

OTA QAC Livestock Committee Comments to NOSB 9/17/02
"Origin of Livestock" Clarification

Good morning, my name is Kelly Shea and I am speaking on behalf of the OTA QAC Livestock committee. On behalf of the Committee --I thank you for the opportunity to comment. I will be speaking at length, three other members of the committee, Chris Ely with Applegate Farms and Albert Straus of Straus Family Creamery, and Matthew Mole of Vermont Organic Fibers have signed up for public comment and listed me as a proxy so our comments could be read in full.

Though I understand it was a glitch, we would like to point out that the origin of livestock recommendation was not posted until August 15, and thus has not followed the NOSB board policy of 60 days for public comment. We recommend that any voting be delayed and we are willing to contribute further with specific language suggestions.

Our comments today deal with the dairy herd replacement clause, health care materials for young stock, as well as the need for specific clarification language surrounding fiber and non-food items produced from livestock.

Some information to begin, (basic as it might be to some of you):

The gestation period for cattle is nine months.

The term "calf" is used to describe baby bovine, regardless of sex.

A female calf is called a heifer until she gives birth for the first time, then she is a "cow."

Most heifers give birth for the first time at about 24 months of age, then begin to give milk.

As the NOSB has identified, there is a lot of confusion and a lack of clarity in the Rule surrounding the origin of dairy stock. The conflict is in 205.236 (a)(2) and 205.236(a)(2)(iii).

205.236 is the section on Origin of Livestock.

The Rule allows for the conversion of non-organic dairy stock to organic status under 205.236(a)(2)- with a 12-month conversion period. This is consistent with OFPA.

The Rule then appears to require organic management from the last third of gestation for all young dairy stock born on the organic farm 205.236(a)(2)(iii). This has previously been the position only for slaughter stock.

Further confusion is created by this apparent requirement for organic management from last third of gestation specifically being a requirement for those who take advantage of the whole herd conversion clause, (i, ii, and iii being the parts of that clause). The Rule is layered this way: 1) the origin of livestock requirement, 2) an exception for dairy animals, 3) an exception (to the dairy animal exception) for a whole herd transition. The requirement for organic from the last third of gestation is under the whole herd transition exception. Yes, it is very confusing.

Prior to the Final Rule, and development of the OTA's American Organic Standards, (an industry generated standard published in 1999) and hereafter referred to as AOS, certifiers followed OFPA and NOSB recommendations. They clearly differentiated between production stock (those raised for milk, wool, etc) and slaughter stock, as did previous versions of the NOP rule.

Though certifiers varied in their requirements for production (non-slaughter) animals raised on the farm when it came to feed requirements, they generally allowed medications with a designated withdrawal period. Based on NOSB recommendations, antibiotics were prohibited for all slaughter stock to be marketed as organic meat. Therefore, there were medications allowed on young production (non-slaughter) stock that were never allowed on animals to be marketed as organic meat.

The NOSB policies on antibiotics for production stock were modified at the March 16-20, 1998 meeting in Ontario, CA. For more information please see the NOSB website at: <http://www.ams.usda.gov/NOSB/archives/livestock/secretary.html>. At this meeting the NOSB recommendation changed from allowing antibiotics with a 90-day withdrawal period specifically on dairy stock to permitting use only in "production stock" prior to 12 months before organic production. So the NOSB went from dairy specific, to production specific and from 90 days to twelve months prior.

At that meeting the NOSB also reaffirmed its 1994 Santa Fe, New Mexico position on replacement stock by stating, *"Replacement dairy stock must be fed certified organic feeds and raised under organic management practices from the time such stock is brought onto a certified organic farm and for not less than the 12 month period immediately prior to the sale of milk and milk products from such stock."*

Other health care materials were **never** specifically addressed by the NOSB, and certifiers continued to offer different policies for young stock management, but many had made some progress in eliminating the use of most antibiotics for young stock. However, the NOSB policy left the inconsistent standard that was replicated in the Final Rule – allowing the use of non-organic, conventionally managed replacement stock while on farm raised organic stock is held to a higher standard of organic.

In simpler terms, the inconsistency is that the Final Rule requires an organic dairy replacement born on the farm to be under the same organic management practices, for 24 months before it gives milk, as a lactating cow. An organic dairy replacement animal purchased and brought onto the farm would be under those organic management practices for 12 months. It is time to fix this loophole.

