

**Table 2. Fatty acid composition of cultured White Sea mussels *Mytilus edulis* L. of different age (% of total fatty acids)**

Fatty acids (% of total FA)	0+	1+	2+	3+	4+	5+–6+
Total saturated FA	18.1	19.0	18.5	19.6	19.1	17.9
Total monounsaturated FA	21.5	24.0	21.4	21.8	20.6	22.1
16:4(n-3)	6.3	4.2	5.4	4.2	5.3	4.6
18:3(n-3)	1.3	1.7	2.0	2.2	1.9	2.1
20:5(n-3)	13.1	13.1	14.8	14.7	16.5	15.4
22:6(n-3)	16.4	17.3	18.8	18.8	19.4	19.4
Total n-3 PUFA	41.0	39.3	43.7	42.6	45.9	44.4
20:4(n-6)	3.6	2.7	2.5	2.3	2.4	2.7
Total n-6 PUFA	14.9	13.1	12.4	11.5	10.9	11.6
Total PUFA	60.4	57.0	60.1	58.6	60.3	60.1

Thus, the fatty acid composition of *Mytilus edulis* L. mussels is noted for high content of n-3 PUFA, represented predominantly by 20:5 (n-3), 22:6 (n-3) acids. Their positive effect at some human diseases has been proven in quite a number of studies. Our results suggest *Mytilus edulis* L. is a commendable source of polyunsaturated acids of the n-3 family to be used in manufacturing of medicines.

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## IDENTIFICATION AND CHARACTERIZATION OF SMALL REGULATORY RNAS IN THE GRAM-NEGATIVE FISH PATHOGEN *ALIIVIBRIO SALMONICIDA*

**Peik Haugen**

Department of Chemistry, Faculty of Science and Technology, University of Tromsø, Norway, Tromsø  
e-mail: peik.haugen@uit.no

Small RNAs from Bacteria, commonly known as sRNAs, make up a new and interesting group of regulatory RNAs involved in stress responses, central metabolism, quorum sensing, motility and more. Even though data on sRNA function is accumulating, there are still large gaps in our understanding of their biological roles in Bacteria. We use bioinformatic tools, biochemical methods and – omics approaches to identify and characterize sRNAs in the cold-loving fish pathogen *Aliivibrio salmonicida*. Our main goal is to understand the critical roles of sRNAs in virulence, for example by triggering expression of proteins involved in iron uptake, oxidative stress and cell-cell communication. Recent data from these experiments will be presented.