

Dr. Eldar Åsgard Bendiksen

born 17.03.1967

Ringveien 21B, 7604 Levanger – eldar.bendiksen@aquanutrition.no

Mobile: +47 906 95 422

KEY COMPETENCE

Fish Physiology and Nutrition, Nutritional requirements cold water species, Feed and Feeding Strategies, Feed price & value evaluations, Feed Quality Surveillance Programs, Flesh quality management, Environmental aspects of fish farming, Project Management within Research, Methodology for fish biology, Data processing and analysis, Product and Concept Development, Dissemination of Knowledge, Scientific publication, Knowledge management

WORK EXPERIENCE

Managing Director <i>AquaNutrition AS</i>	2016 – to date
Nutrition Manager <i>SalMar Farming AS</i>	2015 – 2016
Technical Manager feed, feeding and growth <i>SalMar ASA</i>	2011 – 2015
Group Manager Nutrition <i>Biomar – Global</i>	2007 – 2011
Principal Product Developer <i>Biomar – Global</i>	2007 – 2011
Product Developer <i>Biomar AS</i>	2003 – 2007
PhD Fellow <i>Biomar/Norwegian University of Science and Technology (NTNU)</i>	1999 – 2003
Research Trial manager <i>Nutreco ARC</i>	1997 – 1999
Project Assistant <i>Norwegian Institute for Nature Research (NINA/NIKU)</i> <i>Norwegian University of Science and Technology (NTNU)</i>	1996 – 1996
Fish farmer <i>Borgannfisk AS</i>	1991 – 1993
Military service	1988 – 1989

EDUCATION

Master's degree in knowledge management <i>Nord University</i>	2019
Doctor scientiarum (Dr. scient) in biology <i>NTNU</i>	2003
Candidatus scientiarum (MSc) in fish physiology <i>NTNU</i>	1996
University exams and courses after Dr. scient. dissemination <i>NTNU/ University of Tromsø/Nord University</i> Course in R&D strategy and management in fisheries and aquaculture Course in Process and change management Course in Practical project management	2004 – 2014

LANGUAGES

Norwegian (mother tongue), English (fluently orally/written).

OTHER ASSIGNMENTS

Member of scientific committee at Gildeskål Research Station (GIFAS)

