18:3n-3	-31.6	-27.6	-	-32.1	-30.3	-41.4	-29.3	-29.8	-27.1	-27.4	-28.5	-26.9	-29.0	0.092
18:4n-3	-26.5	-28.1	-29.3	-30.0	-29.4	-28.8	-29.5	-28.9	-25.4	-28.1	-28.4	-26.2	-27.8	0.208
20:1n-9	-25.3	-26.0	-23.2	-26.8	-28.2	-27.8	-23.9	-25.6	-23.4	-23.4	-24.6	-22.9	-24.9	0.027
20:4n-6	-24.6	-24.4	-20.2	-25.4	-25.2	-24.3	-23.1	-24.6	-25.2	-24.3	-23.6	-23.3	-23.9	0.733
20:5n-3	-24.7	-24.4	-23.1	-26.8	-26.4	-25.9	-23.9	-26.4	-24.3	-24.7	-25.6	-23.8	-25.2	0.641
NMID (22:0)	-25.3	-22.2	-20.2	-26.5	-	-23.4	-23.2	-24.9	-21.1	-24.1	-	-22.2	-23.7	0.987
22:6n-3	-26.1	-23.5	-23.1	-27.5	-23.4	-25.9	-24.5	-24.1	-23.3	-23.7	-22.9	-22.7	-22.2	0.014
SFA ¹	-25.0	-24.1	-26.7	-27.8	-26.3	-26.4	-23.6	-26.1	-23.5	-23.6	-24.5	-22.7	-24.2	0.041
MUFA ²	-24.6	-23.9	-25.8	-26.9	-25.7	-30.1	-24.4	-25.9	-22.9	-23.6	-25.4	-22.6	-24.8	0.264
PUFA ³	-26.4	-23.9	-27.3	-27.8	-27.1	-30.1	-25.3	-26.5	-24.9	24.4	-25.7	-23.6	-25.6	0.098
n-3	-26.7	-24.2	-26.3	-28.7	-27.1	-32.6	-25.8	-27.3	-25.5	-24.8	-25.7	-23.9	-25.5	0.102
Bacterial ⁴	-26.1	-23.6	-32.5	-27.7	-25.2	-30.9	-22.3	-25.4	-23.1	-23.3	-22.2	-22.3	-23.1	0.017
Zooplankton ⁵	-21.9	-26.0	-23.3	-26.8	-28.2	-27.8	-23.9	-25.6	-23.4	-23.4	-24.6	-22.9	-24.9	0.077
Overall mean ⁶	-29.1	-24.1	-26.7	-27.5	-26.4	-25.6	-24.7	-26.2	-24	-24	-25.4	-23.1	-25.0	0.038

¹Saturated fatty acid

²Monounsaturated fatty acid

³Polyunsaturated fatty acid

⁴Bacterial marker = *i15:0*, *ai15:0*, *15:0*, *15:1*, *i16:0*, *ai16:0*, *i17:0*, *ai17:0*, *17:0*, *17:1*

⁵Zooplankton marker = *20:1n-9*, *22:1n-9*, *22:1n-11*

⁶Mean $\delta^{13}\text{C}$ of all identified FA weighted by FA concentration

Table S2. Fatty acid stable isotopes values (‰) with distance from salmon cage sites for limpets

Fatty acid	75 m	92 m	200 m	400 m	500 m	775 m	1483 m	1950 m	p-value
14:0	-40.4	-20.0	-18.0	-19.8	-19.9	-23.1	-24.5	-23.9	0.957
16:0	-39.8	-22.6	-23.0	-18.3	-21.7	-22.4	-22.0	-23.0	0.444
16:1n-7	-38.0	-22.1	-25.7	-16.3	-	-22.4	-23.4	-22.8	0.514
17:0	-	-22.4	-	-25.1	-	-22.9	-20.7	-20.0	0.036
18:0	-23.6	-21.9	-17.8	-19.1	-19.9	-20.6	-18.6	-20.3	0.311
18:1n-9	-24.9	-21.0	-20.3	-18.8	-20.8	-23.0	-23.9	-23.8	0.097
18:1n-7	-25.7	-22.2	-18.8	-18.6	-19.4	-23.9	-20.6	-21.1	0.612
18:2n-6	-20.2	-22.2	-	-18.7	-17.2	-22.9	-23.0	-22.4	0.192
18:3n-3	-29.9	-23.9	-	-22.4	-18.6	-23.5	-23.2	-22.6	0.449
18:4n-3	-	-23.2	-	-21.2	-	-	-21.5	-20.1	0.025
20:1n-9	-25.3	-23.3	-20.9	-20.6	-22.1	-24.1	-22.1	-22.4	0.539
20:3n-3	-25.3	-23.5	-22.6	-22.0	-20.1	-25.1	-23.5	-22.7	0.785
20:4n-3	-25.5	-22.2	-	-21.9	-	-	-20.3	-19.7	0.022
20:4n-6	-20.4	-22.1	-19.5	-20.9	-21.8	-21.3	-21.3	-20.3	0.309
20:5n-3	-26.9	-22.5	-19.3	-18.5	-21.4	-22.2	-22.1	-21.5	0.706
NMID (22:0)	-	-20.5	-20.6	-20.5	-21.5	-	-23.9	-26.5	< 0.001
Σ SFA ¹	-39.9	-21.2	-26.0	-19.7	-28.6	-22.3	-21.1	-19.1	0.096
Σ MUFA ²	-36.2	-21.7	-20.0	-18.8	-20.4	-22.2	-22.6	-21.1	0.402
Σ PUFA ³	-31.4	-21.7	-24.1	-20.1	-24.4	-22.5	-21.5	-20.2	0.091
Σ n-3	-20.1	-22.8	-26.8	-19.7	-21.3	-23.0	-22.0	-20.9	0.100
Bacterial ⁴	-48.9	-21.2	-53.0	-19.9	-52.8	-20.9	-20.6	-18.1	0.093
Zooplankton ⁵	-25.3	-23.3	-20.9	-20.6	-22.1	-24.1	-21.3	-19.9	0.035