A New York organic dairy producer described the problem this way: *"As a dairy producer, in regards to the "origin of livestock" subject, I suggest the following thoughts:*

- 1) *A farmer who raises his calves [organically] from the last third of gestation will incur a much greater cost for bring replacement animals into production.*

An average analysis for this is grain costs for 2 years (\$350.00). The cost for milk input up to eight weeks old (700 lbs @ 7cwt x \$20.00 = \$140.00). The cost for roughage using an average of 50 lbs. per day (36,500 lbs over two years or approx. 18 tons @ \$120.00/ton = \$2160.00 per animal for roughage). Total cost to get an animal into production organically would be approximately \$2,650.00 per animal. This does not include mortalities, vet bills, and labor.

- 2) *A farmer who purchases in animals from non-organic sources (and assuming they are purchasing yearling heifers) will have the follow costs: The average cost for the yearling at the sale at today's market price [March '02] is \$800-\$900.00. One year's worth of feed at \$1080.00 for roughage and \$175.00 for grain would make the total cost for a purchased replacement \$2105.00*

You can see it is cheaper for the organic producer to purchase in yearling heifers, which deviates from the organic goal. Furthermore, animals that are purchased have all been treated for worms, viruses, dysentery, etc. which the organically raised heifers did not receive." ENDQUOTE

The farmer then goes on to describe a scenario that could allow a producer, under the direction of a veterinarian, to administer medications to young stock during their first year of life, and not have the animals excluded from organic production. To quote the farmer again, *"My reason being that this would give the person raising the animal organically from the last third of gestation the same leverage that a person purchasing their animals from the outside realms has. Also, this would encourage more people to stay with the organic process rather than purchasing outside animals."* ENDQUOTE

The OTA livestock committee reviewed various pre-NOP certifier requirements for dairy, (submitted as an attachment to this testimony). The requirements ran the gamut from the least stringent (90 days before milk for all animals, whether born on the farm or not) to the most stringent (which was organic from the last third with variances for medications). Producers with animals that never needed to be medicated with a substance prohibited for slaughter stock, had the value added meat market as a reward at the end. The producers who needed to treat an animal were able to keep that calf on the farm and in the herd, though it could never be sold as organic slaughter stock.

Why does it make sense, to treat a one month old calf for a respiratory problem, then have to sell her off the farm and go to the public market to buy another calf (which is "even less organic") and transition that calf for 12 months until it is organic. Why not allow the 1-month-old calf on the farm to be treated with a medication and then transition for 23 months prior to giving organic milk?

The OTA position, as established in AOS, is in support of organic from last third of gestation **with a phase in period designed to allow for review and inclusion of additional health care materials needed for young, non-slaughter stock management.**

This position is not merely a dairy position, as historically certifiers differentiated between animals raised for products such as milk, wool, mohair (including but not limited to cows, goats, sheep, alpaca, llamas) and animals raised for slaughter, which were subject to a stricter prohibition on medications and antibiotics.

The phase in period proposed in AOS was a compromise to allow for transition to total organic management (feed and living conditions) of young stock. At the time, AOS provided four years for producers to acquire the skills necessary to raise their organic stock on the farm the last third of gestation. AOS also placed a limit on the number of conventional replacement animals, to not exceed more than 10% of the milking herd, with the caveat that certifiers had the option of granting variances to this in the case of natural or man made disasters.

The recommendation currently proposed by the NOSB livestock subcommittee wants producers to manage young stock organically immediately, while placing no limits on the amount of non-organic replacement stock that could be brought onto farm. What do you think the result will be? Our committee has spoken with producers across the US who have told us the choice will be simple – **they will sell off their organic young animals and buy in non-organic stock.**

Unfortunately, the NOSB livestock committee's recommendation of July 11 does not solve the problem. We must recognize two things:

1. This is not a dairy only issue; this is also a non-slaughter stock issue.
2. This is directly tied to the issue of health care materials needed for young production stock.

It will be difficult for producers who have not previously had the requirement for all organic feed from birth to source and pay for organic feed for their young stock. In many parts of the US, organic calf formula and organic calf feed is not available. But we feel, in time, that problem is surmountable. The materials issue is not. We must work together to develop a solution to this vexing problem.

