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POLICY & ACTION FROM CONSUMER REPORTS

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National Organic Program
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Comments of Consumers Union to the Agricultural Marketing Service on the Fall 2017 Meeting of the National Organic Standards Board Docket No. AMS-NOP-17-0024

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Consumers Union, the policy division of Consumer Reports, welcomes the opportunity to submit written comments to the U.S. Department of Agriculture (USDA) Agricultural Marketing Service (AMS) on the proposals and discussion documents for the fall 2017 meeting of the National Organic Standards Board (NOSB) in Jacksonville, Florida.

Consumer Reports is an independent, nonprofit organization that works side by side with consumers to create a fairer, safer, and healthier world. For 80 years, we have provided evidence-based product testing and ratings, rigorous research, hard-hitting journalism, public education, and steadfast policy action on behalf of consumers' interests. We work with consumers in many areas, including efforts to create a safe, sustainable, and transparent food system.

One of our areas of focus is food labels, which should be clear, honest, and transparent. We evaluate and rate food labels, including the USDA Organic seal, to empower consumers with knowledge to make better and more informed decisions when shopping for food. Our information and ratings are available to consumers online at www.greenerchoices.org.

In Consumer Reports' publications, in both print and online, we discuss the value of the USDA Organic label when shopping for food. We explain to consumers that the USDA Organic label is backed by federal law and regulations that set a uniform and

consistent standard for what can be labeled "organic." We tell consumers that the federal organic standards are comprehensive, promote sustainable agriculture, and aim to minimize negative impacts on the environment and human health.

This assurance that a consistent set of strong standards is met is critical to the integrity of the USDA Organic seal. When the standards backing the organic label fall short, we advocate for the USDA to strengthen them. Since the National Organic Standards Board, a federal advisory board established by the Organic Foods Production Act (OFPA) of 1990, makes formal recommendations to the Secretary of Agriculture on changes to the federal organic standards, we consistently provide written and oral comments to the NOSB.

There are several proposals and discussion documents on the fall 2017 NOSB meeting agenda that could improve the organic standards and ensure they meet consumer expectations. We urge the Board to remove sodium phosphate and oxytocin from the National List, keep lead salts and tobacco (nicotine) on the National List as prohibited natural substances in crop production, and reject the petition to add anaerobic digestate to the National List.

We support the Crops Subcommittee proposal on hydroponics and container growing. We appreciate the Compliance, Accreditation and Compliance Subcommittee's work on the topic of converting native ecosystems, and we urge the Board to consider the comments of the Wild Farm Alliance. We support the Materials/GMO Subcommittee's proposal to include the terms cisgenesis, intragenesis, and agro-infiltration as excluded methods and to exclude the terms "marker assisted breeding" and "transduction" as excluded methods.

We urge the Livestock Subcommittee to start working on a proposal to prohibit the use of all antibiotics at all stages of life for poultry, to ensure that the routine of use of antibiotics is consistently prohibited in organic production.

In many ways, our vision for a safer, more sustainable, and more transparent food system aligns with the organic system. The USDA Organic label communicates to consumers that the food was produced on a farm that adheres to a comprehensive set of government standards designed to support a system of sustainable agriculture. The integrity of the organic label is worth protecting and, where warranted, its standards should be improved. This is why the work of the National Organic Standards Board is so important, and why we appreciate its work and dedication to the organic label.

Table of Contents

Preserving the Integrity of the Organic Label

The value of the organic label lies in the strength of the Organic Foods Production Act (OFPA) and USDA organic regulations, which promise consumers a consistent standard for organically produced foods. OFPA and the regulations also create a meaningful process with strict limits for determining what can and cannot be used in organic food production. Proper material review by the National Organic Standards Board (NOSB), consistent with the process outlined in OFPA, is a critical component of ensuring the continued integrity of the organic label.

Meeting Consumer Expectations - Survey Data

At Consumer Reports, we conduct consumer surveys, which are second in size only to the U.S. Census. Our surveys are developed by the National Research Center, a research arm of Consumer Reports' National Testing and Research Center in Yonkers, N.Y. The National Research Center is comprised of highly trained social scientists and conducts more than 200 qualitative and quantitative projects annually, surveying consumers about a wide range of topics. The surveys we conduct on consumer sentiment regarding organic food labeling, which we use to develop our comments to the NOSB, use national probability samples to accurately represent the entire U.S. population.

Like the rest of Consumer Reports, the National Research Center is free of corporate influence and advertising. Surveys are never commissioned or financed by industry. Rather, these surveys are designed by survey scientists to gather unbiased, objective information from consumers.

