

Swine blood hydrolysates for European seabass functional diets: impact on fish response to stress

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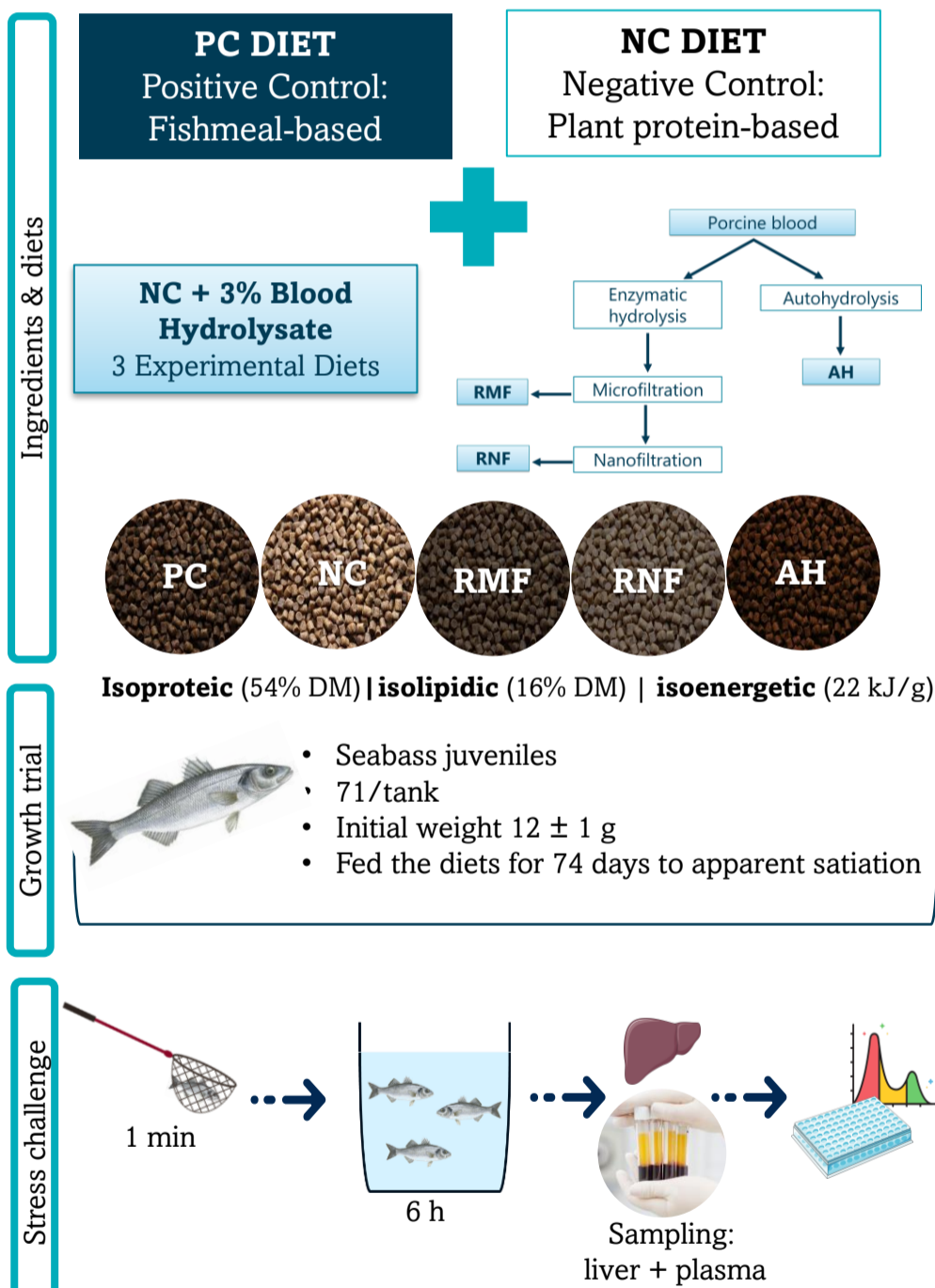
Introduction

- Fishmeal replacement by plant proteins
 - High stocking densities
 - Frequent fish handling
- STRESS**
- ↑ Reactive oxygen species
 - Lipid peroxidation
 - Protein oxidation

Objective

Understand the impact of the dietary inclusion of bioactive blood hydrolysate fractions on fish response to an event of stress (air exposure).

