

Questions documentation

20 årsskjema 20-years Questionnaire

*About tattoos, menstruation, prevention,
diseases, and medication and more.*

The Norwegian Mother and Child Cohort Study (MoBa)

*Recipients: 2. generation MoBa participants 20 year of age or
older when the survey is sent out*

Version	Date	Performed by	Description
1.0	October 2024	Siri Håberg (FHI) Thea Grindstad (FHI) Katrine Kranstad (FHI)	Original version

LIST OF CONTENTS

General information	3
Biological sex	4
Physical measures	5
Questions for both genders	6
Past and current illnesses and health issues	7
Body and food	11
Tattoos and cosmetics.....	12
Snuff, smoke, alcohol.....	14
Puberty.....	15
Menstruation and puberty	17
Contraception.....	21
Questions to all women.....	26
Endometriosis and adenomyosis	27
Life Satisfaction and Pregnancy.....	28

General information

There are two versions of the questionnaire, A and B.

Text from text boxes will not be delivered as is. None of the texts in this questionnaire is coded as of 29.11.2024.

This instrument documentation was written based on version A and B of the questionnaire.

Biological sex

Version	Q		Response options	Variable name
A and B	1	What sex were you born with?		
		[Radio buttons]	1. Male 2. Female	TG119

Description of original questions (including references, if applicable): Standardised question in MoBa questionnaires about gender at birth.

Rationale for choosing the questions: Used to direct respondents to questions relevant to them (and their gender).

Revision during the data collection period: No revisions have been made.

Physical measures

Version	Q		Response options	Variable name
A and B	2	How tall are you?		
		<i>Give your answer in centimeters</i>		
	3		Number box – height in cm (min: 50, max:250)	TG11
		What is your weight?		
		<i>Without clothes and shoes. Enter your answer in kilograms</i>		
			Number box – weight in kg (min:20, max:500)	TG12

Description of original questions (including references, if applicable): MoBa specific question

Rationale for choosing the questions: Asked to ensure consistency across MoBa questionnaires.

Revision during the data collection period:

No revisions have been made.

Questions for both genders

Version	Q	Response options	Variable name
A and B	4	How often have you used the following medicines in the last 4 weeks? Dietary supplements and vitamins are not included. Place a checkmark for each line	
		Over-the-counter pain relievers (e.g., paracetamol, Ibuprofen)	TG13
		Prescription pain relievers	TG14
		Prescription sleeping pills	TG15
		Prescription medicine for depression	TG16
		Over-the-counter allergy medicine	TG17
		Prescription allergy medicine	TG18
		Prescription Asthma medication	TG19
		Prescription anxiety medication	TG20
		Other prescription medication	TG21
	5	Write the names of the medications you have checked above	
		Based on Q4: If checked anything other than "Not used in the last 4 weeks" [Text box]	TG22
	6	In the past year, have you used medicine, inhalers, or other prescribed medications for asthma?	
		[Radio buttons] 1. No 2. Yes	TG23

Description of original questions (including references, if applicable): Developed by the Pharmacoepi group at NIPH.

Rationale for choosing the questions: Included in order to enable analysis of the interplay between medication use and health.

Revision during the data collection period: No revisions have been made.

Past and current illnesses and health issues

Version	Q		Response options	Variable name
A and B	7	Do you have any food allergies?		
		[Radio buttons]	1. Yes, but not confirmed by doctor 2. Yes, confirmed by doctor 3. No 4. Don't know	TG24
	7.1	What foods are you allergic to?		
		<i>Based on Q7: If "Yes, but not confirmed by doctor" or "Yes, confirmed by doctor" was selected.</i> [Multiple choice]	Milk	TG25
			Eggs	TG26
			Peanuts	TG27
			Other nuts	TG28
			Shellfish	TG29
			Fish	TG30
			Fruit	TG31
			Wheat	TG32
			Soy	TG33
			Rye	TG34
			Other foods	TG35
	8	Do you have any of the following diseases or health conditions?		
		[Multiple choice]	Asthma	TG36
			Pollen allergy/hay fever	TG37
			Animal allergies	TG38
			Other allergies	TG39
			Atopic dermatitis	TG40
			Other dermatitis	TG41
			Psoriasis	TG42
			Type 1 diabetes	TG43
			Type 2 diabetes	TG44
			Crohn's disease	TG45
			Ulcerative colitis	TG46
			Celiac disease (confirmed by blood test and gastroscopy)	TG47
			Celiac disease (not confirmed by blood test and gastroscopy)	TG48
			Irritable bowel syndrome (IBS)	TG49
			Migraines	TG50
			Chronic fatigue syndrome/ME	TG51
			Long Covid - lingering symptoms after a COVID infection	TG52
			Epilepsy	TG53
			Anxiety	TG54
			Depression	TG55
			Anorexia/bulimia/other eating disorder	TG56
			ADHD	TG57
			Substance abuse (alcohol, drugs or narcotics)	TG58
			Other mental disorder	TG59
			Other	TG60
B			No, none of these	TG263
A and B	8.1.1	Asthma: Has a doctor diagnosed you with this?	[Radio buttons]	TG61
		<i>Based on Q7: If "Asthma" was selected.</i>	1. No	
	8.2.1	Pollen allergy/hay fever: Has a doctor diagnosed you with this?	2. Yes	TG62

