# Large-scale survey on thiamine status: Biomarkers module for women of reproductive age (W)

W1. a) Survey ID: Cluster number b) c) Individual number (if available)	Household number	<b>W2.</b> Date ( <i>DD/MM/YYYY</i> ):
W3. Interviewer name:	<b>P4.</b> ID:	
<b>W5.</b> Date of birth of respondent ( <i>DD/MM/YYYY</i> ):	<b>W 6.</b> Consent obtained: 1. No If "No", stop here and thank the	
<b>Interviewer notes:</b> use this space to record notes ab attempts to re-visit, reasons for incomplete interview,	-	as call-back times, number of

### Pregnancy & lactation, use of nutrition supplements and symptoms of thiamine deficiency

<b>W7.</b> Are you pregnant? 1. No [ (go to <b>P9)</b> 2. Yes [ (go to <b>P8</b> )
W8. Do you know how many weeks you have been pregnant? 1. No 🛛 2. Yes 🗆 If "Yes", P8 a) weeks
<b>W9.</b> Do you have children? 1. No 2. Yes I <i>If "No", go to the next question.</i>
If yes, W9 a) How many? (number)
W9 b) Are you breastfeeding any of your children? 1. No 🗌 2. Yes 🗌
W9 c) If you breastfed other children, when did you stop breastfeeding your last child?
date:/(MM/YYY)
W10. Nutrition supplements containing thiamine
Are you currently taking any vitamin supplements? 1. No 🛛 2. Yes 🗆
If yes, ask to see the bottle/box and check the label to confirm whether it contains thiamine (also known as vitamin
<i>B1)</i> .
If yes, <b>W10 a)</b> amount of thiamine:mg/day; W10 b) since (date)://(DD/MM/YYYY)
W11. Symptoms of thiamine deficiency
Did you feel any of these symptoms at least in the past 24h?
W11 a) tingling or loss of sensation on hands or feet 1. No 2. Yes 2
W11 b) muscle problems: muscle weakness starting with feet, muscle loss, difficulty in walking 1. No 2. Yes 2.
W11 c) swollen feet or legs 1. No 🗆 2. Yes 🗆

## **Blood specimen collection**

W11. Blood drawn?	1. No 🗌	2. Yes 🗆		
If "No", record the reason	below, stop h	ere and thank the participant	for her time.	
W11 a) If yes, date:		( <i>DD/MM/YYYY</i> ) time:	(H	H:MM)
W11 b) If yes, biom	arker to be a	nalyzed:		
🗌 1. erythr	ocyte ThDP	$\Box$ 2. whole blood ThDP	🗆 З. ЕТКА	Tube ID:

Notes: use this space to record notes about problems associated with blood collection, samples processing issues, storage conditions, etc.

## Large-scale survey on thiamine status: Dietary intake module for women of reproductive age (optional)

#### Medications that can deplete thiamine

W12. Are you taking any medications?	1. No 🗌	2. Yes 🗆			
If "No", go to the next question. If "Yes", interviewer says: I'd like to see the list of medications (you can show me					
the boxes/bottles) that you are regularly taking (	>3months), sc	I can identify those that reduce levels of thiamine in			
your body.					
Anticonvulsant Medications					
W12 a) Phenytoin (brand name:)	1. No 🗌	2. Yes 🗆			
Cardiovascular Medications					
W12 b) Digoxin (brand name:)	1. No 🗌	2. Yes 🗆			
Diuretics					
W12 c) Bumetanide (brand name:)	1. No 🗆	2. Yes 🗆			
W12 d) Ethacrynic Acid (brand name:)	1. No 🗌	2. Yes 🗆			
W12 e) Furosemide (brand name:)	1. No 🗆	2. Yes 🗆			
W12 f) Torsemide (brand name:)	1. No 🗆	2. Yes 🗆			