Material Review - The Importance of OFPA Criteria

According to our 2015 consumer survey, an overwhelming majority (86%) of consumers expect organic foods to be free from artificial ingredients,[1] and this expectation is rooted in the organic law and regulations. Consumers should be able to expect that any synthetic and non-organic materials that are used in organic farming and

[1] Consumer Reports National Research Center, *Natural Food Labels Survey: 2015 Nationally-Representative Phone Survey,* Survey Research Report (Jan. 29, 2016) (online at http://greenerchoices.org/wp-content/uploads/2016/08/CR_2015_Natural_Food_Labels_Survey.pdf)

handling have been carefully reviewed to the consistent set of criteria outlined in the Organic Foods Production Act of 1990: harmlessness to human health and the environment, essentiality for organic production, and consistency with organic farming and handling.

Consumers should also be able to expect that organic farmers and handlers are using only synthetic and non-organic materials that meet all criteria in OFPA.

We urge the NOSB to review each material to OFPA criteria and to ensure that all criteria are met. While other considerations may be of interest to some stakeholders, such as whether certain products will need to be reformulated or whether a certain material is useful to some food processors, these considerations are not OFPA criteria.

Handling Subcommittee

Sunset Review: Sodium Phosphate

According to federal regulations, foods labeled "organic" cannot be produced with the use of synthetic substances unless they are listed as a permitted substance on the National List.[2] The criteria for evaluation of whether substances should be added to or remain on the National List are specified in the Organic Foods Production Act, and include that the substance "would not be harmful to human health" and "is necessary to the production or handling of the agricultural product due to the unavailability of wholly natural substitutes."[3]

Sodium phosphate is an artificial ingredient, and consumers expert foods labeled "organic" to be free from artificial ingredients. Our 2015 consumer survey found that avoiding artificial ingredients is an important objective for 79 percent of consumers. This is especially important for consumers when they purchase foods labeled "organic," as our survey found that 86 percent of consumers expect organic foods to be free from artificial ingredients and colors.[4]

More importantly, the synthetic materials that are exempt from this prohibition should meet all the evaluation criteria in OFPA and the federal regulations. We do not support the relisting of sodium phosphate, due to human health concerns and a lack of essentiality. We previously expressed our concern with the human health impacts of

[2] 7CFR205.105(a)
[3] OFPA 7 U.S.C. 6517(c)(1)(A)(i) and (ii)
[4] Consumer Reports National Research Center, *Natural Food Labels Survey: 2015 Nationally-Representative Phone Survey,* Survey Research Report (Jan. 29, 2016) (online at http://greenerchoices.org/wp-content/uploads/2016/08/CR_2015_Natural_Food_Labels_Survey.pdf)

phosphate food additives in our fall 2015, spring 2016, and spring 2017 comments.

For individuals with chronic kidney disease, the adverse effects of high serum phosphorus levels are well documented.[5] Among them, atherosclerosis and vascular calcification are common features in the presence of hyperphosphatemia. However, emerging science indicates that some adverse effects may also occur in healthy individuals with normal to high serum phosphorus levels.[6]

Uribarri and Calvo have reported that "many epidemiological studies show that mild elevation of serum phosphorus within the normal range are associated with CVD [cardiovascular disease] risk in healthy populations in the absence of apparent kidney disease."[7]

A study of the association between phosphorus intake and mortality in a prospective cohort of more than 9,500 healthy American adults showed that high consumption is associated with increased mortality.[8]

A diet with imbalanced consumption of low calcium and high phosphorus has been suggested to impair bone health in both healthy individuals and patients suffering from chronic kidney disease.[9] Additionally, higher serum phosphorus levels were associated with an increased risk of cardiovascular disease in a prospective study of more than 3,300 healthy individuals.[10] Foley and colleagues also showed that higher levels of phosphorus in serum, even within the normal range, may be a risk factor for coronary artery atherosclerosis in healthy young adults.[11]

No single, isolated phosphate food additive, including sodium phosphate, can be implicated as an isolated risk factor; rather, it is the widespread use of phosphate food additives that gives rise to these human health concerns.

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[5] Block, GA et al. Phosphate homeostasis in CKD: Report of a scientific symposium sponsored by the National Kidney Foundation. 2013. American Journal of Kidney Diseases 62:457-473

[6] Takeda, E et al. Increasing dietary phosphorus intake from food additives: Potential for negative impact on bone health. 2014. Advanced Nutrition 5:92-97

See also: Voorland, C.J., Stremke, E.R., Moorthi, R.N., and K.M.G. Gallant. Effects of Excessive Dietary Phosphorus Intake on Bone Health. 2017. Current Osteoporosis Reports 5(15): 473-482.