		<i>Based on Q7: If "Pollen allergy/hay fever" was selected.</i>	
	8.3.1	Animal allergies: Has a doctor diagnosed you with this? <i>Based on Q7: If "Animal allergies" was selected.</i>	TG63
	8.4.1	Other allergies: Has a doctor diagnosed you with this? <i>Based on Q7: If "Other allergies" was selected.</i>	TG64
	8.5.1	Atopic dermatitis: Has a doctor diagnosed you with this? <i>Based on Q7: If "Atopic dermatitis" was selected.</i>	TG65
	8.6.1	Other dermatitis: Has a doctor diagnosed you with this? <i>Based on Q7: If "Other dermatitis" was selected.</i>	TG66
	8.7.1	Psoriasis: Has a doctor diagnosed you with this? <i>Based on Q7: If "Psoriasis" was selected.</i>	TG67
	8.8.1	Type 1 diabetes: Has a doctor diagnosed you with this? <i>Based on Q7: If "Type 1 diabetes" was selected.</i>	TG68
	8.9.1	Type 2 diabetes: Has a doctor diagnosed you with this? <i>Based on Q7: If "Type 2 diabetes" was selected.</i>	TG69
	8.10.1	Crohn's disease: Has a doctor diagnosed you with this? <i>Based on Q7: If "Crohn's disease" was selected.</i>	TG70
	8.11.1	Ulcerative colitis: Has a doctor diagnosed you with this? <i>Based on Q7: If "Ulcerative colitis" was selected.</i>	TG71
	8.12.1	Celiac disease (confirmed by blood test and gastroscopy): Has a doctor diagnosed you with this? <i>Based on Q7: If "Celiac disease (confirmed by blood test and gastroscopy)" was selected.</i>	TG72
	8.13.1	Celiac disease (not confirmed by blood test and gastroscopy): Has a doctor diagnosed you with this? <i>Based on Q7: If "Celiac disease (not confirmed by blood test and gastroscopy):" was selected.</i>	TG73

	8.14.1	Irritable bowel syndrome (IBS): Has a doctor diagnosed you with this? <i>Based on Q7: If “Irritable bowel syndrome (IBS):” was selected.</i>		TG74
	8.15.1	Migraines: Has a doctor diagnosed you with this? <i>Based on Q7: If “Migraines” was selected.</i>		TG75
	8.16.1	Chronic fatigue syndrome/ME: Has a doctor diagnosed you with this? <i>Based on Q7: If “Chronic fatigue syndrome/ME” was selected.</i>		TG76
	8.17.1	Long Covid - lingering symptoms after a COVID infection: Has a doctor diagnosed you with this? <i>Based on Q7: If “Long Covid - lingering symptoms after a COVID infection” was selected.</i>		TG77
	8.18.1	Epilepsy: Has a doctor diagnosed you with this? <i>Based on Q7: If “Epilepsy” was selected.</i>		TG78
	8.19.1	Anxiety: Has a doctor diagnosed you with this? <i>Based on Q7: If “Anxiety” was selected.</i>		TG79
	8.20.1	Depression: Has a doctor diagnosed you with this? <i>Based on Q7: If “Depression” was selected.</i>		TG80
	8.21.1	Anorexia/bulimia/other eating disorder: Has a doctor diagnosed you with this? <i>Based on Q7: If “Anorexia/bulimia/other eating disorder” was selected.</i>		TG81
	8.22.1	ADHD: Has a doctor diagnosed you with this? <i>Based on Q7: If “ADHD” was selected.</i>		TG82
	8.23.1	Substance abuse (alcohol, drugs or narcotics): Has a doctor diagnosed you with this? <i>Based on Q7: If “Substance abuse (alcohol, drugs or narcotics)” was selected.</i>		TG83
	8.24.1	Other mental disorder: Has a doctor diagnosed you with this? <i>Based on Q7: If “Other mental disorder” was selected.</i>		TG84
Have you ever had, or do you currently have cancer?				
9	[Radio buttons]	1. No 2. Yes, cancer (treated with chemotherapy) 3. Yes, cancer (without chemotherapy treatment)	TG85	

Description of original questions (including references, if applicable): Allergy questions based on the MoBa 7-year-old questionnaire (replicated from NIEHS). Questions about illness inspired by The Bodily Distress Syndrome (BDS)-25-checklist used in the DANFUND study. The question on cancer is based on clinical experience (association between chemotherapy and fecundity).

Rationale for choosing the questions: Included in order to capture data on current illnesses and health issues in the MoBa second generation study population.

Revision during the data collection period:

No revisions have been made.

Body and food

Version	Q	Response options		Variable name
B	10	Think back to when you were 10 years old. Compared to the average, would you describe yourself as:		
		[Radio buttons]	1. Thinner 2. Thicker 3. About average 4. Do not know 5. Do not want to answer	TG264
	11	When you were 10 years old, how tall were you compared to the average for your gender?		
		[Radio buttons]	1. Lower 2. Higher 3. About average 4. Don't know 5. Don't want to answer	TG265
	12	As a baby - were you round or thin when you started taking your first steps (about 9-12 months of age)?		
		[Radio buttons]	1. Thinner 2. Plumper/rounder 3. About average 4. Do not know 5. Do not want to answer	TG266
	13	Decide on the following statements:		
		When I see or smell food I like, I want to eat	[Radio buttons]	TG267
		I get full quickly	1. Strongly Disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree	TG268
		I'm interested in tasting food I haven't tasted before		TG269

Description of original questions (including references, if applicable): Q 10, 11, 12: Developed by a research group at the University of Bergen led by Stefan Johansson.

Q 13: three questions collected from a bigger set of questions included in the Adult Eating Behaviour Questionnaire.

Rationale for choosing the questions: the data generated enables research on topics related to BMI and appetite.

Revision during the data collection period: No revisions have been made.

