Dear Responder,

Now we are asking you to participate in our study by answering the questions in this questionnaire. Both the twins as well as their parents receive their own questionnaire. The forms have been numbered for data processing purposes. Thus, we avoid sending a new form to those who have already answered.

From a scientific perspective, it is important that this questionnaire is answered by as many of you who receive it as possible. Please answer the questions independently: this is vital for the reliability of the study.

Be thorough in answering the questions. When you are done, check to make sure you have not skipped any questions by accident.

Return the completed questionnaire in the enclosed return envelope. You can drop it at the post office without a stamp. We will pay for the postage.

Notice: Your identity and the information you give will remain completely confidential. The results of the research will be studied in the form of tables compiled from all the answers, and won't reveal answers given by individual participants.
[page 3] HOW TO ANSWER:

It is easy to fill out the questionnaire. You will always answer each question or sub-question by circling one of the alternatives. The alternatives have been numbered. Take a look at example 1.

Some of the questions have, after the answer alternatives, a supplementary question or an indication to move on to a certain other question. These have been marked with guiding arrows. Look at example 2.

In some of the questions you are asked to write something. These places have been underlined. Look at example 3.

If you have to correct an answer, cross out the incorrect answer.

EXAMPLES:

EXAMPLE 1  In the past month, have you visited the following

<table>
<thead>
<tr>
<th>never</th>
<th>once</th>
<th>2 or more times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Doctor</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

(in this example the person giving the answers had visited the pharmacy twice and a doctor once during the past month)

EXAMPLE 2  Do you know your blood type?

1  no ----> go to the next question
2  yes ----> what is your blood type? _______________

(here the person answering knew his/her blood type)

EXAMPLE 3  What is your occupation, or if you are not employed, what was your former occupation?

(as much detail as possible)

Painter, Manager in a car paintshop

(in this example, the responder is by occupation a painter, and he works as a manager in a car paintshop)
HERE BEGIN THE ACTUAL QUESTIONS.

1. When and where were you born?

   ___ day  ___ month  ___ year  ___ place of birth

2. Do you have any sisters and brothers? (including step-sisters and step-
   brothers).

   ___ sisters
   ___ brothers

3. In your household, are there any children under school-age? (ages 0-6).

   1. no
   2. yes, how many?

4. In your household, are there any school-aged children? (ages 7-16).

   1. no
   2. yes, how many?  ___ (including the twins)

5. Do you have other children?

   1. no
   2. yes, how many?

QUESTIONS REGARDING WEIGHT AND ITS CHANGES

6. How tall are you?

   ___ (to the accuracy of one centimeter)

7. How much do you weigh presently (without clothes on)?

   ___ (to the accuracy of one kilogram)

8. How much did you weigh as a 20-year old?

   ___kg  0 = I can’t say

9. How much did you weigh 12 years ago (before becoming pregnant
   with the twins)?

   ___kg  0 = I can’t say

10. How much has your weight changed depending on the time of the year (for example, between
    summer and winter) within the last five years?

    1. less than 2 kg
    2. 2-5 kg
    3. 5-9 kg
    4. 10 or more kg
EATING HABITS

11. What type of spread do you use on your bread?
   1. usually nothing
   2. mainly margarine (names of brands)
   3. mainly butter
   4. butter-vegetable oil mixture (brands)
   5. low-fat spread (brands)
   6. other, what?

12. What type of milk do you usually drink? (incl. milk with low lactose content)
   1. I do not drink milk
   2. skim milk
   3. 1% milk
   4. 2% milk
   5. whole milk

13. How many cups of coffee or tea do you drink per day?
   Coffee
   0 - I do not drink daily
   1 - about _____ cups

   Tea
   0 - I do not drink daily
   1 - about _____ cups

THE FOLLOWING QUESTIONS REGARD SYMPTOMS AND ILLNESSES

14. Has a doctor ever said that you have or have had the following? (circle a response, even if the answer is no).

<table>
<thead>
<tr>
<th>NO</th>
<th>YES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergic rhinitis, hay fever</td>
<td>1</td>
</tr>
<tr>
<td>Asthma</td>
<td>1</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>1</td>
</tr>
<tr>
<td>Migraines</td>
<td>1</td>
</tr>
<tr>
<td>Ulcers</td>
<td>1</td>
</tr>
<tr>
<td>Another long-term or harmful illness</td>
<td>1</td>
</tr>
<tr>
<td>What?</td>
<td></td>
</tr>
</tbody>
</table>

15. How often in the last 12 months have you used the following medications or products? (Circle, even if you have not used any).

