



Proliver®

Naturally supporting pet nutrition

**Discover Proliver
human grade
chicken broth**

Meet Proliver

Proliver was founded in 2010 by a family owned leading chicken processor. 3 generations experience in chicken processing and rendering led to this new activity turning edible chicken into protein, broth, meat and liver powders. Initially solely developed for food applications, soon demand increased for pet food applications where humanization and the need for highest quality chicken proteins grew over the years. Our food grade facility based in Belgium provides worldwide distribution and warehousing services.

Our principles:

Today Proliver still sticks to its base principles:

- Only use of edible raw materials, fresh and straight from nearby slaughterhouses, fully traceable.
- Food grade processing, producing the highest quality chicken products suitable for man and pet.
- Low temperature processing and gentle spray drying to preserve the nutritious and savory benefits.

These principles have proven their benefits for pet nutrition in lowest biogenic amine levels and highest protein nutritional value, digestibility and palatability. Enzymatic hydrolysis of the protein into peptides can play an important role in enhancing the above benefits inducing even higher digestibility and palatability and create hypoallergenic protein sources for sensitive pets. These techniques have already proven their benefits in human food, fish and husbandry.

We provide:

Chicken broth powders

- Appetizing replacement of water in your recipes.
- Fully soluble, no fat, golden clear broth without salt or taste enhancers.
- Highest digestibility and protein level up to 92%, source of essential electrolytes.
- From nutritious meat broths up to healing bone broths.

Chicken protein powders

- Spray dried cooked chicken meat and broth, concentrated after removal of bones and fat.
- At least 75% protein, minimal calcium and source of essential electrolytes.
- Enzymatically hydrolyzed to benefit the functionalities of bioactive peptides.
- The powerful powder is ideal for balancing protein levels in pet diets, increasing digestibility and reducing allergenicity.

Chicken hydrolyzed liver powders

- Produced by enzymatic hydrolysis of fresh food grade chicken liver.
- Delivering a 68% protein content full of hypoallergenic low molecular weight peptides and amino acids.
- Boosting digestibility and palatability.
- Base to create your personal pet nutrition flavor if combined with other ingredients to induce maillard reactions and palatability.



01

Only edible chicken

We use only fresh and food grade chicken. That way we ensure the best protein composition. This means no guts, no viscera, no feathers, no heads, no off spec.

- ✓ **Balanced protein composition**
- ✓ **Lowest biogenic amine level**
- ✓ **Traceability**

02

Food grade processing

Installations are completely emptied and cleaned in between batches. So no unnecessary additives, salt or carriers.

- ✓ **Lowest biogenic amine level**
- ✓ **Increased palatability**
- ✓ **Hypoallergenic**

03

Low temperature processing

No rendering and no scorching temperatures that degrade the protein. We spray dry at low temperature to preserve the protein.

- ✓ **Increased digestibility**
- ✓ **Hypoallergenic**



Natural chicken broth powders

In contradiction to so-called broth powder available in the market, the Proliver chicken broth powders are 100% soluble and free from fat.

In no way comparable to high protein rendered powders derived from wet rendering stick water. With a protein content up to 92% with different protein compositions. Whether the broth powders are meat based or bone based, they are a source of highly nutritious proteins and bioactive peptides. It is commonly known that egg protein and chicken breast meat belong to the best nutritional proteins available. The graphs on the right show the correspondence with chicken broth powder proteins.

fig 1. Amino acid composition of a meat broth compared to chicken breast meat

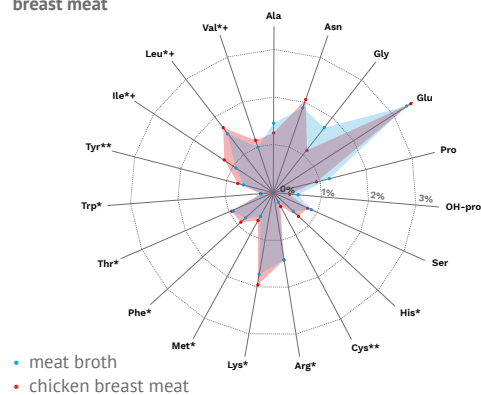
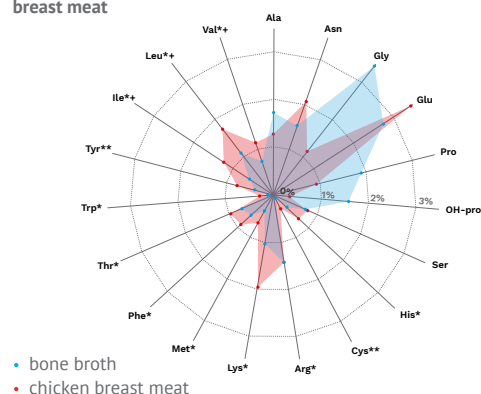


fig 2. Amino acid composition of a bone broth compared to chicken breast meat



A protein cannot be determined as complete without evaluating the amino acid composition.

Powdered versus liquid broths

- Cost effective powder: spray dried powders take less space than liquid products and need no special transport nor storage conditions.
- Shelf stable powder: no risk of deterioration during shelf life, no added salt, acids or other stabilizers.
- Hygiene control: reduced risk of cross contamination in between wet and dry pet food production areas.
- Reconstitution of powder: spray drying does not alter the broth characteristics. The agglomerated powders are free flowing and dissolve easily to deliver an original reconstituted broth.



Benefits

A lot of benefits of chicken broths have been described over decades in food nutrition, told by our ancestors or published in scientific magazines.

Nutritional benefits

- Chicken broth is a flavorful replacement of water in your recipes. According to AAFCO definitions indispensable water can be labeled as chicken broth as soon as it is applied to at least 1 to 135 (protein/water).
- Protein content up to 92% protein with a well-balanced amino acid composition.
- Highest digestibility, low calcium, low ash, adequate levels of essential electrolytes.
- Stimulates water intake and adds palatability to induce sufficient water intake.

Health benefits

- Hypoallergenicity if a hydrolyzed chicken broth is chosen as main protein source in a diet.
- Joint health induced by the collagen peptides and cartilage inherent chondroitin sulfate.
- Digestive health and immunity response factors: essential and balanced electrolytes and amino acids present in the right proportions.
- Obesity prevention: broths proteins, peptides and free amino acids induce satiety triggering factors.
- Antioxidant, hypoglycemic, immunomodulatory and antihypertensive.

Recovery benefits

- Balanced repletion of amino acids and electrolytes after sickness, diarrhea, surgery.
- Stimulated water intake and nutritional repletion after intensive work out.

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Chicken broth powder is recognized as a source of nutrients with many benefits and it's more convenient and affordable in use.

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