Oregon Tilth’s Quick Start Guide series is designed to provide clients with all of the basics necessary to jump right in and get started on certification-related actions immediately.
Decoding livestock feed and supplements in organic production requires knowledge of calculations, special circumstances and how to meet the nutritional needs of your animals while still remaining compliant with the standards. This Quick Start Guide for Feed and Supplements for Organic Livestock is intended to ask (and answer) the most important questions as well as provide you with mini case studies, templates and tools to use when starting the process on your own.

**IMPORTANT QUESTIONS & GUIDELINES:**

- **What can I feed my organic livestock or poultry?**
- **What is the National List and how does it affect what I feed my organic livestock?**
- **What's the difference between a feed supplement and a healthcare input?**
- **What are some feed ingredients with unique considerations?**
- **What can't I feed my organic livestock or poultry?**
- **What are some tips for working with my certifier, feed supplier and nutritionist?**
- **Where can I find more about organic animal nutrition?**

**LET’S GET STARTED!**
Understanding the make up of feed – from agricultural ingredients (forages, concentrates), supplements and additives, and other ingredients to improve delivery (palatability, efficacy) – is critical under organic standards. Feed for organic livestock must be composed of certified organic agricultural products; this includes all agricultural ingredients in feed supplements or additives. The two biggest takeaways from this guide are to be thorough in understanding your labels and always check with your certifier before using an unapproved feed in your operation.

**DEFINED:**

**1. 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.

**2. 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.

**3. FEED SUPPLEMENT**
A combination of nutrients added to livestock feed to improve the nutrient balance or performance of the total ration and intended to be:
- Diluted with other feeds when fed to livestock
- Offered free choice with other parts of the ration if separately available
- Further diluted and mixed to produce a complete feed
The National Organic Standards on livestock feed, §205.237, can be fairly complicated.

**HERE ARE THE KEY REQUIREMENTS BROKEN DOWN:**

**Feed for livestock must be composed of certified organic agricultural products.**

A feed ration **must** be composed of Certified Organic Agricultural products, e.g. any agricultural products being used in a feed are required to be certified organic. Examples of agricultural ingredients include: grains (e.g. corn, oats, barley), meals (soybean meal, cottonseed meal), hay, silage, fodder, and pasture.

Feed rations may include allowed National List synthetic materials as feed additives or feed supplements.

The only allowed synthetic feed additives on the National List are DL-Methionine, used in poultry rations at a specific amount per ton for each species of poultry, and trace vitamins and minerals, used for enrichment or fortification when FDA approved.

- Additives are to be fully incorporated into a ratio & used in minimal quantities.
- Supplements may be incorporated into a ration, but may also be provided as a free choice option (e.g. a mineral block for cattle).
- A supplement may include a feed additive as an ingredient (such as trace minerals in a premix).

Any agricultural ingredients used in feed supplements or additives for organic livestock must be certified organic.

Whether using a purchased feed supplement product – which must identify all agricultural ingredients as organic on the ingredient statement – or if you are mixing a supplement yourself, you need to be sure you document and use organic agricultural ingredients only. This includes carriers or binding agents such as: molasses, wheat middlings, rice hulls, and vegetable oil.

Feed rations may include non-agricultural nonsynthetic (natural) materials as feed supplements that are not prohibited or certified organic.

Provided there is nothing in the Rule and National List that prohibits it, you can use a non-synthetic, non-agricultural material in feed rations. Examples include: blue-green algae, diatomaceous earth, kaolin clay, fishmeal, probiotics and enzymes.

**TOOL TIPS: ENSURING A PRODUCT IS APPROVED FOR USE AS FEED (BEFORE YOU USE IT)**

Oregon Tilth can help you determine if a feed product is approved for use within the regulations. Check with the Organic Materials Review Institute (OMRI) – Oregon Tilth is a co-founder – and the Washington State Department of Agriculture (WSDA) to see if a product is usable. Always check with us prior to use to verify that it is acceptable for your organic production.

OMRI Website | WSDA Website
The National List specifies any synthetic materials that may be used in organic production or processing and what it can be used for, as well as any non-synthetic (also called natural) materials that are prohibited from use.

**WHY DOES IT MATTER?**

The National List provides the only allowable synthetic materials for use in your production for specific purposes. All feed rations and feed ingredients must comply with the National List in order to be used in organic livestock production.

**HOW DO I DETERMINE SPECIFIC RULES FOR LIVESTOCK PRODUCTION?**

Sections §205.603 and §205.604 are specific to livestock production – 603 lists all allowed synthetic materials for organic livestock productions, with specifics about restrictions on their use, while 604 provides a listing of all prohibited non-synthetic materials (currently strychnine is the only listing). Any substances on 603 listed as feed supplements or feed additives may be used in organic livestock feed, in accordance with any annotations they carry. Be sure to match any supplement or material to your intended use. For instance, a material listed as an allowed “topical treatment” on this list may not be allowed for feed use.

