Nutritional Modulation from First Feeding in *Solea senegalensis* Larvae

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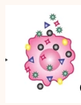
1 INTRODUCTION

Solea senegalensis

Pelagic Phase

Benthic Phase

Oxidative Stress



Lipid Peroxidation

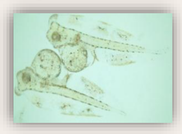
Protein Carbonylation

DNA Damage

01

Early Life Nutrition Matters

Shapes growth, survival, and resilience.



02

Carry-Over Effects

Feeding in the pelagic impact performance later in life.

03

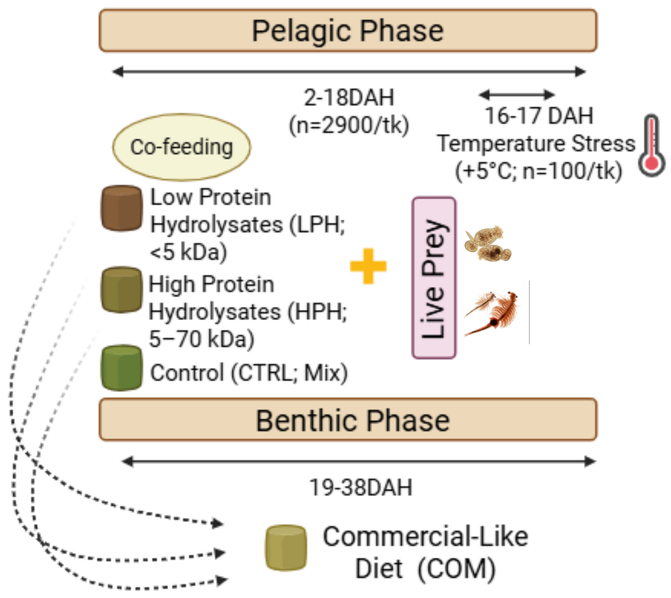
Protein Hydrolysates (PHs)

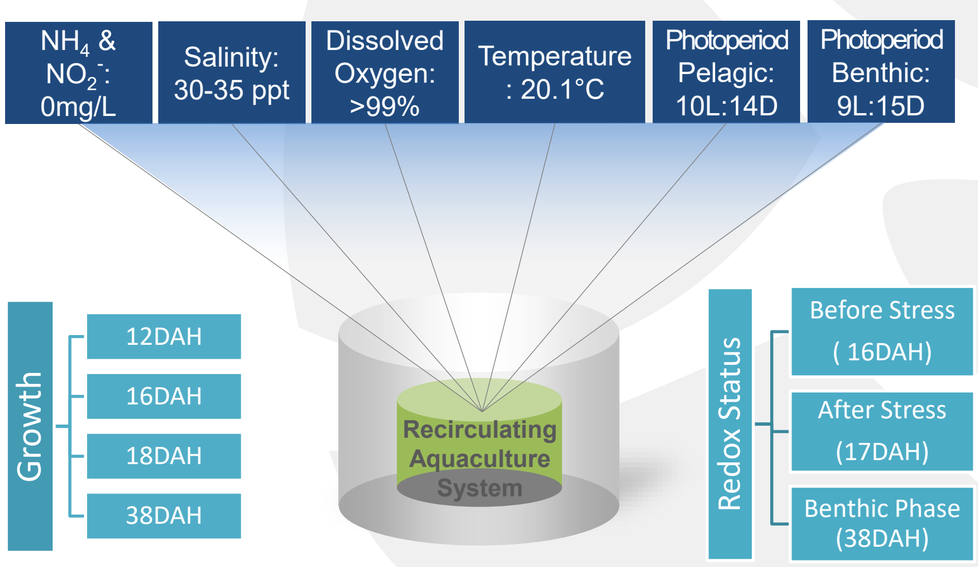
Bioactive peptides influence growth, antioxidant defense, and gut health.

2 OBJECTIVES

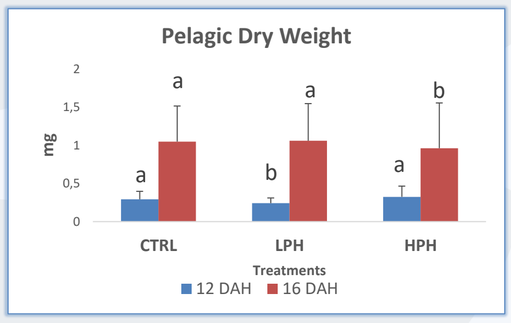
To evaluate the effects of diets containing low (LPH) and high (HPH) MW PHs, compared to a commercial-like diet (CTRL) since first feeding of *Solea senegalensis* larvae, and to assess their eventual carry-over effects during the benthonic phase.

