



## Injectable fat marbling system

Functional marbling system for improved tenderness, appearance and cost-in-use

# Turns a plain steak into a tender and juicy option

Fat injection upgrades the sensory attributes of meat cuts and provides a quality and satisfying product to consumers.

## Tenderizing unpopular cuts

The meat processing industry must contend with high volumes of tough and unpopular cuts of meat. ExcelPro™ Plus B/P Fat Marbling can help upgrade low to medium quality meat to tender and juicy loins with multiple application choices.

ExcelPro™ is available in two versions based on beef (B) or pork (P) origin.

ExcelPro™ Plus B/P Fat Marbling is a fresh meat injection system that quickly stabilizes the injected fat emulsion in the meat. It combines hydrocolloids and beef or pork collagen and allows the injected fat emulsion to mimic the properties of the fat that is already present in the meat – in both appearance and response to hot or cold temperatures.

Injecting meat with ExcelPro™ Plus B/P Fat Marbling ensures added functionality by way of tenderizing. The even distribution of fat and the action of several injection needles penetrating the muscle loosens the intramuscular bonds.

Fat is a by-product that is readily available, and this is one excellent use that promotes upcycling and use in human consumption. It also causes the reduction of food waste with fewer quantities of substandard meats being rejected, left unfinished or thrown out.

## Premiumization of meats

ExcelPro™ Plus B/P Fat Marbling is a free-flowing white powder. It can be stored at ambient temperatures and has a shelf life of 18 months.

- Improves tenderness and juiciness of the meat
- Behaves like natural intramuscular fat – when stored, cooked, frozen, and thawed
- Proportionally small quantities are needed for each use
- Offers impressive meat extension capabilities without getting too moist
- Rapid binding with meat muscle
- Gives a natural-looking marble pattern

## A sustainable upgrade

A large quantity of water is contained in the injected fat emulsion, and as the water binds instantly to the meat structure after injection, it not only adds to the juiciness, but also gives way for an impressive extension of the meat block.

ExcelPro™ Plus B/P Fat Marbling is thus not only reducing food waste through tenderizing unpopular cuts, but it is also an important ingredient system when it comes to stretching expensive meat raw materials further.

This adds up down the supply chain, with a need for slightly fewer livestock, and lower GHG emissions in the long run.

## Improved earnings

The impressive water binding and stabilizing capabilities of ExcelPro™ Plus B/P Fat Marbling allows for injection rates of 20 to 50 %, depending on the final application.

The functionality of ExcelPro™ Plus B/P Fat Marbling lets meat processors make better earnings while using less meat raw materials.

The recommended composition of the fat emulsion contains 35 % beef/pork fat, 63 % water and 2 % ExcelPro™ Plus B/P Fat Marbling.

The fat emulsion must be kept at 40°C at any given time during the injection process, however the meat is kept at low temperatures throughout the entire process, so despite the warm emulsion, there is no cook or discoloration.

When frozen, the fat helps reduce the formation of ice crystals from the relatively high water content. This is why fat marbling with ExcelPro™ Plus B/P Fat Marbling results in far less purge and loss of juices when thawing.



ExcelPro™ Plus  
P Fat Marbling



ExcelPro™ Plus  
B Fat Marbling

ExcelPro™ Plus B/P Fat Marbling supports the injection of beef or pork fat.

If you are looking to inject chicken, please contact your local sales representative.





## Before injection

- Plain
- Dry and tough
- Sold at low/medium price



## After injection

- More tender with added juiciness
- 20 to 50 % added volume
- Sold at a premium

# Why it matters

## The importance of marbling in meat

The presence of marbling in meat has an extremely positive effect on the eating quality in terms of tenderness, juiciness, and flavor.

In marbling, intramuscular fat adds flavor and is one of the main criteria for judging the quality of cuts of meat. The more marbling it contains, the better a cut of meat is.

When cooking, cuts containing high levels of intramuscular marbling have a richer, sweeter flavor and tend to produce a softer and more moist and tender steak.

**Please contact us for further recommendations on how to compose the optimum marbling system for your application.**



Turns a less favorable meat cut into a tender and delicious option



For steaks, stews, and other applications where a tender and juicy bite makes all the difference



Connect with our experts to understand the process and the equipment needed



Visit our test facilities for a customized demo

# Bringing the best of nature directly into your formulation

**Whether you are looking to clean up your label, add appealing attributes to your food or beverage product or improve the nutritional value of your brand, Essentia Protein Solutions can help you reach your goals.**

Essentia Protein Solutions is a global producer of animal protein solutions for the food and beverage industry. All Essentia ingredients are derived from natural raw materials originating from beef, pork,

chicken, lamb, fish and insect. The advanced fractionation methods used in our modern facilities only involve thermal and mechanical processing, without using food additives of any kind.

Whatever trend you want to tap into, a good place to start is our Innovation Centers, where our protein experts are ready to engage with your experts to help create exciting new products that consumers feel good about eating.



**MEAT**



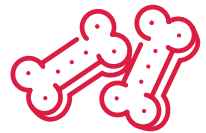
**SAVORY**



**NUTRITION**



**DAIRY**



**PET FOOD**