### Center for Food Safety and Applied Nutrition Food and Drug Administration U.S. Department of Health and Human Services

# Qualitative Risk Assessment: Risk of Activity/Food Combinations for Activities (Outside the Farm Definition) Conducted in a Facility Co-Located on a Farm: Response to Public Comments

**August 2015** 

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# I. A Summary of Key Changes in the Final Risk Assessment Compared to the Draft Risk Assessment

Table 1. A Summary of Key Changes in the Final Risk Assessment Compared to the Draft Risk Assessment

Applicable Section of	Applicable Table of	Change
the Risk	the Risk	
Assessment	Assessment	
I, III, VII	N/A	Asked questions and discussed hazards with respect to "known or
		reasonably foreseeable hazards" rather than "hazards reasonably likely to
		occur" because of changes in terminology and because the hazards that
		require a preventive control are specific to a food and a facility.
I, II	1, 18, 19	Excluded baked goods that require refrigeration for safety from the scope of
		the risk assessment and limited the exclusion for cut fruits and vegetables to
		those that are low-acid. When considering the risk of activities related to
		acid fruits and vegetables, we considered the risk for growth of pathogens
		when the pH is between 4.2 and 4.6. Excluded game meat products that
		require refrigeration for safety in addition to excluding game meat.
I,II	1, 18, 19	Considered information from an updated Food Processing Sector Study.
II, VI, VII	1, 18, 19	Made changes to reflect the revised farm definition, which increased the
		number of activities within the farm definition thereby narrowing the scope
		of the activity/food combinations that needed to be considered in the final
		risk assessment. (For example, drying/dehydrating raw agricultural
		commodities (RACs) without additional manufacturing/processing, such as
TT 7/1 7/11	1 10 10	drying grapes to make raisins, now falls within the farm definition.)
II, VI, VII	1, 18, 19	Added foods and activities as a result of comments submitted on the draft
11 3/1 3/11	1 10 10	RA and on the proposed preventive controls for human food rule.
II, VI, VII	1, 18, 19	Revised the way foods were grouped, e.g., broad categories of foods were
II, VI, VII	1, 18, 19	broken into smaller categories.
11, V1, V11	1, 10, 19	Included activities that encompass multiple steps (e.g., making jams, jellies and preserves may involve steps such as cutting, mashing, boiling, mixing,
		and canning) and grouped these steps to better identify the end product. As
		such, activities that are encompassed within the making of a particular
		product are no longer listed as separate activities within the table. (For
		example, because making syrup includes boiling sap, boiling sap is not
		listed as a separate activity.)
III	2, 3, 4, 5,	Updated the foodborne illness surveillance information in Table 2. Updated
	and 6	the Reportable Food Registry information in Table 3 (now Tables 3, 4, 5,
		and 6).
III	7	Updated Table 4 (now Table 7) on the potential biological and chemical
		hazards likely to be associated with the food categories manufactured,
		processed, packed, or held on a farm mixed-type facility to include the
		revised food categories.
III, IV	7	Updated information in Table 4 (now Table 7) on mycotoxins and added
		references.

Applicable Section of the Risk Assessment	Applicable Table of the Risk Assessment	Change
IV	N/A	Deleted discussion of radiological hazards in the RA, because the preventive controls for human foods rule now considers them as a type of chemical hazard. (We have considered them as part of our consideration of chemical hazards, and we focused in the final RA on the chemical hazards most likely to require a preventive control.)
V	9	Updated Table 6 (now Table 9) on inherent controls for biological hazards to include additional foods.
V	11	Updated the examples in Table 8 (now Table 11) of activities that can introduce, or increase the potential for, biological hazards to better reflect activities relevant to the final RA (e.g., we removed washing fruits and vegetables, as this activity falls within the farm definition).
V	N/A	Deleted information on oxidation-reduction potential as not needed based on the foods included in the final RA.
VI	18	Revised and merged the two draft RA tables addressing whether an activity/food combination is low risk (Table 18 in the final RA) to reflect the revised list of foods and activities in Table 1 of the final RA.
VI	19	Revised the table describing why certain activity/food combinations are not low risk (Table 19 in the final RA) to reflect the decisions made in Table 18.
VII	N/A	Revised the answers to the questions posed in the RA and the list of low-risk activity/food combinations to reflect the outcome of the final RA.
Appendices	N/A	Deleted the draft appendices that focused on categorizing the low-risk activity/food combinations according to the regulatory framework.
Appendices	N/A	Added new appendices on:  the definitions of "farm" and activities relevant to the "farm" definition (i.e., "harvesting," "holding," "manufacturing/processing," and "packing," and the chronology of technical and scientific reviews of the RA.
Throughout	N/A	Revised terminology for consistency with revisions to the preventive controls for human foods rule, e.g., food allergen hazards rather than allergen hazards.
Throughout	N/A	Updated several references and added additional ones.

