

**National Organic Standards Board
Compliance, Accreditation and Certification Subcommittee**

**Discussion Document:
Calculating Percentage Organic in Multi-ingredient Products**

August 14, 2012

I. INTRODUCTION:

The purpose of this document is to review how accredited certifying agents (ACA's) and handlers are determining percentage organic ingredients in multi-ingredient products and develop clear policy that can assist the NOP in development of guidance for certifiers and handlers.

Consumers expect that labels on multi-ingredient products sold as "100% organic" or "organic" or "made with organic" reflect an accurate determination of percentage organic ingredients, and that all certifiers have uniformly calculated such percentages.

The integrity of USDA organic products in the USA and throughout the world depends on assurances of consistency and uniformity in interpretation and application of the law and regulation, especially when calculating percentage organic ingredients.

II. BACKGROUND:

The NOP regulation at § 205.302(c), under "Calculating the percentage of organically produced ingredients" states:

"The percentage must be determined by the handler who affixes the label on the consumer package and verified by the certifying agent of the handler. The handler may use information provided by the certified operation in determining the percentage".

Thus, when an ingredient has been certified to the "organic" category, the supplier of that ingredient must provide information to the handler making the finished product regarding the actual percentage of organic content of that ingredient.

Over the years this has resulted in a wide variety of mechanisms for determining percentage of organic ingredients, and a wide variety of ways of establishing systems which allow verification by auditors and inspectors.

For example, if the supplier does not provide positive information, verified by the certifier, that the organic ingredient contains more than 95% organic content, then many certifiers will only allow that ingredient to be calculated at 95% organic content, but not all certifiers do this.

Since the Rule was first put in place there have been an increasing number of certifying agents who certify multi-ingredient products and, with no clear guidance to the contrary, a lack of uniformity in procedures has developed. For example some certifiers may permit handlers to include 100% of the weight/volume of certified ingredients as organic, even if the ingredient is a formulated product and includes other permitted substances and may be in fact be anywhere from 95-100% organic. For example, chocolate chips may be certified organic, and contain 96 % organic ingredients, plus 4% permitted substances on §205.605 or §205.606. A cookie manufacturer may be considering that the entire weight of the chips counts as organic in the final cookie product.

Further, some handlers, certifiers, inspectors may not be accurately examining the water and salt content for exclusion from the percentage calculation.

In addition there is a wide array of mechanisms in place amongst handlers as to how processing aids as opposed to additives are recorded or, if necessary calculated as part of the ingredient list.

Standard practice is to calculate organic ingredients as a percentage *of all ingredients*, although the relevant area of the regulation, § 205.302(a)(1-3), still states the calculation should be as a percentage *of finished product*.

In October 2001 the NOSB recommended to change to the regulations at § 205.302(a) to replace the phrase “finished product” with “of all ingredients”. The rationale was:

“ Most products lose weight during processing. Dividing the total weight of all combined organic ingredients by the weight of the finished products could easily show that a product contains over 100% organic ingredients. Current practice is to divide the total weight of all combined organic ingredients by the total weight of all ingredients (excluding salt and water). This calculation establishes the total percentage of organic ingredients. The Rule should be changed to correctly calculate the percentage of organic ingredients.”

This regulation change has not yet taken place.

Sub-ingredients are often added to multi-ingredient products, such as spice or flavor or sauce mixes. Such sub-ingredients may be entirely or partially organic in ingredient make up, and the producer of such sub-ingredient mix may provide a specification sheet listing ingredients and their organic percentages. In other instances no details are provided on sub-ingredients.

When the percentage of organic ingredients as a percentage of all ingredients, is calculated to be close to 95% or close to 70% then the issue of correct labeling of that product becomes difficult for the handler and those who must approve or verify.

III. RELEVANT AREAS OF THE RULE:

NOP Regulation and Policy statements:

§ 205.302 Calculating the percentage of organically produced ingredients.

(a) The percentage of all organically produced ingredients in an agricultural product sold, labeled, or represented as “100 percent organic,” “organic,” or “made with organic (specified ingredients or food group(s)),” or that include organic ingredients must be calculated by:

(1) Dividing the total net weight (excluding water and salt) of combined organic ingredients at formulation by the total weight (excluding water and salt) of the finished product.

(2) Dividing the fluid volume of all organic ingredients (excluding water and salt) by the fluid volume of the finished product (excluding water and salt) if the product and ingredients are liquid. If the liquid product is identified on the principal display panel or information panel as being reconstituted from concentrates, the calculation should be made on the basis of single-strength concentrations of the ingredients and finished product.

