

# Questions documentation

## Questionnaire 2

17- 22<sup>nd</sup> week of pregnancy

Your diet

The Norwegian Mother and Child Cohort Study (MoBa)

### Mother questionnaire

This document describing the instruments used to construct the questionnaire has not been finally quality controlled. The document may contain some minor inaccuracy and will be subjected to revision. If you have any comments that may improve this document contact

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Version	Date	Performed by	Description
1.0	Dec. 2014	Fufen Jin	
1.1	June 2015	Margaretha Haugen	
1.2	09.04.2021	Turid S. Solberg	Corrected labels in question Q10_2 and Q10_3.

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## Instrument

This is the food frequency questionnaire (FFQ) developed to monitor the mother's food intake in pregnancy. The decisions taken and the challenges encountered have been described in Meltzer et al.<sup>(1)</sup> An extensive validation of the FFQ has been performed and overall results are described in Brandsæter et al.<sup>(2)</sup>

### 1. Name of original instrument/question:

MoBa FFQ

List wording of questions included in the section (with number from questionnaire in front) and write response categories (with values used in the dataset)

See the publication by Meltzer et al 2008<sup>(1)</sup>

### 2. Modifications:

Q2 has six versions (A, B, C, D, E and W). Version A and B differs substantially from the rest of the versions. This instrument documentation is based on version C, D, E and W, which are virtually the same.

#### Version A and B (KOST\_A) are characterized as follows:

- They were developed by the University of Oslo for use in the population based dietary registration NORKOST2.
- In the MoBa versions the questions ask about dietary intake during **the year before becoming pregnant**.
- Version A and B are not included in the standard delivery of MoBa data but can be delivered if the researcher is interest in the diet before pregnancy.
- 9000 participants included between 1999 and February 2002 answered this version.

#### Versions C, D, E and W (KOST\_B) are characterized as follows:

- These versions apply to all women included in the study after March 1<sup>st</sup> 2002 and includes approximately 87000 pregnancies
- The women are asked about their diet **since they became pregnant**
- When asking for dietary data this questionnaire is following the standard delivery and named PBD\_Skjema2\_CDW
- This questionnaire has been extensively validated, see Brantsæter et al.<sup>(2)</sup>
- The versions of this questionnaire are just modified regarding food supplement use which has no impact on the nutrient calculations or calculations of the foodsupplements.
- Version denoted E or W was answered electronically.

## 1-2. Your diet

### 1. Name of original questions: 2 questions about maternal diet

Q		Response options	Variable name
1	<b>How would you describe your diet since you became pregnant? (Mark only one box)</b>		
		1-I eat both meat and fish 2-I avoid meat, but eat fish 3-I avoid fish, but eat meat 4-I'm a vegetarian and include dairy products and eggs in my diet (ovo-lacto-vegetarian) 5-I'm a vegetarian and include dairy products but not eggs in my diet (lacto-vegetarian) 6-I'm a vegetarian and avoid all dairy products and eggs (vegan)	BB15
2	<b>Have you used organic food products since you became pregnant?</b>		
	Milk, dairy products, cheese	1-Seldom/never	BB16
	Bread and cereals	2-Sometimes	BB17
	Eggs	3-Often	BB18
	Vegetables	4-Usually	BB19
	Fruit		BB20
	Meat		BB21

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

The questions were developed to survey maternal dietary characteristics.

### 4. Revision during the data collection period:

Not included in versions A and B.

### 3. Your meal pattern

#### 1. Name of original questions: question about maternal meal pattern

Q	Response options	Variable name
<b>3</b>	<b>How often have you had the following meals per week since you became pregnant?</b>	
Breakfast	1) 7	BB22
Snack, a.m.	2) 6	BB23
Lunch	3) 5	BB24
Snack, before dinner	4) 4	BB25
Dinner	5) 3	BB26
Snack, in the afternoon	6) 2	BB27
Supper	7) 1	BB28
Night meal	8) 0	BB29

#### 2. Description of original questions: MoBa specific single questions

#### 3. Rationale for choosing the questions:

The questions were developed to survey pregnant women's meal patterns

#### 4. Revision during the data collection period:

No revisions have been made between versions.

## 4-7. Bread/crisp bread/crackers

### 1. Name of original questions: 3 questions about daily intake of bread and butter/margarine

Q		Response options	Variable name
4	<b>How many slices of bread/crispbread/crackers have you eaten on average per day since you became pregnant?</b> When answering this question we ask you to include bread eaten during the whole day, i.e. with all meals. Half a roll = 1 slice of bread, 1 baguette = 4 slices of bread, 1 ciabatta = 3 slices of bread.		
	White bread (baguettes, ciabatta etc.)	1) 13+ per day	BB30
	Wholemeal bread (Kneipp, Graham etc.)	2) 9-12 per day	BB32
	Dark bread (Danish rye bread etc.)	3) 8 per day	BB34
	Fiber bread, fiber crisp bread, ryecrisp	4) 7 per day	BB36
	Crisp bread, rusk etc.	5) 6 per day	BB38
	Crackers	6) 5 per day	BB40
	White bread (baguettes, ciabatta etc.)	7) 4 per day	BB31
	Wholemeal bread (Kneipp, Graham etc.)	8) 3 per day	BB33
	Dark bread (Danish ryebread etc.)	9) 2 per day	BB35
	Fiber bread, fiber crispbread, ryecrisp	10) 1 per day	BB37
	Crispbread, rusk etc.	OR	BB39
Crackers	1) 5-6 per week	BB41	
2) 3-4 per week			
3) 1-2 per week			
4) 0 per week			
5	<b>Do you use butter/margarine with your sandwiches?</b>		
	1- Yes	BB42	
	2- No		
6	<b>If you use butter/margarine, on how many sandwiches on average and what kind do you use?</b>		
Butter/Bremyk	1) 13+ per day	BB43	
Hard margarine (Per, Melange)	2) 9-12 per day	BB45	
"Brelett"	3) 8 per day	BB47	
Soft margarine (soft, Vita, Olivero etc.)	4) 7 per day	BB49	
Light margarine (Soft light, Vita let etc.)	5) 6 per day	BB51	
Butter/Bremyk	6) 5 per day	BB44	
Hard margarine (Per, Melange)	7) 4 per day	BB46	
"Brelett"	8) 3 per day	BB48	
Soft margarine (soft, Vita, Olivero etc.)	9) 2 per day	BB50	
Light margarine (Soft light, Vita let etc.)	10) 1 per day	BB52	
7	<b>How much butter/margarine do you use with your sandwiches?</b>		
	1- Plenty	BB53	
	2- Medium		
	3-Minimum		