**WHAT TYPES OF THINGS ARE ON THE NATIONAL LIST?**

§ 205.600-606
Section of the National Organic Standards that lists the allowed and prohibited inputs for the different scopes of organic production. Basically, any non-synthetic substances are allowed in organic production and handling unless they are on this list as prohibited, and all synthetic substances are prohibited unless they are on this list as allowed.

§ 205.603
Lists allowed synthetic materials for organic livestock production, including any annotations that restrict use.

§ 205.604
Lists prohibited nonsynthetic (natural) materials.

**TOOL TIPS: UNDERSTANDING THE NATIONAL LIST**

The National List is not fixed – it may be amended to add or remove products, or to change a restriction, by National Organic Program (NOP), based on recommendations from the National Organic Standards Board (NOSB). NOSB is a federal advisory committee, and they depend on organic stakeholders – yes, you! – to share comments, experience and expertise through a public comment process so the NOSB may make informed decisions about materials. Learn more about the current [National List](#) and how you can [petition the NOSB](#) to have materials added, changed or removed from the list.
What’s the difference between feed supplements & healthcare inputs?

Certain products could be considered either feed ingredients or healthcare materials – they may provide nutritional value as well as a health benefit.

**SO WHY DOES IT MATTER HOW THEY ARE CLASSIFIED?**

1. **FEED SUPPLEMENTS**
   - must meet the organic livestock feed requirements, including use of certified organic agricultural ingredients.

2. **HEALTHCARE MATERIALS**
   - are not restricted by the livestock feed requirements, and may use non-organic agricultural ingredients.

**WHAT DOES THIS REALLY MEAN?**

Some products can be classified as a feed supplement or a healthcare product, depending on how they are marketed or used. They might be used to provide nutritive value in the diet or used periodically to treat, mitigate and prevent disease. These products tend to blur the line between feed and healthcare products. This is further complicated because feed supplements must use only certified organic agricultural ingredients, but healthcare products are not required to have agricultural ingredients be organic.

**WHAT DOES THIS REALLY MEAN?**

Certifiers take into account how a producer will be using a product. For instance, if a producer wants to use a product as part of the feed ration in order to meet the nutritional needs of the animal, then it would be considered a feed ingredient and would need to meet the feed requirements. But, if the producer used it specifically to treat a periodic health concern and did not administer it to all animals with regularity, then it would be reviewed under the healthcare standards.

**MINI CASE STUDY**

**HEALTHCARE INPUT VERSUS FEED SUPPLEMENT**

Let’s examine a specific and unique example. A farmer requested the use of a kombucha product as both a feed supplement and a healthcare treatment for his dairy cattle. When we reviewed the ingredients list, we found that they were using a number of certified organic ingredients, but had one non-organic ingredient (sugar). We were able to approve it for periodic health treatment use for his cattle for digestive health under the healthcare input standards, but we did not approve it as a feed supplement. The farmer is now working with the kombucha manufacturer to get the product certified organic so he may re-submit it to us for use as a feed supplement in the future.
WHAT ARE SOME FEED INGREDIENTS WITH UNIQUE CONSIDERATIONS?

KELP MEAL

Kelp is an agricultural product per the National Organic Program and must be certified organic for use in livestock feed.

YEAST + BACTERIA CULTURES

Yeast and bacteria cultures used in livestock feed do not require organic certification but do require non-GMO verification.

FISHMEAL

Several fishmeal products are preserved with ethoxyquin — a synthetic material not allowed in organic production — and other compounds that might require certifier verification.

METHIONINE

Fish and crab meal are the only acceptable animal protein sources of methionine in organic livestock feed rations, so it is allowable as a synthetic feed additive at a specific rate per ton of feed.

TOOL TIPS: MAINTAINING COMPLIANCE AND GETTING CERTIFIER APPROVAL

**Compliance through communication**
Communication with your certifier about your feeding program will prevent you from making a costly mistake that could potentially disqualify your animals from organic production or jeopardize your certification.

All inputs must be reviewed and approved by your certifier prior to use.

**Compliance through recordkeeping**
Compliance through recordkeeping
Records provide verification and demonstration of feed and supplement compliance, such as: production and harvest records for farm grown feed, purchase records, organic certificates for purchased organic feed and edible bedding, feeding records by production group, feed labels, and documentation for ruminants to verify the Pasture Rule compliance.

**Compliance through OSP**
Update your OSP when: Implementing any significant change to your feed rations, such as: new feed additives or supplements or changing rations during grazing season (ruminants) that may effect your DMI from pasture, changes to the sources of agricultural ingredients, or adding a new production group that requires new rations.
The National Organic Standards §205.237(b) specifies what organic producers cannot do with regard to livestock feed.

