



BEYOND PESTICIDES

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April, 2016

Ms. Michelle Arsenault
National Organic Standards Board
USDA-AMS-NOP
1400 Independence Ave. SW.,
Room 2648-S, Mail Stop 0268
Washington, DC 20250-0268

Re. HS: Sodium Lactate and Potassium Lactate

These comments to the National Organic Standards Board (NOSB) on its Spring 2016 agenda are submitted on behalf of Beyond Pesticides. Founded in 1981 as a national, grassroots, membership organization that represents community-based organizations and a range of people seeking to bridge the interests of consumers, farmers and farmworkers, Beyond Pesticides advances improved protections from pesticides and alternative pest management strategies that reduce or eliminate a reliance on pesticides. Our membership and network span the 50 states and the world.

Beyond Pesticides agrees that sodium lactate and potassium lactate must be on the National List in order to be used in organic food. However, we oppose their listing because they are synthetic preservatives and are thus not appropriate for use in organic food.

Sodium lactate and potassium lactate are synthetic.

As described in the Lactic Acid and Lactates Technical Review (TR), sodium lactate and potassium lactate are manufactured by a reaction of lactic acid with a synthetic chemical, generally sodium or potassium hydroxide. (TR, lines 519-548) Thus, they would be classified as synthetic according to the NOP draft classification guidance.

As stated in the Technical Review, the USDA Food Standards and Labeling Policy Book says:

It should be noted that meat products that contain sodium and potassium lactates can no longer be labeled as "natural" without a case-by-case assessment of what function these materials are serving in the product, and at what levels (USDA FSIS 2005). The reason is that the lactates are likely to be used as "chemical preservatives," rather than as flavors.

We agree with comments submitted by PCC Natural Markets:¹

¹ Letter from Trudy Bialic, December 7, 2009.

Since sodium lactate is not acknowledged by the FSIS for use in meat products labeled “natural” (except potentially on a case-by-case basis at the time of label approval), it seems logical that sodium lactate should not be allowed for use in certified organic products. Consumers expect organic standards to be more rigorous than standards for “natural.” It seems incongruous that organic would allow something that “natural” would not allow automatically.

The use of sodium lactate and potassium lactate is not essential for organic production.

The TR details several alternative methods and materials available to organic producers to achieve the most important function of the lactates –preventing growth of *Listeria monocytogenes* in processed meats. These include processes that result in a pH or water activity suppressing or limiting microbial growth. The TR says, “Processing alternatives include cook-in-bag products, frozen products with safe handling instructions for cooking, strict facility sanitation and testing requirements (under the FSIS’s Listeria Rule (USDA FSIS 2012)), or post processing applications such as high pressure pasteurization and steam/water pasteurization.” It identifies natural materials, “Alternative nonsynthetic additives include vegetable and fruit juice powders that contain natural nitrite, or that modify pH. Other nonsynthetic alternatives include organic acids such as citric and lactic acid, lactic acid starter cultures such as *Staphylococcus carnosus*, vinegar, essential oils and bacteriophages.” We do not support the addition of nitrite through use of celery powder from chemical-intensive agriculture, but other natural materials can be used.

The use of sodium lactate and potassium lactate for the petitioned use is prohibited by organic regulations at §205.600(b)(4).

Both chemicals are used as preservatives, to prevent the growth of microorganisms. In addition, they are also considered flavor and color enhancers. They may also be combined with sodium diacetate. (TR, lines 266-326) Since sodium diacetate is not on the National List and is added for its functional effect of reducing pH, certainly any lactate product containing it should not be allowed.

§205.600(b)(4) of the regulation states:

(b) In addition to the criteria set forth in the Act, any synthetic substance used as a processing aid or adjuvant will be evaluated against the following criteria:

(4) The substance's primary use is not as a preservative or to recreate or improve flavors, colors, textures, or nutritive value lost during processing, except where the replacement of nutrients is required by law;

Since the purpose for which the lactates were petitioned is as a preservative, and other uses include flavor and color enhancement, sodium lactate and potassium lactate have no place on the National List.

Conclusion

Potassium lactate and sodium lactate are unnecessary. They are synthetic chemicals used for purposes not allowed in organic processing. Therefore, they should not be added to the National List.

Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry Shistar". The signature is fluid and cursive, with a prominent initial "T" and a long, sweeping underline.

Terry Shistar, Ph.D.
Board of Directors