

Secret Value in Dead Things

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A Platform Technology
The marine biorefinery



- Fermentative hydrolysis of a wide range of animal and marine by-products for production of a variety of animal, plant and human natural products.



Potential Dead

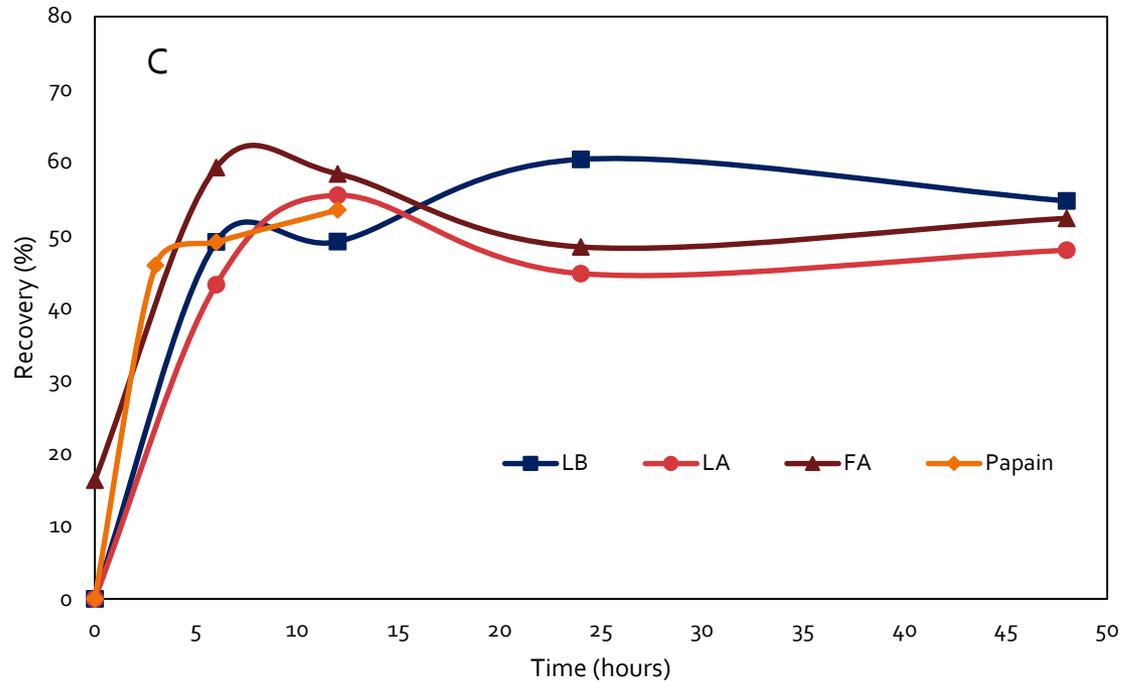
Parts;

Fish, poultry, mink,
lobster, shrimp, clam,
scallop, mussel,



Optimization of parameters determining degree of hydrolysis

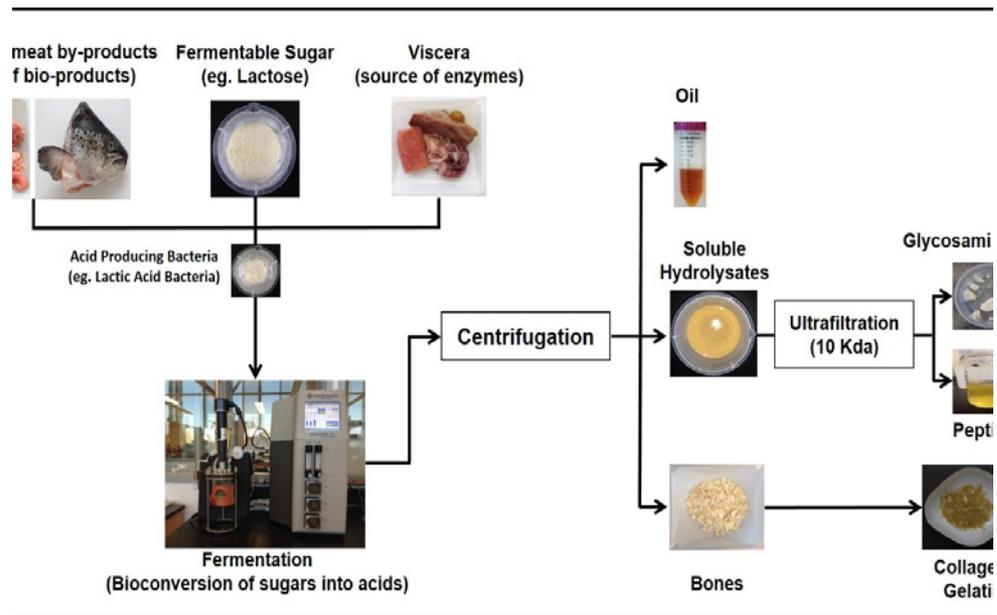
Balance of disruption of fractions with destruction of functional attributes, to yield optimum DH



Production of Glycosaminoglycan for joint health, and collagen peptides

From Poultry and fish heads.