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

This is a measure of daily intake of bread and butter/margarine used on bread.

### 4. Revision during the data collection period:

Some revisions in question order from version KOST\_A and KOST\_B.

## 8. Cheese/meat cold cuts/fish/spreads

### 1. Name of original questions: questions about intake of cheese, meat cold cuts, fish and other spreads

Q No.		Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
<b>8</b>	<b>How often do you have the following food items on yours sandwiches?</b>						
<b>CHEESE</b>	1. Whey cheese goat milk, regular	<i>per day</i>	BB54	<i>per week</i>	BB55	<i>per month</i>	BB56
	2. Whey cheese low fat, spread goat milk	1) 6+	BB57	1) 5-6	BB58	1) 3	BB59
	3. Hard cheese, cream cheese	2) 5	BB60	2) 3-4	BB61	2) 2	BB62
	4. Hard cheese, cream cheese, low fat	3) 4	BB63	3) 1-2	BB64	3) 1	BB65
	5. Blue cheese (Camembert, Norzola etc.)	4) 3	BB66		BB67	4) 0	BB68
	6. Other kinds of cheese	5) 2 6) 1	BB69		BB70		BB71
<b>FISH</b>	7. Roe spread	<i>per day</i>	BB72	<i>per week</i>	BB73	<i>per month</i>	BB74
	8. Mackerel/sardine in tomato sauce	1) 6+	BB75	1) 5-6	BB76	1) 3	BB77
	9. Sardine in oil	2) 5	BB78	2) 3-4	BB79	2) 2	BB80
	10. Smoked salmon/trout/mackerel	3) 4	BB81	3) 1-2	BB82	3) 1	BB83
	11. Herring, pickled	4) 3	BB84		BB85	4) 0	BB86
	12. Shrimp, Northern	5) 2	BB87		BB88		BB89
	13. Crab	6) 1	BB90		BB91		BB92
	14. Tuna		BB93		BB94		BB95
	15. Svolværpostei (spread of fish liver/roe)		BB96		BB97		BB98
	16. Other kinds of fish		BB99		BB100		BB101
<b>MEAT</b>	17. Low fat cold cuts (ham, roast beef etc.)	<i>per day</i>	BB102	<i>per week</i>	BB103	<i>per month</i>	BB104
	18. Medium fat cold cuts of lamb, calf etc.	1) 6+	BB105	1) 5-6	BB106	1) 3	BB107
	19. Salami, Swedish sausage etc.	2) 5	BB108	2) 3-4	BB109	2) 2	BB110
	20. Cold cuts of turkey, chicken	3) 4	BB111	3) 1-2	BB112	3) 1	BB113
	21. Liver paste	4) 3	BB114		BB115	4) 0	BB116
	22. Other kinds of meat	5) 2 6) 1	BB117		BB118		BB119
<b>OTHER SPREADS</b>	23. Spread with mayonnaise (Italian etc.)	<i>per day</i>	BB123	<i>per week</i>	BB124	<i>per month</i>	BB125
	24 Spread made with yogurt and mayo.	1) 6+	BB126	1) 5-6	BB127	1) 3	BB128
	25. Mayonnaise	2) 5	BB129	2) 3-4	BB130	2) 2	BB131
	26. Jam	3) 4	BB133	3) 1-2	BB133	3) 1	BB134
	27. Honey	4) 3	BB135		BB136	4) 0	BB137
	28. Peanut butter	5) 2	BB138		BB139		BB140
	29. Other nut spreads (Nugatti etc.)	6) 1	BB141		BB142		BB143
	30. Sweet spreads (Sjokade, Hapå etc.)		BB144		BB145		BB146
	31. Tartex and other vegetarian spreads		BB147		BB148		BB149
	32. Fruit (banana, apple etc.)		BB150		BB151		BB152
	33. Vegetable (tomato, cucumber etc.)		BB153		BB154		BB155

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

This is a measurement of intake of cheese, meat cold cuts, fish and other spreads.

### 4. Revision during the data collection period:

Revisions have been made between KOST\_A and KOST\_B.

## 9. Eggs

### 1. Name of original questions: questions about intake of eggs

Q		Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
9	<b>How many eggs have you eaten on average since you became pregnant?</b>						
	Eggs-fried, boiled, scrambled, omelet	<i>per day</i> 1) 2+ 2) 1	BB156	<i>per week</i> 1) 5-6 2) 3-4 3) 1-2	BB157	<i>per month</i> 1) 2-3 2) 1 3) 0	BB158
	Number of seagull eggs eaten last year			1) 0 2) 1-5 3) 6-10 4) more than 10			BB159

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

These questions are developed to get information about pregnant women's intake of eggs.

