SMOKING AND CURING

T&E Meats is now offering services for creating certain smoked meat products—specifically, ham and bacon. T&E uses a traditional cure using "pink salt" (sodium nitrite), and we also cure products using celery powder as a source of nitrite, which are then labelled "Uncured" Bacon or "Uncured" Ham, for regulatory reasons. We always use sodium erythorbate in conjunction with pink salt as a cure accelerant to ensure complete utilization of the nitrite, so there is no free nitrite remaining. Similarly, we always use a cherry powder in conjunction with celery powder, for the same reasons. "Uncured" products are more expensive, due to the extra cost and difficulty of working with the curing ingredients.

The following products are available: pork bellies as Smoked Slab Bacon or Smoked Sliced Bacon; boneless pork loins as Smoked Canadian Bacon, and boneless hams as Smoked Ham. The hams can be halved or quartered, but NEVER sliced into deli-style lunchmeats. When bellies are processed as sliced bacon, a certain amount of product will also be labelled as "Bacon Ends & Pieces". We also can produce Smoked Jowls and Smoked Hocks, but only for groups of 10 or more hogs. See below for pricing. All pricing based on 'green weight' of meats, which is the weight of the meat **after** it is prepared for curing, but **prior** to be injected with cure and smoked.

PRICING

Smoking & Curing using Pink Salt: $2.50/lb.

Smoking & Curing using Celery Powder : $3.25/lb.

Note: a discount of $.50/lb is offered for slab bacon, i.e. not sliced.

OTHER PRODUCTS

We may offer processing services for additional products in the future. Please note that products such as snack sticks, hot dogs, bologna, smoked sausage, etc. are considered "Ready to Eat" or "RTE" products. Production of RTE products under inspection involves mandatory listeria testing and increased inspection, which is expensive and time-consuming. Our current bacon and ham offerings are considered "Ready to Cook", not "Ready to Eat", which is one reason we do not offer sliced ham as a deli-style meat (please do not ask for this).

We will alert our customers as we have additional products available in the future. Please note – as of now, we assume that we will be offering these newer products initially as Locker, "Not for Sale" items while we fine-tune our processes, as these do not involve additional inspection requirements.

NOTE ON UNCURED PRODUCTS

Customers should understand that there are no such things as cured meats that do not use *nitrites* in some form, traditionally sodium nitrite or potassium nitrite. "Curing" starts with nitrites. During the curing process, nitrite changes to nitric oxide, which binds to myoglobin proteins in the meat, creating what is called a *nitrosomyoglobin* complex. During heating and smoking, the *nitrosomyoglobin* is converted to *nitrosohemechrome*, a pigment which gives cured meats their typical bright pink color. The use of nitrites to cure meats does many things. Most importantly, it is the only chemical substance able to be added to meat known to inhibit the growth of bacteria responsible for production of the deadly botulism toxin. It also contributes to flavor, color, and shelf life.

Concern over the possible formation of carcinogenic nitrosamines during the curing process led to the search for a more 'natural' curing process in the 1990s. Some meat processors created in an innovative way to cure meat, by using the nitrates present in high quantities in the juice of certain vegetables—such as chard, celery, or spinach—as an alternative to simply adding sodium nitrite. This was a complicated process, and involved a fermentation reaction where beneficial bacteria converted the nitrate to nitrite, making it available for curing the meat. USDA regulators require that meats cured with vegetable nitrite sources be labelled "uncured". This decision, dating back several decades, was based on the thinking that the conversion process was tricky and hard to control, and would have less dependable results, which could affect food and consumer safety. Thus processors were required to label these products as "Uncured" as a warning to the consumer. Interestingly enough, among some groups of consumers, the label "Uncured" is seen as a positive thing, involving a more 'natural' process. However, whether considered "cured" or "uncured", this is only a labelling semantic in this situation. In reality, there is no such thing as "uncured" bacon or ham. We **only** have cured meats with the involvement of nitrites in the curing process, resulting in the creation of nitrosohemochrome in the meat, regardless of the initial source of nitrite. Luckily for small processors, the process of creating ham or bacon which meets USDA criteria for being labelled as "Uncured" has recently become much easier, as we are able to purchase pre-converted vegetable powders containing a dependable level of nitrite, rather than having to use raw vegetable juice or powder and then incorporating a fermentation stage into our curing process. The use of ascorbic acids or erythorbates, also known as Vitamin A, helps accelerate the curing process and eliminates concern about development of carcinogenic nitrosamines in either case.