



AQUACULTURE Nutrition Group

Our research interests coincide with the Institute of Aquaculture's Research Strategy contributing significantly to the four major themes:

- Fish as Food for Humans
- Aquaculture Development and Sustainability
- Development of New Species for Aquaculture
- Welfare of Farmed Fish

A major interest of the group is fish as principal sources of the n-3 (or omega-3) long-chain polyunsaturated fatty acids (LC-PUFA) known to play key roles in human nutrition. These fatty acids are essential nutrients important for development of the nervous system, and in the prevention and therapy of various pathological conditions including cardiovascular and inflammatory disorders. Research into development of feeds utilizing alternative sources of omega-3 LC-PUFA as replacements for traditional fish oils is aimed at increasing sustainability of the industry while maintaining or improving nutritional quality for the consumer.

Replacement of conventional sources of dietary protein (especially fishmeal) is a further research theme concentrating on the effects of toxic and/or antinutritional factors in plant materials and use of low cost locally available feed ingredients. As the principal environmental impact of aquaculture is via uneaten food or unretained dietary nutrients, the Nutrition Group and Environment Group work closely together on a number of projects.

Defining the nutritional requirements of emerging species of aquaculture potential is another important research area as is the impact of changing nutrition on the health and welfare of farmed fish. The group contributes significantly to undergraduate and taught postgraduate programmes in the Institute and annually supports a number of BSc (honours) and MSc projects.

For further information on the Nutrition Group, contact aquaculture@stir.ac.uk or tel +44 (0)1786 467874

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RESEARCH THAT SHAPES AND IMPROVES LIVES