

COMPANY NAME

MAICERIAS ESPAÑOLAS S.A. (DACSA GROUP)

**CHALLENGE SHEET****CHALLENGE CODE**

11.1 DACSA

TITLE

FRACTIONING THE ZOOTECHNICAL FLOUR TO ADD VALUE

DESCRIPTION

Zootechnical meal is a high-volume by-product of the company's corn milling process. This by-product is rich in starch (40-45%) and, by its nature, contains protein and fatty acids that can also be recovered and used.

Currently, its main outlet is animal feed, but this material, as well as its fractions, has the potential for industrial use.

We are in a revolution in terms of the possibility of obtaining products or ingredients that can be applied in vegan analogues, or with functionalities to give differential value.

HOW COULD WE

We are interested in evaluating the possible fractionation of zootechnical meal to try to carry out an integral and efficient utilization. Fractionation methods should be viable at industrial level and, if possible, sequential, so that the by-products obtained from extracting/transforming some of its components can be used or some other component can be recovered.

During these studies, we are interested in evaluating efficient and as sustainable as possible roasting processes, in order to give a differential use to some of the fractions obtained during the process, for example in the snack, bakery and/or confectionery sector.

SELECTION CRITERIA

- Experience in fractionation processes of complex raw materials.
- Previous knowledge in the use of by-products, especially from the food industry.
- Use sustainable and environmentally friendly methods or processes.
- Experience in roasting processes to obtain improved products.

TARGET INDICATORS

- Component recovery performance.
- Process costs.
- Industrial feasibility.
- Application and costs of the products obtained.
- Overall process efficiency.

REQUIREMENTS

This challenge may be conditioned by the costs of conventional fractionation steps, or by possible variability of the by-products, depending on the composition and quality of the starting raw material, which limit their use in the food industry.

We believe it is feasible to find ways to overcome these facts.

CHALLENGE TYPOLOGY
 Process

 Technology

 Business

 Product
KEYWORDS

Zootechnical meal, Fractionation, By-products valorization, Roasting process