Purpose

This report presents results from a pre-test that was conducted to gather information from nine establishments about the use of sodium lactate, potassium lactate and sodium diacetate in ready-to-eat meat and poultry products as a result of the final rule, Food Additives for Use in Meat and Poultry Products: Sodium Diacetate, Sodium Acetate, Sodium Lactate and Potassium Lactate, effective March 2000. An Interview Guide was developed by the Office of Policy, Program Development and Evaluation (OPPDE) to determine whether establishments used these ingredients for microbial control or flavor enhancement or both and whether their HACCP plans were modified and changes made to their production practices.

Methodology

Telephone interviews were conducted with nine establishments. Five use sodium lactate as an ingredient. The remaining four use a potassium lactate/sodium diacetate mix. All uses are well below the limits established in the final rule for microbial control.

Note: Two establishments interviewed used these ingredients only in non ready-to-eat products. Findings that include any of these establishments are annotated with an asterisk.

Key Findings

All of the establishments interviewed stated that the final rule published in March 2000 did not impact the changes they made to product formulation, label design, or new product development in any way. One establishment commented that published rules never dictate changes made to its production practices.

Eight establishments stated that these ingredients were being used for microbial control. Of these eight, four further cited increased product shelf life as a reason for the use of the ingredient, two added that the changes were made as a result of internal initiatives to inhibit pathogen growth, and two made no further comments. Only one establishment stated that its use of the ingredient was for flavor enhancement.

Although the final rule allows for the increase of lactates from 2% up to 4.8% and the increase of sodium diacetate from .1% up to .25%, only one establishment has taken advantage of these changes by increasing its lactate level to 2.86%.

The final rule also states that FSIS "expects" establishments to reassess their HACCP plans for those products in which these ingredients will be used and to establish that use as a Critical Control Point (CCP) if it is for the purpose of anti-microbial treatment. Some establishments felt that this language did not specifically require reassessment. As a result, only six of the eight establishments using these ingredients for microbial control are identifying this use in their HACCP plan. Of these six, only two are establishing this use as a CCP while the other four identify the use as part of their overall process. The remaining two establishments using these ingredients for microbial control do not identify their use of these ingredients in their HACCP plans because "the use of these ingredients were for purposes of quality not safety."

Two establishments questioned the need to include the use of these ingredients as a CCP and felt that the ingredients specified in the final rule were being treated differently than other ingredients they might use in their products. Of these two, one establishment stated that it would not be as aggressive in its use of these ingredients if required to include it as a CCP and felt this requirement would be counterproductive.

Seven establishments cited no change to their production practices. Eight cited minimal or no changes to production costs and five cited minimal or no changes in product quality.

Finally, two establishments commented on the final rule's lack of clarity with respect to whether the weight of total formulation referred to a wet weight or dry weight measure. As a result of this concern, it was decided that a Constituent Update would be prepared and published in May 2000 clarifying this issue.

Survey Questions and Summary Results

Why did you seek new approval of your label change?

- Five establishments stated that the application for a label change was submitted as a result of a change in their production formulations.*
- Two of the establishments indicated that the application was submitted because the design of the product labels was changing.*
- Two of the establishments submitted the application because they were producing a new product.

Purpose of ingredients.

- Eight establishments stated that the use of the ingredient was for the purpose of anti-microbial treatment.* Four further stated the ingredient was used for increased shelf life. Two added that the use of the ingredient was a result of internal initiatives aimed at inhibiting pathogen growth. Two made no further comments.
- One establishment stated that the ingredient was used for flavor enhancement.

Concentration levels of the ingredients.

- Five establishments use sodium lactate at levels up to 2%.*
- Four establishments use a potassium lactate/sodium diacetate mix. Of those four:
  - Three use potassium lactate at levels of 1.4%
  - One uses potassium lactate at a level of 2.86%
  - All four also use sodium diacetate at a level of .1%

HACCP Plan

- Six establishments indicated that they included the use of the ingredient in their respective HACCP plans. Of these six:
  - Two establish the use as a CCP*
  - Four identified the use as part of their overall process.*
- Three indicated that they did not include the use of the ingredient in their HACCP plans.

Changes in production practices

- Two establishments stated that they had to modify their production practices. It is important to note that both of these establishments were adding these ingredients to their products for the first time.*
- Seven establishments cited no change to their production practices.*

Changes in cost of production

- Four establishments commented that the cost of the product increased slightly because of the increased cost associated with the addition/increase of the ingredient.*
- One establishment stated that the cost of production did increase because of the addition of a new product in their production line.
- Four establishments cited no change to their production costs.*

Changes in the quality of the product

- Four establishments indicated that the quality of the product increased because the shelf life increased "providing better performance over a longer range."*
- One establishment stated that the product's flavor changed slightly, although it passed internal taste tests.
- The remaining four establishments cited no significant change to the quality of the product.*