

Blood hydrolysates as promising ingredients for European sea bass (*D. labrax*) diets: impact on fish resistance to *T. maritimum*

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INTRODUCTION

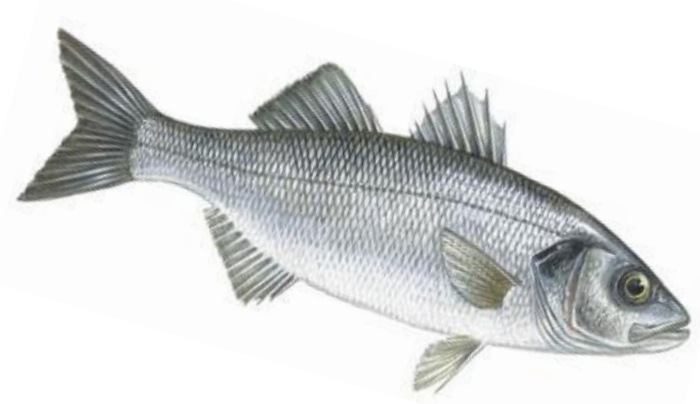
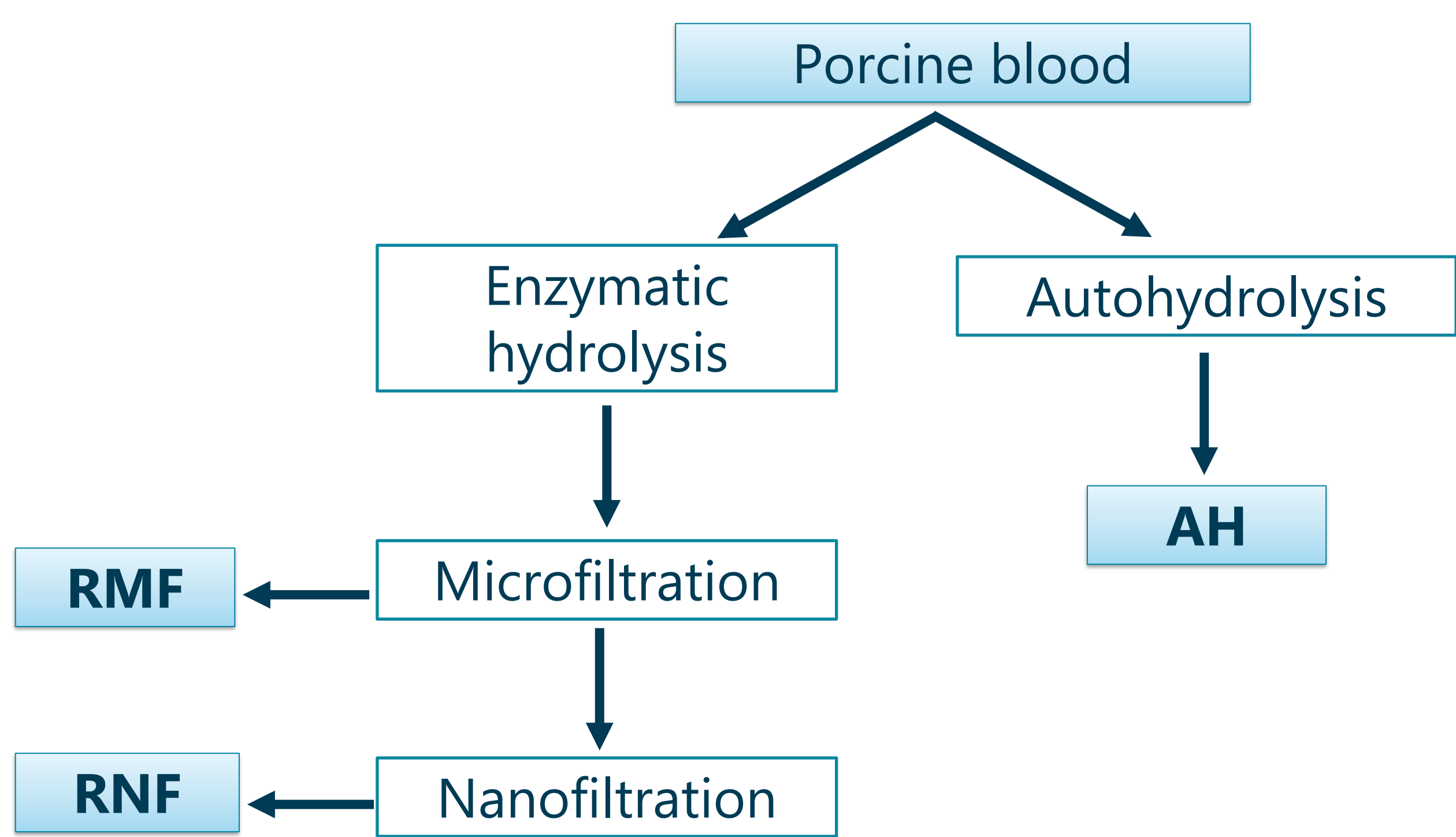
Blood hydrolysates can be a source of peptides with several bioactive properties. These peptides could be applied in diets for European seabass (*D. labrax*), promoting fish growth and robustness towards infections such as *T. maritimum* (which causes large losses in seabass farming), while increasing the economical value of blood and promoting circular economy. Thus, blood hydrolysates could be important on the supplementation of plant-protein based diets, aiming at the development of a functional but sustainable dietary formulation.