# II. Public Comments and FDA/CFSAN's Responses

#### A. Comments on Activity/Food Combinations

**Table 2. Comments on Activities** 

Public Comment: 2012 Draft Risk	FDA/CFSAN's Response
	rda/Crsan s Response
Assessment Comments stated that it is not clear how certain high- or moderate-risk practices (e.g., washing), which are necessary to move product from the field, will affect exemptions. Comments state that future risk assessments should examine the impact of these practices by commodity and volume of intact fruits and vegetables	Washing raw agricultural commodities (RACs) is within the "farm" definition (e.g., when washing is done during harvesting or in an on-farm packinghouse on intact RACs) and is therefore out of the scope of this risk assessment. When washing is done as part of manufacturing/processing (e.g., washing fruits and vegetables as part of freezing them), it is considered in this risk assessment as part of the
marketed through small and very-small	manufacturing/processing and not as a stand-alone
farm low-risk packing and holding activities to include packing and holding	activity.  FDA modified Table 1 of the risk assessment to list more types of food categories so as to make it clearer when a particular food is encompassed within a particular activity/food combination. For example, Table 1 of the risk assessment lists food categories such as baked goods, milled grain products, and other grain products that are processed foods, in place of the original category "grain products." We also expanded the list of foods considered in the risk assessment based on comments submitted. As a result, the list of on-farm low-risk packing and holding activities was also expanded. (See Section III of this document).
Comments ask us to include in the exemption a single list of low-risk manufacturing/processing activity food combinations applicable to farm mixed-type facilities conducting activities on their own RACs and farm mixed-type facilities conducting activities on others' RACs.	The revised "farm" definition no longer distinguishes between activities conducted on a farm mixed-type facility's own RACs and activities conducted on others' RACs. As a result, the comment's request is moot.

Public Comment: 2012 Draft Risk Assessment	FDA/CFSAN's Response
Comments ask us to expand the list of activity/food combinations in the exemption.	FDA evaluated specific additional activity/food combinations provided in the comments within the qualitative risk assessment to determine whether they satisfied the criteria for a low-risk activity/food combination and added additional activity/food combinations where appropriate based on the conclusions of the risk assessment (see Section III, Table 7 and Table 8 of this document (packing and holding) and Section IV, Table 9 and Table 10 of this document (manufacturing/processing)).
Comments stated that FDA should not automatically exclude on-farm activities that require refrigeration and/or freezing for safety from the "low risk" category. Similarly, FDA should not automatically exclude activities that require measurement of cooking times from being considered "low risk".	FDA disagrees with these comments and the risk assessment continues to consider foods requiring time/temperature control for safety to be out of scope of the risk assessment. However, in revising the risk assessment, FDA determined that freezing intact or cut fruits and vegetables with pH <4.2 is a low-risk activity/food combination. See the discussion in sections I.B, I.C, and I.E and Tables 18 and 19 of the risk assessment.
Comments stated that FDA should expand the risk assessment to consider dietary ingredients.	FDA revised the qualitative risk assessment to evaluate foods such as chopped fresh herbs, chopped or ground dried herbs, and herbal extracts, which may be used as dietary ingredients. FDA also added a category "Any other processed food that does not require time/temperature control for safety" in the list of onfarm low-risk packing and holding activities, and considered vitamins, minerals, and dietary ingredients (e.g., bone meal) in powdered, granular, or other solid form as examples of such foods.

#### **B.** Comments on Hazards

**Table 3. Comments on Hazards** 

Public Comment: 2012 Draft Risk Assessment	FDA/CFSAN's Response
Comments stated that FDA should include	FDA has incorporated additional text on relevant
Toxoplasma gondii, Cyclospora	hazards in foods as they relate to risks from
cayetanensis, other pathogenic E. coli, as	activity/food combinations.
well as antibiotic residues, heavy metals	
and other environmental contaminants	
such as cadmium and lead in the list of	
hazards reasonably likely to occur in	
foods being considered.	

#### C. Comments on Data and Data Sources

Table 4. Comments on Data and Data Sources

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Public Comment: 2012 Draft Risk	FDA/CFSAN's Response
Assessment	
Comments stated that FDA should re-	FDA disagrees that it should re-examine its data
examine its data sources in assessing	sources in assessing commodity-specific risks, because
commodity-specific risks, as it is likely	the risk assessment focused on the risk of activity/food
that many will be found to be low risk.	combinations rather than separately considering the risk
	of specific food categories. See the discussion in
	section I.B of the qualitative risk assessment.
Comments stated that the Centers for	The Painter et al. 2013 paper is the most up-to-date
Disease Control and Prevention should	publication available, and more finely grained data for
expand its data analysis effort (see Painter	additional commodities are not currently available.
et al. 2013, Attribution of Foodborne	
Illnesses, Hospitalizations, and Deaths to	
Food Commodities by Using Outbreak	
Data, United States, 1998-2008, Emerging	
Infectious Diseases, 19:407-415).	
Comments stated that FDA should rely on	FDA has updated the references on aflatoxins in the
more recent data on aflatoxin	risk assessment and has added text on long-term
contamination and should consider long-	exposures to aflatoxins and their potential effects.
term exposures.	
Comments stated that FDA should	FDA has included text regarding the data limitations,
consider the disproportionate impact that	including absence of data to conduct a dose-response
some of the hazards have on more	assessment for specific susceptible populations.
susceptible populations in its risk	
assessment.	

