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Development of an index to assess adherence to the traditional Mexican diet using a modified Delphi method

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Ethical Standards Disclosure: This study was conducted according to the guidelines laid down in the Declaration of Helsinki and all procedures involving research study participants were approved by the University of Bristol - School for Policy Studies Research Ethics Committee (SPSREC/18-19/053). Written informed consent was obtained from all subjects.

Questionnaire used for round 1

This questionnaire aims to develop an index to measure adherence to the traditional Mexican diet (TMexD) in present time and in adults (>20 years)¹. Constructing this index could enable us, and other researchers, to use a consistent definition of this diet, which could be used to evaluate in research or in practice if adhering to the TMexD is associated with some health outcomes.

In order to develop such index, we previously conducted a review to identify which foods could be included in the TMexD. We would like to know if you agree or disagree with the inclusion of those foods in the TMexD.

In the first section, you will suggest the foods (and their amounts) that you think need to be included in a TMexD index. In the second section, you will be able to suggest which foods need to be included in each food group. At the end of the questionnaire you will be able to add final comments (optional).

Please enter your 4-digit ID number:

Please select your area or work: Research/ consultancy/ non-governmental organization/ teaching/ government/ industry/ private practice.

First section

- The following food groups were mentioned in most sources describing the TMexD. Please answer, based on your knowledge (or the evidence you consider appropriate) whether you **agree or disagree** on including the following food groups in the TMexD. If you agree on the inclusion of a food group, please select the **weekly frequency** (<1 to 7 days per week), and the **daily portions** in which it is consumed in the TMexD².
- For example, if you were completely sure on including fruits as part of the TMexD, you would suggest completely agree. And if you thought that in the TMexD fruits are consumed 4 times per week and on each day 2 portions are consumed; you would select 4 in weekly frequency and 2 in daily portions. For each category, we have provided a link with visual aid to help you understand the servings corresponding to each food group.

Food item	Inclusion in the TMexD					Frequency (<1 – 7)	Amount (<1 – 7+)
	Completely disagree		Completely agree				
Maize products	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Other grains	☐	☐	☐	☐	☐	___ (per week)	___ (servings)

¹ This is the age cut-off point used in the National Health and Nutrition Survey in Mexico (Romero-Martínez M, Shamah-Levy T, Vielma-Orozco E, Heredia-Hernández O, Mojica-Cuevas J, Cuevas-Nasu L, et al. Encuesta Nacional de Salud y Nutrición (Ensanut 2018): metodología y perspectivas. Salud Publica Mex. 2019; 61:917–23).

² A reference to the size of these portions can be found in pages 9-11.

Tubers	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Legumes	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Vegetables	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Fruits	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Herbs and condiments	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Beverages	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Alcoholic beverages	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Meats	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Fish and seafood	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Sweets and sweeteners	☐	☐	☐	☐	☐	___ (per week)	___ (servings)

- c. In the systematic review, we also analysed separately the sources reporting a TMexD using literature reviews (e.g. those that reviewed historical or anthropological sources) and empirical studies (e.g. those that directly observed the diet of the population). Additionally, we analysed separately the sources reporting the TMexD in the North, Centre, and South of Mexico.

By analyzing these studies separately, we identified other food groups that were mentioned. However, these food groups, unlike the ones presented above, were not present in all study types. For example, some were mentioned in literature reviews and studies reporting intakes in Central and Southern Mexico, but not in original studies and those referring to Northern Mexico.

Please answer whether you **agree or disagree** on including the following food groups in the TMexD. If you agree on the inclusion of a food group, please select the **weekly frequency** (<1 to 7 days per week), and the **daily portions** in which it is consumed in the TMexD. For each category, we have provided a link with visual aid to help you understand the servings corresponding to each food group.

Note: Food groups with an asterisk (*) were only present in studies based on literature reviews. Food groups with a cross (†) were only present in empirical studies. Food groups with an ^N, ^C, ^S, ^{ALL} were only present in studies referring to the North, Centre, South Mexico, and all regions on Mexico, respectively.

Food item	Inclusion in the TMexD					Frequency (<1 – 7)	Amount (<1 – 7+)
	Completely disagree		Completely agree				
Oils and fats *, †, C, S, ALL	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Nuts and seeds *, C, S, ALL	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Insects *, C, S, ALL	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Reptiles *, C, S	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Dairy†, N, ALL	☐	☐	☐	☐	☐	___ (per week)	___ (servings)
Eggs†, N, ALL	☐	☐	☐	☐	☐	___ (per week)	___ (servings)

- d. If you think that other food groups, apart from the ones previously mentioned, need to be included in the TMexD, please suggest them below: _____

The food groups suggested by participants and added in following rounds can be found in Supplementary materials I, Table S2.

Another modification was amending the group 'maize products', as 32% of participants commented on the complexity of suggesting quantities and food items in such a mixed food group. As such, this group was split into 'maize products' (e.g., tortilla) and 'maize-based dishes' (e.g., tacos).

- e. In the TMexD index, do you think all the food groups (that you selected) are equally important and should have equal weight? Or do you think they should have different weights? For example, if one were to measure adherence to the TMexD with this index, would you give one point to each food group which recommendation is met, or would you give two points to certain food groups?, or, would you subtract one point when its recommendation is not met?

- i. All food groups should be assigned one point (when its recommendation is met)
- ii. Some food groups should be assigned two points (when its recommendation is met)
(please list the food groups that should be awarded two points)

- iii. Some food groups should be assigned minus one point (when its recommendation is not met) (please list the food groups that should be awarded minus one point)

Option iii was omitted from following rounds given that less than 50% of participants selected it in round one, and because no participants nominated any food group to be evaluated using this measure.

Second section

- a. Do you think that the following items should be considered in the index to measure adherence to the TMexD? Select the ones that you consider appropriate:
- Cooking your own meals
 - Using traditional cooking techniques
 - Eating with family and friends
 - Other (please specify) _____

If you agree on including one or more of these elements, in which way do you think they should be evaluated in an index? For example, do you think the individuals following these actions should be awarded one point? _____

The options suggested by participants and added in following rounds can be found in Supplementary materials I, Table S9.

Third section

- a. In the systematic review, the following **individual food items** were present in the food groups previously mentioned. Please answer whether you agree or disagree with the inclusion of these food items in each food group in the TMexD.

Note: Food items with an asterisk (*) were only present in studies based on literature reviews. Food items with a cross (†) were only present in studies that directly assessed diet consumption (empirical studies). Food groups with an ^N, ^C, ^S, ^{ALL} were only present in studies referring to the North, Centre, South Mexico, and all regions on Mexico, respectively.

Food item	Agree	Neither agree nor disagree	Disagree
Maize products			
<i>Atole</i>	☐	☐	☐
<i>Pinole</i>	☐	☐	☐
Tortillas	☐	☐	☐
<i>Tamales</i>	☐	☐	☐
Mixed ^{ALL} (sopes, palomitas, gorditas, tostadas, totopos)	☐	☐	☐
Soups (<i>pozole</i> , <i>menudo</i>) ^{ALL}	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			
Other grains			
Amaranth	☐	☐	☐
Rice	☐	☐	☐
Wheat (bread, pasta, tortillas)	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			
Tubers			
Potato	☐	☐	☐
Sweet potato	☐	☐	☐
Yucca *, S, ALL	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			
Legumes			
Beans	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			
Vegetables			
Squash	☐	☐	☐

<i>Chayote</i>	☐	☐	☐
<i>Nopales</i>	☐	☐	☐
<i>Quelites</i>	☐	☐	☐
Tomato	☐	☐	☐
<i>Tomatillo</i>	☐	☐	☐
Carrot ^{ALL}	☐	☐	☐
<i>Guaje</i> ^S	☐	☐	☐
<i>Huauzontle</i> ^C	☐	☐	☐
Lettuce ^{ALL}	☐	☐	☐
Mushrooms * C, S, ALL	☐	☐	☐
<i>Papaloquelite</i> ^S	☐	☐	☐
Purslane ^{S, ALL}	☐	☐	☐
Squash blossoms ^{ALL}	☐	☐	☐