OBJECTIVE



Understand the impact of including 3% blood hydrolysate fractions in plant-protein-rich diets for European seabass, on growth performance and resistance to *T. maritimum*, when compared to a premium fishmeal-based diet

MATERIALS & METHODS



Seabass juveniles, 71/tank, initial weight 12±1 g, fed 5 the isonitrogenous diets for 74 days to apparent satiation:

PC DIET

Positive Control: Fishmeal-based diet

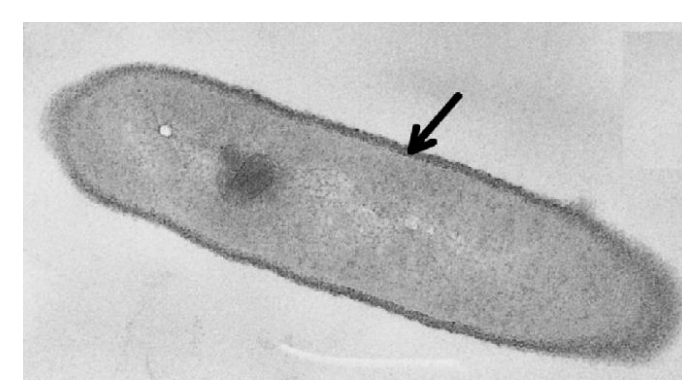
NC DIET