2019 – to date

SCIENTIFIC PUBLICATIONS

1. Resæg, M.V., Rimstad, E., Guttvik, A., Skjelstad, B., Bendiksen, E.Å., Garseth, Å.H., 2018. Effect of pancreas disease caused by SAV 2 on protein and fat digestion in Atlantic salmon. *J. Fish Dis.* 41, 1-12.
2. Broch, O.J., Daae, R.L., Ellingsen, I.H., Nepstad, R., Bendiksen, E.Å., Reed, J.L., Senneset, G., 2017. Spatiotemporal dispersal and deposition of fish farm wastes: A model study from Central Norway. *Front. Mar. Sci.* 4, 1-15.
3. Lerfall, J., Bendiksen, E.Å., Olsen, J.-V., Morrice, D., Østerlie, M., 2016. A comparative study of organic- versus conventional farmed Atlantic salmon. I. Pigment and lipid content and composition, and carotenoid stability in ice-stored fillets. *Aquaculture* 451, 170-177.
4. Lerfall, J., Bendiksen, E.Å., Olsen, J.-V., Østerlie, M., 2016. A comparative study of organic- versus conventional Atlantic salmon. II. Fillet color, carotenoid- and fatty acid composition as affected by dry salting, cold smoking and storage. *Aquaculture* 452, 369-376.
5. Krontvedt, R., Bendiksen, E.Å., Aunsmo, A., 2014. Field monitoring of feed digestibility in Atlantic salmon farming using crude fiber as an inert marker. *Aquaculture* 426-427, 249-255.
6. Johnsen, C.A., Hagen, Ø., Solberg, C., Björnsson, B.Th., Jönsson, E., Johansen, S.J.S., Bendiksen, E.Å., 2013. Seasonal changes in muscle structure and flesh quality of 0+ and 1+ Atlantic salmon (*Salmo salar* L.): Impact of feeding regime and possible roles of ghrelin. *Aquaculture Nutrition* 19, 15-34.
7. Johnsen, C.A., Hagen, Ø., Adler, M., Jönsson, E., Kling, P., Bickerdike, R., Solberg, C., Björnsson, B.Th., Bendiksen, E.Å., 2011. Effects of feed, feeding regime and growth rate on flesh quality, connective tissue and plasma hormones in farmed Atlantic salmon (*Salmo salar* L.). *Aquaculture*, 318, 343-354.
8. Pratoomyot, J., Bendiksen, E.Å., Campbell, P.J., Jauncey, K.J., Bell, J.G., Tocher, D.R., 2011. Effects of different blends of protein sources as alternatives to dietary fishmeal on growth performance and body lipid composition of Atlantic salmon (*Salmo salar* L.). *Aquaculture*, 316, 44-52.
9. Bendiksen, E.Å., Johnsen, C.A., Olsen, H.J., Jobling, M., 2011. Sustainable aquafeeds: Progress towards reduced reliance upon marine ingredients in diets for farmed Atlantic salmon (*Salmo salar* L.). *Aquaculture* 314, 132-139.
10. Karalazos, V., Bendiksen, E.Å., Dick, J.R., Tocher, D.R., Bell, J.G., 2011. Influence of the dietary protein/lipid ratio and fish oil substitution on fatty acid composition and metabolism of Atlantic salmon (*Salmo salar* L.) reared at high water temperatures. *British Journal of Nutrition*, 105, 1012-1025.
11. Johnsen, C.A., Hagen, Ø., Bendiksen, E.Å., 2011. Long-term effects of high-energy, low-fishmeal feeds on growth and flesh characteristics of Atlantic salmon (*Salmo salar* L.). *Aquaculture* 312, 109-116.
12. Karalazos, V., Bendiksen, E.Å., Bell, J.G., 2011. Interactive effects of dietary protein/lipid level and oil source on growth, feed utilisation and nutrient and fatty acid digestibility of Atlantic salmon. *Aquaculture*, 311, 193-200.
13. Penn, M.H., Bendiksen, E.Å., Campbell, P., Krogdahl, Å., 2011. High level of dietary pea protein concentrate induces enteropathy in Atlantic salmon (*Salmo salar* L.). *Aquaculture* 310, 267-273.
14. Pratoomyot, J., Bendiksen, E.Å., Bell, J.G., Tocher, D.R., 2010. Effects of increasing replacement of dietary fishmeal with plant protein sources on growth performance and body lipid composition of Atlantic salmon (*Salmo salar* L.). *Aquaculture* 305 124-132.
15. Bell, J.G., Sprague, M., Bendiksen, E.Å., Dick, J.R., Strachan, F., Pratoomyot, J., Berntssen, M.H.G., Tocher, D.R., 2010. Using decontaminated fish oil or a vegetable/fish oil blend to reduce organic contaminant concentrations in diets and flesh of farmed Atlantic salmon (*Salmo salar*). *British Journal of Nutrition* 103, 1442-1451.
16. Jobling, M., Leknes, O., Sæther, B.-S., Bendiksen, E.Å., 2008. Lipid and fatty acid dynamics in Atlantic cod, *Gadus morhua*, tissues: Influence of dietary lipid concentrations and sources. *Aquaculture* 281, 87-94.
17. Tocher, D.R., Bendiksen, E.Å., Campbell, P.J., Bell, J.G., 2008. The role of phospholipids in nutrition and metabolism of teleost fish. *Aquaculture* 280, 21-34.
18. Pratoomyot, J., Bendiksen, E.Å., Bell, J.G., Tocher, D.R., 2008. Comparison of effects of vegetable oils blended with southern hemisphere fish oil and decontaminated northern hemisphere fish oil on growth performance, composition and gene expression in Atlantic salmon (*Salmo salar* L.). *Aquaculture* 280, 170-178.
19. Karalazos, V., Bendiksen, E.Å., Dick, J.R., Bell, J.G., 2007. Effects of dietary fat and protein level and rapeseed oil on growth and tissue fatty acid composition and metabolism in Atlantic salmon *Salmo salar* L. reared at low water temperatures. *Aquaculture Nutrition* 13, 256-265.
20. Bendiksen, E.Å., Jobling, M., 2004. Effects of rearing temperature and feed composition on partitioning and retention of n-3 HUFA fatty acids in Atlantic salmon (*Salmo salar* L.) parr. *Fish Physiology and Biochemistry* 29, 133-140.
21. Bendiksen, E.Å., Arnesen, A.M., Jobling, M., 2003. Effects of fatty acids and fat content on smolting and seawater performance in Atlantic salmon (*Salmo salar* L.). *Aquaculture* 225, 149-163.
22. Bendiksen, E.Å., Berg, O.K., Jobling, M., Arnesen, A.M., Måseval, K.A., 2003. Digestibility, growth and nutrient utilisation of Atlantic salmon parr *Salmo salar* L. in relation to temperature, feed fat content and oil source. *Aquaculture* 224, 283-299.

23. Jobling, M., Bendiksen, E.Å., 2003. Dietary lipids and temperature interact to influence tissue fatty acid compositions of Atlantic salmon, *Salmo salar* L., parr. *Aquaculture Research* 34, 1423-1441.
24. Bendiksen, E.Å., Jobling, M., Arnesen, A.M., 2002. Feed intake of Atlantic salmon parr *Salmo salar* L. in relation to temperature and feed composition. *Aquaculture Research* 33, 525-532.

DISSERTATIONS

- 1 Bendiksen, E.Å., Bergem, K.V., 2019. From barge-based feeding to centralized remote feeding of farmed salmon. People, environment and technology in the feeding process. Master's thesis in knowledge management, Nord University, Levanger, Norway [*in Norwegian*]
- 2 Bendiksen, E.Å., 2003. Environmental effects on lipid nutrition of farmed Atlantic salmon (*Salmo salar* L.) parr and smolt. *Dr. scient.* thesis in biology, Norwegian University of Science and Technology (NTNU), Trondheim, Norway,
- 3 Bendiksen, E.Å., 1996. Effect of photoperiod and colored light on circulating level of melatonin in Arctic char. *Cand. scient.* thesis in aquaculture, Norwegian University of Science and Technology (NTNU), Trondheim, Norway [*in Norwegian*]