Others (please specify), or use this space to comment on this food group _____

Fruits

<i>Anona</i>	☐	☐	☐
<i>Capulín</i>	☐	☐	☐
Guava	☐	☐	☐
<i>Jicama</i>	☐	☐	☐
<i>Mamey</i>	☐	☐	☐
Plums	☐	☐	☐
Prickly pear	☐	☐	☐
<i>Zapote</i>	☐	☐	☐
Apple ^{ALL}	☐	☐	☐
Banana †, N, ALL	☐	☐	☐
Berries (strawberry, blueberries, etc.) ^{ALL}	☐	☐	☐
Citrus fruits (orange, lemon, lime, mandarin, grapefruit) *, †, N, ALL	☐	☐	☐
<i>Guanábana</i> *, S	☐	☐	☐
Mango ^{ALL}	☐	☐	☐
Melon ^{ALL}	☐	☐	☐
Peach ^{ALL}	☐	☐	☐
<i>Nanche</i> ^S	☐	☐	☐
Pear ^{ALL}	☐	☐	☐
<i>Pitahaya</i> ^{ALL}	☐	☐	☐
Papaya *.S	☐	☐	☐
Pineapple *	☐	☐	☐

<i>Tejocote</i> * C, S, ALL	☐	☐	☐
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Others (please specify), or use this space to comment on this food group _____

Herbs and condiments

Salt	☐	☐	☐
<i>Chile</i> or salsa	☐	☐	☐
Onion	☐	☐	☐
<i>Achiote</i> ALL	☐	☐	☐
<i>Acuyo</i> or <i>hoja santa</i> S, ALL	☐	☐	☐
<i>Chipilin</i> ^S	☐	☐	☐
Coriander ALL	☐	☐	☐
<i>Epazote</i> *, C, S, ALL	☐	☐	☐
Garlic ALL	☐	☐	☐
Parsley ALL	☐	☐	☐
Pepper ALL	☐	☐	☐
Vanilla *, C, ALL	☐	☐	☐

Others (please specify), or use this space to comment on this food group _____

Oils and fats

Avocado	☐	☐	☐
Cream ALL	☐	☐	☐
Lard ^S	☐	☐	☐
Vegetable oil †, ALL	☐	☐	☐

Others (please specify), or use this space to comment on this food group _____

Nuts and seeds

Chia seeds	☐	☐	☐
Pumpkin seeds	☐	☐	☐
Peanuts *, C, ALL	☐	☐	☐
Sesame seeds ALL	☐	☐	☐

Others (please specify), or use this space to comment on this food group _____

Beverages

Cacao drinks	☐	☐	☐
Natural juices	☐	☐	☐
<i>Aguas frescas</i> ALL	☐	☐	☐
Coffee †, ALL	☐	☐	☐
Soda †	☐	☐	☐
Tea †	☐	☐	☐

Others (please specify), or use this space to comment on this food group _____

Alcoholic beverages

<i>Pulque</i>	☐	☐	☐
Beer ^N	☐	☐	☐
<i>Pozol agrio</i> ^{C, S} (fermented maize beverage)	☐	☐	☐
<i>Tesguino</i> ^{ALL} (fermented maize beverage)	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			
Fish and seafoods			
Catfish ^S	☐	☐	☐
Shrimp ^{*, C, S, ALL}	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			
Meats			
Armadillo	☐	☐	☐
Chicken	☐	☐	☐
Duck	☐	☐	☐
Hare	☐	☐	☐
Rabbit	☐	☐	☐
Turkey	☐	☐	☐
Venison	☐	☐	☐
Beef ^{*, ALL}	☐	☐	☐
Chevon ^{ALL}	☐	☐	☐
Lamb ^{ALL}	☐	☐	☐
Partridge ^S	☐	☐	☐
Pork [*]	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			
Sweets and sweeteners			
Honey	☐	☐	☐
Sugar and sugarcane	☐	☐	☐
Desserts ^{ALL}	☐	☐	☐
<i>Pan dulce</i> ^{ALL}	☐	☐	☐
Sweets ^{ALL}	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			
Insects			
<i>Ahuahutle</i> ^C (water-fly eggs)	☐	☐	☐
Ants and their larvae (<i>jicoter</i> ^S <i>escamoles</i>) ^{*, C, S}	☐	☐	☐
Grasshoppers and locusts ^{*,S}	☐	☐	☐
<i>Maguey</i> worms ^{*, C,S}	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			
Reptiles			

Iguana * ^{C, S}	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			
Dairy			
Cheese † ^{ALL}	☐	☐	☐
Milk † ^N	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			
Eggs			
Chicken eggs ^{ALL}	☐	☐	☐
Others (please specify), or use this space to comment on this food group _____			

The foods suggested by participants in each group can be found in Supplementary materials I, Table S11. The comments suggested by participants, which resulted in questions to improve the index, can be found in Supplementary materials I, Table S1.

- b. If a person consumes other foods apart from the ones you selected, would you still consider them for inclusion in the TMexD index? For example, if fruits were part of the TMexD index, and one person only consumed kiwi (which is not one of the fruits listed), would you still provide one point for meeting the fruit group recommendation? _____
- c. If you think something else should be added or modified in the questionnaire, please suggest it below:

Thank you for completing this questionnaire. We will be in touch with you soon in order to complete the second-round questionnaire.

EXAMPLES OF PORTION SIZES (images representing these portion sizes can be found by consulting the references cited)

1 PORTION IS EQUIVALENT TO:

MAIZE PRODUCTS

1 tortilla⁽¹⁾

OTHER GRAINS

½ cup of rice or pasta⁽¹⁾ (the size of your fist)

Or

1 slice of bread⁽¹⁾

TUBERS

½ large potato or 1 small potato⁽¹⁾

LEGUMES

½ cup of chickpeas, beans, lentils, or peas⁽¹⁾ (the size of your fist)

VEGETABLES

1 large carrot, 1 cup broccoli, 1 tomato, ½ maize cob⁽²⁾ (approx. 80 g) (1 handful)

OR

1 cup green leaves (approx. 80 g)⁽²⁾ (2 handfuls)

FRUITS

1 cup of pineapple, grapes, melon, strawberries, watermelon, or papaya (approx. 80g)⁽¹⁾ (the size of your fist)

BEVERAGES

½ glass of juice⁽²⁾

Or

1 cup of chocolate/atole⁽³⁾

Or

2 glasses of *agua fresca*⁽⁴⁾

Or

1 cup of tea/coffee⁽²⁾

ALCOHOLIC BEVERAGES

1 jar of *pulque*⁽³⁾

Or

1 pint of beer⁽⁵⁾

MEATS

60 g cooked (the size of the palm of your hand)⁽¹⁾

FISH AND SEAFOOD

60 g cooked (the size of the palm of your hand)⁽¹⁾

HERBS AND CONDIMENTS

There are no pre-established portions of herbs and condiments. Consider one portion as cooking/eating with these ingredients once per day.

FATS AND OILS

1/3 avocado⁽²⁾, 1 tablespoon of cream⁽²⁾, or 1 teaspoon of oil⁽²⁾

NUTS AND SEEDS

1 handful of nuts (approx.30 g)⁽¹⁾

DAIRY PRODUCTS

1 glass of milk⁽²⁾, or the size of 2 fingers of cheese (approx.30g)⁽⁶⁾

EGGS

1 egg⁽¹⁾

INSECTS

1 handful of insects (approx. 30 g)⁽¹⁾

REPTILES

60 g cooked (the size of the palm of your hand)⁽¹⁾

MAIZE-BASED DISHES

1 *tamal*⁽⁷⁾

Or

2 *tlacoyos*, *sopes*, *chalupas*⁽⁸⁾

Or

1 bowl of *pozole*⁽⁹⁾

QUELITES

1 cup of *quelites*⁽²⁾ (2 handfuls)

PLAIN WATER

1 glass of plain water⁽¹⁰⁾ (240 ml)

CHILE

There are no pre-established portions of *chiles*. Consider one portion as cooking/eating with these ingredients once per day.

NATURAL SWEETENERS/SWEET PRODUCTS

2 teaspoons of honey or sugar⁽²⁾

Or

2 small pieces of candy⁽²⁾

References for portion sizes and images:

The portion sizes were selected based on standard portion sizes from The British Dietetic Association⁽¹¹⁾, Pérez Lizaaur et al.⁽¹²⁾ and Juárez Martínez⁽¹³⁾.