#### Food habits related to thiamine deficiency and food fortification

Food habits						
<b>W13.</b> If you drink tea, do you usually drink it during a meal?	1. 🗆 No	2. 🗆 Yes				
W14. Do you chew fermented tea leaves or betel nuts?	<i>N</i> 14. Do you chew fermented tea leaves or betel nuts? 1. □ No 2. □ Yes					
W15. Do you consume African silkworm larvae?	1. 🗆 No	2. 🗆 Yes				
W16. Do you consume raw or fermented fish (paste)?	1. 🗆 No	2. 🗆 Yes				
<b>W17.</b> Do you soak or wash the rice before cooking it?	1. 🗆 No	2. 🗆 Yes				
W18. Do you eat parboiled rice?	1. 🗆 No	2. 🗆 Yes				
W19. If pregnant or breastfeeding: do you avoid eating certai	n foods? 1	🗆 No 2. 🗆 Yes				
If yes, W19 a) If yes: which foods?						
If yes, W19 b) Why?						
Food fortification						
Interviewer shows pictures of thiamine fortified foods consumed locally and asks:						
W20 a) Do you use any of these foods, which are fortified with thiamine? (examples below)						
□ 1. Rice □ 2. Fish sauce □ 3. Wheat product (flour, bread, pasta) □ 4. Other:						
If yes, see the label of the food and, if fortification with thiamine is reported, record the amount of thiamine per unit (as described in the label) e.g. 1mg of thiamine per 100g of wheat flour						
W20 b) Level of fortification:mg thiamine/g (or mL) of (product and brand)						
W21 c) Level of fortification:mg thiamine/g (or mL) of (product and brand)						

#### W21. Dietary assessment: 24-h recall

Interviewer says: Now I'd like to ask you to describe everything that you ate or drank yesterday during the day or night, whether you ate it at home or anywhere else. Please tell us for each meal consumed: the time, place, name of food or drink, preparation method (e.g. roasted, raw, fried) and amount (e.g. using household measures, such as slices, cups, teaspoons, etc.). Let's start with the first food or drink consumed yesterday.

Did you have anything to eat or drink when you woke up, for breakfast? If yes, at which time? Where were you? What did you eat or drink? How was it cooked or prepared? How much/how many slices/spoons? Anything else? Repeat the questions for the remaining meals.

Food and dri	nks	Preparation method (if possible)	Amount (in household measures)
Breakfast		1	
Time:	Place:		
Mid-morning : Time:	snack Place:		
Time.			
Lunch		I	
Time:	Place:		
Mid-afternoo	n snack		
Time:	Place:		
Dinner Time:	Place:		
A11 1			
Night snack Time:	Place:		
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## W22. Dietary assessment: food frequency questionnaire

Now I'd like to ask you how frequently you eat a list of approximately 45 foods, from a frequency of never to less than once a month, to everyday. How often during 1 week have you eaten the following foods?

