

Functional Proteins for Yield Enhancement



Muscle proteins are a “complete protein,” supplying 100% of the nine essential amino acids necessary for proper growth. They also score very high on the biological value scale (BV – ~80%), protein efficiency ratio (PER–2.9), and protein digestibility rate (~91–98%). Another feature muscle proteins provide is their ability to “function,” which translates to their ability to bind with water or other protein molecules to form three-dimensional structures that retain moisture during cooking and storage.

Meat is an excellent source of various vitamins and minerals, containing vitamin B12, zinc, selenium, iron, niacin and vitamin B6. Proteus®, a line of functional ingredients, provides meat and poultry manufacturers with an enhancement solution to offer juicier products with natural taste.

PRODUCTION

Kemin uses a series of worldwide patented processes to extract these proteins in a manner that retains the proteins’ ability to deliver:

- More natural texture and flavor
- Clean label, minimally processed
- Juicier bite after cook
- Reduced cook shrinkage

APPLICATIONS

Proteus® functional protein can be delivered within various protein applications using either vacuum tumbling or injection, as a:

- Phosphate alternative
- Cook yield enhancer
- Soy protein (allergen) alternative
- Least Cost Formulation to reduce cost of goods sold (COGS)

Proteus® can be combined with:

- rosemary
- green tea
- vinegar
- phosphates

Format

- various protein sources (beef, chicken, pork)
- dry

Sources:

Protein Quality Evaluation, Report of the Joint FAO/WHO Consultation Reference Manual for U.S. Whey Products, 2nd Edition, U.S. Dairy Export Council



Functional Proteins for Fat Blocking



Functional proteins, both muscle and plant-based, are highly functional with excellent solubility, emulsification properties, gelation and viscosity.

Through a patented processing technique, Kemin offers a line of functional protein products that when applied topically, act as a micro-barrier to help bind water and retain moisture juiciness during frying, while reducing oil uptake. This leads to increased yield, better adhesion of breading and coating, and provides a crispier bite.

PRODUCTION

Through a variety of patented processing techniques, these proteins provide:

- Natural texture and flavor
- Increased batter/breading adhesion
- Higher yield
- Up to 30% reduction of oil uptake

APPLICATIONS

InnoBLQ™ is a functional protein solution that can be used to reduce fat pickup during frying for battered and breaded items—both plant- and animal-based.

InnoBLQ™ is available as a dry powder.

Format

- chicken
- pork
- pea/lentil