[7] Uribarri, J and Calvo, MS. Dietary phosphorus excess: A risk factor in chronic bone, kidney, and cardiovascular disease? 2013. Advanced Nutrition 4:542-544

[8] Chang, AR et al. High dietary phosphorus intake is associated with all-cause mortality: results from NHANES III. 2014. American Journal of Clinical Nutrition 99:320-327

[9] Takeda, E et al. Increasing dietary phosphorus intake from food additives: Potential for negative impact on bone health. 2014. Advanced Nutrition 5:92-97

[10] Dhingra, R et al. Relations of serum phosphorus and calcium levels to the incidence of cardiovascular disease in the community. 2007. Archives of Internal Medicine 167:879-885

[11] Foley, RN et al. Serum phosphorus levels associated with coronary atherosclerosis in young adults. 2009. Journal of the American Society of Nephrology 20:397-404

Phosphate food additives, as a category, fail to meet the human health criterion in OFPA. Another criterion is "necessity."[12] It is important for the NOSB to consider the difference between materials that are necessary to the production of an organic product (such as yeast in bread and bacterial cultures in yogurt) and materials that are convenient or useful but not necessary, such as sodium phosphate.

In Consumer Reports' 2016 consumer survey, we specifically asked consumers about essentiality, and 70 percent responded that the USDA should not permit the use of non-organic ingredients in organic food production if the ingredient is not deemed essential.[13]

Given that this material fails to meet the "human health" criterion, it is even more important for the Board to determine whether it is deemed necessary for the production and handling of organic foods.

If a product can be made without a phosphate food additive, it is not essential. The prohibitions on sodium phosphate in European, Japanese, Codex, and the International Federation of Organic Agriculture Movements (IFOAM) standards strongly suggest that sodium phosphate is not essential in the production of organic foods.

We urge the NOSB to remove sodium phosphate from the National List.

Verbal Update: Ancillary Substances

Some materials that are listed on section 205.605 and 205.606 of the National List are not single substances but multi-ingredient mixtures containing materials that are not organic and that do not appear on the National List.

Our position that all ingredients that end up as ingredients in organic foods should be organic or should be reviewed and approved has not changed. We continue to urge the NOSB to review all ingredients to OFPA criteria, including ingredients of ingredients, also referred to as "ancillary substances."

According to our 2014 consumer survey, consumers think that organic foods should be produced without artificial ingredients (89%) and without artificial processing aids (91%).

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[12] 7 U.S.C. 6517(c)(1)(A)(ii)

[13] Consumer Reports National Research Center, *Natural Food Labels Survey: 2015 Nationally-Representative Phone Survey,* Survey Research Report (Jan. 29, 2016) (online at http://greenerchoices.org/wp-content/uploads/2016/08/CR_2015_Natural_Food_Labels_Survey.pdf)

As a first step, the NOSB should request information about ancillary substances in the Technical Reports. This step improves transparency regarding all ingredients and processing aids that are used to produce organic processed foods. The Policy and Procedures Manual (PPM) at section IV.H. SUBSTANCE/MATERIALS REVIEW PROCESS, #1 Step 2, should be amended by adding the additional point:

> *Processing materials that are added to food must have a Technical Review that identifies and evaluates ancillary substances if none has previously been performed.*

Second, the materials should be reviewed to OFPA criteria. There should be no blanket approval –including blanket approval of functional classes. The PPM at section IV.H. SUBSTANCE/MATERIALS REVIEW PROCESS, #1 Step 5, should be amended by adding the additional point:

> *All ancillary substances in the material must be reviewed according to OFPA criteria.*

If the NOSB determines that certain ancillary substances meet OFPA criteria and should be used for the petitioned material or the material under review, these substances could be listed as allowed in an annotation.

If the NOSB does not include an ancillary substance and a handler believes that a material on the National List cannot be sourced without a particular synthetic and unapproved ancillary substance, then that substance should be petitioned to be added to the National List with an annotation restricting its use to the materials for which it is needed. The PPM at section IV.H. SUBSTANCE/MATERIALS REVIEW PROCESS, # 2, should be amended by adding the additional point:

> *The proposal by the Handling Subcommittee on a petitioned or sunsetting material that contains ancillary substances must include one of the following for each ancillary substance identified:*
> o *A motion to allow the ancillary substance, with justification in terms of OFPA criteria;*
> o *A motion to prohibit the ancillary substance, with justification in terms of OFPA criteria; or*
> o *A motion to limit the ancillary substance to the materials and uses for which it meets OFPA criteria.*

This approach is not entirely in line with OFPA, which requires that *all* ingredients in certified organic foods must either be produced in accordance with the

federal organic standards or must appear on the National List of Approved and Prohibited Substances.

SEC. 2111. [7 U.S.C. 6510] HANDLING.