### 4. Revision during the data collection period:

Revision between versions KOST\_A and KOST\_B, Seagull eggs not included in KOST\_A

## 10. Breakfast cereals

### 1. Name of original questions: questions about breakfast cereals or porridge

Q		Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
<b>10</b>	<b>How often do you have the following food items on yours sandwiches?</b>						
	1. Unsweetened cereals (4-kom, All-Bran Flakes, etc.)	<i>per day</i> 1) 2+ 2) 1	BB160	<i>per week</i> 1) 5-6 2) 3-4 3) 1-2	BB161	<i>per month</i> 1) 2-3 2) 1 3) 0	BB162
	2. Sweetened muesli with dried fruit, nuts, etc.		BB163		BB164		BB165
	3. Porridge, cream of wheat, rice, etc.		BB166		BB167		BB168
	4. Corn Flakes, Frosties etc.		BB169		BB170		BB171
	5. Sugar with your cereals/porridge		BB172		BB173		BB174
	6. Jam with your cereals/porridge		BB175		BB176		BB177

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

These questions are developed to get information about pregnant women's intake of cereals.

### 4. Revision during the data collection period:

Revisions have been made between KOST\_A and KOST\_B.

## 11-12. Beverage

### 1. Name of original questions: questions about beverage consumption

Q		Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
11	<b>How many cup/glasses have you been drinking on average of the following beverages since you became pregnant? Please include also milk/yogurt with your breakfast cereals.</b>						
	<b>Milk and yogurt</b>						
	1. Full-fat milk, fermented milk (1 glass)		BB178		BB179		BB180
	2. Low-fat milk(1 glass)	<i>per day</i>	BB181	<i>per week</i>	BB182	<i>per month</i>	BB183
	3. Extra low-fat milk(1 glass)	1) 8+	BB184	1) 5-6	BB185	1) 2-3	BB186
	4. Skimmed/fermented sk. milk	2) 6-7	BB187	2) 3-4	BB188	2) 1	BB189
	5. Cultura, all types(1 glass)	3) 4-5	BB190	3) 1-2	BB191	3) 0	BB192
	6. Biola milk, Biola yogurt(1 glass)	4) 2-3	BB193		BB194		BB195
	7. Yogurt, plain/with fruit(1 glass)	5) 1	BB196		BB197		BB198
	8. Low-fat yogurt(1 glass)		BB199		BB200		BB201
	9. Go'morgen yogurt (1 serving)		BB202		BB203		BB204
	10. Chocolate milk, Litago(1 glass)		BB205		BB206		BB207
	11. Soya milk(1 glass)		BB208		BB209		BB210
	12. Rice and oat milk(1 glass)		BB211		BB212		BB213
	<b>Juice/soft drink/water/alcohol</b>						
	13. Orange juice(1 glass)		BB214		BB215		BB216
	14. Other fruit juice, nectar(1 glass)	<i>per day</i>	BB217	<i>per week</i>	BB218	<i>per month</i>	BB219
	15. Tomato- and vegetable juices(1 glass)	1) 8+	BB220	1) 5-6	BB221	1) 2-3	BB222
	16. Fruit syrup, sweetened(1 glass)	2) 6-7	BB223	2) 3-4	BB224	2) 1	BB225
	17. Fruit syrup, light products(1 glass)	3) 4-5	BB226	3) 1-2	BB227	3) 0	BB228
	18. Coca Cola/Pepsi with sugar(1 glass)	4) 2-3	BB229		BB230		BB231
	19. Other soft drinks with sugar(1 glass)	5) 1	BB232		BB233		BB234
	20. Diet Coca Cola/Pepsi (1 glass)		BB235		BB236		BB237
	21. Other light soft drinks(1 glass)		BB238		BB239		BB240
	22. Energy drinks (Battery etc.) (1 glass)		BB241		BB242		BB243
	23. Tap water(1 glass)		BB244		BB245		BB246
	24. Uncarbonated water, bottled(1 glass)		BB247		BB248		BB249
	25. Carbonated water(1 glass)		BB250		BB251		BB252
	26. Non-alcoholic beer, small beer(1 glass)		BB253		BB254		BB255
	27. Pilsner beer(1 glass)		BB256		BB257		BB258
	28. Wine(1 glass)		BB259		BB260		BB261
	29. Spirits, brandy, liqueur(1 drink)		BB262		BB263		BB264
	<b>Coffee/tea</b>						
	30. Filter coffee (1 cup)		BB265		BB266		BB267
	31. Coffee instant(1 cup)	<i>per day</i>	BB268	<i>per week</i>	BB269	<i>per month</i>	BB270
	32. Coffee boiled/press (1 cup)	1) 8+	BB271	1) 5-6	BB272	1) 2-3	BB273
	33. Café latte, cappuccino(1 cup)	2) 6-7	BB274	2) 3-4	BB275	2) 1	BB276
	34. Espresso(1 cup)	3) 4-5	BB277	3) 1-2	BB278	3) 0	BB279
	35. Decaffeinated coffee(1 cup)	4) 2-3	BB280		BB281		BB282
	36. Fig/barley coffee(1 cup)	5) 1	BB283		BB284		BB285
	37. Tea (ordinary, Lipton fruit tea etc.) (1 cup)		BB286		BB287		BB288
	38. Green tea(1 cup)		BB289		BB290		BB291
	39. Rosehip tea, herb tea(1 mug)		BB292		BB293		BB294
12	<b>In how many cups do you use milk/cream/sugar with your coffee/tea?</b>						
	1. Milk/cream in coffee/tea	<i>per day</i>	BB295	<i>per week</i>	BB296	<i>per month</i>	BB297
	2. Sugar/honey in coffee/tea	1) 8+		1) 5-6		1) 2-3	
		2) 6-7	BB298	2) 3-4	BB299	2) 1	BB300
		3) 4-5		3) 1-2		3) 0	
	3. Artificial sweetener in coffee/tea	4) 2-3	BB301		BB302		BB303
		5) 1					

**2. Description of original questions:** MoBa specific single questions

**3. Rationale for choosing the questions:**

These questions were developed to get information about pregnant women's beverage consumption.

