



Draft Guidance

Evaluating Allowed Ingredients and Sources of Vitamins and Minerals For Organic Livestock Feed, Feed Supplements, and Feed Additives

1. Purpose

This guidance clarifies the agricultural, nonsynthetic, and synthetic ingredients, and the incidental additives and processing aids permitted in organic livestock feed, feed supplements, and feed additives that must be reviewed for compliance with the National Organic Program (NOP) regulations.

2. Scope

This guidance applies to all NOP certifying agents, certified and exempt organic livestock producers, and suppliers of feed, feed supplements, and feed additives.

3. Background

Animal feed labeling requirements are regulated by the Food and Drug Administration (FDA) under 21 CFR § 501. Feed additive requirements, the list of approved feed additives that are generally recognized as safe (GRAS), and the substances prohibited from use in animal feed are published in 21 CFR §§ 570-571, § 573, § 582, § 584, and § 589. The FDA also recognizes the list of additives and feedstuffs published in the Association of American Feed Control Officials (AAFCO) *Official Publication*, which is updated and published annually.¹

Under the NOP regulations, organic producers must provide livestock feed per 7 CFR § 205.237. All agricultural ingredients included in the ingredients list for livestock feed products must be organically produced. Pasture and range used for feed and forage must be certified organic.² All forages, feed, and feed supplements must be listed in the organic system plan. Certifying agents must verify that all forage, feed, feed supplements, and feed additives provided to organic livestock comply with the requirements in § 205.237.

4. Policy

4.1 Certified Organic Livestock Operations

a. General

¹ Copies of AAFCO's *Official Publication* may be obtained through their Assistant Secretary-Treasurer. For more information, please go to their website at <http://www.aafco.org>.

² Please see the Pasture Guidance series *NOP 5017* in the *NOP Program Handbook* for detailed information regarding pasture access and management.



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1. Certified organic livestock operations must feed organic animals certified organic livestock feed.
 2. Certified operations must describe all forages, feed ingredients, formulated feed products, feed supplements, and feed additives in the organic system plan (OSP).
- b. All livestock feed, feed supplements, or feed additives sold, labeled, or represented as organic must be organically produced, handled, and certified under the NOP regulations.
1. All agricultural ingredients included in the ingredients list for livestock feed products must be certified organic.
 2. Agricultural ingredients that are added to feed, such as wheat middlings, rice hulls, vegetable oil, or molasses used as carriers or dust suppressant must be certified organic.
 3. Agricultural ingredients cannot be sourced from slaughter by-products from poultry or mammalian sources (if being fed to poultry or mammals) or sourced from products produced by excluded methods.
 4. Nonsynthetic, nonagricultural ingredients, including direct-fed microorganisms (“probiotics”), yeast, and enzymes are allowed in organic feed under § 205.237.
 5. Allowed synthetic feed additives and supplements as listed in § 205.603 as well as nonsynthetic, nonagricultural feed additives and supplements may be used as ingredients in “organic” livestock feed under § 205.301(e)(2).
 6. Livestock feed sold, labeled or represented as “100% organic” must contain not less than 100% organically produced and handled agricultural products certified under the NOP regulations as per § 205.301(e)(1).
- c. Minerals and vitamins must be approved by the FDA at 21 CFR § 501, §§ 510-558, §§ 570-571, § 573, § 582, § 584, § 589, or listed in the current edition of the AAFCO *Official Publication* (Mineral Products or Vitamins) to be considered for use in organic livestock feed rations.
1. Minerals and vitamins cannot be sourced from slaughter by-products from poultry or mammalian sources (if being fed to poultry or mammals) or sourced from products produced by excluded methods.
 - i. Proteinated mineral sources (metal proteinates) sourced from slaughter by-products or produced by excluded methods are not permitted.
 - ii. Minerals sourced from bone such as bone charcoal, bone meal or bone phosphate are considered slaughter by-products and are also not permitted.
 - iii. Metal amino acid chelates, metal amino acid complexes, and metal (specific amino acid) complexes as defined by AAFCO are permitted.
- d. Incidental additives and processing aids as described in 21 CFR § 501.100 (a)(3) do not require review by certifying agents. They are considered incidental because:



1. They are present in feed at insignificant levels and do not have any technical or functional effect;
2. They are exempt from feed ingredient labeling and do not appear on the ingredients label for the final formulated feed;
3. They are present by reason of having been incorporated into the feed as an ingredient of another food, in which the substance did have a functional or technical effect, but no longer has a technical effect in a final product; and/or
4. They were used as processing aids and have been removed.