Public Comment: 2012 Draft Risk	FDA/CFSAN's Response
Assessment	1 Dily Ci Sin V 5 Response
Comments express concern that	The results of the qualitative risk assessment are based
conclusions drawn regarding risk	on consumer risk to the extent practicable, consistent
categories, and exemptions made based on	with the inherent data limitations.
this qualitative risk assessment do not	
account for consumer risk from	
consumption of activity/food products.	
Comments stated that FDA should justify	FDA evaluated each of the requested activity/food
why certain activities are considered low-	combinations that was within the scope of this rule
risk activities, since they provide	within the qualitative risk assessment to determine
opportunities for spread of biological	whether it satisfied the criteria for a low-risk
hazards.	activity/food combination. See the description of the
	criteria for whether an activity/food combination is low
	risk in section I.E of the qualitative risk assessment and
	the explanation for why FDA concluded that certain
	activity/food combinations are not low risk in Table 19
	within the risk assessment.
Comments stated that the risk assessment	We revised and extended the results of our earlier Food
should not rely on the Food Processing	Processing Sector study by expanding our data sources
Sector study but instead collect data from	and by including representatives from USDA's
large-scale surveys of actual farm mixed-	Economic Research Service, USDA's Agricultural
type facilities and their activities.	Marketing Service, and the American Farm Bureau to
	help oversee the revised study. To better account for
	farms that perform processing activities, we included
	Census of Agriculture data both to provide a count of
	total U.S. farms and to estimate the number of farms
	conducting food processing activities. We also
	included the Agricultural Resource Management
	Survey data. In addition, we obtained estimates from
	commodity specialists at trade associations, USDA, and
	universities with in-depth knowledge of the processing activities for specific agricultural commodities and
	reached out to directors of promotion and marketing
	boards. FDA disagrees that we need to conduct large-
	scale surveys to collect additional information in light
	of the opportunities for broad public input regarding the
	activity/food combinations conducted on farm and farm
	mixed-type facilities (see Appendix 2 of the risk
	assessment, Chronology of Technical and Scientific
	Reviews of the Qualitative Risk Assessment) and the
	· · · · · · · · · · · · · · · · · · ·
	new data sources and input provided to the Food Processing Sector study.

#### **D.** Comments on Definitions

**Table 5. Comments on Definitions** 

Public Comment: 2012 Draft Risk Assessment	FDA/CFSAN's Response
Comments state that FDA should provide	We did not use the term "low-moisture food" in the
a definition for "low moisture food" and	qualitative risk assessment, so there is no need to
should take moisture levels into account	provide a definition. We evaluated a number of foods
more consistently in the draft risk	that could be classified as low-moisture foods, and
assessment. (Comments stated that low	identified a number of low-risk activity/food
moisture food should be defined as any	combinations for such foods; however, we did not
food, whether in liquid, solid, or semisolid	evaluate low-moisture foods as a category because
form, having a water activity lower than	there are differences in the way these foods are
0.85.)	manufactured/processed and not all meet the criteria for
	low-risk activity/food combinations.
Comments stated that FDA needs to be	FDA has made revisions to better define terminology
more transparent when defining terms	used in the risk assessment where appropriate. For
such as "hazards RLTO," "too rare," and	example, we use the term "known or reasonably
criteria used to determine severity of	foreseeable hazard" (a biological, chemical (including
biological hazards with respect to	radiological), or physical hazard that is known to be, or
hospitalizations and deaths.	has the potential to be, associated with the facility or
	the food) as more appropriate for the risk assessment
	we conducted. We did not use the term "too rare." We
	explain the criteria used to determine severity of
	biological hazards with respect to hospitalizations and
	deaths in VI.B Qualitative Risk Characterization of
	Biological Hazards, in which we ordered information
	related to frequency and severity and grouped them as
	"low," "medium," and "high," which seemed most
	appropriate given the data available.

# **E.** Comments on Organization

**Table 6. Comments on Organization** 

Public Comment: 2012 Draft Risk	FDA/CFSAN's Response
Assessment	
Comments stated that FDA should present	FDA has clarified text in the risk assessment for the
information more clearly, particularly	intended public audience. We deleted the draft
information intended for a public	appendices because they no longer reflect the "farm"
audience. Comments stated that data from	definition as a result of regulatory changes in that
Appendix 2 should be moved into the	definition.
main document.	

Public Comment: 2012 Draft Risk Assessment	FDA/CFSAN's Response
Comments stated that use of 3 regulatory groups to categorize different types of onfarm activities is confusing and would benefit from clarification. Comments stated that FDA should address common scenarios such as on farm processing activities for products from other farms, such as farmer owned cooperatives, food hubs, and CSA operations.	We deleted the draft appendices because they no longer reflect the "farm" definition as a result of regulatory changes in that definition. (See Appendix 1 in the risk assessment for the definition of "farm" and the definitions of "harvesting," "holding," "manufacturing/processing," and "packing.") These definitions do not distinguish whether activities are performed on foods from the farm conducting them or from other farms. We do not address scenarios for business types such as cooperatives, food hubs and CSA operations because the purpose of this risk assessment is to identify which activity/food combinations subject to the preventive controls rule are low-risk activity/food combinations when performed on-farm. In many cases the activities of farmer owned cooperatives, food hubs, and CSA operations will not be subject to the preventive controls rule, for example, if they fall within the farm definition.

# F. Comments on Opportunity for Public Comment

**Table 7. Comments on Opportunity for Public Comment** 

Public Comment: 2012 Draft Risk	FDA/CFSAN's Response
Assessment	
Comments stated that FDA should revise	The draft risk assessment was subjected to peer review
the draft risk assessment and make it	in accordance with the OMB Final Information Quality
available for additional public comment.	Bulletin for Peer Review before it was made available
	for a broader public comment period that exceeded 10
	months. The additional iterative process recommended
	is not necessary and would go beyond the processes
	routinely applied for public input on a risk assessment.

#### III. Packing/Holding Activities

The first column in Table 7 lists the food or food category that comments ask us to include in the exemption for on-farm, low-risk packing and holding activities. The second column lists the regulatory citation for the relevant exemption for on-farm packing and holding. Importantly, the full regulatory text of the exemption includes some limitations that were not specified in the comments, and Table 7 should not be viewed as equating the requests of the comments with the final regulatory text of the exemption. For example, § 117.5(g)(2)(ix) specifies that the food category "baked goods" includes processed food products such as breads, brownies, cakes, cookies, and crackers, but does not include products that require time/temperature control for safety (such as cream-filled pastries).

