

# ENHANCED MEATS IN THE CATALAN MARKET

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## INTRODUCTION

### • **Definitions**

- "Preparados de carne": la carne fresca, incluída la carne que ha sido troceada, a la que se han añadido productos alimenticios, condimentos o aditivos, o que ha sido sometida a transformaciones que no bastan para alterar la estructura interna de la fibra muscular ni, por lo tanto, para eliminar las características de la carne fresca. (Reglamento 853/2004).

- "Marinated": a product must use a marinade that is a mixture in which food is either soaked, massaged, tumbled, or injected in order to improve taste, tenderness, or other sensory attributes, e.g., color or juiciness. (USDA Labeling rules, 2005).

### • **Regulations**

→ 853/2004 - enhanced meat description

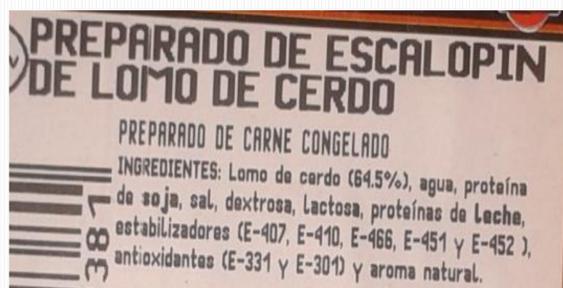
→ 1129/2011 - permitted additives in meat

→ 601/2014 - permitted additives in enhanced meat and

- subcategories: fresh meat/enhanced meat/meat products

In UE added water must be labeled if it represents more of the 5% of weight in the final product. It must be labeled as "preparado de \_\_\_" (Figure 1), "adobado", "salmuerizado" or "marinado".

**Figure 1.** "Preparado de" escalopín de lomo de cerdo"



In USA enhanced meat must be labeled as "injected", "marinated", or similar, always describing the ingredients and the % of water added.

## MATERIALS AND METHODS

• **Market research** → research of enhanced meats in different supermarkets in Barcelona and UK

• **Experimental assay** → marinated meat in milk to evaluate the weight increase and tenderness.

- different meat (chicken/pork)

- different milk (normal/calcium added)

- different temperature (environment/fridge)

• **Polls** → 15 polls to evaluate people's knowledge and opinion about enhanced meat.

## RESULTS

### • **Market research**

- different species: pork, beef, chicken, turkey

- some of them are not labeled with the required denominations

- some of them include nitrates in their formulation (not permitted)

### • **Experimental assay**

- milk with calcium/phosphate added (refrigerated) is better absorbed

- cutting force increases after the marination in milk

- parameters should be compared to cooked meat

### • **Polls**

- People think that enhanced meat is: meat with additives, toxic substances, hormones, growth factors...

- People rarely distinguish fresh meat from enhanced meat

- They think that meat should be labeled as "enhanced food" or with a similar statement.