

# Generate pig fattening standards for Ral d'Avinyó to produce optimal quality pork

## Summary

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The aim is to improve the pork production system based on Ral d'Avinyó genetics with regard to the fasting and transportation conditions of the animals, the reduction of antibiotics in the transition phase and adaptation to thermal stress, assessing how these factors affect the quality of fresh meat. The quality of the meat will be assessed from the perspectives of pH, colour and texture, in addition to intramuscular fat content, which is the distinguishing feature of this type of animal, as they present high fat infiltration levels, and the study will be completed with sensory assessments conducted by a trained tasting panel.

With regard to the meat products, this study will include the assessment of cured loin and cooked ham, validating the end quality of the products in accordance with the studied effects.

## Objectives

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1. Achieve better quality meat by improving the pH level, the fatty infiltration level, the colour of the meat and its tenderness.
2. Study factors that affect the quality of the meat to determine their impact and create standards to improve fresh meat and end products.

## Description of initiatives outlined in the project

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Offering 'healthier products' will make it possible to offer cured meats with less saturated fat and more unsaturated fat, which are therefore more attractive to consumers in terms of their health.

Products with high added value. The end products are pork and derivative products with high added value. The project will also analyse the viability of breeding animals that are 'free of antibiotics' or with 'responsible antibiotic use' and passing this added value on to the end consumer of these meat products.

## Expected results and practical recommendations

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1. Classification of the pre-slaughter factors that may have an impact on the meat's quality variables.
2. Produce recommendations and good practices for the management and transportation of the animals prior to slaughter.
3. Establish relationships between the fasting time of a batch of animals and the quality parameters of their meat by weighing their intestines at the abattoir, and assess the impact of the applied fasting times.
4. Determine the relationship between the different environmental temperature conditions and the quality variables of the intestines and the meat, and how they are affected by heat stress. Subsequently, establish strategies to adapt the production system to produce higher quality meat, in both standard and thermal stress conditions.
5. Have information on the applicability of alternatives to the use of antibiotics, and whether they enable the maintenance, or even improvement, of the same quality standards required by the Ral d'Avinyó line.
6. Assessment of fresh loin, cured loin and cooked ham, validating the end quality of the product in accordance with the effects studied.

## Task force leader

Entity: **Matadero Frigorífico de Avinyó SA**

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Typology of entity:

**Agri-food company**

## Task force coordinator

Entity: **INNOVACC**

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Typology of entity:

**Innovation centre**

## Other task force members (grant beneficiaries)

Entity: **Catalana de Embutidos, S.A.**

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Typology of entity:

**Agri-food company**

## Other task force members

Entity: **IRTA**

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Typology of entity:

**Research centre**

## Subject area(s) of application

Animal husbandry and welfare

Food quality/processing and nutrition

Genetic resource

## Geographical area(s) of application

**Province(s)**

Barcelona

**Region(s)**

Bages

## Dissemination of the project (publications, conferences, multimedia...)

News article in the INNOVACC newsletter of November 2017 explaining the submission of the subsidy application: <http://www.innovacc.cat/2017/11/28/projectes-presentats-en-la-linia-de-grups-operatius-2017-del-darp/>

News article in the INNOVACC newsletter of July 2018 notifying of the awarding of the subsidy for execution of the project: <http://www.innovacc.cat/2018/07/23/ajuts-obtinguts-per-a-6-projectes-pilots-de-grups-operatius-del-darp-2017/>

## Project website

<http://www.innovacc.cat/2018/07/23/el-projecte-obtencio-destandards-dengreix-de-porc-ral-davinyo-per-a-una-optima-qualitat-de-la-carn-a-obtingut-un-ajut-de-grups-operatius-del-darp-2017/>

## More information on the project

### Project dates

Starting date (month-year): June 2018

Completion date (month-year):

Current status: *Underway*

### Budget approved

**Total budget: €164,247.00**

*DARP funding:* €67,124.34

*EU funding:* €50,637.66

*Own funding:* €46,485.00

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*Order ARP/133/2017, of 21 June, approving the regulatory bases of grants for cooperation for innovation through the promotion of the creation of European Association for Innovation task forces in terms of agricultural productivity and sustainability and the execution of innovative pilot projects by these groups.*

*Resolution ARP/1868/2017, of 20 July, calling for applications for grants for the year 2017.*

*Project ID: 028\_2017*