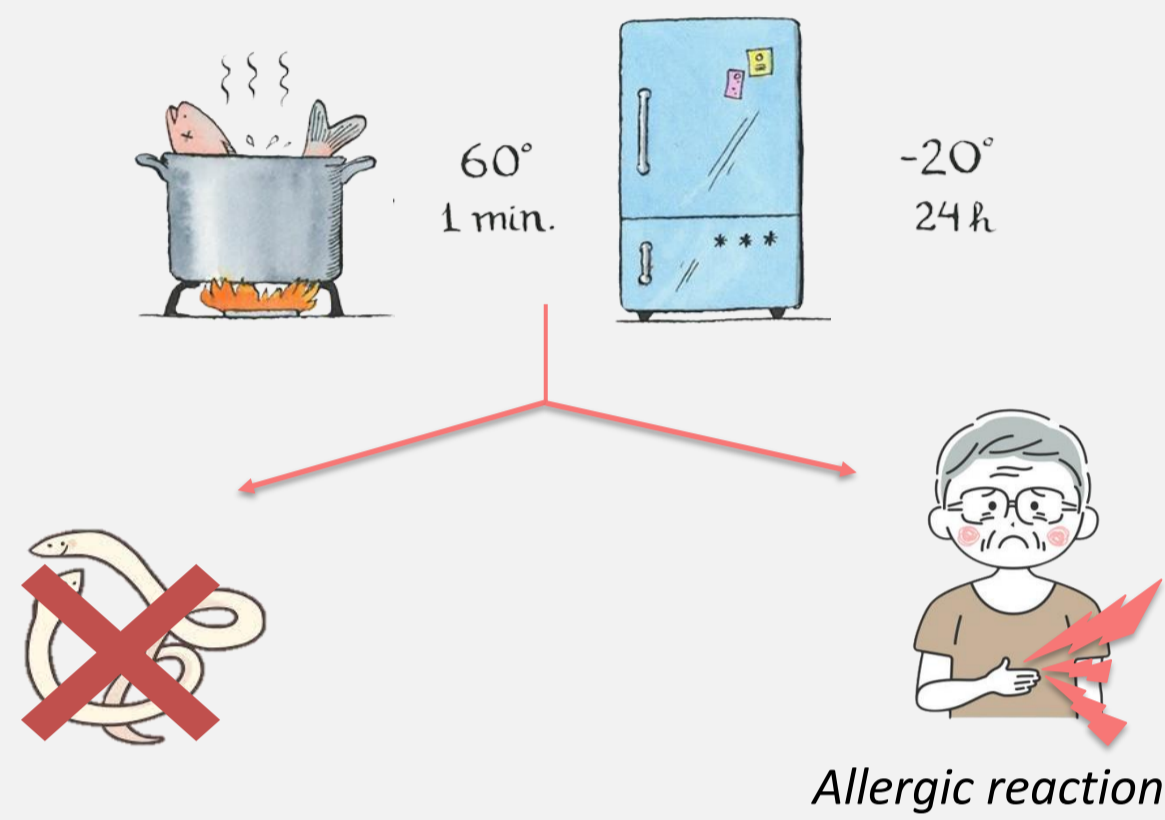


## Contextualization

The European Food Safety Authority (EFSA) recognizes that the **occurrence of *Anisakis* spp.** in fishery products for human consumption poses a **serious public health hazard**.



EU mitigation measures can not guarantee safe products with zero risk of contamination. Allergens can still retain their allergenic potential when exposed to heat/freezing.



## Objectives

- Determine *Anisakis* spp. impact on fish nutritional and organoleptic quality
- Develop highly sensitive biomarkers to detect potential allergens
- Improve fish biosecurity and offer healthy and safer seafood to consumers

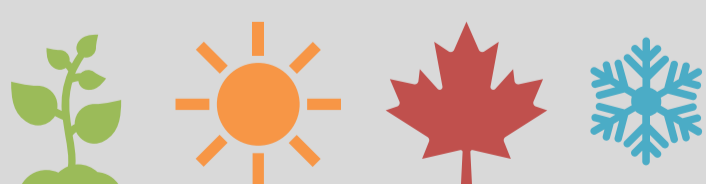
## Study Design

Estimate the prevalence and intensity of *Anisakis* regarding:

