

Starch Applications in Meat Products

Kris J. Swenson & Tom Katen

The application of starch products in meats is nothing new. What is new are the applications and functionality that we are looking for in specific meat products. Yes, the primary function of starches is still moisture retention or management in meat products, however, it's not all about product yields out of the smokehouse these days. The meat processor's yields are still high on the list along with purge reduction and freeze thaw stability. However, with more meat products now reaching consumers through foodservice establishments, starches are being called on to help provide more consistent juiciness, tenderness, and texture in products as well as improve restaurant yields and hold times.

As in the past, starch products are used largely in the meats industry for moisture management. Other than utilizing the protein already present, starches have always been one of the most economical ways to retain water in processed meat products. Most any starch product can increase yield if there is the proper amount of time, temperature, and water available for the starch granule to cook and swell. However, within most processes for meat products, these have been somewhat set. That is why it is important to know these processing parameters prior to selecting a starch for the product. It is also important to have the key meat product attributes that you desire spelled out.

As more meat products are reaching the end consumer through food service outlets, this is increasing the demands on the meats sector to provide more consistent products. This means that our products need to be tolerant to some of the demands of the food service operation while providing consistent eating qualities and handling characteristics. Food service has also offered an avenue for products that utilize starches and other binders to achieve these desired characteristics, often without the labeling concern that would be present for a comparable retail product. However, more and more food service establishments are becoming concerned with how easily the label reads so that they can easily answer any ingredient or allergen questions that their customers may have. Just as food-

service is trying to deliver a more desired and consistent eating experience to it's consumers, the retail meats sector has been working on improving the consistency of some of its products. Whether it is through various branded programs, enhanced meats, or enhanced case ready items. Starch can play a role in improving the consistency of certain meat properties for retail just like it has for food service. For example a company currently produces an enhanced pork item for food service. This item utilizes a properly modified food starch to maintain juiciness through a high temperature cook and a two-hour hold post cook. Now they want to take it to retail. Most marketing departments would not like the idea of labeling the product as a Pork, Water, and Modified Food Starch Product. To address this problem and try to get similar product characteristics they may want to consider another process and label. For the retail side of the business, a somewhat similar item could be produced and labeled as such. If the product was enhanced with a typical water, salt, phosphate solution and then battered with a water, starch, flour and leavening clear coat solution, it could be labeled as a Battered Pork item with the enhanced and battered statement following instead of being labeled a Pork, Water, and Modified Food Starch Product.

In Summary:

Get Informed. Understand the true attributes that you are looking for in your product; the attributes your customer or the final consumer is looking for, and the processing parameters for the product and be able to relay that information to your ingredient suppliers.

Stay Connected, so that your starch and/or ingredient supplier can select or recommend the appropriate starch for the process and desired product attributes.

Discover Something New. Look at properties desired in some products where starches and binder have been avoided and consider some different processing and labeling possibilities.

Kris J. Swenson
Meat Applications
Cargill
2901 North Mead
Wichita, KS 67219

Email: Kris_Swenson@Cargill.com

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