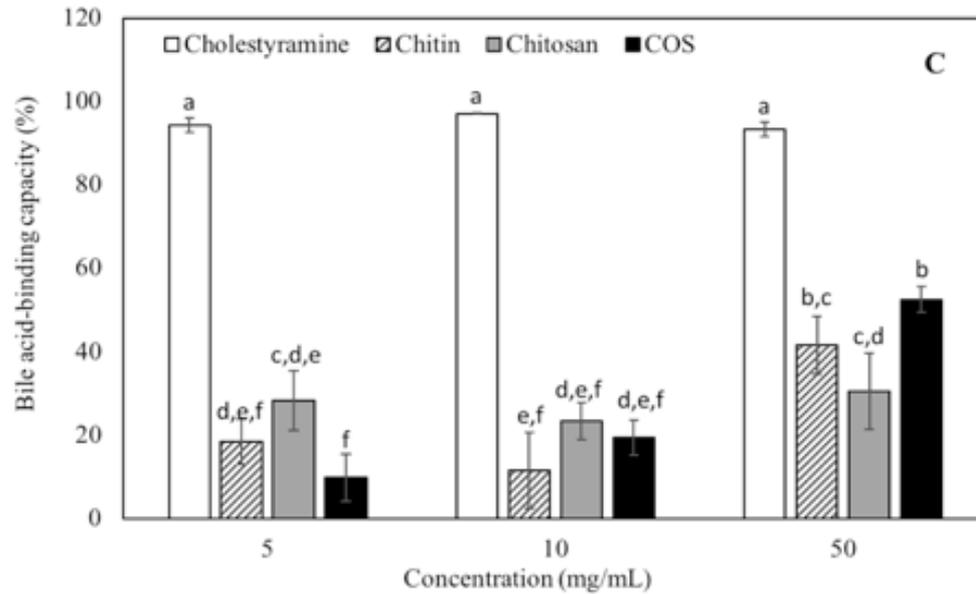
Bench scale representation of process for GAG's



Production of chito-oligosaccharides for cholesterol reduction



Efficacy of COS against traditional statin drug. secondary bile acid: sodium deoxycholate (SDC)-binding capacity



Extraction of
prebiotic
oligosaccharides
from Macro Algae.
MAE/UAS
methods

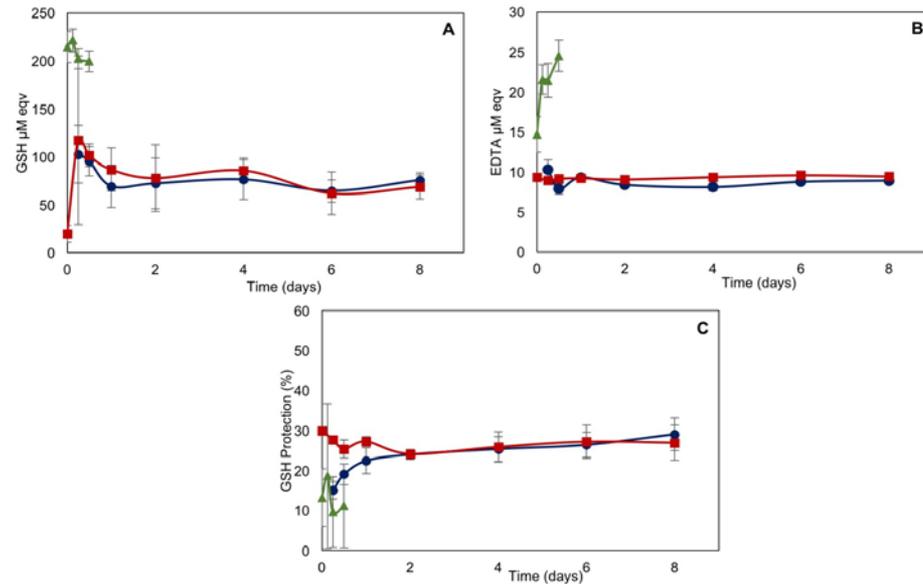
Fucoidans &
Laminarins



Antioxidant peptides;

