

sparos
I&D nutrition in aquaculture

planktonic

ciimar

eureka
innovation beyond borders

eurostars

EarlyCOD

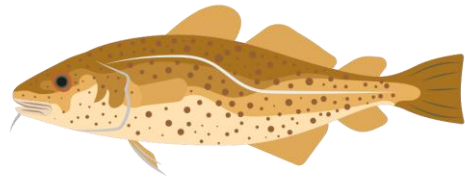



Tailored microdiets for Atlantic cod lead to reduction in skeletal deformities

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Aquafuture Europe 2025 - Valencia

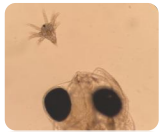
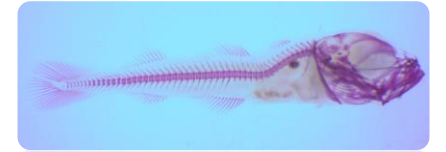
Tailoring your feeds



**HATCHERY
Production**

Knowledge need

- Larval mortalities
- Susceptibility to disease
- Sub-optimal juvenile quality

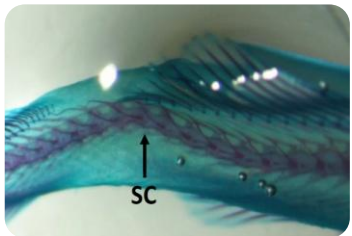
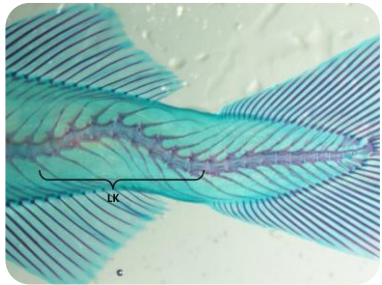


Developing feeding regimes with innovative microfeeds & cryoplankton

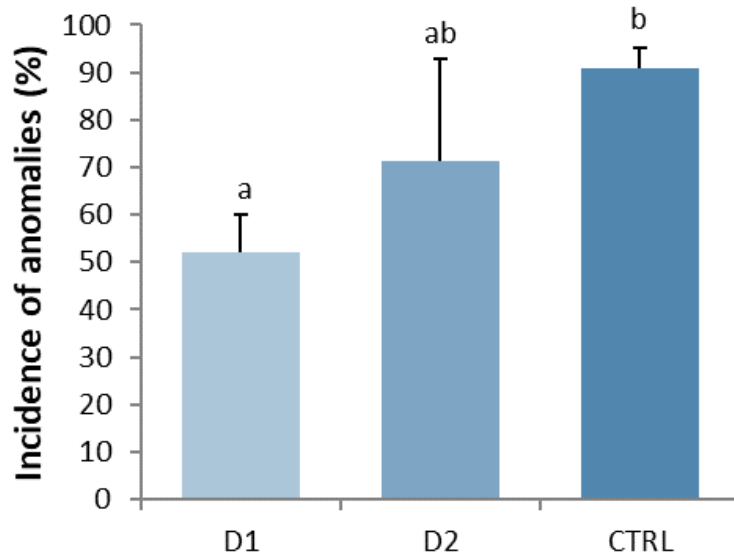
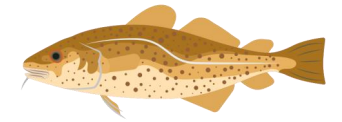
EarlyCOD project aims at...

Increasing robustness and quality of cod larvae & juveniles

Tailoring your feeds

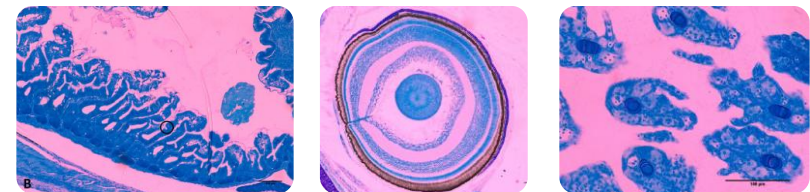


Results

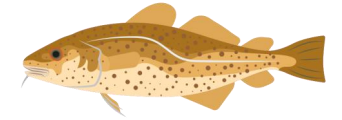


67 DAH	Control	D3
Anterior Intestine*	3/5	5/5
Posterior Intestine	3/5	4/5
Liver	3/5	4/5
Eyes	3/5	4/5
Gills	3/5	4/5

Marine fish larval and juvenile quality scoring system (Pacorig et al, 2022):
Scale from 1 (very poor development) to 5 (very well developed)