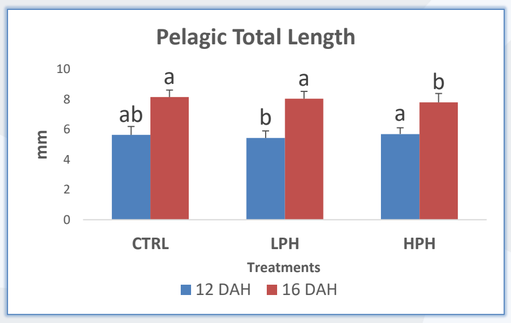
3 METHODS



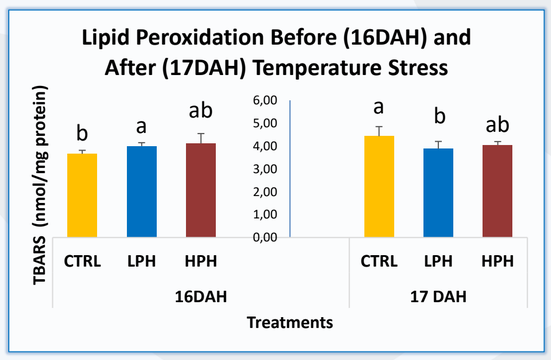


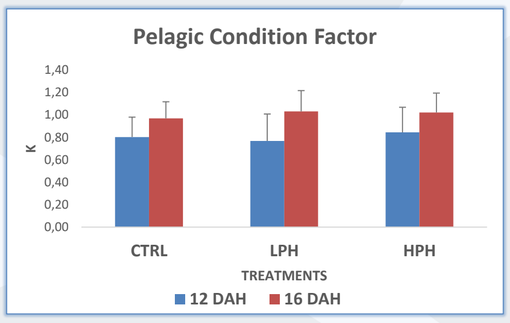
4 RESULTS

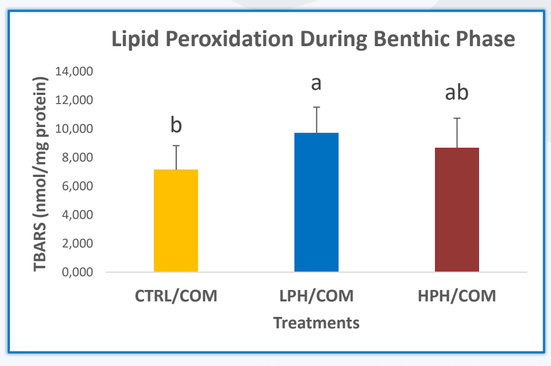


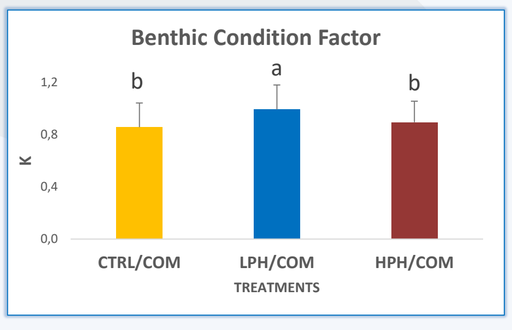


Phase	Relative Growth Rate % day^{-1}	Survival (%)
Pelagic	21.3	42.7
Benthic	9.3	81.0



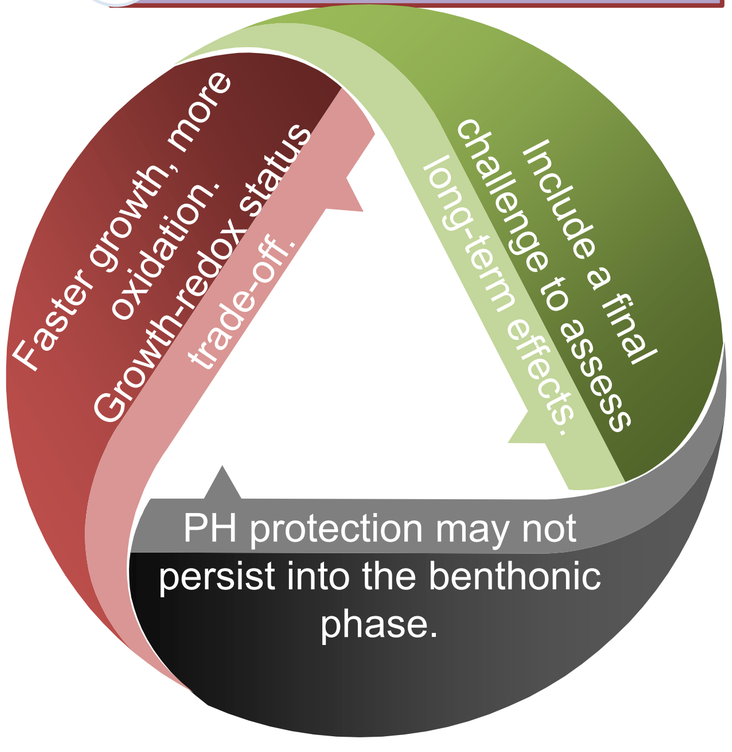






Different letters indicate significant differences (p<0.05) among dietary groups.

5 CONCLUSION



In terms of antioxidant enzyme activities like Superoxide dismutase (SOD) or Catalase (CAT), values were not significantly different among treatments.

Acknowledgments

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