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Figure 1. Participant flow diagram

Supplementary figure S1. Process followed to identify participants. Adapted from Okoli and Pawlowski (2004)*

*Okoli C, Pawlowski SD. (2004) The Delphi method as a research tool: An example, design considerations and applications. *Inf Manag.* 42:15-29.

Table S1. Participant's responses to questions made to refine food classification in the index

Statement	Resolution (% of participants voting for that response)*	
	Round 2 (n=18)	Round 3 (n=17)
<i>Pinole</i> should be in natural sweeteners (instead of in maize products)	Yes: 61.1%	Yes: 52.9%
Both fried and non-fried maize-based dishes should be included	Yes: 81.2%	N/A
All types of vegetable oils (not only one seed type) should be included	Yes: 94.1%	N/A
Both sweetened and non-sweetened beverages should be included	Yes: 68.7%	N/A
The group 'beverages' should stay the same (and not separated into more subgroups)	Yes: 81.2%	N/A
The group 'sugar and sweeteners' should be separated into more subgroups	Yes: 77.7%	N/A
All types of honey (not only bee or maguey honey) should be considered	Yes: 70.6%	N/A
<i>Guajolote</i> should not replace turkey	Yes: 70.6%	N/A
<i>Requesón</i> should not replace cheeses	Yes: 70.5%	N/A
Peas should be moved from legumes to vegetables	N/A	Yes: 64.7%
Avocado should stay in fats and oils (not moved to fruits)	N/A	Yes: 76.5%
Cream should stay in fats and oils (not moved to dairy)	N/A	Yes: 64.7%
All drinks using cacao should be grouped as 'cacao-based drinks'	N/A	Yes: 88.2%
Cheeses should refer to all types of cheese (not only white cheeses)	N/A	Yes: 88.2%

N/A, non-applicable.

*To refine food classification in the index, an item should have achieved consensus by at least 67% of participants. However, when consensus was not reached by this cut-off criterion, majority of votes (>50%) was used as a cut-off for consensus instead.

Table S2. Participant agreement [percentage of agreement, mean (SD) and coefficient of variation] on inclusion of food groups in the index, rounds 1-3

	Round 1 (n=22)*			Round 2 (n=18)*			Round 3 (n=17)†		
	Percentage of agreement‡	Mean§ (SD)	Coefficient of variation	Percentage of agreement‡	Mean§ (SD)	Coefficient of variation	Percentage of agreement‡	Mean§ (SD)	Coefficient of variation
Maize products	95.5% ^a	4.82 (0.85)	0.18	100% ^a	5.00 (0.0)	0.00	N/A	N/A	N/A
Other grains	68.2%	3.95 (1.09)	0.28	50.0%	3.78 (1.0)	0.27	82.4%	4.06 (0.83)	0.20
Tubers	81.8%	4.09 (0.81)	0.20	77.8%	4.11 (0.76)	0.18	N/A	N/A	N/A
Legumes	95.5% ^a	4.73 (0.88)	0.19	100% ^a	5.00 (0.0)	0.00	N/A	N/A	N/A
Vegetables	90.9% ^a	4.64 (0.95)	0.21	100% ^a	4.89 (0.32)	0.07	N/A	N/A	N/A
Fruits	90.9%	4.55(0.96)	0.21	100% ^a	4.89 (0.32)	0.07	N/A	N/A	N/A
Beverages	77.3%	3.95 (1.40)	0.35	94.5%	4.44 (0.78)	0.18	N/A	N/A	N/A
Alcoholic beverages	40.9%	3.05 (1.50)	0.49	50.0%	3.39 (1.04)	0.31	52.9%	3.41 (1.23)	0.36
Meats	72.7%	3.77 (1.15)	0.31	88.9%	4.00 (0.91)	0.23	N/A	N/A	N/A
Fish and seafood	59.1%	3.36 (1.22)	0.36	50.0%	3.28 (1.32)	0.40	58.8%	3.53 (1.23)	0.35
Sugars and sweeteners	63.6%	3.27 (1.45)	0.44	66.7%	3.56 (1.20)	0.34	N/A	N/A	N/A
Herbs and condiments	95.5% ^a	4.68 (0.89)	0.19	100% ^a	4.83(0.38)	0.08	N/A	N/A	N/A
Fats and oils	90.9%	4.36 (0.95)	0.22	100%	4.72 (0.46)	0.10	N/A	N/A	N/A
Nuts and seeds	77.3%	4.09 (1.11)	0.27	77.8%	4.33 (0.84)	0.19	N/A	N/A	N/A
Dairy products	59.1%	3.64 (1.22)	0.33	50.0%	3.61 (1.14)	0.32	76.4%	3.88 (0.93)	0.24
Eggs	90.9%	4.50 (0.67)	0.15	88.9%	4.33 (0.69)	0.16	N/A	N/A	N/A
Insects	68.2%	3.72 (1.20)	0.32	55.6%	3.56 (1.46)	0.41	64.7%	3.65 (1.17)	0.32
Reptiles	18.1%	2.55 (1.14)	0.45	22.2%	2.44 (1.38)	0.57	N/A	N/A	N/A
Maize-based dishes	N/A	N/A	N/A	100% ^c	4.83 (0.38)	0.08	N/A	N/A	N/A
<i>Quelites</i> (wild greens)	N/A	N/A	N/A	77.8%	3.83 (1.42)	0.37	58.8%	3.71 (1.10)	0.30
<i>Chile</i>	N/A	N/A	N/A	72.2%	3.72 (1.67)	0.45	70.6%	4.00 (1.32)	0.33
Plain water	N/A	N/A	N/A	72.2%	4.17 (1.25)	0.30	82.4% ^c	4.35 (1.37)	0.31
Natural sweeteners¶	N/A	N/A	N/A	N/A	N/A	N/A	58.8%	3.41 (1.00)	0.29
Sweet products¶	N/A	N/A	N/A	N/A	N/A	N/A	47.1%	3.47 (1.33)	0.38

N/A, non-applicable. SD, standard deviation.

^aAt least ≥75% participants exclusively selected ‘totally agree’.

*Rows marked with ‘N/A’ represent food groups that were not introduced in the study until later rounds.

†Rows marked with ‘N/A’ represent food groups that had achieved consensus in round 2 and were eliminated from round 3.

‡Represents the percentage of participants selecting either ‘agree’ or ‘totally agree’.

§Descriptive analysis of responses from a 5-point Likert scale (with 1 as ‘totally disagree’ and 5 as ‘totally agree’), were used to calculate means for each category.

||Represents food group suggested by participants in round 1.

¶Represents food groups created in round 3 after suggestions to separate the group ‘sugars and sweeteners’ into ‘natural sweeteners’ and ‘sweet products’.

Table S3. Participant agreement on quantities of food groups consumed in the index, rounds 1-2

		Round 1 (n=22)*		Round 2 (n=18)	
		Weekly frequency	Daily portions	Weekly frequency	Daily portions
Maize products	7	90.5%	9.1%	100%	11.8%
	5	9.5%	9.1%		17.6%
	3		13.6%		29.4%
	1		13.6%		17.6%
	0		18.2%		5.6%
Other grains	7	36.4%	4.5%	29.4%	11.8%
	5	13.6%	9.5%	5.9%	6.3%
	3	13.6%	9.5%	23.5%	12.5%
	1	4.5%	38.1%	5.9%	37.5%
	0		38.1%	5.9%	43.8%
Tubers	7				
	5	31.8%			
	3	36.4%	38.1%	38.9%	27.8%
	1	4.5%	61.9%	27.8%	72.2%
	0			5.6%	
Legumes	7	42.9%		55.6%	
	5	19.0%	4.5%	16.7%	
	3	23.8%	4.5%	11.1%	16.7%
	1	9.5%	31.8%		22.2%
	0		59.1%		61.1%

Table S3 (continued). Participant agreement on quantities of food groups consumed in the index, rounds 1-2