Every day (72/Week)         4-6 x/ week         2-3 x/ week         1x / week         1-3 x/ month         Never or less than 1x/month           1         -<		I		-			_	
Image: result of the searce of chame):         (7x/week)         week         week         week         month         than 1x/month           12. Dry raw fish         1         1         1         1         1         1           3. Fermented fish         1         1         1         1         1         1           4. Cocked fish         1         1         1         1         1         1           5. Shellfish         1         1         1         1         1         1         1         1           7. Beef (not tinned)         1 <t< td=""><td></td><td>Food</td><td>1.</td><td>2.</td><td>3.</td><td>4.</td><td>5.</td><td>6.</td></t<>		Food	1.	2.	3.	4.	5.	6.
Symposition         Image: second					2-3 x/	1x /	1-3 x/	
2         Dyr aw fish			(7x/week)	week	week	week	month	than 1x/month
3. Fermented fish		1. Fresh raw fish						
6. Other seafood (name):	0	2. Dry raw fish						
6. Other seafood (name):	8	3. Fermented fish						
6. Other seafood (name):	AF	4. Cooked fish						
Image: Selection of the	SE	5. Shellfish						
Image: Selection of the		6. Other seafood (name):						
B.         Pork meat (not tinned)         Image: State (not inned)								
9.     Chicken meat (not tinned)     Image: Strength of timed)     Image: Strength of timed)       10.     User of animal (name):     Image: Strength of timed)     Image: Strength of timed)       11.     Other meat (name):     Image: Strength of timed)     Image: Strength of timed)       12.     Tinned fish     Image: Strength of timed)     Image: Strength of timed)       13.     Tinned food:     Image: Strength of timed)     Image: Strength of timed)       14.     Tinned beef     Image: Strength of timed)     Image: Strength of timed)       15.     Other strength of timed)     Image: Strength of timed)     Image: Strength of timed)       16.     Frea     Image: Strength of timed)     Image: Strength of timed)       17.     Fruit julce:     Image: Strength of timed)     Image: Strength of timed)       18.     Other strength of times):     Image: Strength of times)     Image: Strength of times)       20.     Other strength of times):     Image: Strength of times)     Image: Strength of times)       21.     Strength of times):     Image: Strength of times)     Image: Strength of times)       22.     Strength of times):     Image: Strength of times)     Image: Strength of times)       22.     Strength of times):     Image: Strength of times)     Image: Strength of times)       23.     Streage: Strength of times): <td>F</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	F							
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II. Other meat (name):     III. Other meat (name):     III. Other meat (name):       13. Tinned jork     III. Tinned jork     III. Tinned jork       14. Tinned beef     III. Tinned jork     III. Tinned jork       15. Other stinned food:     III. Tinned jork     III. Tinned jork       18. Tinned beef     III. Tinned jork     III. Tinned jork       19. Other stinned food:     III. Truit jute:     III. Truit jute:       10. Other stinned food:     III. Truit jute:     III. Truit jute:       11. Fruit jute:     III. Truit jute:     III. Truit jute:       12. Other stick circle the most consumed:     White or brown or parboiled)     III. Truit jute:       21. Taro     III. Taro     III. Truit jute:       22. Cassava     III. Taro     III. Taro       23. Taro     III. Taro     III. Taro       24. Bread (circle: white or wholegrain)     III. Taro     IIII. Taro       25. Pasta/noodle     III. Taro     IIII. Taro       28. Orange     IIII. Taro     IIII. Taro       29. Tinneaple     IIII. Taro     IIII. Taro       31. Other fruit/veg::     IIII. Taro     IIII. Taro       32. Soybeans     IIII. Taro     IIIII. Taro       33. Other seeds (name):     IIII. Taro     IIII. Taro       34. Lentils     IIII. Taro     IIII. Taro	Σ							
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Store     13. Tinned pork     Image bef     Image bef       14. Tinned bedf     Image bef     Image bef     Image bef       15. Tea     Image bef     Image bef     Image bef       16. Tea     Image bef     Image bef     Image bef       17. Fruit juice:     Image bef     Image bef     Image bef       18. Other soft drink:     Image bef     Image bef     Image bef       19. Beer     Image bef     Image bef     Image bef       20. Other alcoholic drink:     Image bef     Image bef     Image bef       21. Rice (circle the most consumed:     Image bef     Image bef     Image bef       22. Cassava     Image bef     Image bef     Image bef     Image bef       23. Taro     Image bef     Image bef     Image bef     Image bef       24. Bread (circle: white or wholegrain)     Image bef     Image bef     Image bef       25. Potatoes     Image bef     Image bef     Image bef       26. Potatoes     Image bef     Image bef     Image bef       27. Other creasis /starchy roots:     Image bef     Image bef       31. Other fruit/veg:     Image bef     Image bef       32. Soybeans     Image bef     Image bef       33. Other pulses:     Image bef     Image bef       3								
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20. Other alcoholic drink:	NKS							
20. Other alcoholic drink:	RIP							
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42. Soy sauce         42. Soy sauce         43. Bouillon cubes         44. Salt         45. Solution cubes         46. Solution cubes         47. Solution cubes								
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#### W23. Potential food vehicles for fortification

A list of foods that are not fortified with thiamine but could be potential fortification vehicles is selected (examples below). Interviewer says: now I'd like to know where you buy and who produces a few foods (e.g. rice and condiments)

Product	<i>Place of purchase</i> (e.g. supermarket; local market)	<b>Producer (or brand)</b> (e.g. local producer; "Maggi")
Rice		
Salt		
Bouillon cubes		
Fish sauce		
Soy sauce		