4.2 Certifying Agents

Certifying agents must verify that all forages, feed ingredients, formulated feed products, bulk feed products, feed supplements, and feed additives fed to organic livestock comply with the NOP requirements.

5. References

5.1 NOP Regulations

§ 205.2 Terms defined.

Excluded methods. A variety of methods used to genetically modify organisms or influence their growth and development by means that are not possible under natural conditions or processes and are not considered compatible with organic production. Such methods include cell fusion, microencapsulation and macroencapsulation, and recombinant DNA technology (including gene deletion, gene doubling, introducing a foreign gene, and changing the positions of genes when achieved by recombinant DNA technology). Such methods do not include the use of traditional breeding, conjugation, fermentation, hybridization, in vitro fertilization, or tissue culture.

Feed. Edible materials which are consumed by livestock for their nutritional value. Feed may be concentrates (grains) or roughages (hay, silage, fodder). The term, “feed,” encompasses all agricultural commodities, including pasture ingested by livestock for nutritional purposes.

Feed additive. A substance added to feed in micro quantities to fulfill a specific nutritional need; i.e., essential nutrients in the form of amino acids, vitamins, and minerals.

Feed supplement. A combination of feed nutrients added to livestock feed to improve the nutrient balance or performance of the total ration and intended to be:

- (1) Diluted with other feeds when fed to livestock;
- (2) Offered free choice with other parts of the ration if separately available; or
- (3) Further diluted and mixed to produce a complete feed.

§ 205.237 Livestock feed.

- (a) The producer of an organic livestock operation must provide livestock with a total feed ration composed of agricultural products, including pasture and forage, that are organically



produced and handled by operations certified to the NOP, except as provided in §205.236(a)(2)(i), except, that, synthetic substances allowed under §205.603 and nonsynthetic substances not prohibited under §205.604 may be used as feed additives and feed supplements, *Provided, That*, all agricultural ingredients included in the ingredients list, for such additives and supplements, shall have been produced and handled organically.

(b) The producer of an organic operation must not: ...

(5) Feed mammalian or poultry slaughter by-products to mammals or poultry;

(6) Use feed, feed additives, and feed supplements in violation of the Federal Food, Drug, and Cosmetic Act;

§ 205.301 Product composition.

(e) *Livestock feed.*

(1) A raw or processed livestock feed product sold, labeled, or represented as “100 percent organic” must contain (by weight or fluid volume, excluding water and salt) not less than 100 percent organically produced raw or processed agricultural product.

(2) A raw or processed livestock feed product sold, labeled, or represented as “organic” must be produced in conformance with §205.237.

§ 205.603(d)(2) Trace minerals, used for enrichment or fortification when FDA approved.

§ 205.603(d)(3) Vitamins, used for enrichment or fortification when FDA approved.

5.2. Food and Drug Administration Regulations

21 CFR § 501 Animal Food Labeling

21 CFR § 501.100 (a)(3) Exemptions from Food Labeling; Incidental Food Additives

21 CFR § 570 - 573 Food Additives

21 CFR § 582 – 584 Substances Generally Recognized As Safe (GRAS)

21 CFR § 589 Substances Prohibited from Use in Animal Food or Feed

5.3 Association of American Feed Control Officials (AAFCO) Official Publication

The FDA also recognizes the list of additives and feedstuffs published in the Association of American Feed Control Officials (AAFCO) *Official Publication*, which is updated and published annually. Copies of AAFCO’s *Official Publication* may be obtained through their Assistant Secretary-Treasurer. For more information, please go to their website at <http://www.aafco.org>.

5.4 NOP Program Handbook: Guidance and Instructions for Accredited Certifying Agents & Certified Operations

NOP 5017 – Pasture Series