¹Saturated fatty acid²Monounsaturated fatty acid³Polyunsaturated fatty acid⁴Bacterial marker = *i15:0*, *ai15:0*, *15:0*, *15:1*, *i16:0*, *ai16:0*, *i17:0*, *ai17:0*, *17:0*, *17:1*⁵Zooplankton marker = *20:1n-9*, *22:1n-9*, *22:1n-11*

Table S3. Fatty acid stable isotopes values (‰) with distance from salmon cage sites for mussels and limpets

Fatty acid	75 m	92 m	200 m	300 m	306 m	400 m	500 m	727 m	775 m	1483 m	1686 m	1950 m	2358 m	p-value
14:0	-25.2	-22.7	-23.0	-22.4	-27.6	-34.2	-24.1	-26.2	-23.7	-23.9	-26.1	-27.7	-24.9	0.779
16:0	-21.6	-23.1	-25.2	-22.7	-27.2	-33.6	-25.3	-27.5	-23.4	-27.6	-23.8	-26.7	-26.2	0.809
16:1n-7	-20.1	-23.2	-26.0	-21.5	-26.9	-31.8	-24.9	-25.4	-22.9	-23.6	-24.6	-25.6	-24.6	0.928
16:4n-3	-37.2	-25.1	-40.1	-	-25.7	-30.1	-24.4	-	-20.3	-22.8	-24.3	-22.4	-24.5	0.038
18:0	-20.2	-21.4	-21.6	-24.3	-25.4	-25.4	-23.6	-23.8	-21.9	-21.2	-24.4	-22.7	-23.0	0.723
18:1n-9	-22.7	-22.6	-23.6	-25.3	-27.2	-26.3	-24.9	-24.5	-22.9	-22.6	-26.5	-24.7	-24.1	0.544
18:1n-7	-20.6	-23.1	-22.5	-24.4	-26.2	-26.6	-24.7	-23.9	-23.4	-22.6	-24.9	-22.3	-24.1	0.980
18:2n-6	-24.2	-23.6	-28.1	-27.5	-28.5	-25.5	-25.9	-26.9	-24.9	-24.1	-27.3	-22.3	-26.4	0.882
18:3n-3	-22.4	-24.1	-30.1	-31.4	-29.8	-31.0	-28.3	-28.5	-25.7	-25.3	-29.0	-31.7	-27.6	0.588
18:4n-3	-25.3	-24.4	-29.3	-26.5	-28.9	-30.0	-26.6	-28.4	-28.4	-25.9	-24.5	-27.8	-28.1	0.520
20:1n-9	-25.3	-24.7	-22.1	-26.8	-28.2	-24.2	-23.0	-25.6	-23.8	-22.8	-24.6	-22.6	-24.9	0.112
20:4n-3	-20.6	-23.1	-22.5	-24.6	-24.6	-23.3	-23.8	-23.6	-22.8	-21.8	-23.9	-22.4	-24.4	0.726
20:4n-6														0.732
20:5n-3	-20.8	-23.1	-22.7	-24.7	-26.4	-26.9	-24.7	-25.6	-23.4	-23.9	-25.2	-23.9	-24.4	0.736
Σ SFA ¹	-25.0	-22.6	-26.3	-27.8	-26.3	-23.0	-26.1	-26.1	-22.9	-22.4	-24.5	-20.9	-24.2	0.041
Σ MUFA ²	-204.	-22.7	-22.9	-26.9	-25.7	-24.5	-22.4	-25.9	-22.6	-22.6	-25.4	-21.9	-24.8	0.264
Σ PUFA ³	-28.9	-22.8	-25.7	-27.8	-27.0	-25.1	-24.8	-26.5	-23.7	-22.9	-25.7	-21.9	-25.6	0.098
Σ n-3	-28.3	-23.4	-26.6	-28.7	-27.0	-26.2	-23.6	-27.3	-24.2	-23.4	-25.7	-22.4	-25.5	0.102
Bacterial ⁴	-26.1	-22.0	-32.5	-27.7	-25.2	-25.4	-22.3	-25.4	-22.0	-21.9	-22.2	-20.0	-23.1	0.017
Zooplankton ⁵	-23.6	-24.7	-22.1	-26.8	-28.2	-24.2	-23.0	-25.6	-23.7	-22.4	-24.6	-21.4	-24.9	0.077

¹Saturated fatty acid

²Monounsaturated fatty acid

³Polyunsaturated fatty acid

⁴Bacterial marker = *i*15:0, *ai*15:0, 15:0, 15:1, *i*16:0, *ai*16:0, *i*17:0, *ai*17:0, 17:0, 17:1

⁵Zooplankton marker = 20:1n-9, 22:1n-9, 22:1n-11