Table 8. Requested Food or Food Category and Relevant Exemption for On-Farm Low-Risk Packing and Holding Activities

Food Category Requested in the Comments  * Barley malt syrup  * Barley malt extract  * Other concentrated grain malt products in liquid or powder form  * Birch sap and syrup  * Birch sap and syrup  * Birch sap and syrup  * Coconut sap and sugar  * Cane syrup  * Coconut sap and sugar  * Palm sap and sugar  * Sorghum juice and syrup  * Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  * Birch sap and syrup  * Coconut sap and sugar  * Sorghum juice and syrup  * Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  * Cirackers  * Bread crumbs  * Dry bread  * Crude "dietary ingredient botanicals" in cut, chopped, or powdered form  * Dried pasta  * Dried pasta  * Dried pasta  * Dried herbs and spices, chopped or ground  Dry, unsulfited, fruits and vegetable products  * 117.5(g)(3)(xii)—Other fruit and vegetable products  * 117.5(g)(3)(xiii)—Other fruit and vegetable products  * 11	Packing and Holding Activities	
• Barley malt syrup • Barley malt extract • Other concentrated grain malt products in liquid or powder form • Birch sap and syrup • Birch sap and syrup • Cane syrup • Coconut sap and sugar • Palm sap and sugar • Palm sap and sugar • Sorghum juice and syrup • Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  Chips • Crackers • Bread crumbs • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form • Dried cereal • Dried pasta  Dried pasta  Dried herbs and spices, chopped or ground Dry legume products (e.g., chickpea flour) Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil) • Honey infused with dried herbs or spices  Jerky  Molasses and treacle  Potato starch  • 117.5(g)(3)(xii)—Other fruit and vegetable products		Relevant Regulatory Section (§)
• Barley malt extract • Other concentrated grain malt products in liquid or powder form  • Birch sap and syrup • Cane syrup • Coconut sap and sugar • Date sugar • Palm sap and syrup • Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  Crackers • Bread crumbs • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form • Dried cereal • Dried pasta  Dried herbs and spices, chopped or ground Dry legume products (e.g., chickpea flour) Dry unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil) • Honey infused with dried herbs or spices • Otta atsach  Molasses and treacle  Potato starch  • 117.5(g)(3)(xxi)Ninegar • 117.5(g)(3)(xix)Syrups • 117.5(g)(3)(xix)Other fruit and vegetable products • 117.5(g)(3)(xiii)Other herb and spice p		117.7( ) (2) ( ) ) (2)
• Other concentrated grain malt products in liquid or powder form  • Birch sap and syrup  • Cane syrup  • Coconut sap and sugar  • Palm sap and syrup  • Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  Chips  • Crackers  • Bread crumbs • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form  • Dried cereal  • Dried dereal  • Dried herbs and spices, chopped or ground  Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  • 117.5(g)(3)(xxii)-Vinegar  • 117.5(g)(3)(xix)-Sugar  • 117.5(g)(3)(xix)-Syrups  • 117.5(g)(3)(xix)-Syrups  • 117.5(g)(3)(xix)-Syrups  • 117.5(g)(3)(xiii)-Other fruit and vegetable products  • 117.5(g)(3)(xiii)-Other fruit and vegetable products  • 117.5(g)(3)(xiii)-Other fruit and vegetable products  • 117.5(g)(3)(xii)-Other fruit and vegetable products  • 117.5(g)(3)(xiii)-Other fruit and vegetable products  • 117.5(g)(3)(xii)-Other herb and spice		· · · · · · · · · · · · · · · · · · ·
• 117.5(g)(3)(xxiii)—Any other processed food that does not require time/temperature control for safety  • Birch sap and syrup • Cane syrup • Coconut sap and sugar • Date sugar • Palm sap and sugar • Sorghum juice and syrup • Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  Chips • 117.5(g)(3)(xiii)—Other fruit and vegetable products • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form • Dried cereal • Dried pasta  Dried herbs and spices, chopped or ground Dry legume products (e.g., chickpea flour) Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  117.5(g)(3)(xiii)—Other fruit and vegetable products  117.5(g)(3)(xiii)—Other herb and spice products  117.5(g)(3)(xi)—Game meat jerky  Molasses and treacle  Potato starch  117.5(g)(3)(xiii)—Other fruit and vegetable products		
*Birch sap and syrup  *Cane syrup  *Coconut sap and sugar  *Date sugar  *Palm sap and syrup  *Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  *Chips  *Crackers  *Bread crumbs  *Dry bread  *Crude "dietary ingredient botanicals" in cut, chopped, or powdered form  *Dried pasta  *Dried pasta  *Dried perba and spices, chopped or ground  *Dry legume products (e.g., chickpea flour)  *Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  *Gums and resins  *Int.5(g)(3)(xii)Other fruit and vegetable products  *Int.5(g)(3)(xiii)Other fruit and vegetable products  *Int.5(g)(3)(xiii)Other fruit and vegetable products  *Int.5(g)(3)(xiv)Other parin products  *Int.5(g)(3)(xiv)Other herb and spice products  *Int.5(g)(3)(xiii)Other fruit and vegetable products  *Int.5(g)(3)(xiii)Other herb and spice products  *Int.5(g)(3)(xiii)Other herb and spi		
• Birch sap and syrup • Cane syrup • Coconut sap and sugar • Date sugar • Palm sap and sugar • Sorghum juice and syrup • Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  Chips • Crackers • Bread crumbs • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form • Dried cereal • Dried pasta  Dried herbs and spices, chopped or ground Dry, legume products (e.g., chickpea flour) Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil) • Honey infused with dried herbs or spices • Oil and/or vinegar infused with dried herbs or spices  Potato starch  117.5(g)(3)(xii)—Syrups  • 117.5(g)(3)(xiii)—Other fruit and vegetable products • 117.5(g)(3)(xiii)—Other fruit and vegetable products • 117.5(g)(3)(xiv)—Other herb and spice products  117.5(g)(3)(xiii)—Other fruit and vegetable products  117.5(g)(3)(xii)—Other herb and spice products  117.5(g)(3)(xii)—Other herb and spice products  117.5(g)(3)(xi)—Gums, latexes, and resins that are processed foods  117.5(g)(3)(xv)—Other herb and spice products  117.5(g)(3)(xv)—Other herb and spice products  117.5(g)(3)(xv)—Other herb and spice products	liquid or powder form	
• Cane syrup • Coconut sap and sugar • Date sugar • Palm sap and sugar • Sorghum juice and syrup • Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  Chips  117.5(g)(3)(xiii)Other fruit and vegetable products • Crackers • Bread crumbs • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form • Dried cereal • Dried pasta  Dried herbs and spices, chopped or ground Dry legume products (e.g., chickpea flour) Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil) • Honey infused with dried herbs or spices • Oil and/or vinegar infused with dried herbs or spices  Potato starch  • 117.5(g)(3)(xii)Other fruit and vegetable products  117.5(g)(3)(xiii)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products		