Please realize, that over the last 18 months, during implementation, organic dairy farmers have **NOT** been following a consistent interpretation of the requirements for origin of livestock. They have been waiting to see what the interpretation of the Rule will be. In our research, we found a number of producers, and certifiers, who deduced (according to a literal reading of the Rule) that the requirement for organic management from last third of gestation only applied to those animals transitioned under the new dairy herd clause. If instead of using the herd conversion clause, their cattle were fed with 100% organic feed for the 12-month transition, producers thought that they would be exempt from the requirement to raise their on farm replacements organically "from the last third of gestation".

CRUCIAL POINT, this was NOT to avoid the cost of organic feed, nor to avoid humane living conditions, it was to be free to care for the health of their young stock as they saw fit, within the bounds of organic philosophy as they saw it.

Another crucial point, in the case of animals that have been treated with materials that will not be allowed after October 21, **producers expect that these animals will be grandfathered in as approved** under the old standards of their now accredited certification agencies. To this point, I remind you, 12 months is clearly in the statute (OFPA), and it has existed and still exists within many certification agencies. Slaughter and non-slaughter has always been differentiated.

As you deliberate these issues, please keep in mind section 205.238(b)(7) in the NOP's Livestock health care practice standard: *It is prohibited to withhold medical treatment from a sick animal in an effort to preserve its organic status.* This is reiterated in OFPA and in every private certifiers standard. It is important to provide a workable solution as soon as possible to aid producers in meeting this humane obligation to not withhold medication from an animal to preserve its organic status, without them needing to uselessly cull young stock (that will not be slaughter stock) from their herds.

It may not be necessary to undertake the daunting and costly task of reviewing medications for young non-slaughter stock. In OFPA, the medicinal practices twelve months prior are not completely and fully delineated. The statute focuses instead on **6509 ANIMAL PRODUCTION PRACTICES AND MATERIALS.**

(c) Practices. For a farm to be certified under this chapter as an organic farm with respect to the livestock produced by such farm, producers on such farm

(3) shall not use growth promoters and hormones on such livestock, whether implanted, ingested, or injected, **including antibiotics and synthetic trace elements used to stimulate growth or production of such livestock.**

d) Health Care.

(1) Prohibited Practices. For a farm to be certified under this chapter as an organic farm with respect to the livestock produced by such farm, producers on such farm shall not

(A) use subtherapeutic doses of antibiotics;

(B) use synthetic internal paraciticides on a routine basis; or

(C) administer medication, other than vaccinations, in the absence of illness.

If it is necessary for TAP reviews to occur only then does OTA support a concerted effort to identify and review needed medications for young stock. We are searching for a mechanism, which would allow uninterrupted business on family farms across this county and overseas. We believe strongly that we must have a clarifying solution before October 21, 2002.

The NOSB livestock committee's draft recommendation back in March of 2002 seemed much closer to identifying and addressing the problem. The recommendation in March recognized that a requirement for organic replacement stock is the desirable goal, but provided some flexibility for commercial availability. It also addressed the biggest problem-- the lack of health care materials for young stock. The recommendation addressed it by proposing a waiver on medications for the first six months of life, which is more consistent with OFPA's 12-month allowance. We must have a clarifying policy statement of the existing Rule so that business is not interrupted.

The positive thing about the NOSB Livestock committee recommendation in March is that it recognized that this is really a health care materials issue for less than one-year old non-slaughter stock. Unfortunately, the current recommendation for clarification dated July 11 is not a compilation and codification of organic dairy farmers' practices, it does not address other non-slaughter production stock, and does not reflect historical certification practices in the United States.

Last Tuesday (September 10th), 16 members of the OTA QAC Livestock subcommittee were present on a conference call, to continue the dialogue and deliberations surrounding this whole issue. We all agreed on two main issues:

- 1) Producers could uphold a requirement for organic dairy and fiber stock to be raised as organic from last third of gestation (as far as living conditions and feed), provided a phase in period is allowed.
- 2) This would be coupled, IF REQUIRED BY LAW, with a concerted effort to add necessary health care materials to the National List specifically for young production animals that would never be sold as slaughter stock—dairy and fiber bearing animals.

OTA supports making this Rule sustainable for farmers, and urges the NOSB and NOP to consider the effect on farmers in making each of its decisions.

