An Overview of Organic Feeds and Feeding

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<section-header> Personal Background Grew up on dairy farm in Ferndale, CA Pasture-based "Old" organic

Background in Organic

- 1984 Began consulting in animal nutrition and management.
- 1992 Worked w/ first dairy herd converting to organic production in Western US.
- Since 2000 Consulted w/ dairy farmers, vets, feed mills, feed additive manufactures and marketers, milk processors, and certifiers on Organic issues.
- 2006 Member of National Organic Standards Board (appointed to 5 yr term by US Sec of Ag).

The Who's and What's

- USDA United States Department of Agriculture
- NOP National Organic Program
- NOSB National Organic Standard Board
- OFPA Organic Food Production Act 1990
- 7 CFR 205 The Rule
- OSP Organic Systems Plan (Farm Plan)

Other Players

- Accredited Certifiers
 - MOCA
 - CCOF
 - ∎ QAI
- CDFA State Organic Program (SOP)
 Ray Green
- OMRI Organic Material Review Institute

Definitions

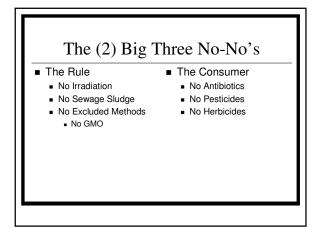
 <u>Pasture</u> – Land used for livestock grazing that is managed to provide feed value and maintain or improve soil, water, and vegetative resources.

Definitions

Synthetic – A substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral sources, except term does not apply to substances created by naturally occurring biological processes.

Synthetic v. Nonsynthetic

- The National List (§ 205.600 205.619)
- Feeds must be organic not part of List.
- Synthetic
 - Must be on National List to be <u>used</u> (§205.603)
- Nonsynthetic
 Must be on National List to be <u>prohibited</u> (§205.604)
- All must meet The Rule's Big 3



New Concept to Know

- Routine
 - Daily or regular procedure to an animal or group of animals at a predetermined time.
 - Example: Pretreat a group of animals to prevent a disease.
- Non-Routine
 - Procedure to animal on an inconsistent basis.
 - Example: Treating an individual sick animal.

Conversion to Organic - General

- Land and Crops 3 yr without prohibited materials or methods.
- Dairy Animals Milk or milk products must be from animals that have been under continuous organic management for no less than 12 months prior to producing organic products.
- Slaughter Last third of gestation.

Dairy Conversion 80/20 conversion is gone in early June. Those started can finish. 100% for 12 months. 100% organic feed and management. 3rd-yr conversion home-grown feed from land in OSP.

• Calf raising: talk to your certifier.

Organic Ration Basics

- Organic Feed All feed must be certified.
- Pasture Certified Pasture.
- Synthetics up to 5% of ration (as-fed basis, not including added water and salt) can be from non-organic allowed synthetic substances.

Pasture

- No mention in OFPA. In Rule as industry evolved.
- Consumer perception.
- Emphasis is Pasture-based, not Grazier-based.
- Mental Paradigm Shift: Pasture-based w/
 - temporary confinement.
 - Not confinement w/ occasional pasture.
 30%/120d
- Great goal
- May or may not make it into regulations.

Pasture Exemptions

- Inclement weather.
- Animal's Stage of production.
 NOSB Recommendation to "Stage of Life",
 - removing "Lactation" as "production" exemption.
- When health, safety or well being of animal is jeopardized.
- Risk to soil and water quality.

Typical Organic Ration Ingredients

- Forages (examples)
 - Pasture
 - Alfalfa Hay
 - Oat Hay
 - Almond Hulls
 - Silage
 - Straw

Typical Organic Ration Ingredients

- Concentrates (examples)
 - Corn
 - Other grains: Wheat, Barley
 - Seeds: Soybeans, Flaxseed, Field Peas
 - Protein meals: Soya, Linseed, Fish*
 - Milled Feeds: Millrun, Rice Bran
 - Oils
 - Other

Vitamins and Minerals

- Synthetic sources allowed under § 205.603
- Natural sources must be non-GMO.
- Must be fed within accepted nutrient levels for normal health.
- Get approval from your certifier of ALL synthetics prior to use.

