

An Overview of Organic Feeds and Feeding

Dan Giacomini
Pacific Nutrition-Consulting
Tomales, CA
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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

- **Pasture** – 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 used (§205.603)
- Nonsynthetic
 - Must be on National List to be prohibited (§205.604)
- All must meet The Rule's Big 3

The (2) Big Three No-No's

- | | |
|-----------------------|------------------|
| ■ The Rule | ■ The Consumer |
| ■ No Irradiation | ■ No Antibiotics |
| ■ No Sewage Sludge | ■ No Pesticides |
| ■ No Excluded Methods | ■ No Herbicides |
| ■ No GMO | |

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 | ■ Organic |
| ■ Feed mill grain mix | ■ Feed mill grain mix |
| ■ Alfalfa Hay | ■ Alfalfa Hay |
| ■ Silage | ■ Silage |
| ■ w/ or w/o Pasture | ■ Pasture |

High Input Rations

- | | |
|---------------------------|---|
| ■ Conventional | ■ Organic |
| ■ Alfalfa Hay (56-57%) | ■ Alfalfa Hay (54-55%) |
| ■ Silage | ■ Silage |
| ■ Almond Hulls | ■ Limited Almond Hulls |
| ■ Corn & other grains | ■ Corn w/limited 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 or synthetic amino acids |
| ■ Synthetic amino acids | ■ Pasture |
| ■ w or w/o Pasture | |

Production Changes

- | | |
|--------------------------------|--|
| ■ Low Input Conventional | ■ High Input Conventional |
| ■ Few feeding tools lost | ■ Number of high production tools lost |
| ■ Minimal production loss | ■ Greater potential production loss |
| ■ Huge impact from hay quality | ■ 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: \$175 | ■ Alfalfa: \$225 |
| ■ Corn: \$140 | ■ Corn: \$300 |
| ■ Soybean meal: \$235 | ■ Soybean meal: \$650 |
| ■ Mill Mix: \$165 | ■ Mill Mix: \$365 |
| ■ Silage: \$28 | ■ Silage: \$28 |
| ■ Typical Herd Average: \$4.50-5.00 /hd/d | ■ Typical Herd Average: \$7.00-8.00 /hd/d |
| | ■ Potential much higher in the short /medium term. |

Income Comparison

- | | |
|----------------------------|----------------------------|
| ■ Conventional | ■ Organic |
| ■ 7 gallons | ■ 7 gallons |
| ■ 50 lb DMI | ■ 50 lb DMI |
| ■ 10% DMI Pasture | ■ 10% DMI Pasture |
| ■ \$ 12.50 cwt milk | ■ \$ 22-25 cwt milk |
| ■ Feed costs: \$ 4.00-5.00 | ■ Feed costs: \$ 7.00-8.00 |
| ■ IOFC: \$ 2.50-3.50 | ■ IOFC: \$ 5.20-8.00 |

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.

Thank you for your time and attention.



Pacific Nutrition-Consulting



Dan Giacomini, MS, PAS
15429 Lake St.
Middletown, CA 95461
Voice: 707-987-9184
Fax: 707-987-2495