

APPENDIX C

Changes Allowed to Modernize Food Standards While Retaining the Basic Nature and Essential Characteristics of Standardized Food						
<i>Changes would be allowed to . . .</i>	Substitute or add ingredients used solely for a technical, nondistinctive effect	Add safe and suitable flavors, sweeteners, salt substitutes, or vegetable fats and oils	Use advanced or more efficient technology to produce ingredients	Use alternate make procedures for the finished food	Change product appearance, form, or shape	Improve nutrition by adding beneficial ingredients or decreasing calories or certain nutrients in moderate amounts
EXAMPLES	Use one defoaming agent in place of another specifically listed agent in the standard; add a preservative where the standard doesn't provide for it; use an antimycotic agent in bulk cheese where the standard allows it only in consumer packages	Use safe and suitable flavors in cheese products; use a salt substitute where a standard allows salt; use any sweetening agent where the standard allows at least one sweetener; use a vegetable fat in place of another vegetable fat named in the standard (e.g., cacao fat)	Use enzyme-modified egg yolk in place of regular egg yolk; use reconstituted milk in yogurt	Use alternatives to pasteurization or other heat treatment, if demonstrated to provide same effect (e.g., same food safety effect or spoilage prevention); use different aging periods for cheese	Market "chunky style" stewed tomatoes; make different shapes of macaroni (e.g., cartoon characters) and still call it a "macaroni product"; sell canned pineapple "whole"; make small (less than ½ pound) loaves of "bread"	Reduce saturated fat in amounts less than the 25% required for a "reduced" claim; add phytosterols to standardized products; add 51% whole wheat flour to spaghetti and call it "whole wheat spaghetti" based on characterizing amount of whole wheat
Key parameters	An ingredient is "technical" and "nondistinctive" if its presence is not ordinarily perceptible to consumers ¹	Any safe and suitable flavors may be used except where expressly prohibited; sweeteners, salt substitutes, and vegetable fats and oils may be used where standards already allow for sweeteners, salt, or at least one specific vegetable fat or oil	Ingredient is interchangeable for a specific one listed in the standard because it (1) is from the same source as the listed ingredient; (2) performs an equivalent functional effect; and (3) retains essential characteristics of the finished food	The same approach as established "alternate make" procedures in the cheese standards, but allowed anywhere the standard identifies a specific procedure	Simple changes in physical form, not substance or content	Moderate decreases must result in a measurable difference per RACC and a change in the Nutrition Facts panel as compared to the standardized food; beneficial additions allow use of ingredients/nutrients to qualify for a health claim or in an amount deemed meaningful by qualified nutritionists

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Boundaries: Nutrition and Performance						
Nutrition	Not inferior: add ingredients if necessary to restore	Not inferior: add ingredients if necessary to restore	Not inferior: add ingredients if necessary to restore	Not inferior: add ingredients if necessary to restore	Not inferior: add ingredients if necessary to restore	Not inferior: add ingredients if necessary to restore
Performance characteristics: physical and chemical properties (other than nutrition)	Equivalent	Equivalent	Equivalent	Equivalent	Equivalent, with exception of intended change	Similar, using same principles as 130.10
Performance characteristics: organoleptic properties	Equivalent or better	Equivalent or better	Equivalent or better	Equivalent or better	Equivalent	Similar, using same principles as 130.10
Performance characteristics: functional uses and shelf life	Equivalent or better	Equivalent or better	Equivalent or better	Equivalent or better	Equivalent	Similar, using same principles as 130.10
Boundaries: Ingredients						
Safe and suitable	Yes	Yes	Yes	Yes	N/A	Yes
Use different sources of mandatory ingredients (i.e., can vegetable oil replace milkfat)?	No (e.g., a non-egg yolk emulsifying agent can't be used to replace egg yolk in mayonnaise)	No	No	N/A	N/A	No

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Use mandatory ingredients in a “significant” amount?	N/A – changes would not significantly affect levels of mandatory ingredients	N/A – changes would not significantly affect levels of mandatory ingredients	Yes – either will not affect mandatory ingredients or will allow only interchangeable mandatory ingredients	N/A – changes would not significantly affect levels of mandatory ingredients	N/A – changes would not significantly affect levels of mandatory ingredients	Yes, using same principles as 130.10 (i.e., minimum is smallest amount necessary to provide intended functional effect)
Ingredients “prohibited” by standard?	No	No	No	No	N/A	No
Other changes allowed as a result of the subject change (e.g., deviations from non-ingredient provisions)?	No	No	No	No	No	Yes, but must be the minimum necessary to maintain similar performance, as per 130.10 principles
Boundaries: Labeling						
Labeling	Same as standardized food; all ingredients declared unless exempt	Same as standardized food; all ingredients declared unless exempt; follow established flavor labeling requirements	Same as standardized food; all ingredients declared unless exempt	Same as standardized food	Same as standardized food; note change in form as appropriate	In general, same identity statement as standardized food; any reduction resulting in perceptible organoleptic changes are noted in explanatory information panel labeling (i.e., Regular ____, 11 g fat per serving, this product 9 g fat); nutrient additions are reflected in product identity if characterizing; for both additions and

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						decreases, limitations in function must be labeled (i.e., “not recommended for frozen storage”)

1. An effect is considered “technical” and “nondistinctive” if the presence of the ingredient is not ordinarily perceptible to consumers, even though the end result (e.g., superior texture) may be. Most of the functional use categories listed in 21 C.F.R. 170.3(o) are purely technical, such as anticaking agents, antimicrobial agents, emulsifiers, etc. Exceptions are flavors, flavor enhancers, sweeteners, nutrient supplements, and vegetable fats and oils, which are addressed under other categories. Note that a “purely technical” ingredient may in fact be mandatory under the standard (e.g., egg yolk used as an emulsifying agent in mayonnaise).