**PROHIBITED**

<table>
<thead>
<tr>
<th>Prohibited Items</th>
<th>Prohibited Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Synthetics that do not appear on the National List</td>
<td>• Plastic pellets for roughage, urea or manure</td>
</tr>
<tr>
<td>• Drugs, including hormones, to promote growth</td>
<td>• Mammalian or poultry slaughter by-products to mammals or poultry, including blood, meat, or bone meal, bone charcoal, and substances that are derived from slaughter byproducts like Vitamin D3 and gelatin</td>
</tr>
<tr>
<td>• Feed supplements or additives beyond the animal’s nutritional needs</td>
<td>• Antibiotics or ionophores</td>
</tr>
<tr>
<td>• Anything that violates the Federal Food, Drug and Cosmetic Act</td>
<td>• Preventing ruminants from grazing pasture during the grazing season per the requirements of the Pasture Rule, §205.237(c) and §205.240</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prohibited Items</th>
<th>Prohibited Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Any minerals that have been proteinated or derived from slaughter by-products or GMOs</td>
<td>• Using a temporary variance to provide non-organic feed or other inputs that are required to be from certified organic sources</td>
</tr>
<tr>
<td>• Premixes/vitamin-mineral packs that have not been reviewed by your certifier or OMRI</td>
<td>• Non-certified organic kelp</td>
</tr>
<tr>
<td>• Non-certified organic kelp</td>
<td>• Agricultural ingredients that are not identified as organic</td>
</tr>
<tr>
<td>• Using a temporary variance to provide non-organic feed or other inputs that are required to be from certified organic sources</td>
<td>• Synthetic substances that are not on the National List</td>
</tr>
</tbody>
</table>

**MINI CASE STUDIES**

**Dissecting a noncompliant feed ration**

Red flags when looking at a feed tag or ration sheet:

- Agricultural ingredients that are not identified as organic
- Synthetic substances that are not on the National List
- Certified organic products intended for human consumption - beware, they may not necessarily be compliant for livestock feed
It can be a challenge for you (farmer) to speak the same language as your certifier, nutritionist or feed suppliers when it comes to discussing organic feed requirements.

A few things to keep in mind:

**NUTRIENTS + VITAMINS + MINERALS ARE NOT ALL CREATED EQUAL:**

**FEED SUPPLIER**

Thinks in terms of nutritional content of the final mixed ration and is unconcerned with which ingredients are used to get these nutrients.

**ORGANIC CERTIFIER**

Thinks in terms of where nutrients are coming from (which ingredients are used), and if the ingredients are compliant with the organic regulations.

Both viewpoints are necessary ways of looking at organic livestock feed in order to maintain high quality animal nutrition and organic compliance. Keeping both of these perspectives in mind when talking to your certifier and your feed supplier/nutritionist will give you much needed context for those conversations.

Feed ingredients and healthcare products are both important aspects of your animals’ well-being, and can be viewed as part of one holistic approach, but healthcare inputs must be reviewed and documented separately from feed in order to maintain compliance.
AVOIDING USUAL MISTAKES
The biggest and most expensive mistakes can easily be avoided just by communicating with your certifier whenever you are unsure about a substance, material or product.

A few things to keep in mind:

ENSURE ORGANIC INGREDIENTS MEET THE NOP STANDARDS

CONTACT

ORGANIC CERTIFIER

Always double check a product not just based on ingredient listings but also against your certifier and / or a material review organization like OMRI or WSDA

FEED SUPPLIER

Develop relations with your product salespeople and nutrition advisors that your production is certified organic and requires excellent documentation for compliance

Assuming that a salesperson’s understanding of “organic” ingredients meets expectations of the NOP is an preventable pitfall.
TIPS FOR WORKING WITH CERTIFIERS & FEED SUPPLIERS

BE PATIENT & OPEN WITH YOUR CERTIFIER
Certifiers are tasked with decoding and clarifying enormous quantities of ingredients in thousands of products, materials and supplements. Sometimes it can take time to work with a manufacturer to get a clear understanding of a product. Sometimes it requires consulting others to ensure consistency in certification approaches to a particular material.

You can help by:

Check in with your certifier prior to using any new unapproved or unknown material

It’s vital to understand that even a small amount of a prohibited substance is enough to void your certification. Certifiers, material review organizations and others should be viewed as support structures to helping guide you through decisions before making a mistake. It’s generally a good rule to:

• Check twice and then ask a lot of questions for any material
• Rely on your certifier to determine allowable versus prohibited

Give specific details about materials, good contact information and even pose the first questions to your manufacturer to get the ball rolling
WHERE CAN I FIND OUT MORE ABOUT ORGANIC ANIMAL NUTRITION?

The NOP rule §205.238(a)(2) provides vague guidance for what “sufficient” feed rations in terms of meeting nutritional requirements can and should be. Nutritional guidance ought to be found through a variety of peer-reviewed or quality third-party sources.

A FEW EXAMPLES INCLUDE:

- Organic Livestock Producer Guide (from NOP Handbook)
- Nutrient Requirements of Dairy Cattle
- Feed Stuffs Magazine (Reference issue on all species)
- Morrison’s Feeds and Feeding Reference
- ATTRA/NCAT

TOOL TIPS: ADDITIONAL RESOURCES

- Livestock, Nutrition, Husbandry, and Behavior
- eOrganic
- Oregon Tilth Webinar: The Pasture Rule
- USDA National Agricultural Library, Alternative Farming Systems Information Center