• Coconut sap and sugar • Date sugar • Palm sap and sugar • Sorghum juice and syrup • Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  Chips  117.5(g)(3)(xiii)—Other fruit and vegetable products • Crackers • Bread crumbs • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form • Dried cereal • Dried cereal • Dried pasta  Dried herbs and spices, chopped or ground Dry legume products (e.g., chickpea flour) Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil) • Honey infused with dried herbs or spices • Oil and/or vinegar infused with dried herbs or spices  Potato starch  117.5(g)(3)(xii)—Other fruit and vegetable products  117.5(g)(3)(xiii)—Other herb and spice products  117.5(g)(3)(xii)—Other herb and spice products  117.5(g)(3)(xv)—Other herb and spice products		
• Date sugar  • Palm sap and sugar  • Sorghum juice and syrup  • Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  Chips  • Crackers  • Bread crumbs • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form  • Dried cereal  • Dried pasta  Dried herbs and spices, chopped or ground  Dry legume products (e.g., chickpea flour)  Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  • Honey infused with dried herbs or spices  • Oil and/or vinegar infused with dried herbs or spices  Potato starch  • Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  117.5(g)(3)(xiii)—Other fruit and vegetable products  117.5(g)(3)(xii)—Other fruit and vegetable products  117.5(g)(3)(xii)—Other herb and spice products  117.5(g)(3)(xv)—Other herb and spice products		• 117.5(g)(3)(xx)Syrups
• Palm sap and sugar • Sorghum juice and syrup • Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  Chips  117.5(g)(3)(xiii)—Other fruit and vegetable products • Crackers • Bread crumbs • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form • Dried cereal • Dried pasta  Dried herbs and spices, chopped or ground Dry legume products (e.g., chickpea flour) Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  • Honey infused with dried herbs or spices • Oil and/or vinegar infused with dried herbs or spices Potato starch  Potato starch  117.5(g)(3)(xiii)—Other fruit and vegetable products  117.5(g)(3)(xiii)—Other herb and spice products  117.5(g)(3)(xv)—Other herb and spice products		
• Sorghum juice and syrup • Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  Chips • Crackers • Bread crumbs • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form • Dried cereal • Dried pasta  Dried herbs and spices, chopped or ground Dry legume products (e.g., chickpea flour) Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil) • Honey infused with dried herbs or spices • Oil and/or vinegar infused with dried herbs or spices Fotato starch  Potato starch  • 117.5(g)(3)(xiii)Other fruit and vegetable products • 117.5(g)(3)(xiii)Other herb and spice products • 117.5(g)(3)(xv)Other herb and spice products • 117.		
• Other concentrated natural sweetener having a water activity lower than 0.85 and made with an adequate microbial reduction step  Chips  117.5(g)(3)(xiii)Other fruit and vegetable products  • Crackers  • Bread crumbs  • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form  • Dried cereal  • Dried pasta  Dried herbs and spices, chopped or ground  Dry legume products (e.g., chickpea flour)  Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  • Honey infused with dried herbs or spices  • Oil and/or vinegar infused with dried herbs or spices  Jerky  Molasses and treacle  Potato starch  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xiii)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products		
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an adequate microbial reduction step  Chips  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xiii)Baked goods  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xiv)Other grain products  117.5(g)(3)(xiv)Other herb and spice products  117.5(g)(3)(xiv)Other fruit and vegetable products  117.5(g)(3)(xiii)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products		
Chips Crackers Bread crumbs Dry bread Crude "dietary ingredient botanicals" in cut, chopped, or powdered form Dried herbs and spices, chopped or ground Dry legume products (e.g., chickpea flour) Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form Gums and resins Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil) Honey infused with dried herbs or spices Oil and/or vinegar infused with dried herbs or spices Jerky Molasses and treacle Potato starch  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xv)Other herb and spice products		
• Crackers • Bread crumbs • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form • Dried cereal • Dried pasta  Dried herbs and spices, chopped or ground  Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil) • Honey infused with dried herbs or spices • Oil and/or vinegar infused with dried herbs or spices  Jerky  Molasses and treacle  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xvi)Other herb and spice products  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xvi)Gums, latexes, and resins that are processed foods  117.5(g)(3)(xv)Other herb and spice products	an adequate microbial reduction step	
• Bread crumbs • Dry bread  Crude "dietary ingredient botanicals" in cut, chopped, or powdered form • Dried cereal • Dried cereal • Dried pasta  Dried herbs and spices, chopped or ground Dry legume products (e.g., chickpea flour)  Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil) • Honey infused with dried herbs or spices • Oil and/or vinegar infused with dried herbs or spices  Jerky  Molasses and treacle  Potato starch  Potato starch starch spicus starch spicu	Chips	117.5(g)(3)(xiii)Other fruit and vegetable products
<ul> <li>Dry bread</li> <li>Crude "dietary ingredient botanicals" in cut, chopped, or powdered form</li> <li>Dried cereal</li> <li>Dried pasta</li> <li>Dried herbs and spices, chopped or ground</li> <li>Dry legume products (e.g., chickpea flour)</li> <li>Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form</li> <li>Gums and resins</li> <li>Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)</li> <li>Honey infused with dried herbs or spices</li> <li>Oil and/or vinegar infused with dried herbs or spices</li> <li>Jerky</li> <li>Molasses and treacle</li> <li>Potato starch</li> <li>117.5(g)(3)(xiii)Other fruit and vegetable products</li> <li>117.5(g)(3)(xv)Other herb and spice products</li> </ul>	Crackers	117.5(g)(3)(i)Baked goods
Crude "dietary ingredient botanicals" in cut, chopped, or powdered form  • Dried cereal • Dried pasta  Dried herbs and spices, chopped or ground  Dry legume products (e.g., chickpea flour)  Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  • Honey infused with dried herbs or spices  Oil and/or vinegar infused with dried herbs or spices  Jerky  Molasses and treacle  Potato starch  Dried cereal  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xiii)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products	Bread crumbs	
chopped, or powdered form  • 117.5(g)(3)(xv) Other herb and spice products  • Dried cereal  • Dried pasta  Dried herbs and spices, chopped or ground  Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  • Honey infused with dried herbs or spices  Oil and/or vinegar infused with dried herbs or spices  Jerky  Molasses and treacle  Potato starch  117.5(g)(3)(xiv)Other herb and spice products  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(vii)Gums, latexes, and resins that are processed foods  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products	Dry bread	