**4. Revision during the data collection period:**

Revisions have been made between KOST\_A and KOST\_B.



## 13-14. Hot meals

### 1. Name of original questions: questions about hot meals

Q		Response Options 1	Variable name	Response Options 2	Variable name
<b>13</b>	<b>How often have you on average had the following for your hot meals since you became pregnant?</b>				
	<b>General questions</b>				
	1. Meat and meat products	<i>per week</i>	BB307	<i>per month</i>	BB308
	2. Meat and meat products prepared as grilled	1) 6+	BB309	1) 3	BB310
	3. Offal	2) 5	BB311	2) 2	BB312
	4. Chicken, turkey	3) 4	BB313	3) 1	BB314
	5. Fish, fish products, boiled/cooked in oven	4) 3	BB315	4) 0	BB316
	6. Fish, fish products, fried	5) 2	BB317		BB318
	7. Vegetarian dishes	6) 1	BB319		BB320
	<i>More detailed questions</i>				
<b>14</b>	<b>How often have you on average had the following for your hot meals since you became pregnant?</b>				
	<b>Hot meal with meat products</b>				
	1. Meat/pork sausage	<i>per week</i>	BB321	<i>per month</i>	BB322
	2. Hot dogs and/or frankfurters	1) 6+	BB323	1) 3	BB324
	3. Chicken and/or turkey sausage	2) 5	BB325	2) 2	BB326
	4. Meat balls, meat loaf	3) 4	BB327	3) 1	BB328
	5. Hamburger, meat patty	4) 3	BB329	4) 0	BB330
	6. minced meat	5) 2			
		6) 1	BB331		BB332
	<b>Beef/veal</b>				
	7. Beef and/or veal roast	<i>per week</i>	BB333	<i>per month</i>	BB334
		1) 6+		1) 3	
	8. Beef (fillet, tenderloin, sirloin, entrecote)	2) 5	BB335	2) 2	BB336
		3) 4		3) 1	
	9. T-bone steak, beef and veal	4) 3	BB337	4) 0	BB338
		5) 2			
	10. Beef stew, beef soup	6) 1	BB339		BB340
	<b>Pork</b>				
	11. Pork chop, pork roast, pork schnitzel	<i>per week</i>	BB341	<i>per month</i>	BB342
	12. Pork tenderloin, fillet	1) 6+	BB343	1) 3	BB344
	13. Pork loin smoked	2) 5	BB345	2) 2	BB346
	14. Pork belly bacon, spareribs	3) 4	BB347	3) 1	BB348
	15. Bacon	4) 3	BB349	4) 0	BB350
	16. Pork stew	5) 2	BB351		BB352
		6) 1			
	<b>Lamb</b>				
	17. Lamb roast, lamb sirloin		BB353		BB354
	18. Lamb stews (Fårikål etc.)		BB355		BB356
	<b>Venison</b>				
	19. Reindeer roast	<i>per week</i>	BB357	<i>per month</i>	BB358
	20. Roast of elk, roe deer, fallow deer	1) 6+	BB359	1) 3	BB360
	21. Reindeer patty/reindeer stew	2) 5	BB361	2) 2	BB362
	22. Patty/stew of elk, roe/fallow deer	3) 4	BB363	3) 1	BB364
		4) 3		4) 0	
	<b>Offal</b>				
	23. Liver, kidney from beef, pork	5) 2	BB365		BB366
	24. Liver kidney from lamb	6) 1	BB367		BB368
	25. Liver, kidney from venison		BB369		BB370
	26. Black pudding, lungemos (hashed lungs)		BB371		BB372
	<b>Hot meal with poultry</b>				
	27. Chicken fillet, turkey fillet	<i>per week</i>	BB373	<i>per month</i>	BB374
	28. Fried chicken	1) 6+	BB375	1) 3	BB376
	29. Pan fried/baked/boiled chicken, hen, turkey	2) 5	BB377	2) 2	BB378
		3) 4		3) 1	
	30. Chicken schnitzel, nuggets	4) 3	BB379	4) 0	BB380
	31. Game (grouse, pheasant etc.)	5) 2	BB381		BB382
	32. Other poultry (duck, goose, ostrich)	6) 1	BB383		BB384