Round 1 (n=22)*				Round 2 (n=18)					
	Weekly frequency		Daily portions			Weekly frequency		Daily portions	
Vegetables	7	57.1%	7+	4.5%	7	88.9%	7+	5.6%	
	5	14.3%	5		5	5.6%	5	5.6%	
		14.3%				5.6%			
	3	9.5%	3	27.3%	3		3	50.0%	
		4.8%		31.8%				16.7%	
	1		1	36.4%	1		1	22.2%	
Fruits	0		0		0		0		
	7	50.0%	7+		7	77.8%	7+		
		10.0%	5		5	5.6%	5		
	5	35.0%	3	14.3%	3	16.7%	3	33.3%	
	3	5.0%		61.9%				61.1%	
	1		1	23.8%	1		1	5.6%	
Beverages	0		0		0		0		
	7	38.9%	7+		7	55.6%	7+		
		11.1%	5		5	5.6%	5	5.6%	
	5	16.7%	3	10.5%	3	5.6%	3	11.1%	
		16.7%		47.4%		11.1%		22.2%	
	3		1	42.1%	1	5.6%	1	61.1%	
Alcoholic beverages	0		0		0		0		
	7		7+		7		7+		
		5.6%	5		5		5		
		5.6%				6.3%			
	3	16.7%	3	11.1%	3		3	6.3%	
		33.3%		16.7%		37.5%		25.0%	
	1		1	61.1%	1	43.8%	1	62.5%	
	5.6%		5.6%		12.5%		6.3%		
0		0	5.6%	0		0			

Table S3 (continued). Participant agreement on quantities of food groups consumed in the index, rounds 1-2

Table S3 (continued). Participant agreement on quantities of food groups consumed in the index, rounds 1-2

Round 1 (n=22)*				Round 2 (n=18)			
Weekly frequency		Daily portions		Weekly frequency		Daily portions	
Fats and oils	7	50.0%	7+	77.8%	7+	5.6%	
		9.1%		5.6%		5.6%	
	5	18.2%	5	11.1%	5		
		9.1%		5.6%			
	3	9.1%	3		3	11.1%	
		4.5%				50.0%	
	1		1		1	33.3%	
	0		0		0		
Nuts and seeds	7	23.8%	7+	41.2%	7+		
		9.5%					
	5	4.8%	5	11.8%	5		
		4.8%					
	3	9.5%	3	11.8%	3	23.5%	
		19.0%		11.8%		70.6%	
	1	23.8%	1	17.6%	1		
		4.8%		5.9%		5.9%	
	0		0		0		
Dairy products	7	30.0%	7+	11.8%	7+		
				5.9%			
	5	10.0%	5	29.4%	5		
		10.0%		5.9%			
	3	15.0%	3	11.8%	3	52.9%	
		20.0%		23.5%			
	1	5.0%	1	5.9%	1	41.2%	
		10.0%		5.9%		5.9%	
	0		0		0		
Eggs	7	14.3%	7+	11.1%	7+		
		9.5%		5.6%			
	5	14.3%	5	27.8%	5		
		14.3%					
	3	38.1%	3	27.8%	3	33.3%	
		9.5%		22.2%		66.7%	
	1		1		1		
	0		0		0		

Table S3 (continued). Participant agreement on quantities of food groups consumed in the index, rounds 1-2

Round 1 (n=22)*				Round 2 (n=18)			
		<i>Weekly frequency</i>	<i>Daily portions</i>			<i>Weekly frequency</i>	<i>Daily portions</i>
Insects	7	10.0%	7+	7	6.3%	7+	
	5		5	5		5	
	3	25.0%	3	3	12.5%	3	
	1	15.0%	1	1	6.3%	1	31.3%
	1	10.0%	1	1	18.8%	1	31.3%
	0	35.0%	0	0	56.3%	0	37.5%
	0	5.0%	0	0		0	
Reptiles	7		7+	7		7+	
	5		5	5		5	
	3	5.6%	3	3		3	
	1	16.7%	1	1	13.3%	1	6.7%
	1	38.9%	1	1	33.3%	1	33.3%
	0	38.9%	0	0	53.3%	0	53.3%
	0		0	0		0	
Maize-based dishes†	7		7+	7	5.6%	7+	5.6%
	5		5	5	5.6%	5	
	3		3	3	5.6%	3	16.7%
	1		1	1	38.9%	1	55.6%
	1		1	1	5.6%	1	22.2%
	0		0	0	38.9%	0	
	0		0	0		0	
<i>Quelites</i> (wild greens)†	7		7+	7	12.5%	7+	
	5		5	5	18.8%	5	
	3		3	3	6.3%	3	6.3%
	1		1	1	12.5%	1	25.0%
	1		1	1	6.3%	1	62.5%
	0		0	0	31.3%	0	6.3%
	0		0	0	12.5%	0	

Table S3 (continued). Participant agreement on quantities of food groups consumed in the index, rounds 1-2

Round 1 (n=22)*		Round 2 (n=18)	
Weekly frequency	Daily portions	Weekly frequency	Daily portions
Chile†	N/A	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>
		<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>
Plain water†	N/A	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>
		<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>

*Rows marked with 'N/A' represent food groups that were not introduced in the study until later rounds.

†Food group suggested by participants in first round.

Table S4. Participant agreement (median and interquartile range) on inclusion of food groups in the index, rounds 1-3

	Round 1 (n=22)*		Round 2 (n=18)*		Round 3 (n=17)†	
	<i>Median‡</i>	<i>Interquartile range</i>	<i>Median</i>	<i>Interquartile range</i>	<i>Median</i>	<i>Interquartile range</i>
Maize products	5.0	0.0	5.0	0.0	N/A	N/A
Other grains	4.0	2.0	3.5	2.0	4.0	1.0
Tubers	4.0	1.0	4.0	1.0	N/A	N/A
Legumes	5.0	0.0	5.0	0.0	N/A	N/A
Vegetables	5.0	0.0	5.0	0.0	N/A	N/A
Fruits	5.0	1.0	5.0	0.0	N/A	N/A
Beverages	4.5	1.0	5.0	1.0	N/A	N/A
Alcoholic beverages	3.0	2.0	3.5	1.0	4.0	1.0
Meats	4.0	2.0	4.0	0.0	N/A	N/A
Fish and seafood	4.0	2.0	3.5	2.0	4.0	1.0
Sugars and sweeteners	4.0	2.0	4.0	1.0	N/A	N/A
Herbs and condiments	5.0	0.0	5.0	0.0	N/A	N/A
Fats and oils	5.0	1.0	5.0	1.0	N/A	N/A
Nuts and seeds	4.0	1.0	5.0	1.0	N/A	N/A
Dairy products	4.0	2.0	3.5	2.0	4.0	0.0
Eggs	5.0	1.0	4.0	1.0	N/A	N/A
Insects	4.0	2.0	4.0	3.0	4.0	1.0
Reptiles	3.0	1.0	2.0	2.0	N/A	N/A
Maize-base dishes§	N/A	N/A	5.0	0.0	N/A	N/A
<i>Quelites</i> (wild greens)§	N/A	N/A	4.0	1.0	4.0	2.0
<i>Chile</i> §	N/A	N/A	4.5	3.0	5.0	2.0
Plain water§	N/A	N/A	5.0	2.0	5.0	0.0
Natural sweeteners	N/A	N/A	N/A	N/A	4.0	1.0
Sweet products	N/A	N/A	N/A	N/A	3.0	2.0

N/A, non-applicable.

*Rows marked with 'N/A' represent food groups that were not introduced in the study until later rounds.

†Rows marked with 'N/A' represent food groups that had achieved consensus in round 2 and were eliminated from round 3.

‡Descriptive analysis of responses from a 5-point Likert scale (with 1 as 'totally disagree' and 5 as 'totally agree'), were used to calculate medians for each category.

§Represents food group suggested by participants in round 1.

||Represents food groups created in round 3 after suggestions to separate the group 'sugars and sweeteners' into 'natural sweeteners' and 'sweet products'.