Tattoos and cosmetics

Version	Q		Response options	Variable name
A and B	14	Do you have one or more tattoos?		
		[Radio buttons]	1. Yes, one 2. Yes, several 3. No	TG86
	14.1	What type of tattoo(s) do you have?		
		Based on Q14: If "Yes" or "Yes, several" was selected	Regular	TG87
			Medical (from radiation treatment, reconstruction, or similar)	TG88
B	14.2	[Multiple choice]	Permanent make-up (PMU)	TG89
		How old were you when you got your first tattoo? Based on Q14: If "Yes" or "Yes, several" was selected	1. Under 15 2. 15 3. 16 4. 17 11. 24 12. 25 13. Do not remember	TG270
A	9.2	How old were you when you got your first tattoo? Based on Q14: If "Yes" or "Yes, several" was selected	1. 0 2. 1 3. 2 24. 23 25. 24 26. 25 27. Do not remember	TG90
A and B	14.3	What colors are your tattoos?		
		[Multiple choice] Based on Q14: If "Yes" or "Yes, several" was selected	Black	TG91
			Red	TG92
			Blue	TG93
			White	TG94
			Gray	TG95
			Yellow	TG96
			Orange	TG97
			Purple	TG98
			Green	TG99
			Other colors	TG100
	14.4	How large are your tattoo(s), approximately measured in palms? (For multiple tattoos, indicate the combined area)		
		Based on Q14: If "Yes" or "Yes, several" was selected	1. Less than 1 palm 2. 1-5 palms 3. More than 5 palms 4. Don't know	TG101
	15	Have you ever removed one or more tattoos?		
		Based on Q14: If "Yes" or "Yes, several" was selected	1. Yes, one 2. Yes, several 3. No	TG102
	16	[Radio buttons]		
		How often do you use the following products:		
		Skin makeup	Radio buttons: 1. Seldom/never 2. Once a week 3. A few times a week 4. Daily	TG103
		Hair shampoo		TG104
		Conditioner		TG105
		Hair styling products		TG106
		Body lotion (for body, face)		TG107
		Hand lotion		TG108
		Lip balm		TG109
		Fragrances (e.g., perfume, eau de toilette)		TG110
		Deodorant		TG111

		Massage oil		TG112
	17	In the last 6 months, how often have you painted your nails with regular nail polish (not shellac, gel)?		
		[Radio buttons]	1. Never 2. Once 3. Twice 4. Three times 5. Four times or more	TG113
	18	In the last 6 months, how often have you had a nail treatment with shellac or gel?		
		[Radio buttons]	1. Never 2. Once 3. Twice 4. Three times 5. Four times or more	TG114

Description of original questions (including references, if applicable): Questions 9, 9.1, 9.2, 9.2, 9.2 and 10 are copied from a questionnaire on tatoos, lifestyle factos and cancer risk, coordinated by the Danish Center for Twin research, Jacob Hjelmberg at the University of Southern Denmark. Link to the project website:
https://www.sdu.dk/da/om_sdu/institutter_centre/ist_sundhedstjenesteforsk/centre/dtr/projects/tattoo (from a These questions describe the current tattoo status of the participants.

Cosmetics questions based on questionnaire for mother and child (7-14 years) in MoBa,

Rationale for choosing the questions: To get an overview of how common tatoos are within this age group. Tattoo ink can give immunological reactions and can be endocrine disruptors. To get an overview of how frequent the respondents are exposed to cosmetics. Cosmetics can be endocrine disruptors.

Revision during the data collection period:

No revisions have been made.

Snuff, smoke, alcohol.

Version	Q		Response options	Variable name
A and B	19	How often do you use the following:		
		Smoke	Radio buttons: 1. Never 2. Less than once a week 3. Once a week or more 4. Daily	TG115
		E-cigarettes		TG116
		Snuff		TG117
B	20	How many times in the last 6 months have you consumed enough alcohol to noticeably feel intoxicated? <i>[Radio buttons]</i>	1. Never 2. Once 3. 2-4 times 4. 5-10 times 5. 11-15 times 6. 16-20 times 7. 20-25 times 8. More than 25 times 9. Don't remember	TG271
A	15	How many times in the last 6 months have you consumed enough alcohol to noticeably feel intoxicated? <i>[Radio buttons]</i>	1. Never 2. Once 3. 2-4 times 4. 5-10 times 5. 11-15 times 6. 16-20 times 7. 21-25 times 8. More than 25 times	TG118

Description of original questions (including references, if applicable): MoBa specific questions

Rationale for choosing the questions: capture data on smoking, snuff and alcohol from the MoBa second generation study population

Revision during the data collection period: No revisions have been made.

Puberty

Version	Q		Response options	Variable name
A and B	21	Compared to your peers, when did you hit puberty (testicles started to grow, pubic hair started to grow)?		
		Based on Q1(version A) or Q16.1: If "Male" was selected [Radio buttons]	1. Earlier than my peers 2. Somewhat at the same time as my peers 3. Later than my peers 4. Don't know	TG257
B	22	How old were you when you had your first ejaculation? Based on Q1: If "Male" was selected [Drop-down list]	1. Under 8 years 2. 8 years 3. 9 years 18. 24 years 19. 25 years 20. Do not remember 21. Have not happened yet	TG272
A	16.12	How old were you when you had your first ejaculation? Based on Q16.1: If "Male" was selected [Drop-down list]	1. 7 years 2. 8 years 3. 9 years 18. 24 years 19. 25 years 20. Do not remember 21. Have not happened yet	TG258
B	22.1	And how many months: Based on Q22: If "Have not had it yet" or "Don't remember" was NOT selected [Drop-down list]	1. 1 month 2. 2 months 3. 3 months 10. 10 months 11. 11 months 12. Can't remember	TG273
A	16.12.1	And how many months: Based on Q22: If "Have not had it yet" or "Don't remember" was NOT selected [Drop-down list]	1. 0 2. 1 3. 2 11. 10 12. 11 13. Can not remember	TG259
B	23	How old were you when you began to experience voice changes? Based on Q1: If "Male" was selected [Drop-down list]	1. Under 8 years 2. 8 years 3. 9 years 18. 24 years 19. 25 years 20. Do not remember 21. Has not yet experienced voice change	TG274
A	16.13	How old were you when you began to experience voice changes? Based on Q16.1: If "Male" was selected [Drop-down list]	1. 7 years 2. 8 years 3. 9 years 18. 24 years 19. 25 years 20. Do not remember 21. Have not happened yet	TG260
B	23.1	And how many months: Based on Q23: If "Have not happened yet" or "Don't remember" was NOT selected [Drop-down list]	1. 1 month 2. 2 months 3. 3 months 11. 10 months 12. 11 months 13. Can't remember	TG275
A	16.13.1	And how many months:	1. 0	TG261