(a) IN GENERAL.—For a handling operation to be certified under this title, each person on such handling operation shall not, with respect to any agricultural product covered by this title—

(1) add any synthetic ingredient not appearing on the National List during the processing or any postharvest handling

But this approach still ensures proper review, is more practical than requiring every ancillary substance to be listed on the National List, and ensures that each ancillary substance is reviewed in the context of the biological and chemical environment in which it appears in food.

Livestock Subcommittee

Sunset review: Oxytocin

We support the Livestock Subcommittee's proposal to remove oxytocin from the National List. According to Consumer Reports' 2015 consumer survey, 82% of consumers think that federal organic standards should prohibit the use of antibiotics and other drugs.[14]

Antibiotic Use in Organic Hatcheries

Eliminating the routine use of antibiotics in healthy food animals is a top priority for Consumer Reports, given the connection between the overuse of antibiotics and the development of antibiotic resistance. While the organic standards prohibit the routine use of antibiotics, there is an exception: the Organic Foods Production Act of 1990 allows for the use of antibiotics in chicks prior to day two of life because it exempts day-old chicks from organic management.[15]

This creates inconsistency in the organic standards, and means that the organic label on poultry fails to meet consumer expectations. In our 2015 consumer survey on

[14] ibid.

[15] 7 U.S.C. § 6509(e)(1).

food labels, 82% of consumers responded that they think federal organic standards should mean no antibiotics or other drugs were used.[16]

We have repeatedly requested that the NOSB take action on this issue and recommend a clear prohibition on antibiotics at all stages of life for all farm animals used in organic food production. In recent years, major poultry producers, including Perdue and Tyson Foods, have phased out the use of antibiotics in hatcheries (including for conventional production).

We recognize certain OFPA limitations concerning day-old poultry; however, the OFPA provision exempting day-old poultry from organic production standards does not prohibit the application of individual aspects of the organic standards. Instead, the provision merely states that organic standards cannot be required for day-old poultry as a whole. Prohibiting the administration of antibiotics to day-old chicks, or *in ovo*, does not amount to a requirement that these products adhere to organic production standards across the board. Rather, it adds a singular requirement that would satisfy a key purpose of OFPA concerning consumer assurance and organic consistency, as well as other mandatory labeling standards under separate acts.

Therefore, the OFPA exemption for day-old chicks from organic management does not prevent the NOSB from recommending a prohibition on all antibiotic use in organic poultry production.

This could be achieved by recommending the following addition (in bold) to 7 CFR 205.238(c)(1)

(c) The producer of an organic livestock operation must not:

(1) Sell, label, or represent as organic any animal or edible product derived from any animal treated with antibiotics, any substance that contains a synthetic substance not allowed under §205.603, or any substance that contains a nonsynthetic substance prohibited in §205.604. ***The prohibition on antibiotics treatment applies to poultry not under organic management prior to day two of life.***

We strongly urge the NOSB's Livestock Subcommittee to begin work developing a recommendation prohibiting all antibiotic use in organic poultry production. Our full legal analysis on this issue is included in the Appendix.

[16] Consumer Reports National Research Center, *Natural Food Labels Survey: 2015 Nationally-Representative Phone Survey,* Survey Research Report (Jan. 29, 2016) (online at http://greenerchoices.org/wp-content/uploads/2016/08/CR_2015_Natural_Food_Labels_Survey.pdf)

Certification, Accreditation, and Compliance Subcommittee

Proposal: Eliminating the incentive to convert native ecosystems to organic production

We appreciate the work of the Certification, Accreditation, and Compliance Subcommittee on the proposal to eliminate the incentive to convert native ecosystems to organic production. We agree that the conversion of native ecosystems to farmland can have negative impacts on biodiversity and the environment. There is an incentive to convert previously unproductive land, which has not been farmed and therefore has not been treated with prohibited chemicals, to organic farmland because it eliminates the three-year conversion period.

The Wild Farm Alliance has worked for years on this issue, and we support their comments on this topic. We agree that "it is most important to clearly state the intent – to incentivize the transition to organic production of lands that have had prohibited materials applied, while minimizing the loss of lands with important habitats from conversion. These lands will be necessary to support declining and rare species today and a hundred years from now, when there will be much less available due to increased human populations and climate change."

We support the suggestion of the Wild Farm Alliance to add the following text to 7 C.F.R. 205.200:

> *A site supporting a native ecosystem cannot be certified for organic production as provided under this regulation for a period of 10 years from the date of conversion.*

Materials/GMO Subcommittee

Discussion Document: Non-GMO organic seed integrity

A majority of consumers (72%) expect foods labeled "organic" to mean no GMOs were used, according to our 2015 consumer survey.[17] We therefore support the efforts of the Materials/GMO Subcommittee to develop a proposal on non-GMO organic seed purity for the spring 2018 meeting.

