



@blueccproject
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Commercial exploitation of collagen and chitin from marine sources

THE AIM

The BlueCC project aims to take underutilised marine sources – such as invasive species, by-catch and cleaner fish from aquaculture – to develop new eco-friendly marine ingredients and products in a market acceptance approach.

Invasive crabs, jellyfish, starfish, fishery by-catch, and aquaculture cleaner fish are untapped resources of chitin, chitosan, and collagen. If exploited further, these resources can be used in new product concepts that fulfil consumer demands for desirable and sustainable products.

THE SUMMARY

Programme:
BlueBio Cofund

Priority area:
Exploring new resources

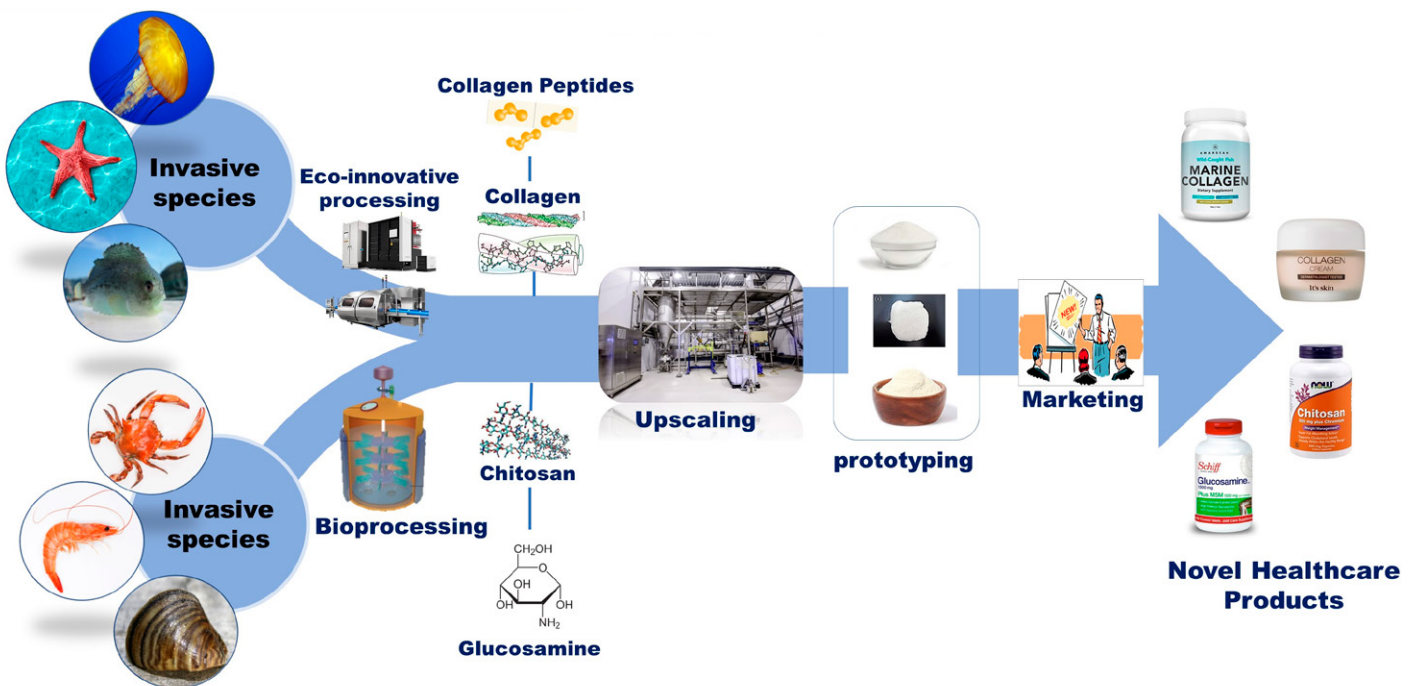
Project duration:
June 2020 – May 2023 (36 months)

COORDINATOR:
Nofima – The Norwegian Institute of Food, Fisheries and Aquaculture Research.

CONSORTIUM:
7 leading European academic institutions + 1 industry partner

BUDGET:
€2 million

BlueCC



THE PROCESS



Market acceptance approach

We investigate the potential demand for products based on chitin, chitosan and collagen peptides across consumer and industry sectors.



Eco-friendly chitin & collagen production

We develop greener methods for the isolation of chitin, chitosan and collagen from marine invasive species, by-catch and aquaculture cleaner fish. Demonstrators are designed and tested for each application.



Health effects of new marine ingredients

We study the potential health benefits. The novel marine ingredients are checked for nutritional and nutraceutical components with e.g. anti-inflammatory, anti-microbial and antioxidant functions.



Characterisation of marine bioactives

We analyse the chemical properties of the produced chitin, chitosan, and collagen to characterise their capabilities, including assessments concerning biosafety and regulatory approval.



Commercial feasibility

We evaluate the commercial feasibility of the demonstrators and prepare strategies for the most successful cases, including legal and regulatory aspects.

THE INNOVATION

- Using invasive marine species as untapped resources of chitin and collagen to produce biobased materials with nutritional and nutraceutical potential.
- Producing chitin and collagen in an eco-friendly manner by reducing the amount of chemicals used in the process.
- Merging market research and natural sciences to guide the production of chitin and collagen polymers into products that are desired by consumers.

THE CONSORTIUM



Stazione
Zoologica
Anton Dohrn
Napoli



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