

ARE INSECTS THE FOOD OF THE FUTURE?

By: Xavier Rincón Moledo
Final degree project-June 2022

INTRODUCTION

Climate change, population growth and hunger are some of the challenges that humanity must face nowadays

"The Sustainable Development Goals (SDG) are the blueprints to achieve a better and more sustainable future for all". United Nations



SUSTAINABLE DEVELOPMENT GOALS



OBJECTIVES

- Advantages and disadvantages of edible insects as a food source
- Evaluation of edible insects consumption to mitigate hunger (SDG2 - Zero hunger)
- Current situation and potential of edible insects industry
- Spain population's opinion on edible insects

PROS

- High nutritional quality
- Low environmental impact
- Low feed conversion ratio
- Simple rearing conditions
- Ability to feed on waste

CONS

- Highly extended neophobia
- Environmental impact of feed
- Lack of economic resources
- It's required more research
- Strict laws (Novel food)

SURVEY

654 people surveyed
46% wouldn't eat whole insects
57% would eat insect-based products

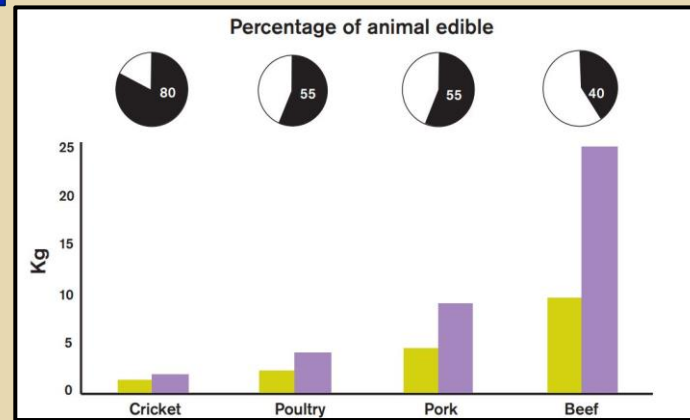
INTERVIEW

Ignacio Barandalla, Ecoinsect Sustainable Farming, April 2022

Novel food: must be approved by EFSA and the EC (RE 2283/2015)

Feed: RE 769/2009
Dead insects: RE 1069/2002
Insect feeding: APM/189/2018

EU



Feed conversion ratio (kg feed/kg mass gain) and percentage of animal edible of cricket, poultry, pork and beef (1)



CONCLUSIONS

- Biggest challenges: negative western society perception, lack of involvement of large companies, strict legislation and need of further research
- Mass production of insects can help to achieve SDG 2, but in developing countries it can be difficult due to lack of basic resources
- Edible insects can be a suitable meal for both humans and animals
- Western society may have a better acceptance towards insects if they are not visible in the food