Proposal: Excluded Methods Terminology

At both the fall 2016 meeting and spring 2017 meeting, we commented on a discussion document regarding the use of four terms in the Terminology Chart—transposon, cisgenesis, intragenesis, and agro-infiltration—that should be considered excluded methods. We strongly support the Materials/GMO Subcommittee's proposals to include cisgenesis, intragenesis, and agro-infiltration in the terminology for excluded methods and to exempt the techniques of marker-assisted selection and transduction. We also encourage the Materials/GMO Subcommittee to include transposons in the terminology for excluded methods.

Agro-infiltration, as the accompanying note in the fall 2016 discussion document's chart explains, means "in vitro nucleic acids are introduced to plant leaves to be infiltrated into them." Thus, agro-infiltration is clearly an in vitro nucleic acid technique and clearly falls under the definition of "modern biotechnology." Therefore, agro-infiltration should be an excluded technique since modern biotechnology is an excluded method. In order not to create any confusion, we urge the Materials/GMO Subcommittee to define the terms cisgenesis and intragenesis. As we noted in our previous comments, cisgenesis refers to "the genetic modification of a recipient plant with a natural gene from a crossable—sexually compatible—plant. Such a gene includes its introns and is flanked by its native promoter and terminator in the normal-sense orientation."[18] Intragenesis also involves the genetic engineering (or genetic modification) of a recipient plant with hybrid genes from a crossable species. Unlike cisgenesis, with intragenesis, the regulatory components of the gene (e.g., the promoter and the terminator region) do not need to come from the same species; they can come

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[17] Consumer Reports National Research Center, *Natural Food Labels Survey: 2015 Nationally-Representative Phone Survey,* Survey Research Report (Jan. 29, 2016) (online at http://greenerchoices.org/wp-content/uploads/2016/08/CR_2015_Natural_Food_Labels_Survey.pdf)

[18] Schouten HJ, Krens FA and E Jacobsen. 2006. Cisgenic plants are similar to traditionally bred plants. EMBO Reports, 7(8): 750-753. At: www.ncbi.nlm.nih.gov/pmc/articles/PMC1525145/pdf/7400769.pdf

from a crossable species, hence their being called a hybrid gene.[19] Both cisgenesis and intragenesis are clearly subsets of genetic engineering and clearly constitute an excluded method.

Although cisgenesis and intragenesis are clearly forms of genetic engineering, some people feel that the term "cell fusion within plant family" is a form of cisgenesis. Thus, an opinion published in May 2014 in *Food Safety News*, quotes the general manager from High Mowing Organic Seeds as saying, "We do not support or sell cisgenic (within the same plant family) CMS [cytoplasmic male sterility] cell fusion seeds as we believe the process is the same as GMO."[20] Indeed, a number of organic seed companies in the U.S. agree with High Mowing Organic Seeds. Given the definitions listed in this document, cisgenesis is not the same as cell fusion, whether the plant cells fused come from within the same plant family or between plant families. Indeed, the definition of "modern biotechnology" in this document includes only "fusion of cells beyond the taxonomic family," so cell fusion within the same family is outside of the definition of "modern biotechnology."

As the article in *Food Safety News* points out, using cell fusion to move CMS into the Brassica crops or to move CMS between sunflower and chicory (both in family *Asteraceae*) is fairly common. The article goes on to note that this use of cell fusion to move CMS trait often also involves mutagenesis techniques—what the document refers to as "induced mutagenesis." That said, although the terms "cell fusion within plant family" and "protoplast fusion" fall outside of the definition of "modern biotechnology," this does not mean that they meet the first criterion of excluded methods, e.g., that "the genome is respected as an indivisible entity …" Indeed, there should be further discussion as to whether "cell fusion within plant family" and "protoplast fusion" are excluded methods, so it is appropriate that they are labeled as TBD. In addition, the term "induced mutagenesis" involves a variety of techniques—radiation, chemicals, etc.—to cause/induce a mutation, also raises questions about whether such techniques meet the first criterion of excluded methods, so it is appropriate that "induced mutagenesis" remains on the TBD list.