		Based on Q16.13: If “Have not happened yet” or “Don’t remember” was NOT selected [Drop-down list]	2. 1 3. 2 11. 10 12. 11 13. Can not remember	
--	--	---	---	--

Description of original questions (including references, if applicable): Questions are formulated by researchers. The questions are also asked in the DNBC “Global Questionnaire (BIOSFER)” and in the the MoBa questionnaire UngHelse.

Rationale for choosing the questions: Included in order to capture retrospective data on puberty development in the male MoBa second generation study population

Revision during the data collection period: No revisions have been made.

Menstruation and puberty

Version	Q		Response options	Variable name
B	24	How old were you when you had your first menstruation? <i>Based on Q1: If "Female" was selected</i>	1. Under 10 years 2. 10 years 3. 11 years 16. 24 years 17. 25 years 18. Do not remember 19. Have not had it yet	TG276
A	16.1	How old were you when you had your first menstruation? <i>Based on Q16: If "Female" was selected</i>	1. 0 2. 1 3. 2 25. 24 26. 25 27. Do not remember 28. Have not had it yet	TG120
And how many months:				
A and B	24.1.1	<i>Based on Q24: If "Do not remember" or have not had it yet" was NOT selected</i>	1. 0 2. 1 3. 2 11. 10 12. 11 13. Can not remember	TG121
Compared to your peers, when did you get the first signs of puberty?				
A and B	25	<i>Based on Q1: If "Female" was selected</i> <i>[Radio buttons]</i>	1. Earlier than my peers 2. Somewhat at the same time as my peers 3. Later than my peers 4. Do not know	TG122
B	25.1	Has your menstrual cycle been regular in the past 6 months? <i>Based on Q24: If anything else than "Have not had it yet" was selected</i> <i>[Radio buttons]</i>	1. Yes, I have been able to predict my next period within 1-3 days. 2. Yes, I have been able to predict my period within 4-5 days 3. Yes, I have been able to predict my period within 6-7 days 4. No, irregular. My cycle length often varied by more than 7 days. 5. Do not know 6. I do not have menstrual bleeding	TG277
A	16.3	Has your menstrual cycle been regular in the past 6 months? <i>Based on Q16.1: If anything else than "Have not had it yet" was selected</i> <i>[Radio buttons]</i>	1. Yes, regularly and I can predict next period within 3 days accuracy 2. No, irregular with up to 4-6 days difference in cycle length 3. No, irregular with up to 7 days or more difference in cycle length 4. No, very irregular and I cannot predict the next period 5. Don't know 6. I don't have menstrual bleeding	TG123
B	25.1.1	In the last 6 months, how many days are there usually between your periods? <i>Based on Q25.1: If anything else than "I don't have menstrual bleeding" was selected</i> <i>[Radio buttons]</i>	1. Less than 15 days 2. 15 days 3. 16 days 76. 89 days 77. 90 days 78. More than 90 days 79. Do not know	TG278
A	16.3.1	In the last 6 months, how many days are there usually between your periods (from the first day of one period to the first day of the next)?	1. Less than 24 days 2. 24-27 days 3. 28-31 days 4. 32-35 days 5. More than 35 days 6. Don't know	TG124

		Based on Q16.3: If anything else than "I don't have menstrual bleeding" was selected [Radio buttons]	7. Too irregular to answer	
A and B	25.1.2	How many days do you usually bleed during menstruation?		
		Based on Q25.1: If anything else than "I don't have menstrual bleeding" was selected [Radio buttons]	1. 1-2 days 2. 3-7 days 3. More than 7 days 4. Varies too much 5. Don't know	TG125
A and B	25.1.3	About how much do you bleed on the heaviest bleeding days?		
		Based on Q25.1: If anything else than "I don't have menstrual bleeding" was selected [Multiple choice]	Light (no need to change pads or tampons often/only spotting)	TG126
			Change pads/tampons 5 times or less per day	TG127
			Change pads/tampons between 6 to 9 times per day	TG128
			Need 9 or more pads/tampons on days on the heaviest days	TG129
			Change pads/tampons every 2 hours	TG130
			There are blood clots/clumps	TG131
			Often bleed through pads/tampons	TG132
			Using both pads and tampons to avoid bleeding through	TG133
			Get up at night to change pads/tampons	TG134
			Often blood on bedding even If you use pads and tampons	TG135
			You stay at home during your period in fear of accidents	TG136
			Not sure	TG137
B	25.1.4	In the last 6 months, have you experienced bleeding or "spotting" between your menstrual cycles?		
		Based on Q25.1: If anything else than "I don't have menstrual bleeding" was selected [Radio buttons]	1. Yes, usually 2. Yes, sometimes 3. No 4. Not sure 5. Not relevant	TG279
A	16.3.4	In the last 6 months, have you experienced bleeding or "spotting" between your menstrual cycles?		
		Based on Q16.3: If anything else than "I don't have menstrual bleeding" was selected [Radio buttons]	1. Yes, usually 2. Yes, sometimes 3. No 4. Not sure	TG138
A and B	25.2	Do you usually have pain just before or during menstruation or pain that follows the menstrual cycle (cyclical pain)?		
		Based on Q25.1: If anything else than "I don't have menstrual bleeding" was selected [Multiple choice]	I have no cyclical pain	TG139
			Pain in the lower abdomen just before or during menstruation	TG140
			Pain in the lower abdomen at other times in the cycle than just before or during menstruation	TG141
			Pain in the lower back just before or during menstruation	TG142
			Pain in the lower back at other times in the cycle than just before or during menstruation	TG143
			Pain down the legs just before or during menstruation	TG144
			Pain down the legs at other times in the cycle than just before or during menstruation	TG145