Table S5. Participant agreement on food group quantities consumed in the index, round 3 (n=17)

Table S5 (continued). Participant agreement on food group quantities consumed in the index, round 3 (n=17)

Daily portions		Weekly portions	
Natural sweeteners	7	31.3%	
	5	12.5%	
	3	18.8%	
	1	18.8%	
	1	18.8%	
Sweet products	7	6.3%	
	6		
	5		
	4	25.0%	
	3		
	2	18.8%	
	1	50.0%	
Dairy product	10		
	7		
	5	18.8%	
	4	18.8%	
	3	37.5%	
	2	25.0%	
Insects	3		
	2		
	1	37.5%	
	<1	50.0%	
	0	12.5%	
<i>Quelites</i> (wild greens)	6	5.9%	
	4		
	2	17.6%	
	2	17.6%	
	<1	47.1%	
<i>Chile</i>	14	5.9%	
	7	23.5%	
	6		
	5	47.1%	
	4	17.6%	
	3	5.9%	

Table S6. Participants' views on the scoring system for food groups in the index, rounds 1-3

	Round 1 (n=22)	Round 2 (n=18)	Round 3 (n=17)
All food groups should be awarded one point when their recommendation is met	45.5%	27.8%	35.3%
Some food groups should be awarded two points when their recommendation is met	54.5%	72.2%	64.7%
Some foods should be awarded minus 1 point when their recommendation is not met*	22.7%	N/A	N/A

N/A, non-applicable.

*The option 'minus one point' was omitted in rounds 2 and 3 given that less than 50% of participants selected it in round 1, and because no participants nominated any food group to be evaluated using this measure.

Table S7. Food groups suggested to be awarded two points in the index, rounds 1-3

	% of participants in round 1 (n=12)*	% of participants in round 2 (n=13)*	% of participants in round 3 (n=11)*
Vegetables	91.7%	76.9%	81.8%
Maize products	66.7%	76.9%	90.9%
Other grains	0%	7.7%	0%
Tubers	0%	7.7%	0%
Legumes	41.7%	84.6%	100%
Fruits	41.7%	23.1%	45.5%
Nuts and seeds	25.0%	7.7%	0%
Insects	16.7%	15.4%	9.1%
Meats	8.3%	7.7%	0%
Fish and seafood	8.3%	7.7%	0%
Fats and oils	8.3%	15.4%	9.1%
Natural sweeteners	8.3%	0%	0%
Maize-based dishes†	N/A	15.4%	27.3%
<i>Quelites</i> (wild greens)†	N/A	15.4%	0%
<i>Plain water</i> †	N/A	7.7%	0%

*The numbers represent only the percentage of participants who suggested that some food groups must be awarded two points, rather than all participants in the survey.

†Food group suggested by participants in the first round.

Table S8. Participant's views on scoring system for food-related habits in the index, rounds 1-3

	Round 1 (n=22)	Round 2 (n=18)	Round 3 (n=17)
Food-related behaviours should be awarded one point when their recommendation is met	63.6%	72.2%	82.4%
Food-related behaviours should be awarded two points when their recommendation is met	13.6%	5.6%	11.8%
Food-related behaviours should be awarded three points when their recommendation is met	0%	5.6%	0%
Food-related behaviours should be awarded ½ point when their recommendation is not met	4.5%	0%	0%

Table S9. Participant agreement on inclusion of food-related habits in the index, rounds 1-3

	Percentage of participants in round 1 (n=22)	Percentage of participants in round 2 (n=18)	Percentage of participants in round 3 (n=17)
Cooking your meals/consuming home-made meals*	63.6%	83.3%	88.2%
Using traditional culinary techniques	77.3%	72.2%	52.9%
Eating with family, friends, and colleagues†	59.1%	88.9%	82.4%
Buying at markets and <i>tianguis</i> ‡§	4.5%	66.7%	82.4%
Consuming high-quality foods (e.g. consuming whole grains only)‡	4.5%	44.4%	N/A
Consuming in-season foods‡	4.5%	72.2%	64.7%
Not having time to accomplish these goals (e.g. not having time to eat with family/friends or not having time to cook)	N/A	5.6%	23.5%
Consume traditional dishes in celebrations	N/A	5.6%	29.4%

N/A, non-applicable.

*This option was re-named to ‘consuming home-made meals’ after round 2, due to feedback of 28% of participants.

†Colleagues were added after second round, due to participant feedback.

‡Option suggested by participants in first round.

§Refers to a traditional open-air market, which occurs on certain days of the week.

||Option suggested by participants in second round.

Table S10. Participant's views on how to evaluate food-related habits in the index, rounds 1-3

	Measures recommended (% of participants recommending measure*)		
	Round 1 (n=22)	Round 2 (n=18)	Round 3 (n=17)
Cooking your meals/consuming home-made meals†	N/A	Frequency: Daily (40.0%), 5 times per week (40.0%), 3 times per week (13.3%), 4 times per week (6.7%).	Frequency: Daily (53.3%), 5 times/week (13.3%), 4 times/week (13.3%), 10 times/week (6.7%), 6 times/week (6.7%).
Using traditional culinary techniques	Specific recommendations: Consuming nixtamalized maize (17.6%), <i>tamales</i> (11.8%), non-fried (11.8%), steamed, and grilled (5.9%) foods. Consuming hand-made tortillas (5.9%).	Frequency: 5 times per week (46.2%), 3 times per week (23.1%), daily (15.4%), 4 times per week (7.7%), 4 times per week (7.7%). Specific recommendations: Not using microwave (7.7%), consuming non-fried foods (7.7%)	Specific recommendations: Consuming grilled (44.4%), boiled (22.2%), steamed (22.2%), roasted (22.2%), stir-fried (11.1%) or cured (11.1%) foods. Consuming, soups, sauces and stews (11.8%), nixtamalized maize (11.1%), hand-made <i>tortillas</i> (11.1%). Not consuming battered (11.1%), fried (11.1%) or roasted (11.1%) foods. Using <i>molcajete</i> ^a and <i>metate</i> ^a (11.1%). Not using pressure cooker (11.1%).
Eating with family, friends, and colleagues‡	N/A	Frequency: Daily (31.3%), 5 times/week (25.0%), 4 times/week (12.5%), 2 times/week (12.5%), once/week (12.5%), 6 times/week (6.3%).	Frequency: Daily (64.3%), 10 times/week (7.1%), 5 times/week (7.1%), 4 times/week (7.1%), 3 times/week (7.1%), 2 times/week (7.1%).
Buying at markets and <i>tianguis</i> §	N/A	Frequency: Once/week (50.0%), 3 times/week (33.3%), once/month (16.6%), 2 times/week (8.3%), 6 times/week (8.3%).	Frequency: Once/week (78.6%), 2 times/week (7.1%), 5 times/week (7.1%).
Consuming high-quality foods (e.g. consuming whole grains only)§	N/A	Frequency: Daily (50.0%), 6 times/week (25.0%), 5 times/week (25.0%).	N/A

Table S10 (continued). Participant's views on how to evaluate food-related behaviours in the index

Consuming in-season foods§	N/A	Frequency: Daily (46.2%), 5 times/week (23.1%), 4 times/week (23.1%), 3 times/week (7.7%).	Specific recommendations: Asking people if they know which are the in-season products (27.3%), or whether they know where the products they buy are produced (18.2%). Buying from local markets (18.2%), buying low-cost foods (9.1%), buying what is available (9.1%). Comparing what the person consumes against official lists of seasonal products (9.1%).
Not having time to accomplish these goals (e.g. not having time to eat with family/friends or not having time to cook)¶	N/A	N/A	N/A
Consume traditional dishes in celebrations¶	N/A	N/A	Specific recommendations: Consuming foods traditional of Christmas (40.0%), patron saints celebrations (20.0%), day of the dead (20.0%), weddings and baptisms (20.0%), Easter (20.0%), Three Kings' Day (20.0%). Consuming <i>mole</i> ^b (40.0%), <i>mixiotes</i> ^c (40.0%), <i>tamales</i> ^d (20.0%), <i>atole</i> ^e (20.0%), <i>pipián</i> ^f (20.0%), home-made pastries (20.0%), <i>pozole</i> ^g (20.0%), <i>barbacoa</i> ^h (20.0%).

N/A, non-applicable.

