



OXYTOCIN USE IN ORGANIC CATTLE

Guidance

Oxytocin is a hormone produced in the brains of all male and female mammals and plays an important role in milk letdown, the contraction of the smooth uterine muscles during the birthing process, and various maternal behaviors. Oxytocin has been used by veterinarians to stimulate uterine contraction to facilitate parturition (animal birth); promote the return of the post parturient uterus to pre-pregnancy conditions and aid the passage of retained placentae and the removal of detritus; and help control post partum hemorrhage. Oxytocin is also used to promote milk letdown in cases of agalactia (lack of milk) and to facilitate treatment of mastitis (infection or inflammation of the mammary glands) in cows.

NOP REGULATIONS AND PCO POLICY

Oxytocin has been included on the National List of Allowed and Prohibited Substances as a synthetic substance allowed for use in organic livestock production. Use of oxytocin is limited to “use in post parturition therapeutic applications.” §205.603

Oxytocin is commonly used for retained placenta, uterine bleeding after prolapse or dystocia, and milk let-down. Allowed uses do not include prolonged use to promote milk let-down.

ADDITIONAL INFORMATION

PROPOSAL TO REMOVE OXYTOCIN FROM NATIONAL LIST

Oxytocin is currently listed at §205.603(a)(16) of the National List for use in post-parturition therapeutic applications in organic livestock production. The sunset review of this material was completed at the Fall 2017 NOSB meeting. The NOSB recommended removing oxytocin from the National List because it no longer meets the OFPA criteria for essentiality. Specifically, the NOSB determined that oxytocin is not essential for livestock production because natural alternatives are available, and many organic livestock producers supported its removal during public comment period. Oxytocin was recommended for removal from the National List pending NOP rulemaking prior to its sunset date of 3/15/2022.

ALTERNATIVES TO OXYTOCIN

Natural alternatives to synthetic oxytocin include botanicals, homeopathies, herbal tinctures, and manual stimulation techniques designed to aid in milk-let down. Management techniques to prevent reproductive challenges, such as retained placenta, may be employed so that synthetic oxytocin use is not required. This may include a review of selenium and vitamin A and E levels in the dry cow diet, avoiding weight gain in the dry period, selecting bulls for easy calving, and use of calcium supplements.

In the case that prevention techniques or natural alternatives are not sufficient, it may be necessary for a veterinarian to use a synthetic material such as oxytocin to maintain the health and safety of the cow. As in any case when a synthetic material not on the National List is required to be used, the affected cow will need to be taken out of the organic herd.

APPROVED INPUTS

All inputs must be reviewed and approved by PCO prior to use, so be sure to check with us or consult a current PCO Approved Materials List, OMRI, or WSDA list prior to purchasing or using a product. PCO does not endorse any of the products listed in this guidance document. This is not an all-inclusive list and other inputs may be allowed. Please contact PCO if you have any questions on materials or restrictions.

- **FLC Tincture** by Dr. Paul's Lab
- **First Step** Tincture by Dr. Paul's Lab
- **Fresh Cow Bolus** by Dr. Paul's Lab must not be administered in the absence of illness. Records must be kept documenting specific animal treated, treatment/dosage used, and duration of treatment.
§205.238(b)
- **Hemocel 100** by Agri-Dynamics must Must not be administered in the absence of illness. Records must be kept documenting specific animal treated, treatment/dosage used, and duration of treatment.
§205.238(b)
- **UterFlush** by Van Beek Natural Science, LLC must not be administered in the absence of illness. Records must be kept documenting specific animal treated, treatment/dosage used, and duration of treatment.
§205.238(b)

PCO is not endorsing the efficacy of any of the approved treatments, and producers should work with a trained professional to treat any distressed animals.

RESOURCES

- <https://www.ams.usda.gov/sites/default/files/media/Oxytocin%20TR%202005.pdf>
- <https://www.omri.org/sites/default/files/marketing/OMRI-NOSB-Report-Fall-2017.pdf>
- <http://articles.extension.org/pages/67231/organic-dairy-herd-health:-reproductive-management-from-breeding-through-freshening>