### 1 Geographical distribution



### 2 Seasonality



### 3 Economically relevant species

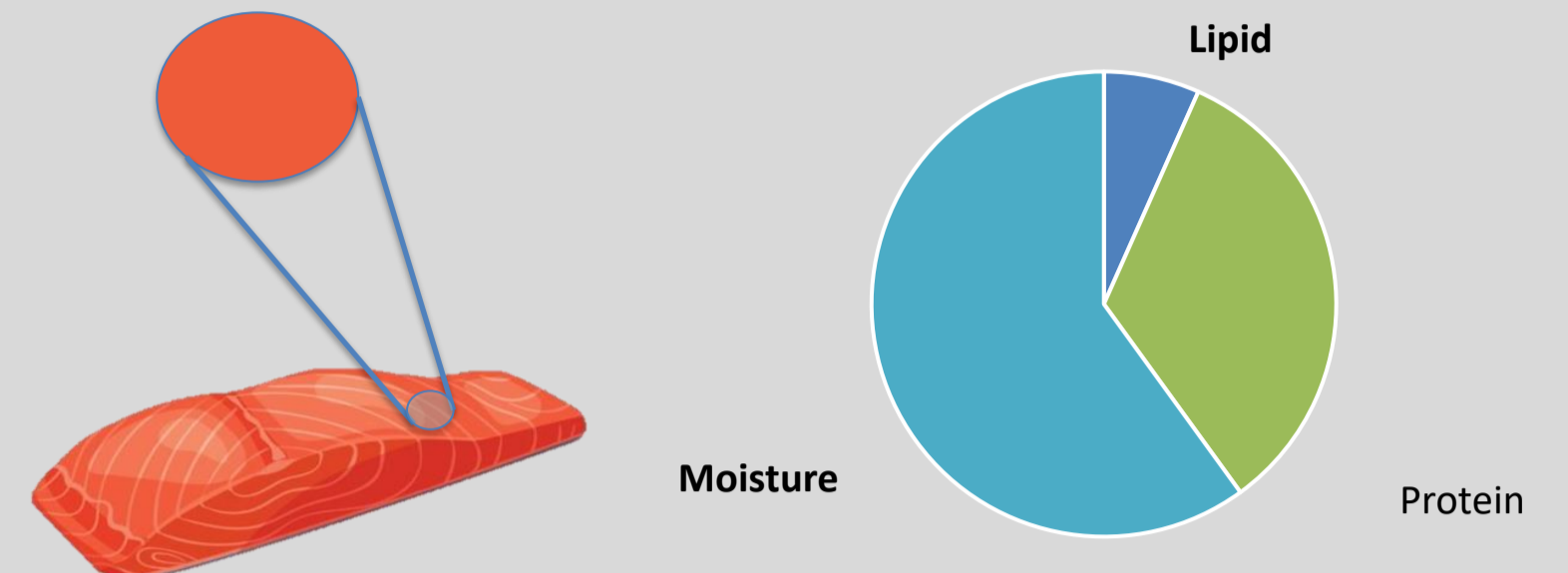


## Access the impact in quality traits

Analyze muscle nutritional and organoleptic quality parameters

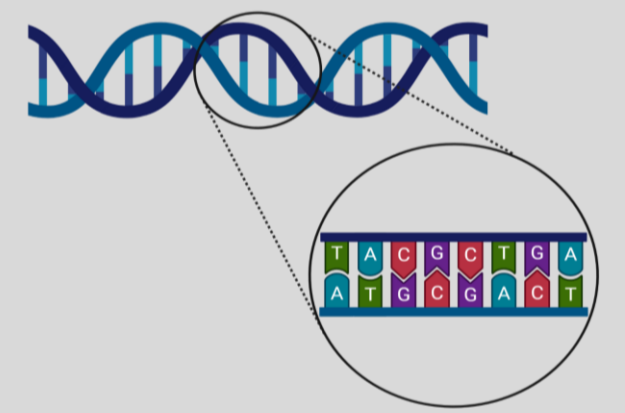
### 1 Organoleptic analysis

### 2 Nutritional analysis



## Identify allergens in parasitized fish, and develop new biomarkers

- Seek specific allergenic markers involved in the *Anisakis* spp. allergen/IgE-dependent pathway
- Develop fish traceability methods for the detection and quantification of fish allergens



## Perform risk analysis and consumer safety

- Identify potential hazards and assess the risk levels associated with *Anisakis* spp. and allergens ingestion.
- Develop strategies to mitigate the potential impact of *Anisakis* spp. on consumer health.



This will allow policymakers, food industry stakeholders and consumers to **make informed decisions and create safer products**.

### ACKNOWLEDGMENTS:

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