


# The Facts About Processed Animal Proteins – Pigs and Poultry




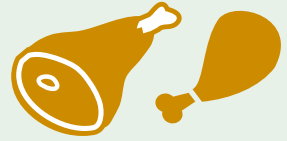
**EFPPRA**

DRIVING FOOD CHAIN SECURITY AND SUSTAINABILITY IN EUROPE

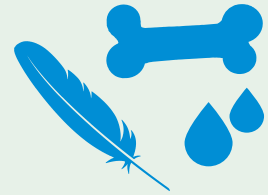
# ABOUT PAPs



**ABOUT 60%** of each meat producing animal becomes food for human consumption.



**THE REMAINING 40%** becomes animal by-products. The safest of which are turned into Processed Animal Proteins (PAPs): healthy and protein rich feed ingredients.



## Sustainable

The rendering industry recovers nutrients, energy and functional molecules from by-products. Research and innovation ensure their optimal use. The European strategy for a circular bio-economy aims to prevent residues and use by-products as effectively as possible.

## Safe

PAPs are made from Category 3 by-products which originate from healthy animals from EU-approved abattoirs, cutting plants and other sites. Track and trace systems are installed to ensure safety at every stage.

## Healthy

PAPs are a healthy feedstuff for omnivores such as pigs and poultry, and carnivores, including fish. Protein is a vital part of these animals' natural diet. Especially in young animals, PAPs contribute to healthy development and growth, supporting good animal welfare.

# Processing PAPs

PAP production is strictly controlled by EU-ABPR regulations which are applicable in all EU Member States. The regulation can be classified as the safest worldwide. Throughout processing, HACCP based precautions prevent any microbiological contamination.

# Using PAPs

Thanks to the excellent nutritional value of the protein, PAPs have a variety of applications. Innovative technology allows us to use PAPs in compound feed, aqua feed, pet food and fertilisers. Inclusion levels vary from 5–30% depending on the species.

Outside Europe, regulations and standards are different. Animal by-products for feed are known as 'Meat-and-Bone Meal (MBM)' or simply 'Animal Proteins'. They have always been used as valuable protein rich ingredients in feed production.



## Nutritional benefits

- ✓ Animal health and welfare
- ✓ Good protein digestibility
- ✓ High in essential amino acids
- ✓ Available phosphorous without additives

## Environmental benefits

- ✓ Builds a circular economy
- ✓ Sustainable and safe
- ✓ Relatively low carbon footprint
- ✓ Less manure because of higher digestibility
- ✓ Reduced reliance on imported feedstuffs



## Poultry Diets

In poultry diets, there are three main types of PAPs that could be beneficial: high protein pork meal, medium protein pork meal and pork blood meal. For broilers, high protein pork meal and pork blood meal fits best nutritionally. The medium protein meal is suitable for layers, its high phosphorus level is particularly beneficial.

## Pig Diets

Pig diets could benefit from high protein poultry meal, medium protein poultry meal, poultry blood meal and hydrolysed feather meal. Piglets develop and perform best with feed containing high protein poultry meal and the poultry blood meal. In diets for older pigs, medium protein meal, containing good available phosphorus and hydrolyzed feather meal which is high in protein are potentially very valuable feed ingredients.



## Other Applications

Both Poultry PAPs and Porcine PAPs can also be used in aqua feed nutrition and pet food diets.



For carnivorous fish species like salmon and trout, and omnivorous shrimps, high protein feed sources are important for development and productivity. Animal proteins are a key constituent of nearly all pet food worldwide. In addition to nutritional value, the taste and colour appeal to cats and dogs.

# Good Amino Acid Profile in PAPs

PAPs have high levels of essential amino acids which supports animal growth and development.

Sum Essential Amino Acids in g/kg	
Pork meal	213
Poultry blood meal	441
Poultry meal HP	266
Feather meal	312
Soybean meal	186

## Approved Uses of PAPs



Pork blood meal	✓	✓	✗
Pork meal medium protein	✓	✓	✗
Pork meal high protein	✓	✓	✗
Poultry blood meal	✓	✗	✓
Poultry meal medium protein	✓	✗	✓
Poultry meal high protein	✓	✗	✓
Hydrolysed feather meal	✓	✗	✓

✓ = approved and available

✗ = not permitted

# PAPs for Pigs and Poultry – Summary of Benefits

- ✓ Optimal use of PAPs in animal feed is a step towards a circular bio-economy as part of the European Green Deal.
- ✓ Higher digestibility and a lower carbon footprint reduce the environmental impact of animal production.
- ✓ Safe proteins from healthy animals are used in valuable ingredients for a wide range of animal feeds.
- ✓ PAPs support animal health and thus animal welfare.

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EFPRA is the European Fat Processors and Renderers Association. It represents the European animal by-product industry. It is a leading authority on the manufacture, usage and regulation of animal fats and proteins.

EFPRA works with partners in the supply chain, research institutes and regulators to develop safe, sustainable and healthy uses for animal by-products.

EFPRA members employ over 15,000 employees and process raw material on approximately 400 separate production lines across the entire membership.

For more information about processed animal protein, animal fats and the European by-product processing industry, visit [www.efpra.eu](http://www.efpra.eu), email [info@efpra.eu](mailto:info@efpra.eu) or call +32 (0) 2 203 51 41.

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