### 13-14. Hot meals (cont.)

#### 1. Name of original questions: questions about hot meals

Q		Response Options 1	Variable name	Response Options 2	Variable name
14	<b>How often have you on average had the following for your hot meals since you became pregnant?</b>				
	<b>Seafood</b>				
	33. Cod, saithe, haddock, Pollack	<i>per week</i>	BB385	<i>per month</i>	BB386
	34. Mackerel, herring	1) 6+	BB387	1) 3	BB388
	35. Salmon, trout	2) 5	BB389	2) 2	BB390
	36. Halibut, plaice, funder	3) 4	BB391	3) 1	BB392
	37. Tuna fish	4) 3	BB393	4) 0	BB394
	38. Perch, pike, pikecake	5) 2	BB395		BB396
	39. Other fishes	6) 1	BB397		BB398
	40. Fish cake, fish pudding, fish balls		BB399		BB400
	41. Fish finger, breaded fish		BB401		BB402
	42. Fish casserole, soup		BB403		BB404
	43. Shrimps		BB405		BB406
	44. Mussels		BB407		BB408
	45. Crab		BB409		BB410
	46. Roe		BB411		BB412
	47. Fish liver		BB413		BB414
	<b>Pasta</b>				
	48. Pasta with meat (Spaghetti bolognaise, lasagna, etc.)	<i>per week</i>	BB415	<i>per month</i>	BB416
		1) 6+		1) 3	
	49. Pasta with fish/mussels/shrimp	2) 5	BB417	2) 2	BB418
	50. Pasta with vegetables	3) 4	BB419	3) 1	BB420
	51. Pasta with only tomato sauce/ketchup	4) 3	BB421	4) 0	BB422
	52. Cheese (parmesan, etc.) with pasta	5) 2	BB423		BB424
		6) 1			
	<b>Other hot meals</b>				
	53. Pizza	<i>per week</i>	BB425	<i>per month</i>	BB426
	54. Taco, burritos etc.	1) 6+	BB427	1) 3	BB428
	55. Pancakes	2) 5	BB429	2) 2	BB430
	56. Cream of rice etc. (not breakfast)	3) 4	BB431	3) 1	BB432
	57. Soup, homemade and packaged	4) 3	BB433	4) 0	BB434
	58. Only with vegetables	5) 2	BB435		BB436
	59. With beans and /or lentils	6) 1	BB437		BB438
	60. With soy products (sausage, burger)		BB439		BB440

#### 2. Description of original questions: MoBa specific single questions

#### 3. Rationale for choosing the questions:

These questions are developed to get information about pregnant women's intake of hot meals.

#### 4. Revision during the data collection period:

Revisions have been made between KOST\_A and KOST\_B.

## 15. With your hot meal

### 1. Name of original questions: questions about the food eaten with hot meals

Q		Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
15	<b>How often have you on average eaten the following food items since you became pregnant?</b>						
	<b>Milk and yogurt</b>						
	1. Potatoes (boiled, baked, mashed)	<i>per day</i> 1) 1	BB441	<i>per week</i> 1) 5-6 2) 3-4 3) 1-2	BB442	<i>per month</i> 1) 2-3 2) 1 3) 0	BB443
	2. French fries, fried potatoes		BB444		BB445		BB446
	3. Creamed potatoes, potato casserole		BB447		BB448		BB449
	4. Spaghetti, macaroni, noodles		BB450		BB451		BB452
	5. Rice		BB453		BB454		BB455
	6. Millet, couscous etc.		BB456		BB457		BB458
	<b>Gravy/trimmings</b>						
	7. Melted butter	<i>per day</i> 1) 1	BB462	<i>per week</i> 1) 5-6 2) 3-4 3) 1-2	BB463	<i>per month</i> 1) 2-3 2) 1 3) 0	BB464
	8. Melted margarine		BB465		BB466		BB467
	9. Brown/white gravy		BB468		BB469		BB470
	10. Béarnaise sauce etc.		BB471		BB472		BB473
	11. Mayonnaise, remoulade		BB474		BB475		BB476
	12. Sour cream		BB477		BB478		BB479
	13. Low-fat sour cream		BB480		BB481		BB482
	14. Ketchup		BB483		BB484		BB485
	15. Mustard		BB486		BB487		BB488

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

These questions are developed to get information about pregnant women's intake of the food eaten with hot meals.

### 4. Revision during the data collection period:

Revisions have been made between KOST\_A and KOST\_B.

## 16. Cooking fat

### 1. Name of original questions: questions about cooking fat

Q		Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
16	<b>How often have you used the following types of fat in your cooking since you became pregnant?</b>						
	<b>Cooking fat</b>						
	1. Butter		BB489		BB490		BB491
	2. Margarine soft (Bremyk, Smørgod)	<i>per day</i> 1) 2+ 2) 1	BB492	<i>per week</i> 1) 5-6 2) 3-4 3) 1-2	BB493	<i>per month</i> 1) 2-3 2) 1 3) 0	BB494
	3. Margarine hard (Melange, Per)		BB495		BB496		BB497
	4. Soft, Soya margarine		BB498		BB499		BB500
	5. Margarine with olive oil (Olivero)		BB501		BB502		BB503
	6. Other types of margarine		BB504		BB505		BB506
	7. Soya oil		BB507		BB508		BB509
	8. Cooking oil		BB510		BB511		BB512
	9. Olive oil		BB513		BB514		BB515
	10. Corn oil		BB516		BB517		BB518
	11. Other types of oil		BB519		BB520		BB521

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

These questions are developed to get information about pregnant women's intake of cooking fat.

### 4. Revision during the data collection period:

Revisions have been made between KOST\_A and KOST\_B.