^aAncient cooking instruments used for crushing and grinding maize or condiments. ^b Traditional Mexican *chile*-based sauce. ^c Seasoned, pit-barbecued meat dish. ^d Dish prepared with maize dough, can be sweet or savoury. ^eHot beverage prepared with maize dough. ^fTraditional Mexican pumpkin-seed-based sauce. ^g Soup made with maize kernels, meat (optional), *chile*, and seasonings. ^h pit-barbecued lamb.

*The numbers represent only the percentage of participants who suggested that those elements should be included, rather than all participants in the survey.

†This option was re-named to 'consuming home-made meals' after round 2, due to feedback of 28% of participants.

‡Colleagues were added after the second round, due to participant feedback.

§Option suggested by participants in first round.

||Refers to a traditional open-air market, which occurs on certain days of the week.

¶Option suggested by participants in second round.

Table S11. Participant agreement on inclusion of individual foods into food groups, rounds 1-3

	Round 1 (n=22)			Round 2 (n=18)			Round 3 (n=17)		
	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree
Maize products									
Tortillas	0%	0%	100%	0%	0%	100%	N/A	N/A	N/A
Other maize presentations (<i>tostadas</i> and <i>totopos</i> ^a)	14%	14%	73%	0%	6%	94%	12%	12%	76%
Maize-based dishes									
<i>Tamales</i> ^b	18%	9%	73%	0%	6%	94%	N/A	N/A	N/A
<i>Pozole</i> ^c	10%	14%	76%	0%	6%	94%	N/A	N/A	N/A
<i>Tacos</i> *	N/A	N/A	N/A	0%	0%	100%	N/A	N/A	N/A
<i>Quesadillas</i> *	N/A	N/A	N/A	0%	0%	100%	N/A	N/A	N/A
Mixed Dishes ^e : <i>Sopes</i> , <i>gorditas</i> , <i>huaraches</i> , <i>tlacoyos</i> , <i>chalupas</i> , <i>tlayudas</i>	N/A	N/A	N/A	0%	0%	100%	N/A	N/A	N/A
<i>Esquites</i> and <i>elote</i> ^{f*}	N/A	N/A	N/A	6%	6%	88%	N/A	N/A	N/A
Other grains									
Amaranth	0%	5%	96%	0%	0%	100%	N/A	N/A	N/A
Rice	9%	27%	64%	6%	33%	61%	6%	6%	88%
Wheat	9%	36%	55%	11%	33%	56%	24%	24%	53%
Oats*	N/A	N/A	N/A	17%	44%	39%	41%	35%	25%
Sorghum [†]	N/A	N/A	N/A	N/A	N/A	N/A	65%	29%	6%
Tubers									
Sweet potato	0%	23%	77%	0%	0%	100%	N/A	N/A	N/A
Potato	0%	29%	71%	0%	17%	83%	N/A	N/A	N/A
Yucca	5%	45%	50%	0%	17%	83%	N/A	N/A	N/A
<i>Chinchayote</i> *	N/A	N/A	N/A	11%	28%	61%	6%	18%	76%
Legumes									
Beans	0%	0%	100%	0%	0%	100%	N/A	N/A	N/A
Lentils*	N/A	N/A	N/A	0%	11%	89%	N/A	N/A	N/A
Chickpeas*	N/A	N/A	N/A	0%	17%	83%	N/A	N/A	N/A
Fava beans*	N/A	N/A	N/A	0%	11%	89%	N/A	N/A	N/A
<i>Ayocotes</i> [†]	N/A	N/A	N/A	6%	28%	67%	12%	18%	71%
Vegetables									
Squash	0%	0%	100%	0%	0%	100%	N/A	N/A	N/A
<i>Chayote</i>	0%	0%	100%	0%	0%	100%	N/A	N/A	N/A
<i>Nopales</i>	0%	0%	100%	0%	0%	100%	N/A	N/A	N/A
Tomato	0%	0%	100%	0%	0%	100%	N/A	N/A	N/A
Green tomato	0%	5%	95%	0%	0%	100%	N/A	N/A	N/A

Table S11 (continued). Participant agreement on inclusion of individual foods into food groups, rounds 1-3

	Round 1 (n=22)			Round 2 (n=18)			Round 3 (n=17)		
	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree
<i>Quelites</i> (wild greens; includes <i>papaloquelite</i> , <i>verdolaga</i> , <i>huauzontle</i> , purslane, <i>chaya</i> , etc.)	0%	9%	91%	0%	0%	100%	N/A	N/A	N/A
Mushrooms	0%	19%	81%	0%	22%	78%	N/A	N/A	N/A
<i>Guaje</i>	0%	29%	71%	0%	33%	67%	6%	18%	76%
Carrot	0%	24%	76%	0%	22%	78%	N/A	N/A	N/A
Lettuce	10%	20%	70%	0%	17%	83%	N/A	N/A	N/A
Squash blossoms	0%	0%	100%	0%	0%	100%	N/A	N/A	N/A
Radish*	N/A	N/A	N/A	0%	33%	67%	0%	12%	88%
Green beans*	N/A	N/A	N/A	0%	6%	94%	N/A	N/A	N/A
Spinach*	N/A	N/A	N/A	0%	11%	89%	N/A	N/A	N/A
Chard*	N/A	N/A	N/A	0%	6%	94%	N/A	N/A	N/A
Cucumber*	N/A	N/A	N/A	6%	11%	83%	N/A	N/A	N/A
<i>Huitlacoche</i> *	N/A	N/A	N/A	0%	0%	100%	N/A	N/A	N/A
<i>Chilacayote</i> *	N/A	N/A	N/A	0%	17%	83%	N/A	N/A	N/A
Palm*	N/A	N/A	N/A	44%	17%	39%	53%	18%	29%
Celery*	N/A	N/A	N/A	0%	44%	56%	12%	59%	29%
Peas	N/A	N/A	N/A	6%	28%	67%	12%	24%	65%
Alfalfa sprouts†	N/A	N/A	N/A	N/A	N/A	N/A	12%	35%	53%
Aubergine†	N/A	N/A	N/A	N/A	N/A	N/A	18%	35%	47%
Broccoli†	N/A	N/A	N/A	N/A	N/A	N/A	6%	24%	71%
Cauliflower†	N/A	N/A	N/A	N/A	N/A	N/A	6%	18%	76%
Cabbage†	N/A	N/A	N/A	N/A	N/A	N/A	12%	41%	47%
Fruits									
<i>Anona</i>	11%	42%	47%	0%	31%	69%	6%	0%	94%
<i>Capulín</i>	0%	35%	65%	0%	12%	88%	N/A	N/A	N/A
Plum	0%	11%	89%	0%	12%	88%	N/A	N/A	N/A
Guava			100%	0%	6%	94%	N/A	N/A	N/A
<i>Jícama</i>	0%	5%	95%	0%	0%	100%	N/A	N/A	N/A
<i>Mamey</i>	0%	20%	80%	0%	6%	94%	N/A	N/A	N/A
Prickly pear			100%	0%	0%	100%	N/A	N/A	N/A
<i>Zapote</i>	0%	5%	95%	0%	0%	100%	N/A	N/A	N/A
Peach	5%	20%	75%	6%	24%	71%	6%	47%	47%
Berries	10%	14%	76%	12%	24%	65%	12%	18%	71%
<i>Guanábana</i>	0%	20%	80%	0%	12%	88%	N/A	N/A	N/A
Citrus fruits	0%	5%	95%	0%	6%	94%	N/A	N/A	N/A
Mango	0%	10%	90%	0%	6%	94%	N/A	N/A	N/A
Apple	5%	9%	86%	0%	6%	94%	N/A	N/A	N/A

Table S11 (continued). Participant agreement on inclusion of individual foods into food groups, rounds 1-3