Negative Control: Plant-protein rich diet

NC + 3% Blood Hydrolysate
3 Experimental Diets



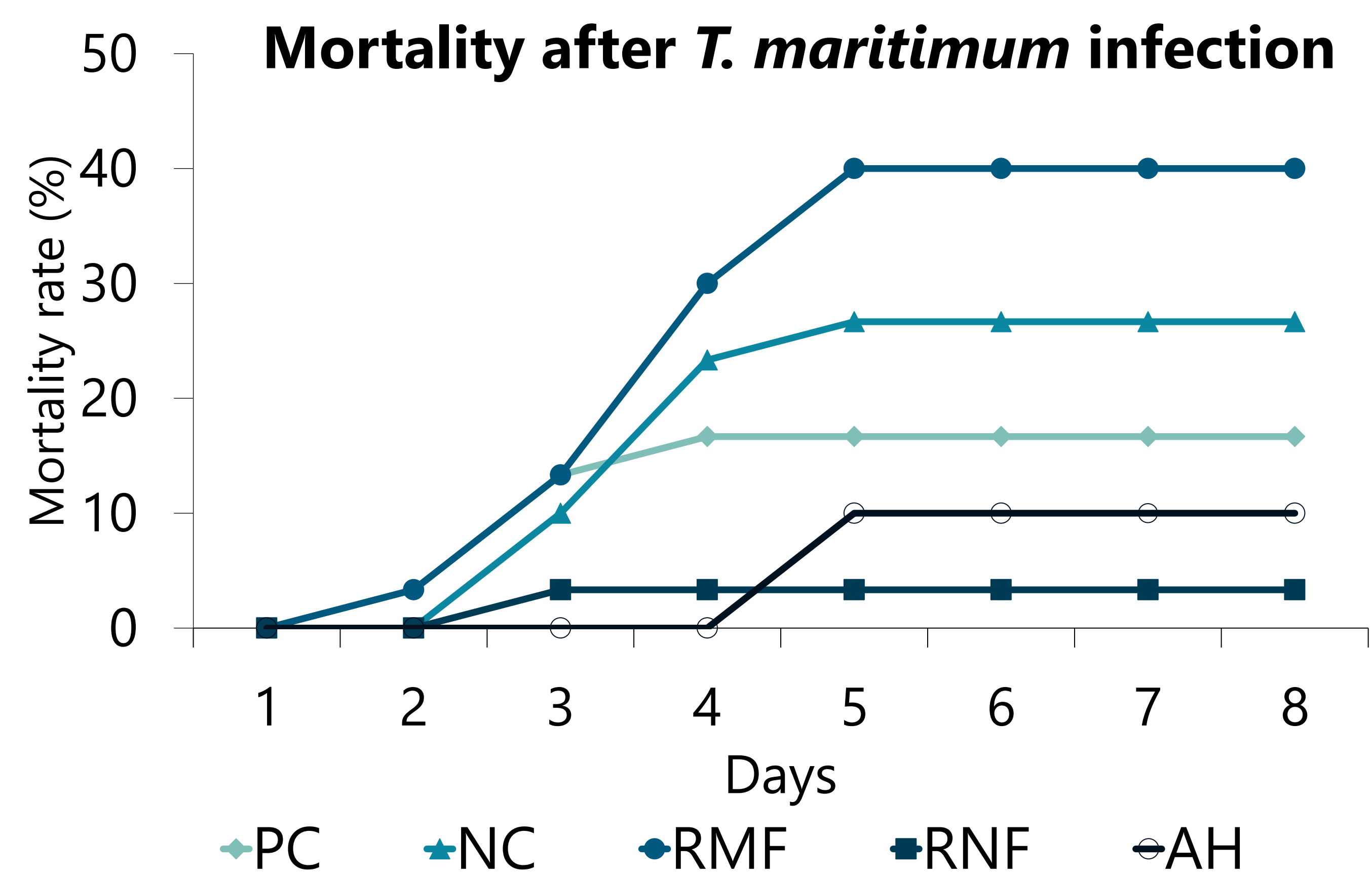
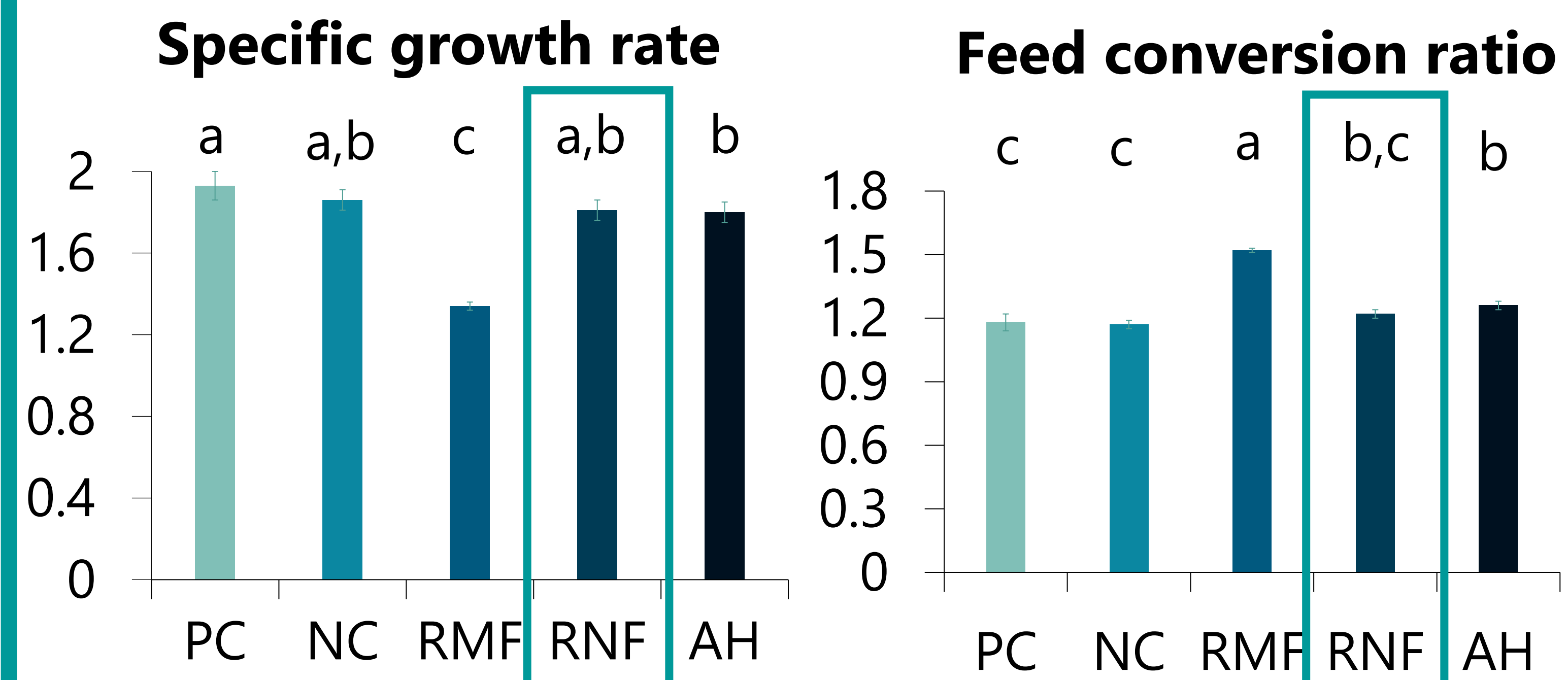
- Growth performance evaluation
- Challenge with *T. maritimum*



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RESULTS



CONCLUSIONS

✓ RNF increased seabass resistance towards the pathogen *T. maritimum*, and resulted in a growth performance and feed conversion similar to fish fed the Positive Control (PC).