Methods



Methods

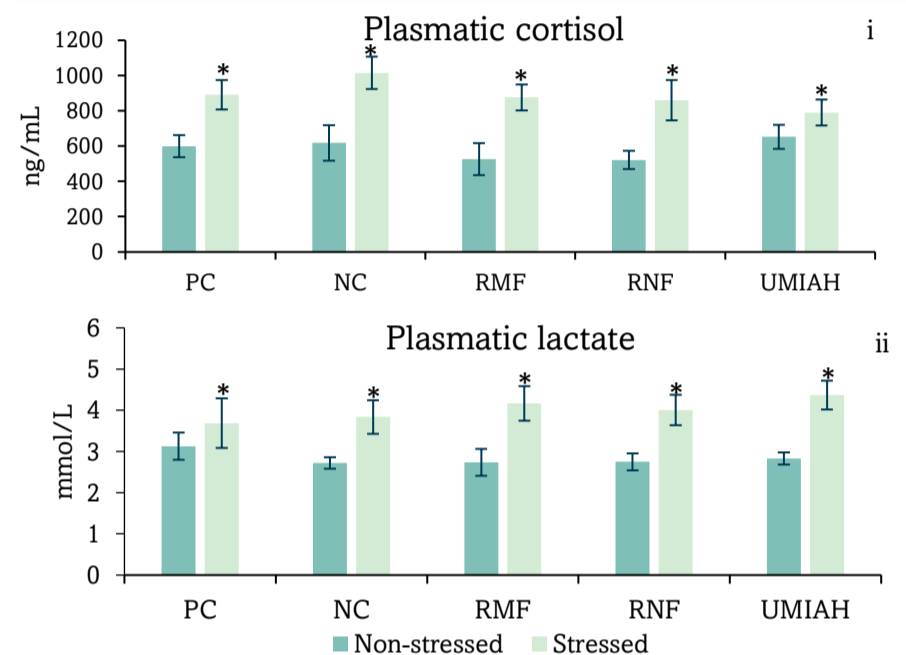


Fig. 1 – Stress indicators evaluated in plasma: i, cortisol; ii, lactate.

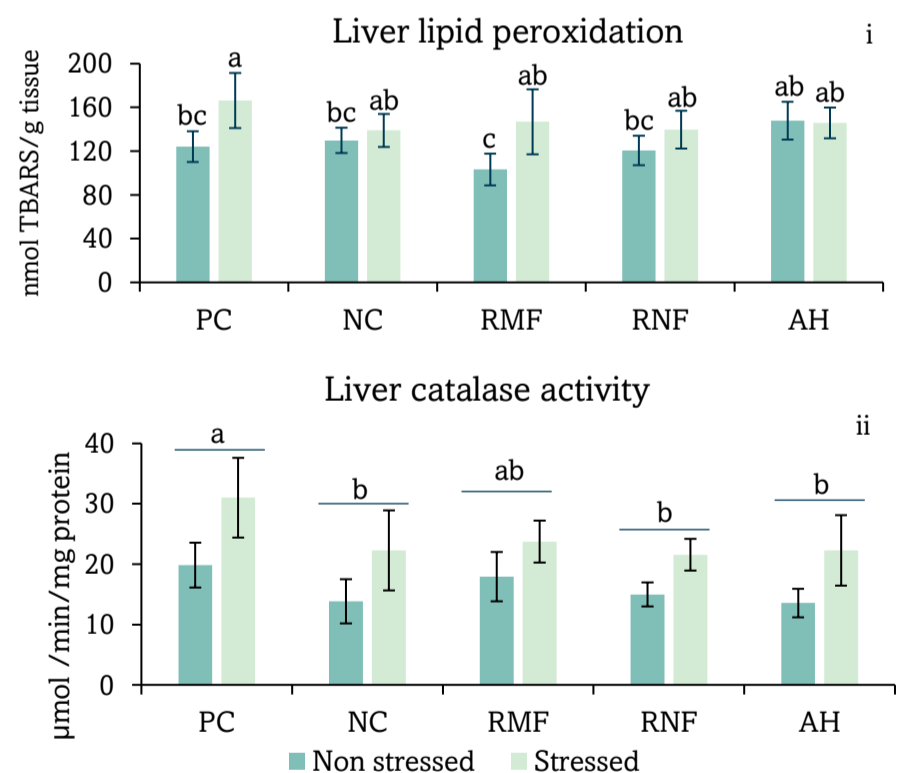


Fig. 2 – Liver lipid peroxidation (i) and catalase activity (ii).

Conclusions

- Stress elevated plasmatic levels of cortisol and lactate
- Diets did not change significantly plasma stress response
- **RNF** lowered the need for catalase, without increasing lipid peroxidation possibly providing exogenous antioxidants – **promising ingredient for aquafeeds**

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