			Pain when I go to the bathroom to urinate just before or during menstruation	TG146
			Pain when I go to the bathroom to urinate at other times in the cycle than just before or during menstruation	TG147
			Pain in connection with defecation just before or during menstruation	TG148
			Pain in connection with defecation at other times in the cycle than just before or during menstruation	TG149
			Other cyclical pains	TG150
			Constant pain that does not vary with the menstrual cycle	TG151
			Constant pain that worsens with the menstrual cycle	TG152
B	25.2.15		Not relevant	TG280
B	25.3	If you have used painkillers for menstrual cramps in the past 6 months, how many days did you usually use them?		
		Based on Q24: If anything else than "Have not had it yet" was selected [Radio buttons]	1. Have not used painkillers for menstrual pain in the last 6 months 2. 1 day 3. 2 days 4. 3 days 5. 4 days 6. 5 days 7. 6 days 8. 7 days 9. More than 7 days	TG281
A	16.3.6	In the last 6 months, do you usually use painkillers for menstrual pain?		
		Based on Q16.1: If anything else than "Haven't had it yet" was selected [Radio buttons]	1. Yes, more than 2 days every menstruation 2. Yes, 1-2 days every menstruation 3. Yes, but not every menstruation 4. No 5. I do not have pain 6. Don't know	TG153
A and B	25.3.1	How strong are your period pains if you don't use painkillers?		
		Based on Q25.2: If anything else than "I have no cyclical pain" was selected [Multiple choice]	I am in so much pain that I am often bedridden	TG154
			I am in so much pain that I have to be away from studies/work - normal daily activities	TG155
			I am in pain, but can do normal daily activities	TG156
			Do not know	TG157
A and B	25.3.2	How strong are your period pains if you use painkillers?		
		Based on Q25.2: If anything else than "I have no cyclical pain" was selected [Multiple choice]	I am in so much pain that I am often bedridden	TG158
			I am in so much pain that I have to be away from studies/work - normal daily activities	TG159
			I am in pain, but can do normal daily activities	TG160
			I am not in pain when I use painkillers	TG161
			Do not know	TG162
B	25.3.2.6		Not relevant	TG282
A and B	25.4	When you are not on your period, do you often feel tired and fatigued?		
		Based on Q24: If anything else than "Have not had it yet" was selected	I am not usually tired and fatigued	TG163
			I am often tired and fatigued, but can be in normal daily activities	TG164
			I am often so tired and fatigued that I have to stay away from studies/work - usual daily activity	TG165
			I am often so tired and fatigued that I am bedridden	TG166
			Don't know	TG167
B	25.4.6		Not relevant	TG283

		When you are on your period, do you often feel tired and fatigued?	
A and B	25.5	Based on Q24: If anything else than "Have not had it yet" was selected [Multiple choice]	I am not usually tired and fatigued when I have my period
			I am often tired and fatigued, but can do normal daily activities when I have my period
			I am often so tired and fatigued that I have to stay away from studies/work - usual daily activity
			I am often so tired and fatigued that I am bedridden when I have my period
			Don't know
B	25.5.6		Not relevant
A	16.5.6		Not applicable

Description of original questions (including references, if applicable): Questions on puberty are formulated by researchers. The questions are also asked in the DNBC "Global Questionnaire (BIOSFER)" and in the MoBa questionnaire UngHelse.

The questions on menstruation and pain are developed by researchers and clinicians. Guides on diagnosis criteria from Legeforeningen and Helsebiblioteket have been consulted. Inspired by clinical practice and the ALSPAC questionnaire for people over 21 ("Your life now"). Some questions overlap with the MoBa Q1 and the Participant questionnaire (Deltakerskjema) in the Moba collection "Unge kvinners fruktbarhet").

Specific references for the following questions:

- Q25.1.1 and 25.1.2: guide on cycle length
<https://www.legeforeningen.no/foreningsledd/fagmed/norsk-gynekologisk-forening/veiledere/veileder-i-gynekologi/gynekologiske-blodningsforstyrrelser/>
- Q25.1.3: response options based on definition of heavy menstrual bleeding
<https://www.helsebiblioteket.no/innhold/artikler/pasientinformasjon/menstruasjon-med-store-blodninger-menoragi> - Which is based on original brochure published by BMJ Publishing Group as part of the BMJ Best Practice.
- Q25.1.4: symptoms connected to PCOS and endometriosis
<https://www.helsebiblioteket.no/innhold/artikler/pasientinformasjon/menstruasjon-med-store-blodninger-menoragi> and guide in gynecology, chapter on endometriosis
https://www.legeforeningen.no/contentassets/7064007622ad4343baa279b0c61500a3/pcos_2024.pdf
- Q25.2: based on WF questionnaire, but improved response options, guide in gynecology, chapter on endometriosis <https://www.legeforeningen.no/foreningsledd/fagmed/norsk-gynekologisk-forening/veiledere/veileder-i-gynekologi/endometriose/>
- Q25.3: Questions designed to e.g. capture endometriosis-related symptoms
- Q25.3.1 + 25.3.2: based on clinical experience
- Q25.4 and 25.5: Guide in gynecology, chapter on endometriosis
<https://www.legeforeningen.no/foreningsledd/fagmed/norsk-gynekologisk-forening/veiledere/veileder-i-gynekologi/endometriose/>

Rationale for choosing the instrument: Included in order to capture data on puberty, menstruation and pain in the female MoBa second generation study population.