(3) For products containing organically produced ingredients in both solid and liquid form, dividing the combined weight of the solid ingredients and the weight of the liquid ingredients (excluding water and salt) by the total weight (excluding water and salt) of the finished product.

(b) The percentage of all organically produced ingredients in an agricultural product must be rounded down to the nearest whole number.

(c) The percentage must be determined by the handler who affixes the label on the consumer package and verified by the certifying agent of the handler. The handler may use information provided by the certified operation in determining the percentage.

IV. DISCUSSION:

1. Language change: It is assumed that all handlers are calculating percentage organic based on percent of all ingredients, not finished products, and yet the Rule does not state this.

The CACS is considering a recommendation for a Rule change at the spring 2013 meeting to replace at 205.302 (a), 1, 2, and 3, the language “finished product” with the phrase “of all ingredients”. Prior to this rulemaking action, the CACS is seeking information from ACA’s on current practices to bring efficient uniformity to the process, especially when ingredients cross certifier lines.

2. Typically a processor of a multi-ingredient product applies to an NOP accredited agent and receives the annual application forms and instructions of that specific certifier. Each certifier has their own set of forms, many of which are fillable documents such as a form for calculating organic percentage, several examples of which have been reviewed by the CACS. Such product formulation sheets list water and salt and processing aids which are not included in the self-calculation.

There is also usually a Product Profile form for every multi-ingredient product, listing all ingredients, name of supplier, certifier of each ingredient, and percentage of each ingredient relative to the total of all ingredients, EXCLUDING water and salt. Water may be included in the calculation when it is specified as part of an FDA standard of identity, (includes single strength juices, does not include soy milk or juices for which there is no standard of identity). FDA standards of identity are found at 21 CFR 131-169.

With the growth of processed organic foods, it can be very difficult for handlers, certifiers and inspectors to consistently derive the same calculations with varied format specification sheets and calculation forms.

In order to obtain uniformity in organic claims for products, should the NOSB recommend standardized forms and/or the use of self-calculating tables for determining organic percentage, and specification sheets for all sub-ingredients?

3. In calculating the percentage organic of sub-ingredient mix either the handler assumes 95% organic content, or obtains additional verification of the actual organic content from the supplier to justify a higher claim. If no "Specification Sheets" (or equivalent information) on the sub-ingredients are available, the certifier and inspector has to assume the lowest denominator based on sub-ingredient list reviewed, so it defaults to 95% or 70%.

If sub-ingredients are included without a specification sheet and accompanying calculation, should ingredients be calculated as 70%, 95% or 100% based on stated labeling category?

4. Processing aids. We understand the variability among certifiers on how processing aids affect the 100% label claim. If a product is not allowed the 100% claim, does it fall all the way to 95%? This could automatically keep numerous products out of organic status and fall to "made with" status.

5. Salt. Does the ACA or handler consider other salts, such as potassium chloride as well as sodium chloride in determining calculation?

V. REQUEST FROM CAC Subcommittee:

The CACS is seeking input in developing upcoming recommendations if necessary. Please give us your input on these questions and other pertinent information, as you deem necessary.

1. What difficulties do you encounter when verifying percentage calculations for multi-ingredient products? Do supplier forms meet necessary expectations?

2. Is calculating the percentage organic made more complex when multiple certifier forms are being used to make calculations for multi ingredient products with sub-ingredients ?
3. Should all ACA's use a uniform calculation tool to verify percentage calculations?
4. Do all ACA's provide calculation tools to reviewers/inspectors? Do inspectors have their own tools? Are there an adequate number of qualified inspectors available perform this work?
5. How does use of processing aids affect percentage organic calculations? For example in the absence of other technical specification does the product default to the 95% category for the purpose of the calculation?
6. Would guidance from the NOP bring clarity and uniformity to the process? What features and characteristics should be incorporated into the policy?
7. Do we have in place adequate mechanisms to ensure that all agricultural products which have received no post harvest treatment can be verified to the 100% category as raw ingredients for calculating percentage organic in multi-ingredient products? Explain process used in calculation.

The CAC Subcommittee would appreciate receiving answers to the questions posed above as well as other suggestions on how best to ensure consistency and uniformity in determining percentage organic in multi-ingredient products.

Sub Committee Vote:

Moved: Jean Richardson Second: Calvin Walker

Yes- 8 No- 0 Abstain- 0 Recusal- 0 Absent- 0