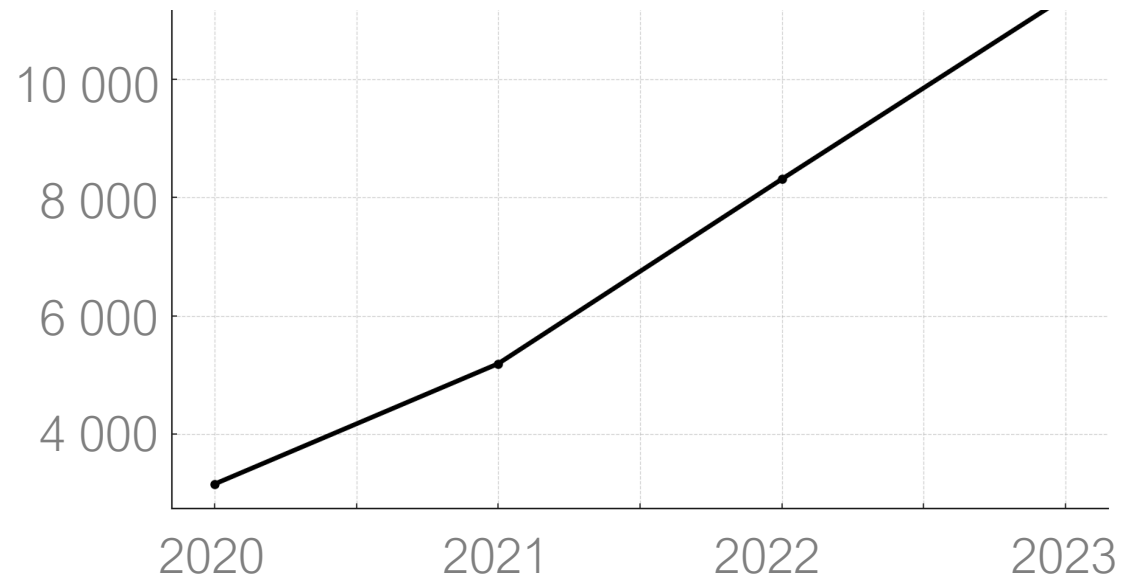


- Combining **cryoplankton** with tailored **microfeeds** improved skeletal and organ development in Atlantic cod larvae;
- Bringing faster organ maturation and lower incidence of skeletal anomalies



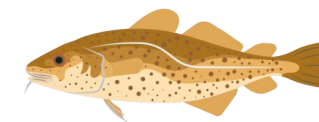
- Hatcheries for emerging cod farming in Norway (& Iceland):
 - 11 000 tons in 2023
 - up to 50 000 tons by 2030

Tons of cod farmed in Norway (Directorate of Fisheries)



Tailoring your feeds

Impact

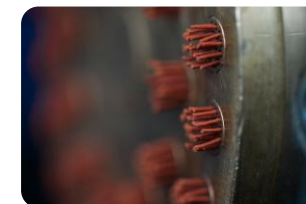
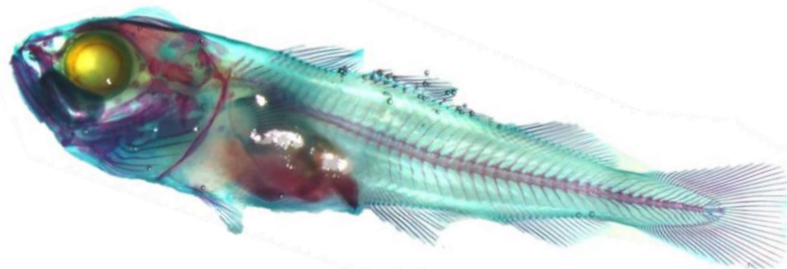


Lower incidence of skeletal
anomalies

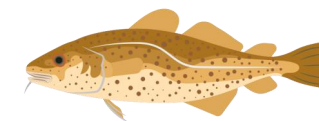
Faster development of organs
(e.g., gut, eyes, gills)

Good growth rates

Easier operation by reducing use
of traditional live feeds



- Combining cryoplankton with tailored microfeeds will improve cod juvenile quality and hatchery returns



Acknowledgments



This work is part of project E!219 EarlyCOD_17205, supported by EUROSTARS-3 program and by: Portugal and the European Union through ERDF, Algarve 2030, and COMPETE 2030, in the framework of Portugal 2030; and the Research Council of Norway.

Our EarlyCOD posters @AE2025:

- Nutrition & requirements session

João Henriques et al.

Manuel Monteiro et al.

- Early life session

Luís Conceição et al.