Finally, let's keep in mind that the Preamble to the Final Rule, states that the rationale for the last third of gestation was that organic management for breeder and dairy stock **being used as slaughter stock** needed to be consistent with the requirement that slaughter stock be under organic management from the last third of gestation. What was not fully considered, were dairy and fiber animals that would never be slaughtered as organic.

An interpretation, and ergo perhaps a recommendation, might seem to be the following, for non-slaughter stock, during the period between birth and 12 months, there should be an allowance for medications (other than subtherapeutic antibiotics and growth hormones) as OFPA prohibits.

In Conclusion:

We recognize that this is not a **dairy only** issue; this is a non-slaughter stock issue. It is including but not limited to milk and fiber from cattle, goats, llamas, alpacas, sheep, etc. The fiber community was heavily affected by the Final Rule requiring fiber animals (whether destined for the organic meat market or not) to be raised as organic from the last third of gestation. They don't even have a whole herd conversion clause----and they should.

The whole issue is one of health care for young stock that will never be marketed as organic meat. We recognize and appreciate the effort that the NOSB livestock committee has put into the July 11th recommendation, and hope this effort continues in our ongoing dialogue and deliberations to reach a solution. The allowance of non-organic

replacements doesn't solve the on farm medication issues. And remember, basically we are talking about the medicinal needs of less than one year old non-slaughter stock.

We urge NOP to post a clarifying statement on the Policies section of the USDA NOP website, a clarifying statement that delineates the medicinal allowances and the inherent production differences between organically raising slaughter stock and non-slaughter stock. The clarifying statement should incorporate OFPA's allowance for medications on less than one-year-old non-slaughter stock. The policy should point out that this is not a difference in feed or living conditions, but an inherent difference, with precedence, between the health care items allowed when raising animals for slaughter and the health care items allowed when raising animals solely as production stock.

**REFERENCE DOCUMENT FOR OTA QAC LIVESTOCK
SUBCOMMITTEE CONFERENCE CALL
9/10/02**

The OTA's American Organic Standards Section 6: Livestock Production
Version 1 47 October 20, 1999

6.4. Sources of Livestock.

6.4.1. Origin of livestock. 74

Livestock, including slaughter stock, on a certified organic farm, and the 75 products of such livestock, that are to be sold, labeled or represented as 76 organically produced, shall have been under organic management from birth 77 or hatching, or, in the case of mammals, shall be the offspring of breeder 78 stock, which have been under organic management since at least the last 79 third of gestation, except that: 80

6.4.1.1. Breeder stock. Livestock may be designated as breeder stock for 81 offspring that are to be raised as organic slaughter stock, provided that 82 female breeder stock are managed in accordance with organic standards 83 during at least the last third of gestation in order for their offspring to 84 qualify as organic slaughter stock. 85

6.4.1.2. Dairy livestock. Livestock may be designated as organic dairy 86 livestock for the production of organic milk or milk products, provided 87 that, for replacement animals, cows must be managed in accordance 88 with organic standards for at least 12 months prior to the production of 89 the milk or milk products that are to be sold, labeled or represented as 90 organic. Other dairy species from conventional sources must be 91 managed organically 12 months prior to production or from birth if less 92 than 12 months to production. 93

6.4.1.2.A) Replacement dairy animals from conventional sources shall 94 not exceed 10% of the milking herd on an annual basis. 95 Exceptions, with specific time limits, may be granted by the 96 certification agent for unforeseen severe natural or man-made 97 disasters or when organic replacement animals are not 98 commercially available in a region. 99

6.4.1.2.B) One time new herd conversion. When an entire, distinct 100 dairy herd is converted to organic production, the certification 101 agent may grant the following exemption: 102

6.4.1.2.B)1) During the first 9 months (270 days) of the 12 month 103 conversion period, up to 20% of the daily ration, (as measured 104 on an "as is" basis), may consist of non-organic feed, with the 105 remaining 80% of the ration composed of certified organic 106

feed or feed produced on-farm that is eligible for certification 107

prior to the final 90-day period. 108

6.4.1.2.B) 2) Animals must be fed 100% certified organic feed for at 109
least the final 3 months (90 days) prior to the production of 110
milk or milk products to be sold, labeled, or represented as 111
organic. 112

**6.4.1.2.C) Effective January 1, 2003, once a dairy operation has been 113
converted to organic production, all dairy animals shall be under 114
organic management from the last third of gestation, except that: 115**