Transposons are mobile genetic elements that have been used to genetically engineer plants and animals.[21] These uses clearly constitute an excluded method since they are used in genetic engineering. Transposons can also be used to create animal vaccines. While genetically engineered (GE) vaccines are not prohibited in the organic

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[19] See slide 11 in www.slideshare.net/HudaNazeer/transgenesis-intragenesis-cisgenesis

[20] Sutherland D. 2014. Organic mutagenic/cell fusion hybrid seeds are genetically engineered. *Food Safety News*, May 15, 2004. At: http://www.foodsafetynews.com/2014/05/draft-a-gmo-conundrum-organic-mutageniccell-fusion-hybrid-seeds-are-genetically-engineered/#.WdLYmyiGM2w

[21] Ivics Z and Z Izsvák. 2010. The expanding universe of transposon technologies for gene and cell engineering. Mobile DNA. At: mobilednajournal.biomedcentral.com/articles/10.1186/1759-8753-1-25

program, due to the exemption of vaccines from the excluded methods terminology, we believe that GE vaccines should not be allowed in organic production. However, even if they are to be permitted, transposon use for creating GE plants and GE animals clearly falls under the excluded methods. At the least, transposons should be in the Terminology Chart in the Guidance on Excluded Methods with a note saying that use in vaccines for animals may be allowed.

In summary, we support the subcommittee's proposal to include the terms cisgenesis, intragenesis, and agro-infiltration as excluded methods and to exclude the terms "marker assisted breeding" and "transduction" as excluded methods. We urge the Board to develop definitions for all the excluded methods, e.g., cisgenesis, intragenesis, agro-infiltration and transposons. In addition, we urge the subcommittee to include "transposons" as an excluded method, perhaps with a note saying that "transposons" may be used in animal vaccines, since vaccines are exempted from organic regulations.

Crops Subcommittee

Proposal: Hydroponics and container growing

We urge the NOSB to support the Crops Subcommittee proposal on hydroponics and container growing. We are not opposed to hydroponic production, but we are opposed to products of hydroponic systems being labeled as "organic" when those crops can be grown in soil. While hydroponic production may have a place in our food system, we do not believe that hydroponic production systems can meet the requirements in the federal law and regulations for crops that naturally grow in soil.

One of the founding principles—arguably *the* founding principle—of organic agriculture is the focus on soil health to produce healthy crops and healthy animals, which in turn fosters the health of people.[22] Living soil provides the basis for organic crop production, which relies on the recycling of nutrients, rather than on outside inputs for fertility and plant growth.[23]

These principles were included in the federal law and regulations that provide consumers with the assurance that a consistent standard is met for foods labeled "organic." In the Organic Foods Production Act, section §6513 states that "an organic

[22] See IFOAM Principles of Organic Agriculture, http://www.ifoam.bio/en/principles-organic-agriculture/principle-health
[23] See IFOAP Principles of Organic Agriculture, http://www.ifoam.bio/en/principles-organic-agriculture/principle-ecology

plan shall contain provisions designed to foster soil fertility, primarily through the management of the organic content of the soil through proper tillage, crop rotation, and manuring…An organic plan shall not include any production or handling practices that are inconsistent with this chapter."

In the Code of Federal Regulations, 7 CFR 205.200 states:

> Production practices implemented in accordance with this subpart must maintain or improve the natural resources of the operation, soil and water quality, including:
>
> 7 CFR 205.203 Soil fertility and crop nutrient management practice standard:
>
> (a) The producer must select and implement tillage and cultivation practices that maintain or improve the physical, chemical, and biological condition of soil and minimize soil erosion.
>
> (b) The producer must manage crop nutrients and soil fertility through rotations, cover crops, and the application of plant and animal materials.
>
> (c) The producer must manage plant and animal materials to maintain or improve soil organic matter content…

Our concern is that hydroponic systems for crops that naturally grow in the soil do not meet the spirit and the letter of the organic law and regulations. Again, we are not opposed to hydroponic production. We are opposed to the labeling of hydroponically grown produce as "organic" due to the clear requirements in federal law and regulations for fostering soil fertility and providing plant nutrients through rotations, cover crops, and the application of plant and animal materials.

We support the Crops Subcommittee's proposals to prohibit aeroponic and aquaponic production from being considered organic, and to limit the amount of nitrogen that can be supplied through liquid feeding in hydroponic and container systems.

Petition: Anaerobic Digestate

We oppose the petition to allow the use of anaerobic digestate in organic crop production, and support the Crops Subcommittee's unanimous vote to reject the motion to amend 7 C.F.R. 205.203(c) to allow animal manure that has undergone an anaerobic digestion process.

We agree with the Crops Subcommittee that "[because] of the potential for negative effects on human health through food-borne pathogen, the unproven safety of digestate fiber, and the many alternative practices and materials already in use in organic production, this substance as petitioned without preharvest application intervals is not compatible with a system of sustainable agriculture."

Sunset review: Lead salts

We support retaining lead salt in 7 C.F.R. 205.602 as a prohibited non-synthetic on the National List. Lead affects humans of all ages, and the neurodevelopmental health effects are most serious in young children. Clinical manifestations of lead toxicity include symptoms referable to the central nervous system, the peripheral nervous system, the hematopoietic system, the renal system, and the gastrointestinal systems.[24] Lead salts should continue to be prohibited in organic food production.