## 17-18. Vegetables

### 1. Name of original questions: questions about vegetables

Q		Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
<b>17</b>	<b>How often have you on average had the following vegetables since you became pregnant?</b>						
	<b>General questions</b>						
	1. Raw vegetables (Salads etc.)	<i>per day</i>	BB522	<i>per week</i>	BB523	<i>per month</i>	BB524
	2. Vegetables in casserole, soups, wok etc.	1) 2+ 2) 1	BB525	1) 5-6 2) 3-4	BB526	1) 2-3 2) 1	BB527
	3. Boiled vegetables with main dish		BB528	3) 1-2	BB529	3) 0	BB530
<b>18</b>	<b>More detailed questions about vegetables</b>						
	<b>Vegetables</b>						
	1. Frozen vegetables	<i>per day</i>	BB531	<i>per week</i>	BB532	<i>per month</i>	BB533
	2. Cucumber	1) 2+ 2) 1	BB534	1) 5-6 2) 3-4 3) 1-2	BB535	1) 2-3 2) 1 3) 0	BB536
	3. Aubergine		BB537		BB538		BB539
	4. Avocado		BB540		BB541		BB542
	5. Cauliflower, raw		BB543		BB544		BB545
	6. Cauliflower, boiled/in casseroles		BB546		BB547		BB548
	7. Broccoli, raw		BB549		BB550		BB551
	8. Broccoli, boiled /in casseroles		BB552		BB553		BB554
	9. Green beans, haricots verts		BB555		BB556		BB557
	10. Peas		BB558		BB559		BB560
	11. Carrots, raw		BB561		BB562		BB563
	12. Carrots, boiled/in casseroles		BB564		BB565		BB566
	13. Cabbage, raw		BB567		BB568		BB569
	14. Cabbage, boiled/in casseroles		BB570		BB571		BB572
	15. Garlic		BB573		BB574		BB575
	16. Swede, raw		BB576		BB577		BB578
	17. Swede, boiled /in casseroles		BB579		BB580		BB581
	18. Onion, leek, spring onion, raw		BB582		BB583		BB584
	19. Onion, leek, boiled /in casseroles		BB585		BB586		BB587
	20. Corn, corn-on-the cob		BB588		BB589		BB590
	21. Pepper, raw		BB591		BB592		BB593
	22. Pepper in casseroles		BB594		BB595		BB596
	23. Brussels sprouts, boiled /in casseroles		BB597		BB598		BB599
	24. Green salad mix in plastic bag		BB600		BB601		BB602
	25. Lettuce, Chinese cabbage		BB603		BB604		BB605
	26. Celery, celeriac		BB606		BB607		BB608
	27. Button mushroom, raw		BB609		BB610		BB611
	28. Button mushroom, fried/in casseroles		BB612		BB613		BB614
	29. Mushroom wild		BB615		BB616		BB617
	30. Spinach		BB618		BB619		BB620
	31. Squash (zucchini)		BB621		BB622		BB623
	32. Tomato		BB624		BB625		BB626
	33. Other vegetables		BB627		BB628		BB629

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

These questions are developed to get information about pregnant women's intake of vegetables.

**4. Revision during the data collection period:**

Revisions have been made between KOST\_A and KOST\_B.

## 19. Dressing/trimming with salad

### 1. Name of original questions: questions about dressing/trimming with salad

Q		Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
19	<b>How often have you had dressing and other trimmings with your salad since you became pregnant?</b>						
	<b>Dressing/trimmings</b>						
	1. Dressing (Thousand-island etc.)	<i>per day</i>	BB630	<i>per week</i>	BB631	<i>per month</i>	BB632
	2. Light dressing, yogurt dressing	1) 2+	BB633	1) 5-6	BB634	1) 2-3	BB635
	3. Olives, black/green	2) 1	BB636	2) 3-4	BB637	2) 1	BB638
	4. Feta cheese		BB639	3) 1-2	BB640	3) 0	BB641
	<b>Homemade dressing</b>						
	5. With oil		BB642		BB643		BB644
	6. Without oil		BB645		BB646		BB647
	7. With sour cream/yogurt		BB648		BB649		BB650

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

These questions are developed to get information about pregnant women's intake of dressing/trimming with salad.

### 4. Revision during the data collection period:

Revisions have been made between KOST\_A and KOST\_B.

## 20. Proportion between vegetables and meat/fish

- 1. Name of original questions:** Questions about the proportion between vegetables and meat/fish in casseroles

Q	Response options	Variable name
20	How would you characterize the usual proportion between vegetables and meat/fish in your casseroles?	
1. Casseroles with meat/fish	1- Have not eaten 2- More vegetables than meat 3- Same amount meat and vegetables 4- More meat than vegetables	BB651
2. Casseroles with minced meat		BB652
3. Casseroles with offal		BB653

- 2. Description of original questions:** MoBa specific single questions

- 3. Rationale for choosing the questions:**

These questions are developed to get information about proportion between vegetables and meat/fish in casseroles.

- 4. Revision during the data collection period:**

Revisions have been made between KOST\_A and KOST\_B.

## 21-23. Fruit

### 1. Name of original questions: questions about fruit

Q		Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
<b>21</b>	<b>How many fresh fruits have you eaten on average since you became pregnant?</b>						
	Fresh fruit	<i>per day</i> 1) 8+ 2) 6-7 3) 4-5 4) 2-3 5) 1	BB657	<i>per week</i> 1) 5-6 2) 3-4 3) 1-2	BB658	<i>per month</i> 1) 2-3 2) 1 3) 0	BB659
<b>22</b>	<b>How often have you on average eaten the following fresh fruits since you became pregnant?</b>						
	<b>Fresh fruit</b>						
	1. Orange	<i>per day</i>	BB660	<i>per week</i>	BB661	<i>per month</i>	BB662
	2. Banana	1) 4+	BB663	1) 5-6	BB664	1) 2-3	BB665
	3. Grapes	2) 3	BB666	2) 3-4	BB667	2) 1	BB668
	4. Apple	3) 2	BB669	3) 1-2	BB670	3) 0	BB671
	5. Peach, nectarine	4) 1	BB672		BB673		BB674
	6. Grapefruit		BB675		BB676		BB677
	7. Strawberries		BB678		BB679		BB680
	8. Other berries (blueberries etc.)		BB681		BB682		BB683
	9. Mango		BB684		BB685		BB686
	10. Melon		BB687		BB688		BB689
	11. Papaya		BB690		BB691		BB692
	12. Plum		BB693		BB694		BB695
	13. Pear		BB696		BB697		BB698
	14. Other fruits		BB699		BB700		BB701
<b>23</b>	<b>How often have you on average eaten the following dried fruits since you became pregnant?</b>						
	<b>Fresh fruit</b>						
	1. Apricots	<i>per day</i>	BB702	<i>per week</i>	BB703	<i>per month</i>	BB704
	Raisins	1) 4+	BB705	1) 5-6	BB706	1) 2-3	BB707
	Prune, fig, date	2) 3	BB708	2) 3-4	BB709	2) 1	BB710
	Peanuts	3) 2	BB711	3) 1-2	BB712	3) 0	BB713
	Almonds, hazelnuts cashew nuts etc.	4) 1	BB714		BB715		BB716

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

These questions are developed to get information about pregnant women's intake of both fresh and dried fruits.