Revision during the data collection period: No revisions have been made.

Contraception

Version	Q		Response options	Variable name
A and B	26	Are you currently using hormonal contraception?		TG174
		<i>Based on Q1: If "Female" was selected</i> <i>[Radio buttons]</i>	1. No, not using any contraception at the moment 2. No, I use non-hormonal contraception 3. Yes, birth control pills 4. Yes, mini-pills 5. Yes, hormonal intrauterine device (IUD) 6. Yes, birth control implant 7. Yes, birth control injection (Depo-Provera) 8. Yes, birth control patch 9. Yes, birth control ring 10. Other hormonal contraception	
B	26.1	Number of years. How long have you been using this contraception method? <i>Based on Q26: If any of "Yes,..." was selected</i>	1. Less than 1 year 2. 1 year 3. 2 years 4. 15 14 years 16 15 years 17 Do not remember	TG285
A	16.6.1	Number of years. How long have you been using this contraception method? <i>Based on Q16.6: If any of "Yes,..." was selected</i>	1. 0 2. 1 3. 2 4. 15 14 16 15 17 Do not remember	TG175
B	26.1.1	And how many months: Based on Q26.1: If "Don't remember" was NOT selected	1. 1 Month 2. 2 Months 3. 3 Months 4. 10. 10 Months 11. 11 Months 13. Can not remember	TG286
A	16.6.1.1	And how many months: <i>Based on Q16.6.1: If "Don't remember" was NOT selected</i>	1. 0 2. 1 3. 2 4. 11 10 12. 11 13. Can not remember	TG176
B	26.2	Number of years. How old were you when you started with hormonal contraception the first time? <i>Based on Q26: If any of "Yes,..." was selected</i>	1. under 10 years 2. 10 years 3. 11 years 4. 16. 24 years 17. 25 years 18. Do not remember	TG287
A	16.6.2	Number of years. How old were you when you started with hormonal contraception the first time? <i>Based on Q16.6: If any of "Yes,..." was selected</i>	1. 0 2. 1 3. 2 4. 25. 24 26. 25 27. Do not remember	TG177
B	26.2.1	And how many months: <i>Based on Q26.2: If "Don't remember" was NOT selected</i>	1. 1 Month 2. 2 Months 3. 3 Months 4. 10. 10 Months 11. 11 Months 12. Can't remember	TG288
A	16.6.2.1	And how many months:	1. 0 2. 1 3. 2	TG178

		Based on Q16.6.2: If “Don’t remember” was NOT selected	4. 11. 10 12. 11 13. Can not remember	
B	26.3	Number of years. How long have you been using some form of hormonal contraception? Based on Q26: If any of “Yes,...” was selected	1. Less than 1 year 2. 1 year 3. 2 years 4. 15. 14 years 16. 15 years 17. Do not remember	TG289
A	16.6.3	Number of years. How long have you been using some form of hormonal contraception? Add total time if you had breaks or used different types. Based on Q16.6: If any of “Yes,...” was selected	1. 0 2. 1 3. 2 4. 15. 14 16. 15 17. Do not remember	TG179
B	26.3.1	And how many months: Based on Q26.3: If “Don’t remember” was NOT selected	1. 1 Month 2. 2 Months 3. 3 Months 4. 10. 10 Months 11. 11 Months 12. Can’t remember	TG290
A	16.6.3.1	And how many months: Based on Q16.6.3: If “Don’t remember” was NOT selected	1. 0 2. 1 3. 2 4. 11. 10 12. 11 13. Can not remember	TG180
B	26.4	Why are you using hormonal contraception? Based on Q26: If any of “Yes,...” was selected [Multiple choice]	To prevent pregnancy	TG291
			To control the timing and frequency of my menstrual bleeding	TG292
			To have more regular bleedings	TG293
			To reduce the bleeding	TG294
			To reduce pain associated with menstruation	TG295
			To control acne/pimples	TG296
			As treatment for diagnoses/diseases (endometriosis, adenomyosis, PCOS)	TG297
A	16.6.4	Why are you using contraception? Based on Q16.6: If any of “Yes,...” was selected [Multiple choice]	Other	TG298
			To prevent pregnancy	TG181
			To avoid sexual transmitted infections	TG182
			To control the timing and frequency of my menstrual bleeding	TG183
			To have more regular bleedings	TG184
			To reduce the bleeding	TG185
			To reduce pain associated with menstruation	TG186
B	26.5	Was your menstrual cycle regular before starting hormonal contraception? Based on Q26: If any of “Yes,...” was selected [Radio buttons]	To control acne/pimples	TG187
			As treatment for diagnoses/diseases (endometriosis, adenomyosis, PCOS)	TG188
			Other	TG189
			1. Yes, I have been able to predict my next period within 1-3 days.	TG299
			2. Yes, I have been able to predict my period within 4-5 days	
			3. Yes, I have been able to predict my period within 6-7 days	
			4. No, irregular. My cycle length often varied by more than 7 days.	
			5. Don't know remember	
A	16.6.5	Was your menstrual cycle regular before starting hormonal contraception?	6. I didn't have menstrual bleeding	
			1. Yes, regular and I could predict next menstruation within 3 days accuracy	TG190