Sunset review: Tobacco dust

We support retaining tobacco dust (nicotine sulfate) in 7 C.F.R. 205.602 as a prohibited non-synthetic on the National List.

Conclusion

We appreciate the work of the NOSB and urge the following:

- Remove sodium phosphate from the National List, due to lack of essentiality and human health concerns;
- Remove oxytocin from the National List;
- Consider the comments of the Wild Farm Alliance on the proposal to eliminate the incentive to convert native ecosystems to organic production;
- Support the Materials/GMO Subcommittee's proposal to include the terms cisgenesis, intragenesis, and agro-infiltration as excluded methods and to exclude the terms "marker assisted breeding" and "transduction" as excluded methods. in addition, "transposons" should be included as an excluded method;
- Support the Crops Subcommittee proposal on hydroponics and container growing;
- Reject the petition to add anaerobic digestate to the National List;
- Keep lead salts and tobacco (nicotine) on the National List as prohibited natural substances in crop production;

We urge the Livestock Subcommittee to start working on a proposal to prohibit the use of all antibiotics at all stages of life for poultry, to ensure that the routine of use of antibiotics is consistently prohibited in organic production.

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[24] Toxicological Profile for Lead. U.S. Department of Health and Human Services. Public Health Service. Agency for Toxic Substances and Disease Registry. August 2007. Available at: https://www.atsdr.cdc.gov/toxprofiles/tp13.pdf

Thank you for considering our comments. We encourage the Board to reach out to us if questions arise; we are happy to provide more information and background materials on any of the topics in this comment.

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Appendix B: Consumers Union's recommended approach to prohibiting antibiotics in day-old chicks and hatcheries

Consumers Union recognizes the OFPA limitation concerning day-old poultry; however, we would like to provide some additional background and analysis to aid the NOP and USDA in reconsidering all of the potential regulatory options available to them in addressing this problematic inconsistency within the organic label.

OFPA and Regulations

A. OFPA and the Day-Old Poultry Exemption

The provision within OFPA that exempts up to day-old poultry from organic production standards is found in section 6509(e) as codified. This section governs organic animal production practices and materials and reads as follows:

(e) Additional guidelines
(1) Poultry
With the exception of day old poultry, all poultry from which meat or eggs will be sold or labeled as organically produced shall be raised and handled in accordance with this chapter prior to and during the period in which such meat or eggs are sold.[25]

In other words, all poultry that is to be labeled and sold as organic must be raised and handled in accordance with the organic standards established under OFPA and its implementing regulations, unless it falls within the day-old poultry time period. What this means is that day-old and younger poultry can be obtained from conventional hatcheries that have not been produced according to organic standards. Second-day and older poultry, however, cannot be sourced conventionally. OFPA regulations do not elaborate on the day-old poultry exemption.

B. OFPA and Antibiotics in Livestock

OFPA and its implementing regulations do address the use of antibiotics in livestock, by placing a general prohibition on any subtherapeutic treatment of livestock with antibiotics,[26] as well as use as a growth stimulant in feed.[27] These references are the only specific mention of antibiotics or medications within OFPA concerning livestock.

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[25] 7 U.S.C. § 6509(e)(1).
[26] 7 U.S.C. § 6509(d)(1)(A).
[27] 7 U.S.C. § 6509(c)(3), *see also* 7 C.F.R. § 205.237(b)(7).

OFPA only prohibits treatment of animals with medications in the absence of illness[28] and OFPA regulations go one step further as to actually require treatment of sick animals for animal welfare purposes.[29] Because an antibiotic is considered a synthetic substance, however, and prohibited under organic production unless included on the National List, use of antibiotics on sick animals removes their organic eligibility in the marketplace and the resulting product cannot be labeled organic.[30] Treatment of a sick animal with an antibiotic, however, does not require that a livestock producer's organic certification as a whole be removed.

Additional Antibiotic Use and Labeling Standards

As you are aware, the power of the USDA as a whole to regulate labeling claims and consider consumer expectations with regard to those claims on certain food items is not limited to the confines of OFPA. In fact, to ensure that animal product labels are truthful, accurate, and not misleading to consumers—as required by USDA law and regulations—these claims must be submitted to the USDA's Food Safety and Inspection Service (FSIS) for approval prior to marketing in interstate commerce.[31] Moreover, while the organic label is primarily regulated within the confines of its own program and FSIS defers to the Agricultural Marketing Service (AMS) and NOP on approval and oversight of products carrying the organic label, it is still considered a label which falls under the purview and authority of FSIS's meat and poultry labeling responsibilities.[32]

While there is no regulation that details USDA positions or standards on claims involving "raised without antibiotics," "no antibiotics added," and similar statements, the USDA provides guidance on the process for label evaluations and general standards underlying it.[33]