### 4. Revision during the data collection period:

Revisions have been made between KOST\_A and KOST\_B.

## 24-26. Desserts, ice cream, cakes, candy

### 1. Name of original questions: questions about desserts, ice cream, cakes, candy

Q		Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
<b>24</b>	<b>How often have you on average eaten the following sweets since you became pregnant?</b>						
	<b>Dessert/ice cream</b>						
	1. Pudding (chocolate, crème caramel etc.)	<i>per day</i> 1) 2+	BB717	<i>per week</i> 1) 5-6	BB718	<i>per month</i> 1) 2-3	BB719
	2. Canned fruit, stewed fruit thickened with potato flour	2) 1	BB720	2) 3-4 3) 1-2	BB721	2) 1 3) 0	BB722
	3. Fruit salad made of fresh fruit		BB723		BB724		BB725
	4. Ice cream		BB726		BB727		BB728
	5. Ice cream made of yogurt, low fat ice cream		BB729		BB730		BB731
	6. Water ice stick, sherbet		BB732		BB733		BB734
	7. Vanilla sauce		BB735		BB736		BB737
	8. Cream, whipped cream		BB738		BB739		BB740
<b>25</b>	<b>How often have you on average eaten cakes and buns since you became pregnant?</b>						
	<b>Cakes, buns</b>						
	1. Sweet bun	<i>per day</i> 1) 4+	BB741	<i>per week</i> 1) 5-6	BB742	<i>per month</i> 1) 2-3	BB743
	2. Danish pastry	2) 3	BB744	2) 3-4 3) 1-2	BB745	2) 1 3) 0	BB746
	3. Doughnut, sponge cake	3) 2	BB747		BB748		BB749
	4. Waffle	4) 1	BB750		BB751		BB752
	5. Chocolate cake, cream layer cake etc.		BB753		BB754		BB755
	6. Cookie		BB756		BB757		BB758
<b>26</b>	<b>How often have you on average eaten sweets and snacks since you became pregnant?</b>						
	<b>Sweets and snacks</b>						
	1. Plain chocolate	<i>per day</i> 1) 4+	BB759	<i>per week</i> 1) 5-6	BB760	<i>per month</i> 1) 2-3	BB761
	2. Fancy and filled chocolate	2) 3	BB762	2) 3-4 3) 1-2	BB763	2) 1 3) 0	BB764
	3. Caramel, candies, liquorice	3) 2	BB765		BB766		BB767
	4. Jelly sweets, marshmallow	4) 1	BB768		BB769		BB770
	5. Pastille with sugar		BB771		BB772		BB773
	6. Pastille sugar free		BB774		BB775		BB776
	7. Marzipan		BB777		BB778		BB779
	8. Potato chips		BB780		BB781		BB782
	9. Popcorn		BB783		BB784		BB785
	10. Salty snacks		BB786		BB787		BB788

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

These questions are developed to get information about pregnant women's intake of desserts, ice cream, cakes and candy.

### 4. Revision during the data collection period:

Revisions have been made between KOST\_A and KOST\_B.

## 27. Other food items

### 1. Name of original questions: questions about other food items

Q	Variable name	Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
27	It will not be possible to include all kinds of food in a questionnaire. We therefore ask you to write down food items that you have eaten since you became pregnant and that you have not yet been asked about.						
	Other food items eaten						
1.	BB789	<i>per day</i>	BB790	<i>per week</i>	BB791	<i>per month</i>	BB792
2.	BB793	1) 2+	BB794	1) 5-6	BB795	1) 2-3	BB796
3.	BB797	2) 1	BB798	2) 3-4	BB799	2) 1	BB800
4.	BB801		BB802	3) 1-2	BB803	3) 0	BB804

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

These questions are developed to get information about pregnant women's intake of other food items not yet been asked about.

### 4. Revision during the data collection period:

Not included in KOST\_A

## 28-29. Genetically modified food

### 1. Name of original questions: Questions about genetically modified food

Q			Response options	Variable name				
28	Have you eaten any genetically modified food items, either abroad or in Norway, since you became pregnant?							
			1- Yes 2- No 3- Don't know	BB805				
29	It will not be possible to include all kinds of food in a questionnaire. We therefore ask you to write down food items that you have eaten since you became pregnant and that you have not yet been asked about.							
	<b>Other food items eaten</b>							
	1.	BB806	<i>per day</i> 1) 6+	BB807	<i>per week</i> 1) 5-6	BB808	<i>per month</i> 1) 2-3	BB809
	2.	BB810	2) 5 3) 4	BB811	2) 3-4 3) 1-2	BB812	2) 1 3) 0	BB813
	3.	BB814	4) 3 5) 2	BB815		BB816		BB817
	4.	BB818	6)1	BB819		BB820		BB821

### 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

This is a measure of pregnant women's intake of genetically modified food.

### 4. Revision during the data collection period:

No included in KOST\_A.

