

MICROBIOLOGICAL EVALUATION OF SEAWEED-ENRICHED MEATBALLS AS A STRATEGY TO ENHANCE IODINE INTAKE

Ana Gomes Rodrigues¹, Cátia Morgado^{1,2}, Mafalda Alexandra Silva^{3,4}, Gilberto Costa^{1,2}, Carlos Brandão^{1,2}, Helena Soares Costa^{3,4}, Tânia Gonçalves Albuquerque^{1,3,4*}

¹ Escola Superior de Hotelaria e Turismo do Estoril (ESHTE); ² Centro de Investigação, Desenvolvimento e Inovação em Turismo (CiTUR); ³ Instituto Nacional de Saúde Doutor Ricardo Jorge (INSA); ⁴ REQUIMTE-LAQV/Faculdade de Farmácia da Universidade do Porto

*tania.albuquerque@eshte.pt

Seaweed

Functional foods

Food innovation

Iodine deficiency continues to affect populations globally, and **seaweed** has emerged as natural, sustainable source of this essential micronutrient.

Foods that have a **beneficial effect** on one or more target functions in the body, beyond basic nutritional effects, thereby **improving health** and/or **reducing disease risk**

The incorporation of seaweed into conventional food products, such as **meatballs**, represents a **promising strategy to develop functional foods** with enhanced nutritional profiles and health benefits.

The objective of this work was to **develop a potential functional food product**, meatballs enriched with edible seaweed (*Undaria pinnatifida* and *Himanthalia elongata*), aimed at **improving iodine intake**, and to **assess its microbiological quality** according to current food safety standards.



Ten grams of each sample was weighed into sterile stomacher bags and homogenized with 90 mL of sterile peptone buffered water for 2 min at medium speed in a stomacher

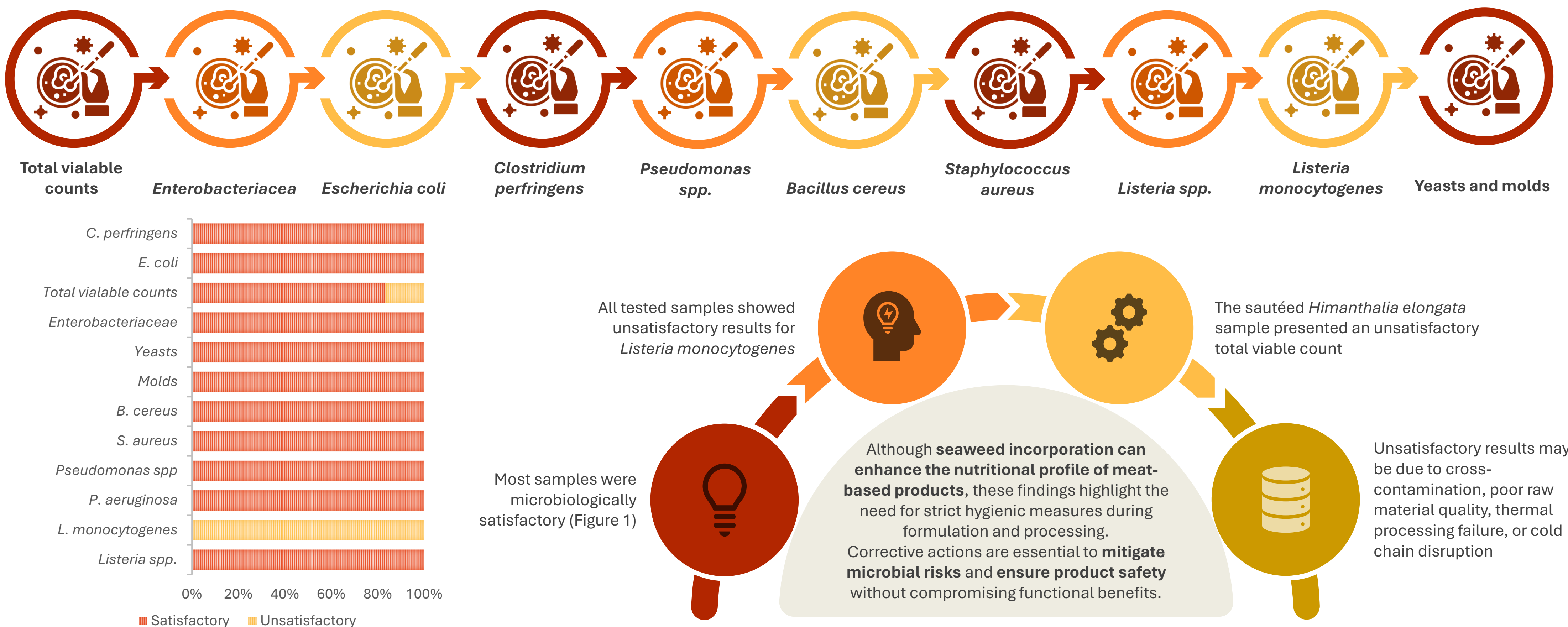


Figure 1. Global results of microbiological evaluation in meatballs samples.