Extra-Benefit Additives to Consider

- Maximize health/immunity to minimize disease.
- Yeast and yeast derivatives
- Probiotics
- Proteinate/Chelate Mineral Complexes Zn, Mn, Cu, Co, Se
- B-Vitamins (i.e. Biotin, Choline, Niacin)
- Silage additives
- Mycotoxin binders

Low Input Rations

- Conventional
 - Feed mill grain mix
- Alfalfa Hay Silage
 - w/ or w/o Pasture
- Organic
 - Feed mill grain mix
- Alfalfa Hay
- Silage
 - Pasture

High Input Rations Conventional Organic . Alfalfa Hay (56-57%) Alfalfa Hay (54-55%) Silage Silage Almond Hulls Limited Almond Hulls Corn w/limited other grains Corn & other grains Soybean / Canola meal Soybean / Linseed meal Whole cottonseed Limited by-products Bypass fat and proteins Limited milled feeds By-products No slaughter by-products Synthetic amino acids or synthetic amino acids w or w/o Pasture Pasture

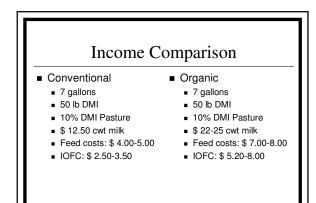
Production Changes High Input Low Input Conventional Conventional Few feeding tools lost Number of high production tools lost Minimal production loss Greater potential Huge impact from hay quality production loss Significant impact from hay quality

Maximize Home-Grown Production

- Greatest Opportunity
- Soil Testing & Soil Building
- Silage: Put it up right feed it right
- Pasture: Intensive management
- Hay: Max yield vs. Max performance
- Add forage expert to Farm Advisory Team
 - Kinsey, Brunetti, Zimmer, Savory

Conversion Costs Conventional Organic Alfalfa: \$225 Alfalfa: \$175 Corn: \$140 Corn: \$300 Soybean meal: \$235 Soybean meal: \$650 Mill Mix: \$165 Mill Mix: \$365 Silage: \$28 Silage: \$28 Typical Herd Average: Typical Herd Average: . \$4.50-5.00 /hd/d \$7.00-8.00 /hd/d

 Potential much higher in the short /medium term.



Conversion "Holl"

- Organic Feed Costs: \$7.00 8.00
- Conventional Income: \$7.50 (60 lb @ \$12.50 cwt)
- Conversion IOFC: \$ (0.50) 0.50
- Help: Conversion-cost bonuses, "signing" bonus, partial herd conversion –heifers only (2 tanks), home-grown forage costs not all out-of-pocket \$\$.

Raising Young Stock

- Grey Area: Talk to your certifier
- Typical enforcement (unofficial):
 - Organic feed and management.
 - Allow prohibited material to alleviate pain and suffering on non-routine basis during first year of life.
 Re-enter organic management for minimum of 12 months.
- ANPR to resolve Two-track process (12-month)
- vs. Last third of gestation)
- OFPA §6509(e)(2): 12 month rule

Milk Replacers

 §205.603 Synthetic substance allowed for use in organic livestock production.

(c) as feed supplements – Milk replacers w/o antibiotics, as emergency use only, no nonmilk products or products from BST treated animals.

National List – 5 yr sunset review.
 NOSB voted to remove from the List.

Feed Suppliers

- Not Complete List. Not an endorsement.
- Mixes: Hunt & Behrens, Modesto Milling, Blackrock, Grange (OR)
- Commodities: Above plus: Dairyman's, MLine, individual brokers, other mills
- Hay: Most all hay dealers will be looking.
- Molasses: Westway, BestAg, Modesto Milling

Dealing w/ Certifiers

- Read The Rule.
- Understand your operation.
- Interview potential certifiers.
- Develop a personal relationship with your certifier.
- Talk to them before you make a change.
- Amend your OSP as necessary.

Accepting the Philosophy

- Accept at least part of the philosophy or don't bother – It's not for everyone!
- Expect to improve your Animal Husbandry and Land Use Practices.
- Respect the Industry.
 - Don't just chase dollars.
 - Don't expect to cheat when convenient.
 - Don't be willing to commit fraud.

Be Willing to Accept

- A lot more record keeping.
- A lot more people looking over your shoulder.
- Grey areas and moving targets.
- Rules that may not make total sense.
- The need to become involved in the industry processes especially rule-making actions.
- Less consistent feed supplies than used to.
- Flakes.

Indecision
 One Point: I know of NO operation that has
 ever converted to organic production and
 went back to conventional.