### 30. Hot meals bought at kiosks, gas stations and fast food restaurants

**1. Name of original questions:** questions about hot meals bought at kiosks, gas stations and fast food restaurants

Q		Response Options 1	Variable name	Response Options 2	Variable name	Response Options 3	Variable name
30	<b>How often have you eaten hot meals bought at kiosks, gas stations and fast food restaurants?</b>						
	<b>Food bought from</b>						
	1. Kiosks	<i>per day</i> 1) 4+	BB825	<i>per week</i> 1) 5-6	BB826	<i>per month</i> 1) 2-3	BB827
	2. Gas stations	2) 2-3	BB828	2) 3-4	BB829	2) 1	BB830
	3. Fast food restaurants (McDonald's etc.)	3) 1	BB831	3) 1-2	BB832	3) 0	BB833

**2. Description of original questions:** MoBa specific single questions

**3. Rationale for choosing the questions:**

This is a measure of pregnant women's intake of hot meals bought at kiosks, gas stations and fast food restaurants.

**4. Revision during the data collection period:**

Revisions have been made between KOST\_A and KOST\_B.

### 31-38. Dietary changes due to this pregnancy

#### 1. Name of original questions: questions about dietary changes due to this pregnancy

Q	Response options	Variable name
<b>31</b>	<b>Please mark if you have eaten more, less or the same amount of the following food items compared to before you became pregnant?</b>	
	Milk, dairy products and cheese	BB834
	Bread and cereals	BB835
	Biscuits	BB836
	Fat	BB837
	Meat	BB838
	Fish	BB839
	Eggs	BB840
	Vegetables	BB841
	Fruit	BB842
	Chocolate	BB843
	Other sweets	BB844
	Coffee	BB845
	Tea	BB846
	Juice	BB847
	Soft drinks with sugar	BB848
	Soft drinks sugar free	BB849
	Alcohol	BB850
<b>32</b>	<b>Have you experienced nausea during this pregnancy?</b>	
	1- Yes	BB851
	2- No	
<b>33</b>	<b>If yes, has this caused you to eat more or less than before?</b>	
	1- More	BB852
	2- Less	
<b>34</b>	<b>In which week (s) have you been most bothered with nausea?</b>	
	From pregnancy week	BB853
	To pregnancy week	BB854
	Still nauseated	BB855
<b>35</b>	<b>Have you been throwing up (vomiting) during this pregnancy?</b>	
	1- Yes	BB856
	2- No	
<b>36</b>	<b>In which week (s) have you been throwing up (vomiting)?</b>	
	From pregnancy week	BB857
	To pregnancy week	BB858
	Still throwing up	BB859
<b>37</b>	<b>Have you started to eat or drink certain food items during this pregnancy?</b>	
	1- Yes	BB860
	2- No	
<b>38</b>	<b>If yes, name the two most important food items you have started to eat/drink.</b>	
	1.	BB861 (txt)
	2.	BB862 (txt)

#### 2. Description of original questions: MoBa specific single questions

#### 3. Rationale for choosing the questions:

These questions were developed to get information about pregnant women's dietary changes due to this pregnancy.

#### 4. Revision during the data collection period:

Questions designed for version KOST\_B.

### 39-40. Supplements

#### 1. Name of original questions: questions about supplements

Q	Response options / Variable name		
<b>39</b>	<b>Do you use, or have you used supplements during this pregnancy?</b>		
		1- Yes 2- No	BB863
<b>40</b>	<b>Do you use, or have you used supplements during this pregnancy?</b>		
		Times per week 1) 7 2) 6 3) 5 4) 4 5) 3 6) 2 7) 1 8) <0 9) 0	Amount 1) 1ts 2) 1bs 3) 1ss
	<b>Liquid supplements</b>		
	1. Cod liver oil	BB864	BB865
	2. Omega-3 cod liver oil	BB866	BB867
	3. Sanasol	BB868	BB869
	4. Biovit	BB870	BB871
	5. Liquid iron mixture (Floradix etc.)	BB872	BB873
	Other liquid supplements		
	6. Name:	BB874	BB875
	7. Corporation	BB876	BB877
	8. Name	BB878	BB879
	9. Corporation	BB880	BB881
		Times per week 1) 7 2) 6 3) 5 4) 4 5) 3 6) 2 7) 1 8) <0 9) 0	Numbers at a time 1) 1 2) 2 3) 3 4) 4+
	<b>Capsules/ tablet</b>		
	10. Cod liver capsules	BB882	BB883
	11. Cod liver capsules without A and D-vitamins	BB884	BB885
	12. Vitaplex	BB886	BB887
	13. Kostpluss/myco plus multi	BB888	BB889
	14. Nyco plus folic acid 0,4mg	BB890	BB891
	15. Spekro (Solaray)	BB892	BB893
	16. Hemofer	BB894	BB895
	17. Duroferon durretter	BB896	BB897
		Times per week 1) 7 2) 6 3) 5 4) 4 5) 3 6) 2 7) 1 8) <0 9) 0	Numbers at a time 1) 1 2) 2 3) 3 4) 4+
	<b>Other supplements</b>		
	18. Name	BB898	BB900
	19. Corporation	BB899	BB901
	20. Name	BB902	BB904
	21. Corporation	BB903	BB905
	22. Name	BB ??	BB ??

23. Corporation	BB ??		
24. Name	BB ??	BB ??	BB ??
25. Corporation	BB ??		

\* The question mark '??' means that the variable names are not annotated.

## 2. Description of original questions: MoBa specific single questions

### 3. Rationale for choosing the questions:

This is a measure of pregnant women's intake of supplements during this pregnancy.

### 4. Revision during the data collection period:

Revisions have been made between KOST\_A and KOST\_B.

## References

References for validation of questionnaire 2cdew (KOST\_B) <sup>(3; 4; 5; 6)</sup>

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