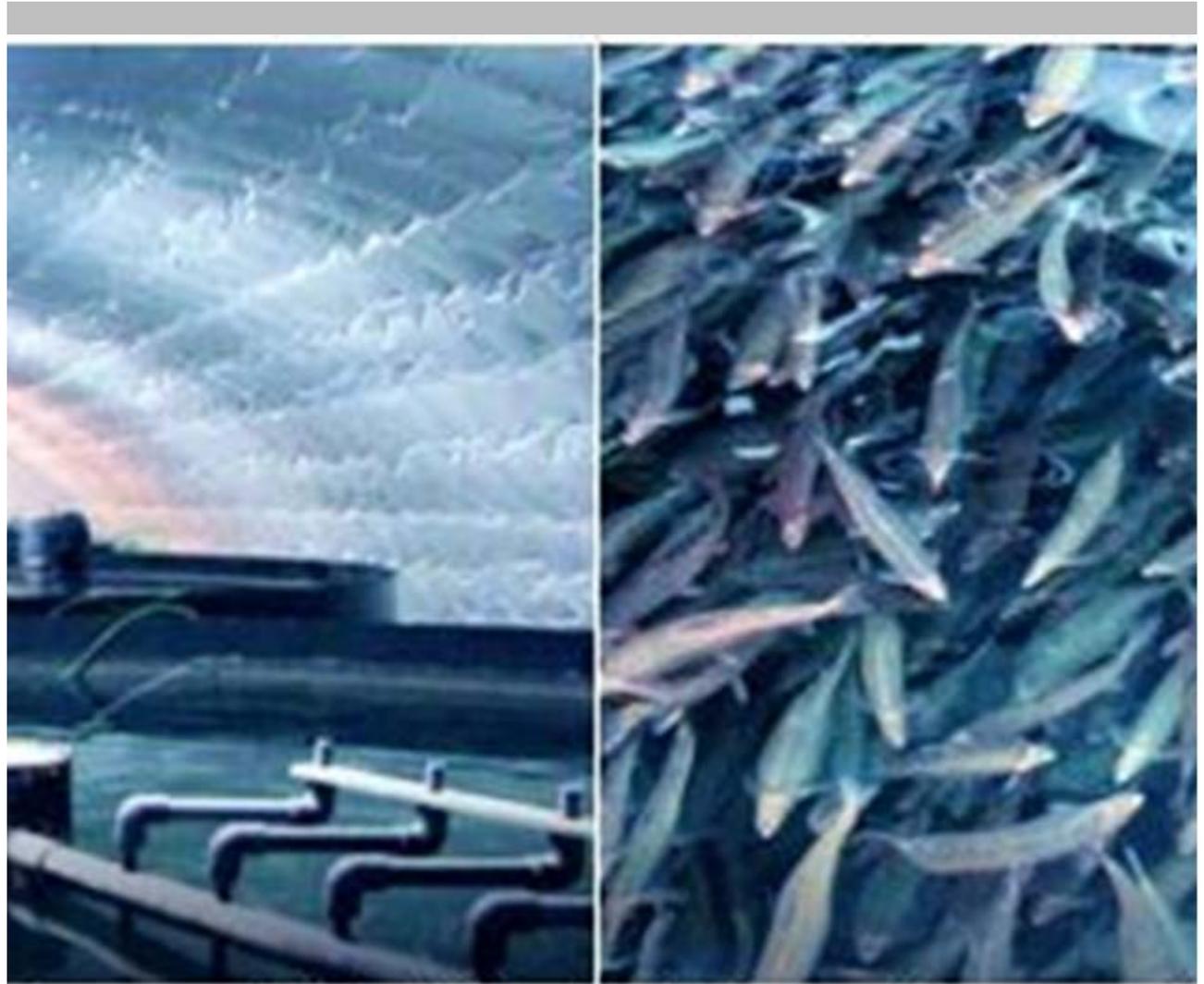
Ferric reducing, Fe chelation and sacrificial oxidant tests.

Figure 4 salmon by-product protein hydrolysates prepared from LA, FA and FL. (A) Ferric reducing capacity expressed as mM glutathione (GSH) equivalent, (B) Fe(II) chelation activity expressed as μM EDTA equivalent and (C) Sacrificial antioxidant capacity of the hydrolysates assessed and expressed as percentage protection of GSH subjected to Fenton's 8. Characterization of antioxidant properties of the reaction.



Livestock & Aquaculture functional ingredients

Antimicrobial peptides,
prebiotic OS



Plant bio-stimulants

Improved yield, root growth, and resistance to abiotic stress.



Aquaculture nutrition

Combined feed and
health promotion.



Fractionated Functional ingredients for human food

Bioactive peptides

Functional peptides
(food preparation),
antioxidants, prebiotics
& immune
regulatory