<ul> <li>Dried cereal</li> <li>Dried pasta</li> <li>Dried herbs and spices, chopped or ground</li> <li>Dry legume products (e.g., chickpea flour)</li> <li>Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form</li> <li>Gums and resins</li> <li>Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)</li> <li>Honey infused with dried herbs or spices</li> <li>Oil and/or vinegar infused with dried herbs or spices</li> <li>Jerky</li> <li>Molasses and treacle</li> <li>Potato starch</li> <li>Dry, unsulfited, fruits and spice products</li> <li>117.5(g)(3)(xiii)Other fruit and vegetable products</li> <li>117.5(g)(3)(xiii)Other fruit and vegetable products</li> <li>117.5(g)(3)(xv)Other herb and spice products</li> <li>117.5(g)(3)(xv)Other herb and spice products</li> <li>117.5(g)(3)(vi)Game meat jerky</li> <li>117.5(g)(3)(xii)Molasses and treacle</li> <li>Potato starch</li> <li>117.5(g)(3)(xiii)Other fruit and vegetable products</li> </ul>	Crude "dietary ingredient botanicals" in cut,	• 117.5(g)(3)(xiii)Other fruit and vegetable products
• Dried pasta  Dried herbs and spices, chopped or ground  Dry legume products (e.g., chickpea flour)  Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  • Honey infused with dried herbs or spices  Oil and/or vinegar infused with dried herbs or spices  Jerky  Molasses and treacle  Potato starch  Dry, unsulfited, fruits and vegetable products  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xiii)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(xi)Other herb and spice products	chopped, or powdered form	• 117.5(g)(3)(xv) Other herb and spice products
Dried herbs and spices, chopped or ground  Dry legume products (e.g., chickpea flour)  Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  Honey infused with dried herbs or spices  Oil and/or vinegar infused with dried herbs or spices  Jerky  Molasses and treacle  Potato starch  117.5(g)(3)(xvi)Other herb and spice products  117.5(g)(3)(xvi)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products	Dried cereal	117.5(g)(3)(xiv)Other grain products
Dry legume products (e.g., chickpea flour)  Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  Honey infused with dried herbs or spices  Oil and/or vinegar infused with dried herbs or spices  Jerky  Molasses and treacle  Potato starch  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(xiii)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(xiii)Other herb and spice products		
Dry, unsulfited, fruits and vegetables in cut, chopped, sliced, shredded, or other form  Gums and resins  117.5(g)(3)(xiii)Other fruit and vegetable products  117.5(g)(3)(vii)Gums, latexes, and resins that are processed foods  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  • Honey infused with dried herbs or spices  • Oil and/or vinegar infused with dried herbs or spices  Jerky  117.5(g)(3)(xv)Other herb and spice products	Dried herbs and spices, chopped or ground	117.5(g)(3)(xv)Other herb and spice products
chopped, sliced, shredded, or other form  Gums and resins  117.5(g)(3)(vii)Gums, latexes, and resins that are processed foods  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  • Honey infused with dried herbs or spices  • Oil and/or vinegar infused with dried herbs or spices  Jerky  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(vi)Game meat jerky  Molasses and treacle  117.5(g)(3)(xi)Molasses and treacle  Potato starch  117.5(g)(3)(xiii)Other fruit and vegetable products		117.5(g)(3)(xiii)Other fruit and vegetable products
Gums and resins  117.5(g)(3)(vii)Gums, latexes, and resins that are processed foods  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  • Honey infused with dried herbs or spices  • Oil and/or vinegar infused with dried herbs or spices  Jerky  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(vi)Game meat jerky  117.5(g)(3)(vi)Game meat jerky  117.5(g)(3)(xi)Molasses and treacle  Potato starch  117.5(g)(3)(xii)Other fruit and vegetable products	Dry, unsulfited, fruits and vegetables in cut,	117.5(g)(3)(xiii)Other fruit and vegetable products
processed foods  Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  • Honey infused with dried herbs or spices  • Oil and/or vinegar infused with dried herbs or spices  Jerky  Jerky  Molasses and treacle  Potato starch  processed foods  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(vi)Game meat jerky  117.5(g)(3)(vi)Game meat jerky  117.5(g)(3)(xi)Molasses and treacle	chopped, sliced, shredded, or other form	
Herbal extracts (e.g., in solvents such as glycerin, alcohol and oil)  • Honey infused with dried herbs or spices  • Oil and/or vinegar infused with dried herbs or spices  Jerky  Int.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(xv)Other herb and spice products	Gums and resins	117.5(g)(3)(vii)Gums, latexes, and resins that are
glycerin, alcohol and oil)  • Honey infused with dried herbs or spices  • Oil and/or vinegar infused with dried herbs or spices  Jerky  Il 17.5(g)(3)(xv)Other herb and spice products  117.5(g)(3)(vi)Game meat jerky  Molasses and treacle  Potato starch  117.5(g)(3)(xii)Molasses and treacle  117.5(g)(3)(xiii)Other fruit and vegetable products		processed foods
<ul> <li>Honey infused with dried herbs or spices</li> <li>Oil and/or vinegar infused with dried herbs or spices</li> <li>Jerky</li> <li>Molasses and treacle</li> <li>Potato starch</li> <li>117.5(g)(3)(xv)Other herb and spice products</li> <li>117.5(g)(3)(vi)Game meat jerky</li> <li>117.5(g)(3)(xi)Molasses and treacle</li> <li>117.5(g)(3)(xii)Other fruit and vegetable products</li> </ul>	Herbal extracts (e.g., in solvents such as	117.5(g)(3)(xv)Other herb and spice products
<ul> <li>Oil and/or vinegar infused with dried herbs or spices</li> <li>Jerky</li> <li>Molasses and treacle</li> <li>Potato starch</li> <li>117.5(g)(3)(vi)Game meat jerky</li> <li>117.5(g)(3)(xi)Molasses and treacle</li> <li>117.5(g)(3)(xii)Other fruit and vegetable products</li> </ul>	glycerin, alcohol and oil)	
or spices  Jerky 117.5(g)(3)(vi)Game meat jerky  Molasses and treacle 117.5(g)(3)(xi)Molasses and treacle  Potato starch 117.5(g)(3)(xiii)Other fruit and vegetable products	Honey infused with dried herbs or spices	117.5(g)(3)(xv)Other herb and spice products
or spices  Jerky 117.5(g)(3)(vi)Game meat jerky  Molasses and treacle 117.5(g)(3)(xi)Molasses and treacle  Potato starch 117.5(g)(3)(xiii)Other fruit and vegetable products		
Molasses and treacle117.5(g)(3)(xi)Molasses and treaclePotato starch117.5(g)(3)(xiii)Other fruit and vegetable products		
Molasses and treacle117.5(g)(3)(xi)Molasses and treaclePotato starch117.5(g)(3)(xiii)Other fruit and vegetable products	Jerky	117.5(g)(3)(vi)Game meat jerky
Potato starch 117.5(g)(3)(xiii)Other fruit and vegetable products		
	Potato starch	
ropcom [11/.5(g)(5)(xiv)Other grain products	Popcorn	117.5(g)(3)(xiv)Other grain products