6.4.1.2.C) 1) Transitional feed raised on the farm may be fed to 116
young stock up to twelve months prior to milk production. 117

**6.4.1.2.D) In order for dairy stock to be sold as organic slaughter stock, 118
all organic slaughter stock standards shall apply. 119**

6.7.5.2. If a prohibited material is used on an animal, that animal cannot be
used thereafter for organic production or be sold, labeled or represented 352
as organic. The following livestock health care substances and methods 353
are **prohibited**: 354

6.7.5.2.A) The use of antibiotics in slaughter stock, dairy stock, or other 355
stock producing edible or non-edible products; 356

**6.7.5.2.A) 1) Except for dairy stock more than one year prior to 357
lactation, the use of which shall be prohibited effective 358
January 1, 2003; 359**

**6.7.5.3. The action of a producer to withhold treatment to maintain the 374
organic status of an animal, which results in the otherwise avoidable 375
suffering or death of an animal are grounds for decertification. 376**

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National Organic Program Final Rule (7 CFR Part 205)

Section 205.236(a)(2) allows milk or milk products to be sold or otherwise represented as
organic as long as the animal has been under organic management for at least **one full
year** prior to the production of milk.

However, in §205.236(a)(2)(iii) pertaining to the time after an entire operation/herd has
transitioned to organic **via the “herd conversion clause/exemption,”** the statement “all
dairy animals shall be under organic management from the last third of gestation”
conflicts with the previous resolution.

Prior to the implementation of the National Organic Program Final Rule, numerous
American and foreign organic certification agencies applied their own set of standards.
The standards for origin of livestock among the individual certification agencies were
significantly similar. Since Section 205.236, Origin of Livestock, has caused confusion
regarding the source and treatment of dairy animals, a review of previously enforced
industry standards may be helpful, especially in gauging the impact on the organic dairy
industry as the NOSB and NOP seek interpretations for this.

	Dairy Stock	Slaughter Stock
NOP	?	Last Third of Gestation
AOS	6.4.1.2 12 months prior, replacements 10% yearly from conventional source with 12 month transition, exceptions granted by certifiers if necessary, 4 year sunset to get to raising on farm replacements from last 3 rd , 4 year sunset to eliminate antibiotic use in young stock (6.7.2A.1)	From birth
CCOF (2000)	Organic Feed, 12 mo. Prior, Medication & Parasiticides - 30 days or twice FDA withdrawal	Organic Feed - From Birth; Medication & Parasiticides - 90 days or twice FDA withdrawal
FOG (2000)	Should be farm raised or purchased from organically certified dairy stock. Dairy stock purchased from non-certified sources is restricted.	Slaughter stock must be raised organically or purchased from a verifiable organic source.
MOFGA (2001)	Must have met MOFGA organic standards for at least 3 months prior to certification of milk or milk products. (This applies to transition herds and replacement animals. Beginning in 2002 replacement animals to organic herds may have to meet organic standards for 12 months. Conventional herds will still be able to transition to organic in 3 months.)	Slaughter stock may be purchased from whatever source, provided that the animal has been maintained since from birth according to MOFGA standards and its mother has not received any drugs, pesticides, or antibiotics during the last third of gestation, or last 50 days of gestation for milking cows.

**ECC 2092/91
(Current)***

At least six months reared according to organic standards; however, during a transitional period of three years expiring on August 24, 2003, the period shall be three months.

12 months reared according to organic standards in the case of equidae and bovines (including *bubalus* and bison species) for meat production, and in any case at least three quarters of a lifetime.

**Canadian and European standards included for International comparison.*

	IFOAM	CODEX 2001	CANADA June 1999	COABC 1997	USDA NOP 2000	Soil Association UK 1998
Conversion: Dairy herds	Not less than 30 days.	90 days during the implementation period established by the Competent authority, after that, six months	In accordance with the standards for at least 12 months. 12 months organic feed, 90 days health and living conditions	12 months incorporating all required practices. Replacements 90 day transition if certified livestock not available but must be heifers or 120 day dry treated cows	12 months incorporating all required practices. New herd conversion, 80% organic feed for first 10 months	12 weeks
Health Care	Natural medicines and methods emphasized. Use of conventional veterinary medicines allowed when no other alternatives are available	Use of veterinary drugs prohibited in absence of an illness. If no alternative permitted treatment or management, vaccinations and therapeutic uses permitted. Should not withhold necessary treatment to maintain organic status	Vaccination and use of veterinary drugs allowed only when disease cannot be combated by other means. Withholding of necessary treatments to maintain organic status is not permitted.	Vaccinations allowed as appropriate to each bioregion. Withhold of necessary medical treatment that would disqualify organic status is prohibited.	Vaccinations allowed. Administrations of medications in absence of illness prohibited. Withholding treatment to maintain organic status causing suffering or death shall be grounds for decertification.	Use of veterinary medical products where no known problem exists prohibited. Medications must never be withheld where it will result in unnecessary suffering. Vaccines restricted to known disease risk that cannot be controlled by other means.