		<i>Based on Q16.6: If any of “Yes, ...” was selected</i> <i>[Radio buttons]</i>	2. No, irregular with up to 4-6 days difference in cycle length 3. No, irregular with up to 7 days or more difference in cycle length 4. No, very irregular and I could not predict the next period 5. Don’t remember 6. I didn’t have menstrual bleeding		
B	26.5.1	How many days were usually between two menstruations before starting hormonal contraception? <i>Based on Q26.5: If “I didn’t have menstrual bleeding” was NOT selected</i> <i>[Radio buttons]</i>	1. Less than 24 days 2. 24-27 days 3. 28-31 days 4. 32-35 days 5. More than 35 days 6. Do not know/Do not remember 7. Too irregular to answer	TG300	
A	16.6.5.1	How many days were usually between two menstruations before starting hormonal contraception? (From the first day of one menstruation to the first day of the next). <i>Based on Q16.6.5: If “I didn’t have menstrual bleeding” was NOT selected</i> <i>[Radio buttons]</i>	1. Less than 24 days 2. 24-27 days 3. 28-31 days 4. 32-35 days 5. More than 35 days 6. Don’t know 7. Too irregular to answer	TG191	
B	26.5.2	How many days did you usually bleed when you had menstruation before starting hormonal contraception? <i>Based on Q26.5: If “I didn’t have menstrual bleeding” was NOT selected</i> <i>[Radio buttons]</i>	1. Less than 3 days 2. 3-7 days 3. More than 7 days 4. Varies too much 5. Don’t know/ Do not remember	TG301	
A	16.6.5.2	How many days did you usually bleed when you had menstruation before starting hormonal contraception? <i>Based on Q16.6.5: If “I didn’t have menstrual bleeding” was NOT selected</i> <i>[Radio buttons]</i>	1. 1-2 days 2. 3-7 days 3. More than 7 days 4. Varies too much 5. Don’t know	TG192	
A and B	26.5.3	Before starting hormonal contraception, about how much do you bleed on the days with the heaviest flow during a regular menstruation?			
		<i>Based on Q26.5: If “I didn’t have menstrual bleeding” was NOT selected</i> <i>[Multiple choice]</i>	Light (no need to change pads or tampons often/only spotting)	TG193	
			Change pads/tampons 5 times or less per day	TG194	
			Change pads/tampons between 6 to 9 times per day	TG195	
			Need 9 or more pads/tampons per day on the heaviest days	TG196	
			Change pads/tampons every 2 hours	TG197	
			There are blood clots/clumps	TG198	
			Often bleed through pads/tampons	TG199	
			Using both pads and tampons to avoid bleeding through	TG200	
			Get up at night to change pads/tampons	TG201	
Often bleed on bedding even if you use pads and tampons	TG202				

			You stay at home during your period in fear of accidents	TG203
			Do not remember	TG204
A and B	26.5.4	Did you have bleeding or "spotting" between your menstruations before starting hormonal contraception?		
		Based on Q26.5: If "I didn't have menstrual bleeding" was NOT selected [Radio buttons]	- Yes, usually - Yes, sometimes - No - Not sure	TG205
A and B	26.6	Before starting hormonal contraception, did you usually have pain just before or during menstruation or pain that follows the menstrual cycle (cyclical pain)?		
		Based on Q26.5: If "I didn't have menstrual bleeding" was NOT selected [Multiple choice]	I have no cyclical pain	TG206
			Pain in the lower abdomen just before or during menstruation	TG207
			Pain in the lower abdomen at other times in the cycle than just before or during menstruation	TG208
			Pain in the lower back just before or during menstruation	TG209
			Pain in the lower back at other times in the cycle than just before or during menstruation	TG210
			Pain down the legs just before or during menstruation	TG211
			Pain down the legs at other times in the cycle than just before or during menstruation	TG212
			Pain when I go to the bathroom to urinate just before or during menstruation	TG213
			Pain when I go to the bathroom to urinate at other times in the cycle than just before or during menstruation	TG214
			Pain in connection with defecation just before or during menstruation	TG215
			Pain in connection with defecation at other times in the cycle than just before or during menstruation	TG216
			Other cyclical pains	TG217
			Constant pain that does not vary with the menstrual cycle	TG218
			Constant pain that worsens with the menstrual cycle	TG219
			Do not remember	TG220
A and B	26.6.1	Before starting hormonal contraception, did you usually use painkillers for menstrual pain?		
		Based on Q26.5: If "I didn't have menstrual bleeding" was NOT selected [Radio buttons]	- Yes, more than 2 days every menstruation - Yes, 1-2 days every menstruation - Yes, but not every menstruation - No - Don't remember	TG221
A and B	26.6.2	Before starting hormonal contraception, how strong were your period pains?		
		Multiple choice: Based on Q26.6: If anything else than "I have no cyclical pain" was selected [Multiple choice]	I had so much pain that I was often bedridden	TG222
			I was in much pain that I had to be away from studies/work - normal daily activities	TG223
			I was in pain, but could do normal daily activities	TG224
			Do not know	TG225
			Do not remember	TG226

Description of original questions (including references, if applicable):

Questions are formulated by researchers and clinicians and based on clinical experience and the knowledge status in the research field. Below is a list of references used by the researchers and clinicians when developing the questions:

- Q26: MoBa specific questions

- Q26.1: Based on MoBa Q1 (Q12-13) - the motivation behind the question is that the duration of contraceptive use can conceivably affect fertility.
- Q26.2: Based on MoBa Q1 (Q13)
- Q26.3: Based on clinical experience and the status of the research field.
- Q26.4: the Participant questionnaire (Deltakerskjema) in the Moba collection “Unge kvinners fruktbarhet”)
- Q26.5: Based on MoBa Q1, the Participant questionnaire (Deltakerskjema) in the Moba collection “Unge kvinners fruktbarhet”), and the DNBC questionnaire “The Global Questionnaire (BIOSFER)”.
- Q26.5.1 and 26.5.1: guide on cycle length
<https://www.legeforeningen.no/foreningsledd/fagmed/norsk-gynekologisk-forening/veiledere/veileder-i-gynekologi/gynekologiske-blodningsforstyrrelser/>
- Q26.5.3: response options based on definition of heavy menstrual bleeding
<https://www.helsebiblioteket.no/innhold/artikler/pasientinformasjon/menstruasjon-med-store-blodninger-menoragi> - Which is based on original brochure published by BMJ Publishing Group as part of the BMJ Best Practice.
- Q26.5.4: symptoms connected to PCOS and endometriosis
<https://www.helsebiblioteket.no/innhold/artikler/pasientinformasjon/menstruasjon-med-store-blodninger-menoragi> and guide in gynecology, chapter on endometriosis
https://www.legeforeningen.no/contentassets/7064007622ad4343baa279b0c61500a3/pcos_2024.pdf
- Q26.6: based on the Participant questionnaire (Deltakerskjema) in the Moba collection “Unge kvinners fruktbarhet”), but improved response options, guide in gynecology, chapter on endometriosis <https://www.legeforeningen.no/foreningsledd/fagmed/norsk-gynekologisk-forening/veiledere/veileder-i-gynekologi/endometriose/>
- Q26.6.1: based on the Participant questionnaire (Deltakerskjema) in the Moba collection “Unge kvinners fruktbarhet”). Questions designed to e.g. capture endometriosis-related symptoms
- Q26.6.2: based on the Participant questionnaire (Deltakerskjema) in the Moba collection “Unge kvinners fruktbarhet”)