	Round 1 (n=22)			Round 2 (n=18)			Round 3 (n=17)		
	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree
Melon	5%	25%	70%	6%	18%	76%	N/A	N/A	N/A
<i>Nanche</i>	0%	26%	74%	0%	18%	82%	N/A	N/A	N/A
Papaya	0%	10%	90%	0%	6%	94%	N/A	N/A	N/A
Pear	5%	20%	75%	6%	18%	94%	N/A	N/A	N/A
Pineapple	0%	25%	75%	0%	12%	88%	N/A	N/A	N/A
<i>Pitahaya</i>	5%	16%	79%	0%	12%	88%	N/A	N/A	N/A
Banana	0%	10%	90%	0%	6%	94%	N/A	N/A	N/A
<i>Tejocote</i>	0%	5%	95%	0%	0%	100%	N/A	N/A	N/A
Medlar*	N/A	N/A	N/A	6%	24%	71%	18%	29%	53%
Watermelon*	N/A	N/A	N/A	6%	18%	76%	N/A	N/A	N/A
<i>Xoconostle</i> *	N/A	N/A	N/A	0%	18%	82%	N/A	N/A	N/A
<i>Chicozapote</i> †	N/A	N/A	N/A	N/A	N/A	N/A	0%	12%	88%
<i>Pitaya</i> †	N/A	N/A	N/A	N/A	N/A	N/A	0%	12%	88%
Pomegranate†	N/A	N/A	N/A	N/A	N/A	N/A	0%	18%	82%
Grapes†	N/A	N/A	N/A	N/A	N/A	N/A	6%	41%	53%
<i>Garambullo</i> †	N/A	N/A	N/A	N/A	N/A	N/A	6%	24%	71%
Herbs and condiments									
Onion	0%	5%	95%	0%	0%	100%	N/A	N/A	N/A
<i>Chile</i> or salsa	0%	0%	100%	0%	0%	100%	N/A	N/A	N/A
Salt	15%	15%	70%	12%	29%	59%	6%	35%	59%
<i>Achiote</i>	0%	19%	81%	0%	6%	94%	N/A	N/A	N/A
<i>Acuyo</i> or <i>hojasanta</i>	0%	14%	86%	0%	12%	88%	N/A	N/A	N/A
Garlic	0%	5%	95%	0%	6%	94%	N/A	N/A	N/A
<i>Chipilín</i>	0%	24%	76%	0%	13%	87%	N/A	N/A	N/A
Cilantro	0%	5%	95%	0%	0%	100%	N/A	N/A	N/A
<i>Epazote</i>	0%	9%	91%	0%	0%	100%	N/A	N/A	N/A
Parsley	0%	11%	90%	0%	0%	100%	N/A	N/A	N/A
Pepper	0%	25%	75%	0%	6%	94%	N/A	N/A	N/A
Vanilla	5%	9%	86%	0%	6%	94%	N/A	N/A	N/A
Peppermint*	N/A	N/A	N/A	7%	27%	67%	0%	47%	53%
<i>Pipicha</i> *	N/A	N/A	N/A	0%	33%	67%	12%	37%	50%
Basil*	N/A	N/A	N/A	25%	25%	50%	12%	47%	41%
<i>Spirulina</i>	N/A	N/A	N/A	47%	29%	24%	53%	29%	18%
<i>Algae</i> *	N/A	N/A	N/A	47%	29%	24%	53%	29%	18%
<i>Tequesquite</i> (mineral salt)†	N/A	N/A	N/A	N/A	N/A	N/A	12%	12%	76%
Cinnamon†	N/A	N/A	N/A	N/A	N/A	N/A	0%	12%	88%
Clove†	N/A	N/A	N/A	N/A	N/A	N/A	6%	18%	76%
Fats and oils									
Avocado	0%	5%	96%	6%	0%	94%	N/A	N/A	N/A
Vegetable oil	10%	29%	62%	0%	35%	65%	0%	24%	76%

Table S11 (continued). Participant agreement on inclusion of individual foods into food groups, rounds 1-3

	Round 1 (n=22)			Round 2 (n=18)			Round 3 (n=17)		
	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree
Cream	20%	35%	45%	18%	29%	53%	29%	24%	47%
Lard	19%	19%	62%	12%	29%	59%	6%	24%	71%
Nuts and seeds									
Pumpkin seeds	0%	5%	95%	0%	0%	100%	N/A	N/A	N/A
Chia seeds	5%	9%	86%	6%	6%	89%	N/A	N/A	N/A
Sesame seeds	0%	10%	90%	0%	6%	94%	N/A	N/A	N/A
Peanuts	0%	5%	95%	6%	0%	94%	N/A	N/A	N/A
<i>Chilacayote</i> seeds*	N/A	N/A	N/A	6%	33%	61%	12%	12%	76%
<i>Capulín</i> seeds*	N/A	N/A	N/A	11%	56%	33%	18%	18%	65%
Pecan nuts*	N/A	N/A	N/A	0%	22%	78%	N/A	N/A	N/A
Almonds*	N/A	N/A	N/A	0%	28%	72%	18%	41%	41%
Sunflower seeds*	N/A	N/A	N/A	0%	22%	78%	N/A	N/A	N/A
Beverages									
Cacao drinks (includes <i>pozol</i> , <i>tacalate</i> *, <i>tejate</i> *, and <i>chilatole</i> *)	5%	0%	95%	0%	6%	94%	N/A	N/A	N/A
<i>Atole</i> ^g	9%	9%	82%	0%	6%	94%	N/A	N/A	N/A
<i>Aguas Frescas</i> ^h	5%	15%	80%	0%	22%	78%	N/A	N/A	N/A
Coffee	0%	10%	90%	0%	17%	83%	N/A	N/A	N/A
Natural juice	11%	16%	74%	11%	44%	44%	31%	31%	38%
Soda	79%	11%	11%	78%	11%	11%	N/A	N/A	N/A
Tea	10%	30%	60%	0%	33%	67%	31%	0%	69%
Alcoholic beverages									
<i>Pulque</i> ⁱ	11%	16%	74%	0%	22%	78%	N/A	N/A	N/A
Beer	45%	15%	40%	11%	28%	61%	6%	53%	41%
<i>Pozolagrio</i> ^j	5%	15%	80%	0%	12%	88%	N/A	N/A	N/A
<i>Tesguino</i> ^k	5%	20%	75%	6%	12%	82%	12%	24%	65%
<i>Tepache</i> ^l *	N/A	N/A	N/A	0%	17%	83%	N/A	N/A	N/A
<i>Aguamiel</i> ^m *	N/A	N/A	N/A	0%	12%	88%	N/A	N/A	N/A
<i>Atoleagrio</i> ⁿ *	N/A	N/A	N/A	0%	13%	88%	N/A	N/A	N/A
<i>Mezcal</i> *	N/A	N/A	N/A	18%	24%	59%	18%	35%	47%
Tequila*	N/A	N/A	N/A	18%	24%	59%	18%	35%	47%
Wine*	N/A	N/A	N/A	47%	41%	12%	65%	29%	6%
Fish and seafood									
Shrimp	5%	29%	67%	0%	13%	88%	N/A	N/A	N/A
Catfish	15%	25%	60%	6%	18%	77%	N/A	N/A	N/A
<i>Huauchinango</i> (red snapper)*	N/A	N/A	N/A	6%	6%	88%	N/A	N/A	N/A
<i>Mojarra</i> (sea bream)*	N/A	N/A	N/A	0%	12%	88%	N/A	N/A	N/A

Table S11 (continued). Participant agreement on inclusion of individual foods into food groups, rounds 1-3