Use of Antibiotics	When conventional veterinary medicines are used the withholding period shall be at least double	Withdrawal periods double that required by legislation. After 2005 antibiotics not allowed	If veterinary drugs used, withdrawal period at least double	Not permitted for slaughter animals. Allowed for breeding animals but not in a sub-therapeutic manner. If used on animals in 3 rd trimester or during lactating will disqualify offspring for slaughter. Milk to be withheld for 30 days or twice withdrawal period if longer.	Not permitted	Permitted in clinical cases where no other remedy is effective. Withdrawal at least three times that permitted on product license and not less than 14 days.
Use of Parasiticides	When conventional veterinary medicines are used the withholding period shall be at least double	Withdrawal periods double that required by legislation	If veterinary drugs used withdrawal at least double	Not permitted for slaughter animals. Allowed for breeding herd use but use in 3 rd trimester or during lactation disqualifies offspring as organic for slaughter purposes.	Not permitted for slaughter stock. OK in breeder stock if sickness or infection, Progeny can be sold as organic but not if used during last third of gestation or during lactation. 90-day withdrawal for dairy animals.	Permitted when used therapeutically when clinical symptoms appear. Restricted use on routine basis over a specific time period as part of the disease reduction program. Ivermectin based products prohibited.

From the tables, one can easily ascertain that the organic industry traditionally applies stricter standards for slaughter livestock than for production livestock.

If the NOSB interpretation of 206.236 is for all dairy animals born on the farm to be organically managed from the last third of gestation, there will be virtually no difference between slaughter and dairy requirements. Because this would be a shift from the historical and regional industry standards, there should be a full 60 period of public comment (per the NOSB Policy) and a long-term analysis of the potential financial impact.

A final consideration on this matter is the impact it will have on International Trade. A stricter interpretation will make it much more difficult to negotiate any organic livestock standard equivalency agreement with the European Union, Japan (once their livestock standards are in place) and other regions that have more lenient standards. Moreover, if an equivalency agreement were established, U.S. organic livestock farmers would be at a disadvantage compared to their foreign counterparts making the same market claims.

What is the intent of the NOSB recommendation? If we are looking for clarification, this does not seem to do that. It merely points out two radically different ways of raising livestock (12 months, or as if they were slaughter stock).

In the Preamble, P. 80569, (2) Organic Management for Livestock from the Last Third of Gestation. The proposed rule required that organically managed breeder and dairy stock sold, labeled, or represented as organic slaughter stock must be under continuous organic management from birth. Many commenters stated that this requirement was an inappropriate relaxation of most existing organic standards, which require organic management for all slaughter stock from the last third of gestation. These commenters cited the NOSB's 1994 recommendation that all slaughter stock must be the progeny of breeder stock under organic management from the last third of gestation or longer. Commenters also recommended extending the organic management provision to cover the last third of gestation to make it consistent with the requirements in section 205.236(a)(4) for the organically raised offspring of breeder stock. We agree with the argument presented by commenters and have changed the final rule to require that breeder or dairy stock be organically raised from the last third of gestation to be sold as organic slaughter stock.

Clearly the commentors and the author of the preamble were discussing a recommendation surrounding slaughter stock, not production animals. OFPA clearly demonstrated a difference between slaughter and production stock, as does AOS and independent certification standards.

Conclusion:

AOS clearly was shooting towards raising the bar to something consistent with the true philosophy of organic. AOS also realized that dairy calf medications were an issue and therefore had a 4-year implementation to allow for calf medications to be added to the list and in order for producers to find a way to no longer rely on antibiotics for calves.

Is the AOS solution a viable one? What is the minimum implementation period?