



Dear Friends of the F3 Future of Fish Feed,

The F3 Team held its second F3 Companies Got Talent Meeting from Feb. 19 - 22, 2019 in the San Francisco Bay Area.

The purpose of the meeting was to showcase ingredients that are substitutes for fishmeal or fish oil in aquaculture feeds, and also highlight the perspectives and progress among major feed companies in substitution. The meeting brought together leaders from academia, alternative ingredient companies, feed companies, synthetic biology companies, aquafarms, investors, and NGOs, among others.



We will also have videos from the talks available on the [F3 Youtube channel](#) and will let you know when these are available. Below is information about F3 in the News, Special Announcements including information on how to comment on the Monterey Bay Seafood Watch Standard, and Resources available to the F3 Community.

As statistics have shown, this work is important not only for support of ocean health and maintenance of genetic diversity, but also for the continued growth of aquaculture, and future food security. The F3 Team is continuing to make resources available to encourage progress listed on the next page. Thank you again for your support of the F3 effort.

The F3 Team  
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### F3 In The News

- Intrafish: [Silicon Valley meets alternative fish feeds](#)
- Aquafeed: [Fishmeal and oil alternatives coming of age](#)
- GAA: [Aquafeed moonshots at the F3 'talent show'](#)
- Fish Farming Expert: [Creating a fish oil alternative for feed](#)
- Undercurrent News: 2/19 [Fish-free feed blog: Alternative ingredients gaining acceptance](#)
- Undercurrent News: 2/20 [Off-take agreements key for alternative ingredient makers to reach scale](#)
- Undercurrent News: 2/28 [Algae oil producers gaining scale, markets, momentum](#)
- The Fish Site: [Future-proofing aquafeed needs](#)
- Feed Navigator: [Sales challenge laid down in fish oil alternative game](#)
- Fish First [探讨鱼粉鱼油替代 20余国水产大咖云集F3无鱼饲料潜力企业论坛掀头脑风暴](#)
- Scientific American: [Faux Fish Might Help Aquaculture Keep Feeding the World](#)

### Special Announcements

- Monterey Bay Seafood Watch is seeking feedback on their sustainable seafood standard by May 3rd. Details on how to give feedback are [here](#).
- Leading Atlantic Salmon Producer Commits to “Fish-Free” Fish Oil Trials: Mowi commits to testing winning formula in their research facilities. Full announcement [here](#).
- Alpha Feed and Yuehai, large Chinese aquafeed producers, have also committed to running F3 feed trials for the F3 oil winner.
- A simpler, faster and more effective way of trading feeds and feed ingredients both globally and domestically, will soon be available via a digital open exchange to change the way the industry does business. Contact [Mike Budreski](#) or [Suzi Dominy](#) to learn more.
- Arlin Wasserman, Founder and Partner of Changing Tastes, has released a report about changing dietary trends in the U.S. marketplace and the growing opportunity for fish and shellfish aquaculture [here](#), and has also just released a report on mariculture [here](#).

### Resources Available to the F3 Community

- 1 - [F3 Ingredient suppliers List](#)
- 2 - A list of commercially available [algae suppliers](#) and nutrient composition, ecological information and market availability.
- 3 - [F3 Feed Suppliers List](#) that also outlines the species with feeds available.
- 4 - [Open Formulas](#) project. Thanks to researchers at the F3 team, there are now 76 formulas for feed that are publicly available, for salmon and tilapia. These are at various gradations, but all formulas indicate progress in fishmeal and fish oil reduction.
  - F3 – Fishmeal & Fish Oil Free
  - F2 – Fishmeal or Fish Oil Free
  - F1 – Fishmeal or Fish Oil Reduced
  - F0 – Contains Fishmeal & Fish oil
- 5 - There is also a list of [companies testing F3 feeds](#) .
- 6 - For organizations embarking on F3 evaluations, there are suggested flowcharts and testing protocols for evaluating [ingredient s](#) and [feed s](#) as well as a list of [testing facilities](#) where testing can be conducted.
- 7 - Testing ingredient efficacy requires small batch production to test feeds made with customized ratios. Small batch production facilities are also [listed](#) .

There is much research ongoing in F3 feeds. As our team becomes aware of projects, they are listed [here](#) , so other researchers can examine experiments, and embark on others for other commercially important species.