Food or Food Category Requested in the	Relevant Regulatory Section (§)
Comments	
Salt, baking powder	117.5(g)(3)(xxiii)Any other processed food that does not
	require time/temperature control for safety
Vitamins, minerals, and processed dietary	117.5(g)(3)(xxiii)Any other processed food that does not
ingredients (e.g., bone meal) in powdered,	require time/temperature control for safety
granular, or other solid form	

In Table 8, we list those foods or food categories, requested by comments, that are not included in the exemption for on-farm, low-risk packing and holding activities, and explain why.

Table 9. Why Certain Requested Food Categories Are Not Included in the Exemption for On-Farm Low-Risk Packing and Holding Activities

Food or Food Category Requested in the	Why the Food or Food Category is Not Listed in the
Comments	Exemption
Barley malt and other grain malts	Malting increases the potential for a hazard, e.g., growth of
	microbial pathogens such as Salmonella, during the germination
	process. (However, the risk is mitigated when malting is done in
	conjunction with making sugar, syrups or vinegar.)
Crude "dietary ingredient botanicals" in	These are RACs, so packing and holding them is within the
whole, form	farm definition.
Dates (RACs)	These are RACs, so packing and holding them is within the
	farm definition.
Dried intact herbs and spices	Although these are processed foods, packing and holding them
	is specifically included within the farm definition.
Dried legumes	Although these are processed foods, packing and holding them
	is specifically included within the farm definition.
Gums, resins, and exudates in solid,	Gums, resins and exudates (including latexes such as chicle) are
powdered, granular, or paste form	RACs, so packing and holding them is within the "farm"
	definition. These products are made into processed foods in
	some cases, such as by boiling or cutting. The powdered,
	granular and paste forms from further processing are considered
	in the risk assessment as "any other processed food that does not
	require time/temperature control for safety."

#### IV. Manufacturing/Processing Activities

The first column in Table 9 lists the activity/food combination that comments ask us to include in the exemption for on-farm, low-risk manufacturing/processing activity/food combinations. The second column lists the regulatory citation for the relevant exemption for an on-farm manufacturing/processing activity/food combination. Importantly, the full regulatory text of the exemption includes some limitations that were not specified in the comments, and Table 9 should not be viewed as equating the requests of the comments with the final regulatory text of the exemption. For example, § 117.5(g)(2)(ix) specifies that the food category "baked goods" includes processed food products such as breads, brownies, cakes, cookies, crackers, but does not include products that require time/temperature control for safety (such as cream-filled pastries).