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[28] 7 U.S.C. § 6509(d)(1)(C).
[29] 7 C.F.R. § 205.238(c)(7).
[30] *See* 7 C.F.R. § 205.60_ *and* 7 C.F.R. § 205.238(c)(7) ("Livestock treated with a prohibited substance must be clearly identified and shall not be sold, labeled, or represented as organically produced.").
[31] *See* 21 U.S.C. § 607(e); 21 U.S.C. § 457(c). *See also* accompanying regulations for meat and poultry inspections at 9 C.F.R. §§ 412.1 – 412.2.
[32] *See* U.S. Dept. of Agriculture, Food Safety Inspection Service, *Meat and Poultry Labeling Terms*, webpage available at http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/food-labeling/meat-and-poultry-labeling-terms/meat-and-poultry-labeling-terms/!ut/p/a1/jZDNCsIwEISfxQcI2doqepSCtFVbRNSYi6ya1kCblCYq-vRaREHxp7unZb5hh6GcMsoVHmWGVmqFeX3z7hqm0HX6PkRJ3xlCGC-mycj3oTfr3IDVDyB2G_q_zAD--aMGD9rVxJ9klJdo90SqVFOWCUtQmZOoDGWp1jtiMBX2TFLcWmL2QtiHkONG5FJllBUCa9eOlPqQ2-r8lIgVVWH-A0vKX-OCc9swdmdeEMUuJN478KHPO_C9sLKYs8t4EIAMW1dofMrM/#14.
[33] *See* U.S. Dept. of Agriculture, A Guide to Federal Food Labeling Requirements for Meat Poultry, and Egg Products, *available at* http://www.fsis.usda.gov/shared/PDF/Labeling_Requirements_Guide.pdf; U.S. Dept. of Agriculture, Animal Production Claims Outline of Current Process, *available at*

The USDA has made it known through individual label approvals, statements to Consumer Reports, and litigation concerning antibiotic statements on labels that the use of feed containing antibiotics, as well as the injection of hatchery eggs and day-old poultry with antibiotics, disqualifies a food from bearing a claim of "raised without antibiotics."[34] This has been confirmed through industry practice and statements to the media.[35]

Options to Address the Organic Poultry and Egg Labeling Inconsistency

While understanding that the NOP and USDA must not violate OFPA, the Department as a whole must also be wary of violating explicit directives in separate sections of OFPA and in other statutes. In this case, we believe that OFPA requires the Department to assure consumers that organically produced products meet consistent standards[36] and that the Federal Meat Inspection Act (FMIA), Poultry Product Inspection Act (PPIA), and Egg Products Inspection Act (EPIA) all prohibit the labeling of products that are misleading to consumers and thus misbranded.[37]

Therefore, while the NOP faces a particular legal obstacle in the OFPA provision specifically exempting day-old poultry from organic standards (including the general prohibition of subtherapeutic antibiotic treatments) the canon of statutory interpretation and legal precedent require that all statutory language should be given effect unless leading to the truly absurd.

With this in mind, we would posit that the OFPA provision exempting day-old poultry from organic production standards **does not prohibit** the application of individual aspects of the organic standards. Instead, the provision merely states that the full organic standards cannot be required for day-old poultry as a whole. Prohibiting the injection of eggs and day-old poultry with antibiotics does not amount to a requirement that these products adhere to organic production standards across the board, but rather a singular component. Furthermore, because implementing this singular requirement would be satisfying a key purpose of OFPA concerning consumer assurance and organic

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http://www.fsis.usda.gov/wps/wcm/connect/6fe3cd56-6809-4239-b7a2-bccb82a30588/RaisingClaims.pdf?MOD=AJPERES.

[34] Sanderson Farms, Inc. v. Tyson Foods, 547 F. Supp. 2d 491 (D.Md. 2008)(holding that Tysons "raised without antibiotics" campaign misled consumers when poultry was fed with ionophores and hatchery eggs injected with antibiotics two-to-three days before hatching.)

[35] *See*, *e.g.*, Tom Philpott, Wait, We Inject Antibiotics Into Eggs for Organic Chicken?!, MotherJones, Jan. 15, 2014 ("Perdue has over the past five years removed antibiotics from 80 percent of its hatcheries[,]") *available at* http://www.motherjones.com/tom-philpott/2014/01/organic-chicken-and-egg-antibiotics-edition.

[36] 7 U.S.C. § 6501(2).

[37] 21 U.S.C. § 607(e); 21 U.S.C. § 457(c); 21 U.S.C. § 1036.

consistency as well as other mandatory labeling standards under separate acts, there is a strong argument that a narrowly tailored regulation addressing this issue would be viewed as legally favorable.