

Functional Proteins



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® is a ready-to-use solution or powder that can be delivered into beef, pork, or poultry using either vacuum tumbling or injected as a:

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

Proteus® can also be used as a topical spray over breading to reduce fat pickup during deep fat frying.

Proteus® can be combined with:

- rosemary
- green tea
- vinegar

Format

- various protein sources (beef, chicken, pork, fish)
- liquid
- 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