Table 10. Requested Activity/Food Combinations and Relevant Exemption for On-Farm Low-Risk Manufacturing/Processing Activities

Activity/Food Combination Requested in	Regulatory Section (§) Listing the Exemption
the Comments	
Baking activities involving grain products	117.5(h)(3)(ix)Making baked goods from milled grain
	products (e.g., breads and cookies)
Chopping, coring, cutting, peeling, pitting,	117.5(h)(3)(ii)Chopping, coring, cutting, peeling, pitting,
shredding, and slicing:	shredding, and slicing:
<ul> <li>Crackers, dry bread, bread crumbs</li> </ul>	Baked goods
• Dry cereal, popcorn	Other grain products
• Gums, resins and exudates	Gums/latexes/resins
• Jerky	Game meat jerky
Cooking low-moisture foods with dry heat	117.5(h)(3)(xxv)Roasting and toasting baked goods
Drying/dehydrating cut fruits and vegetables	117.5(h)(3)(iv)Drying/dehydrating (that includes
that are immediately moved into a drying	additional manufacturing or is performed on processed
process	foods) other fruit and vegetable products with pH less than
	4.2, and other herb and spice products (e.g., chopped fresh
	herbs, including tea)
Distilling mint	117.5(h)(3)(v)Extracting (including by pressing, by
<ul> <li>Extracting virgin olive oil</li> </ul>	distilling, and by solvent extraction) from:
• Extracting oils from seeds (e.g., sunflower	Dried/dehydrated herb and spice products
seeds, flax seeds)	• Fresh herbs
<ul> <li>Making liquid botanical extracts from dry</li> </ul>	• Fruits and vegetables
botanical raw material with solvents such as	• Grains
glycerin, ethanol, vinegar, honey	Other herb and spice products
Grinding/milling/cracking/crushing:	117.5(h)(3)(vii)Grinding/milling/cracking/crushing:
<ul> <li>Crackers, dry bread, bread crumbs</li> </ul>	Baked goods
<ul> <li>Dry cereal, dry pasta, popcorn</li> </ul>	Other grain products
• Dry legumes	Dried/dehydrated fruit and vegetable products
Mixing	117.5(h)(3)(xxii)—Mixing other herb and spice products
<ul> <li>Honey infused with dried herbs or spices</li> </ul>	
<ul> <li>Oil and/or vinegar infused with dried herbs</li> </ul>	
or spices	
Making maple cream, maple sugar, and	117.5(h)(3)(x)Making candy
molded maple candy	
Making molasses and treacle from sugarcane	117.5(h)(3)(xiv)Making molasses and treacle
and sugar beets	

Activity/Food Combination Requested in	Regulatory Section (§) Listing the Exemption
the Comments	
Making apple syrup	117.5(h)(3)(xix)Making sugar and syrup from:
Making syrups from sorghum, rice	Fruits and vegetables
Making syrups from malted barley	• Grains
<ul> <li>Making syrups such as birch and walnut</li> </ul>	Other grain products
syrup	• Saps
Making vinegar, including infused and	• 117.5(h)(3)(xxi)—Making vinegar from fruits and
flavored vinegars	vegetables, other fruit and vegetable products, and other
-	grain products
	• 117.5(h)(3)(xxii)—Mixing other herb and spice products
Processing tea	• 117.5(h)(3)(iv)Drying/dehydrating (that includes
	additional manufacturing or is performed on processed
	foods) other fruit and vegetable products with pH less than
	4.2, and other herb and spice products (e.g., chopped fresh
	herbs, including tea)

In Table 10, we list those activity/food combinations, requested by comments, that are not included in the exemption for on-farm, low-risk manufacturing/processing activity/food combinations, and explain why.

Table 11. Why Certain Requested Activity/Food Combinations Are Not Included in the Exemption for On-

Farm Low-Risk Manufacturing/Processing Activities

Activity/Food Combination Requested in the	Why the Activity/Food Combination is Not Listed in
Comments	the Exemption
Acidifying, pickling, and fermenting low-acid fruits	Acidifying, pickling, and fermenting activities control
and vegetables made in compliance with CGMPs	microbial hazards and, thus, are not low-risk activities.
Cucumbers, garlic scapes, peppers, and other low-	The production of low-acid processed foods must control
acid foods that are preserved	the microbial hazard C. botulinum and, thus, is not a low-
	risk activity.
Drying/dehydrating tea leaves (e.g., by withering)	Drying/dehydrating tea leaves is within the "farm"
	definition.
Fermentation of vegetables	Fermenting activities control microbial hazards and, thus,
	are not low-risk activities.
Food processing conducted in compliance with	It is the risk associated with the activity/food combination,
relevant State regulation	not the regulatory oversight by a State, that is relevant to
	this exemption.
Freezing fruit juices	Fruit juices are outside the scope of the RA based on the
	statutory framework of FSMA.
Low-acid fruits and vegetables manufactured in	The production of low-acid processed foods must control
compliance with CGMPs under the FD&C Act	the microbial hazard C. botulinum and, thus, is not a low-
	risk activity.
Making pickles and salsa	The processes for making pickles and salsa must control
	microbial hazards and, thus, are not low-risk activities.
Roasting grains for animal feed	This activity involves the production of animal food,
	which is subject to the animal preventive controls rule
	rather than the human preventive controls rule.