	Round 1 (n=22)			Round 2 (n=18)			Round 3 (n=17)		
	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree
Trout*	N/A	N/A	N/A	6%	18%	77%	N/A	N/A	N/A
Dogfish*	N/A	N/A	N/A	0%	0%	100%	N/A	N/A	N/A
Tuna*	N/A	N/A	N/A	0%	13%	88%	N/A	N/A	N/A
Crab*	N/A	N/A	N/A	6%	31%	63%	18%	41%	41%
Sardines*	N/A	N/A	N/A	0%	18%	82%	N/A	N/A	N/A
Carp*	N/A	N/A	N/A	6%	19%	75%	N/A	N/A	N/A
<i>Jaiba</i> (type of crab)*	N/A	N/A	N/A	6%	19%	75%	N/A	N/A	N/A
Octopus*	N/A	N/A	N/A	0%	19%	81%	N/A	N/A	N/A
Oysters*	N/A	N/A	N/A	0%	25%	75%	N/A	N/A	N/A
Lobster†	N/A	N/A	N/A	N/A	N/A	N/A	24%	42%	35%
Mussels†	N/A	N/A	N/A	N/A	N/A	N/A	24%	42%	35%
Snails†	N/A	N/A	N/A	N/A	N/A	N/A	17%	53%	29%
Meats									
Duck	33%	29%	38%	22%	44%	33%	12%	35%	53%
Turkey	5%	10%	86%	0%	6%	94%	N/A	N/A	N/A
<i>Guajolote</i> (native turkey)	N/A	N/A	N/A	N/A	N/A	N/A	0%	0%	100%
Chicken	0%	10%	91%	0%	11%	89%	N/A	N/A	N/A
Armadillo	38%	38%	24%	29%	41%	29%	41%	29%	29%
Rabbit	0%	38%	62%	0%	33%	67%	6%	18%	76%
Hare	19%	48%	33%	17%	44%	39%	35%	24%	41%
Venison	33%	29%	38%	28%	33%	39%	29%	29%	41%
Chevon	19%	33%	48%	0%	29%	71%	6%	18%	76%
Pork	0%	14%	86%	0%	6%	94%	N/A	N/A	N/A
Lamb	10%	29%	62%	0%	33%	67%	6%	24%	71%
Beef	5%	14%	82%	0%	17%	83%	N/A	N/A	N/A
Quail *	N/A	N/A	N/A	18%	35%	47%	18%	12%	71%
Hen*	N/A	N/A	N/A	0%	35%	65%	0%	6%	94%
Field rat*	N/A	N/A	N/A	35%	41%	24%	35%	35%	29%
<i>Tlacuahu</i> (opposom)*	N/A	N/A	N/A	41%	41%	18%	47%	18%	35%
Natural sweeteners									
Sugar and sugar cane	32%	11%	58%	11%	11%	78%	18%	6%	76%
Honey	5%	10%	85%	0%	11%	89%	6%	6%	88%
<i>Mezquite</i> ^{o*}	N/A	N/A	N/A	0%	24%	77%	18%	12%	71%
<i>Piloncillo</i> ^{p *}	N/A	N/A	N/A	0%	6%	94%	6%	0%	94%
<i>Pinole</i> ^{q ‡}	5%	29%	67%	28%	33%	39%	19%	13%	69%
Sweet products									
Candy	6%	22%	72%	6%	33%	61%	23%	12%	65%
<i>Sweet bread</i> (pastries)	21%	16%	63%	11%	39%	50%	18%	18%	65%

Table S11 (continued). Participant agreement on inclusion of individual foods into food groups, rounds 1-3

	Round 1 (n=22)			Round 2 (n=18)			Round 3 (n=17)		
	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree	Disagree	Neither agree/ disagree	Agree
Mexican desserts	6%	33%	61%	11%	33%	56%	29%	24%	47%
Insects									
<i>Ahuahutle</i> (water fly eggs)	15%	30%	55%	6%	19%	75%	N/A	N/A	N/A
Grasshoppers	0%	10%	91%	0%	11%	89%	N/A	N/A	N/A
Maguey worms	0%	19%	81%	0%	11%	89%	N/A	N/A	N/A
Ants	0%	19%	81%	0%	11%	89%	N/A	N/A	N/A
<i>Jumiles</i> or (stink bug)*	N/A	N/A	N/A	0%	22%	78%	N/A	N/A	N/A
<i>Cocopache</i> (bug)*	N/A	N/A	N/A	6%	44%	50%	19%	38%	44%
Caterpillar*	N/A	N/A	N/A	7%	47%	47%	19%	38%	44%
<i>Acociles</i> (crayfish)*	N/A	N/A	N/A	6%	17%	78%	N/A	N/A	N/A
Reptiles									
Iguana	21%	37%	42%	7%	40%	53%	N/A	N/A	N/A
Viper*	N/A	N/A	N/A	23%	46%	31%	N/A	N/A	N/A
Frog*	N/A	N/A	N/A	14%	43%	43%	N/A	N/A	N/A
Crocodile*	N/A	N/A	N/A	23%	54%	23%	N/A	N/A	N/A
Dairy products									
Milk	23%	14%	64%	12%	29%	59%	12%	29%	59%
Cheese	5%	14%	82%	0%	11%	89%	N/A	N/A	N/A
Yogurt*	N/A	N/A	N/A	17%	33%	50%	29%	29%	42%
<i>Requesón</i> [†]	N/A	N/A	N/A	N/A	N/A	N/A	0%	6%	94%
Eggs									
Chicken eggs	0%	5%	95%	0%	6%	94%	N/A	N/A	N/A
<i>Guajolote</i> eggs*	N/A	N/A	N/A	0%	33%	67%	12%	12%	76%
Quail eggs*	N/A	N/A	N/A	6%	50%	44%	19%	13%	69%
Duck eggs*	N/A	N/A	N/A	18%	47%	35%	18%	29%	53%
Goose eggs*	N/A	N/A	N/A	18%	47%	35%	23%	29%	47%

N/A, non-applicable.

^a Fried tortillas. ^b Dish prepared with maize dough, can be sweet or savoury. ^c Soup made with maize kernels, meat (optional), *chile*, and seasonings; ^d Tortillas filled with cheese. ^e Variety of dishes prepared with maize, which often include beans or meats, vegetables and seasonings. ^f Maize kernels or on the cob prepared with mayonnaise, cheese, *chile*. ^g Hot beverage prepared with maize dough. ^h Water blended with fruit/flowers and sugar. ⁱ Fermented maguey drink. ^j Fermented maize drink prepared with cacao. ^k Fermented maize drink, often referred to as corn beer. ^l Fermented pineapple drink; ^m “Honey water” made with the sap of maguey. ⁿ Fermented *atole*. drink maize. ^o Ground legume commonly used to sweeten drinks and other dishes; ^p Raw cane sugar; ^q Maize flour, occasionally sweetened and mixed with cacao, cinnamon, or anise. ^r Dairy product similar to ricotta cheese

*Food item suggested by participants after first round.

†Food items suggested by participants after second round.

‡Food item moved from another group, due to participant feedback (Table S11).

Table S12. Participants' views on adding items not mentioned in the questionnaire, rounds 1-3

	Round 1 (n=22)	Round 2 (n=18)	Round 3 (n=17)
Yes	45.5%	55.6%	70.6%
No	27.7%	33.3%	29.4%
Maybe/ have a separate category	13.6%	5.6%	0%

Table S13. Themes generated in participants' criteria for classifying traditional foods in the index

	Percentage of participants mentioning theme at any round (n=22)	Illustrative quotes
Foods commonly consumed in present time	54.5%	<p>“Some foods are [excluded] because they are consumed by a too limited group of people to be considered traditional”</p> <p>“Some foods [were excluded because], although they are from pre-Hispanic origin, their current consumption is limited”</p>
Reflects past habits	50.0%	<p>“<i>Aguas frescas</i>^a are consumed but it is not clear if they form part of the traditional Mexican diet. Same issue with sodas. Unfortunately, these are highly consumed, but I would not say they are part of the ‘traditional diet’. It’s something more modern”</p> <p>“[I] include[d] foods from the Mesoamerican diet, which are numerous, and add[ed] those that were incorporated [to the diet] during colonial times”.</p>
Reflects a healthy diet	31.8%	<p>“In many cases, I [did not include an item] when the food could be considered traditional, but [...] its nutritional value is low”</p> <p>“Apart from considering [foods] that constitute the traditional diet, I took into consideration foods [...] with an adequate nutrition value”</p>
Foods common to all regions	27.3%	<p>“Unfortunately, the fish and seafood consumption, apart from regions that produce them, is too localised to be considered traditional”.</p>
Non-industrialised products	18.2%	<p>My criteria to add foods in the traditional diet was [based on] non-industrialised products, apart from culinary products or minimally processed products”</p>
Accessible foods	18.2%	<p>“[I would not select] fruits as passion fruit, carambola, blueberry, and others which are starting to be consumed but are very expensive”</p>
Produced in or native to Mexico	18.2%	<p>“While fava beans and [other] legumes are not from Mexican/Mesoamerican origin, they are currently highly produced in the country and form part of dishes that could be [...] part of the Mexican food culture”</p>
Compatible with environmental issues	13.6%	<p>“[I would not select] armadillos, iguanas, and other foods, as they are endangered species”</p>

^aWater blended with fruit/flowers and sugar.