Rationale for choosing the questions: Included in order to capture data on contraception use and to map symptoms when respondents are on and off hormonal contraception.

Revision during the data collection period: No revisions have been made.

Questions to all women

Version	Q		Response options	Variable name
A and B	27	Do you usually experience pain during intercourse?		
		<i>Based on Q1: If "Female" was selected</i>	1. No	TG227
	[Radio buttons]		2. Yes, often	
			3. Yes, sometimes	
			4. Not sure	
			5. Have not had intercourse before	
	27.1	What type of pain do you experience?		
		<i>Based on Q27: If "Yes,..." was selected.</i>	Pain upon penetration	TG228
			Stabbing pain	TG229
			Pain after intercourse	TG230
			Internal pain	TG231
		[Multiple choice]		

Description of original questions (including references, if applicable):

Questions are formulated by researchers and clinicians and based on clinical experience and the knowledge status in the research field. Below is a list of references used by the researchers and clinicians when developing the questions:

10. Q27 + 27.1: questions connected to endometriosis. Guide in gynecology, chapter on endometriosis
https://www.legeforeningen.no/contentassets/7064007622ad4343baa279b0c61500a3/pcos_2024.pdf

Rationale for choosing the instrument/questions:

To obtain information on risk factors for endometriosis and how common this type of pain is.

Modifications:

No revisions have been made.

Endometriosis and adenomyosis

Version	Q		Response options	Variable name
A and B	28	Have you been diagnosed with endometriosis?		
		<i>Based on Q.1: If "Female" was selected</i>	No	TG232
			No, but my doctor suspects I have it	TG233
			No, but I suspect I have it	TG234
			Yes	TG235
			Don't know	TG236
	28..1	How were you diagnosed with it?		
		<i>Based on Q28: If "Yes" was selected</i> [Multiple choice]	By laparoscopic surgery/keyhole surgery	TG237
			Ultrasound by a gynecologist	TG238
			MRI examination	TG239
			By another surgery	TG240
			Other	TG241
	29	Have you been diagnosed with adenomyosis?		
		<i>Based on Q1: If "Female" was selected</i> [Radio buttons]	No	TG242
			No, but my doctor suspects I have it	TG243
			No, but I suspect I have it	TG244
			Yes	TG245
			Don't know	TG246
	29.1	How were you diagnosed with it?		
		<i>Based on Q29: If "Yes" was selected</i> [Multiple choice]	Ultrasound by a gynecologist	TG248
			MRI examination	TG249
			By another surgery	TG250
			Other	TG251
A	19.9.1.1	<i>Based on Q16.9: If "Yes" was selected</i>	By laparoscopic surgery/keyhole surgery	TG247
A and B	30	Have you been diagnosed with Polycystic Ovary Syndrome (PCOS)		
		<i>Based on Q1: If "Female" was selected</i> [Radio buttons]	No	TG252
			No, but my doctor suspects I have it	TG253
			No, but I suspect I have it	TG254
			Yes	TG255
			Don't know	TG256

Description of original questions (including references, if applicable): All questions from the Participant questionnaire (Deltakerskjema) in the Moba collection "Unge kvinners fruktbarhet") and based on current practice for the diagnosis of endometriosis and adenomyosis.
<https://www.legeforeningen.no/foreningsledd/fagmed/norsk-gynekologisk-forening/veiledere/veileder-i-gynekologi/endometriose/> and <https://www.legeforeningen.no/foreningsledd/fagmed/norsk-gynekologisk-forening/veiledere/veileder-i-gynekologi/adenomyose/>

Rationale for choosing the questions: to capture data than can be used in research on endometriosis and adenomyosis

Revision during the data collection period: No revisions have been made.

Life Satisfaction and Pregnancy

Version	Q	Response options		Variable name
B	31	Below is a scale from 0 to 10, where 0 is the worst possible life for you and 10 is the best. Where do you think you stand on this scale now?		
		[Linear scale]	0 – worst possible life 1 2 8 9 10 – Best possible life	TG302
	32	Are you pregnant now?		
		[Radio buttons]	1. Yes 2. No 3. Not sure 4. Do not want to answer	TG303
	32.1	Are you planning to carry the pregnancy to term?		
		[Radio buttons]	1. Yes 2. No 3. Not sure 4. Do not want to answer	TG304

Description of original questions (including references, if applicable): Q31: The Cantril Self-Anchoring Striving Scale (CSASS)

Q32+32.1: MoBa specific questions

Rationale for choosing the instrument/questions: Q31: CSASS is a validated instrument used to measure peoples- attitudes towards their life.

Q32+32.1: Included in order to select respondents who will be directed to the “Helse og svangerskap” (“Health in pregnancy”) questionnaire

Modifications:

No revisions have been made.