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March 2023 News Update

IFFO's monthly newsletter

Editorial

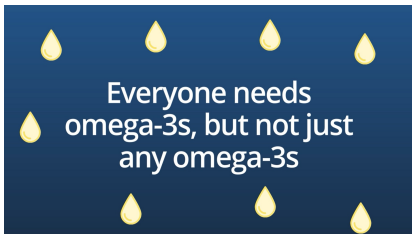
80% of people worldwide are not getting enough EPA and DHA omega3s in their diets. On Global Omega-3 Day (3rd March), it is important to raise awareness on their benefits and the way to get them. [...]

Read more

Registrations are open for the Members' Meeting

IFFO's Members Meeting will be held in Madrid from 1-3 May 2023. **The list of speakers is available here.** Early bird registrations will end on 17 March.

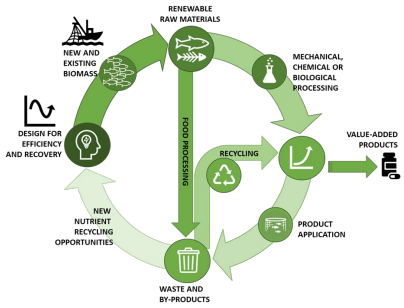
Register



Global Omega-3 Day

With a low carbon footprint and a unique range of nutritional properties, marine ingredients provide essential omega-3s.

Access IFFO's campaign



No such thing as waste

While the use of trimmings and by-products is not a new initiative in the marine ingredients sector, the momentum behind the use of these "circular" proteins and lipids is something that is steadily growing.

Read on

MarinTrust welcomes new Fisheries Manager

MarinTrust is pleased to welcome environmental scientist and fisheries expert Dr Emily McGregor to their team as Fisheries Manager. In the past, Emily worked closely with MarinTrust through her role at Marine Stewardship Council (MSC).

Read on

Industry news

- The Intrafish: Aquaculture industry needs to watch pigs, not fish, for clues on fishmeal prices
- UndercurrentNews: Rabobank: Norway's new tax to benefit other salmon producing countries in the short-term
- MisPeces: Ecuadorian shrimp loses competitiveness against India and Vietnam
- AquaCultureAsiaPacific: Latest insights on fishmeal and fish oil market trends
- FeedNavigator: How did PFAS contaminate the organic egg supply chain? Feed suppliers weigh in
- Nature: Four ways blue foods can help achieve food system ambitions across nations
- Phys.org: Chicken and farmed salmon have remarkably similar environmental footprints

Innovation & Research

FISHMEALS and their competition

- In a study, some "**functional ingredients**" (butyrate, arginine, nucleotides, beta-glucans) were evaluated to see if they could reduce inflammatory responses caused by certain feed ingredients (e.g. soybean meal). The addition of the functional ingredients did not improve any histological inflammation markers, though they did influence some molecular immune and stress markers. Notably, there was some also effect of the functional ingredients in altering the gut microbiota towards that in fish fed the control diet, but this was not linked to improvement in inflammation response.

- A dietary **single-cell protein** produced from Spirulina meal (Arthrospira platensis) was tested in diets fed to Atlantic salmon at an inclusion level up to 20% of the total diet. Feeds were well accepted and the Spulina meal was well digested. It was suggested by the authors that Spirulina meal was a suitable low-trophic alternative protein source for salmon.

FISHOILS and their competition

- The influence of using a continuous or finishing **diet strategy on the fatty acid and flavour compound characteristics** of Tiger Puffer (Takifugu rubripes) was evaluated. The authors initially used a series of diets with blends of poultry oil and fish oil to examine the impacts on flesh quality, where after they examined the recovery efficiency over a four-week period. EPA recovery was more efficient than that of DHA. The use of poultry oil also led to changes of flavour characteristics, whereas use of a fish oil-finishing strategy mitigated the changes.

- High levels of **canola oil** substitution for fish oil (≥75%) did not negatively affect growth of rainbow trout, according to a recent study. Replacement of fish oil by canola oil was linked to improvements in fillet color, texture, umami and lipid nutritional values. Notably, it was suggested that use of canola oil could increase fillet odor intensity, bitterness and sourness. However, use of canola oil also increased fillet fragility and decreased total n-3 LC-PUFA content.

PROCESSING and its development

- A method has been developed that allows s**pecies identification in fishmeal produced from fisheries by-product biomass** based on using a DNA metabarcoding analysis. The study shows that the method was able to detect 81–122 fish species present at more than 0.001% by weight, and quantitatively detect more than 0.01% by weight.

CONTAMINANTS

- A study evaluated the nutritional quality and levels of key contaminants in farmed **Atlantic salmon** from different regions. Fish from Chilean farms were less fatty and had lower levels of vitamin E than other origins. Fish from Scottish farms had the highest levels of EPA and DHA. Various contaminants from polychlorinated biphenyls, organochlorinated pesticides, brominated flame retardants, and perfluoroalkylated and polyfluoroalkylated substances were measured, and were found to be at very low concentrations that did not exceed any legislation limits applicable in the European Union.

- The occurrence and implications of **per and polyfluoroalkyl substances** (PFAS) in animal feeds used in laboratory toxicity testing was recently reported. It was demonstrated that PFAS contamination in animal feed is pervasive.

Calendar

- 7-9 March 2023: North Atlantic Seafood Forum, Bergen, Norway
- 12-14 March 2023: Seafood Expo North America, Boston USA
- 25-27 April 2023: Seafood Expo Global, Barcelona, Spain
- 1-3 May 2023: IFFO's members Meeting, Madrid, Spain
- 23-24 May 2023, Blue Food Innovation Summit, London, UK

IFFO
THE MARINE INGREDIENTS ORGANISATION