<table>
<thead>
<tr>
<th>Never Used</th>
<th>Occasionally Used</th>
<th>Regularly Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine for pains</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Medicine for blood pressure</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Medicine for allergies</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Sleeping pills or tranquilizers</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Vitamins or trace elements</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(Natural medications) Alternative drugs</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

16. Do you have a repeated cough or long bouts of coughing?
1. no → move to question 19
2. yes

17. For how many consecutive months in a year do you experience this cough?
   1. for less than three consecutive months
   2. for more than three consecutive months

18. For how many consecutive months in a year do you cough up mucus/phlegm from your lungs?
   1. for less than three consecutive months
   2. for more than three consecutive months

THE FOLLOWING QUESTIONS CONCERN YOUR EDUCATION AND CAREER

19. What is your basic education?
   1. less than elementary school (less than 6 yrs of basic education)
   2. elementary school (6-8 yrs of basic education; emphasis on practical subjects)
   3. less than intermediate school (4 yrs of basic education; under 5 yrs of intermediate school)
   4. intermediate school, comprehensive school (9 years)
   5. part of senior high school (under 3 yrs)
   6. high-school diploma (= a national exam in Finland at the age of 18-19; 12 years of school)

20. How long is your vocational training (following the basic education queried in the previous question)?
   1. no vocational training
   2. only course work on training given at place of work
   3. vocational training at school for up to 2 years
   4. vocational training at school for over 2 years
   5. university degree

21. What is your occupation, or if you are not employed, what was your former occupation? (as much detail as possible).

   occupation: __________________________ (description of work):

22. What was your occupation about 12 years ago (before the twins were born)?
   1. same as now
   2. other, what?

23. Are you presently:
   1. working outside the home
   2. working at home
   3. disability pension
   4. on other pension
   5. a student, further training
   6. unemployed, searching for a job
   7. other, what?
24. Are you presently:
   1. employed by another on salary or hourly wages
   2. employed by another on contract
   3. self-employed/entrepreneur (other than a farmer)
   4. farmer
   5. at this moment I am not employed
   6. I have never been employed

25. Is your present employment or the last employment in which you last worked at:
   1. regular day work
   2. regular work in the evenings
   3. regular work at night
   4. irregular or part-time work
   5. two-shift work, without night shift
   6. two-shift work with night shift
   7. three-shift work
   8. I have never been employed

26. Describe your present employment (or the employment in which you last worked at)?
   1. mainly sitting down, requires very little physical movement
   2. work which mainly requires standing and walking but no other physical movement
   3. work which requires standing and walking as well as lifting and carrying
   4. heavy physical work
   5. I have never been employed

27. In the last year, have you been unemployed or laid-off?
   1. no
   2. yes, under a month
   3. yes, for a month - six months
   4. yes, over six months

THE FOLLOWING QUESTIONS CONCERN YOUR SLEEPING HABITS

28. How many hours do you usually sleep within a day (24 hours)?
   1. 6 hours or less
   2. 6.5 hours
   3. 7 hours
   4. 7.5 hours
   5. 8 hours
   6. 8.5 hours
   7. 9 hours
   8. 9.5 hours
   9. 10 hours or more

29. How many hours of sleep do you usually need in order to be alert and active the next day?
   1. 6 hours or less
   2. 6.5 hours
   3. 7 hours
   4. 7.5 hours
   5. 8 hours
   6. 8.5 hours
   7. 9 hours
8. 9.5 hours
9. 10 hours or more

30. How do you usually sleep?
   1. well
   2. fairly well
   3. fairly badly
   4. badly
   5. I can't say

31. Do you feel tired when you wake up in the mornings?
   1. every morning or nearly every morning
   2. 3-5 mornings of the week
   3. 1-2 mornings of the week
   4. less than once a week
   5. less that once a month or hardly ever

32. Do you feel tired during the day?
   1. every day or nearly every day
   2. 3-5 days of the week
   3. 1-2 days of the week
   4. less than once a week
   5. less that once a month or hardly ever

ACTIVITIES AND LEISURE TIME

33. Do you have any pets?
   1. no
   2. cat
   3. dog
   4. other furry animal
   5. bird
   6. other animal

34. How much time do you spend doing/going to the following?

   A few times:
   
   At home a day a week a month months never
   - watching tv 1 2 3 4 5
   - watching videos 1 2 3 4 5
   - playing computer games 1 2 3 4 5
   - doing work-related tasks 1 2 3 4 5
   - listening to music 1 2 3 4 5
   - playing a musical instrument 1 2 3 4 5
   - reading books 1 2 3 4 5
   - writing or artistic work 1 2 3 4 5 (poems, diary, drawing, etc.)
   - educating yourself, studying 1 2 3 4 5
   - crafts, sewing, technical work 1 2 3 4 5
- with relatives, friends 1 2 3 4 5
in your own home
- being busy, playing, reading 1 2 3 4 5
with children

Outside the home

- cultural events (theatre, 1 2 3 4 5
concerts, art shows . . .)
- the library 1 2 3 4 5
- a hobby group 1 2 3 4 5
- at the bar, restaurant 1 2 3 4 5
- visiting relatives or 1 2 3 4 5
friends
- sports 1 2 3 4 5
- outdoor recreation 1 2 3 4 5
(walking, fishing)
- church service or other event 1 2 3 4 5
organized on a religious community
- traveling 1 2 3 4 5

QUESTIONS REGARDING LEISURE TIME/PHYSICAL EXERCISE

35. How many times a month do you exercise nowadays?

1. less than once a month
2. 1-2 times a month
3. 3-5 times a month
4. 6-10 times a month
5. 11-20 times a month
6. over 20 times a month

36. Your physical exercises are usually as strenuous as:

1. walking (the least strenuous)
2. walking and light running by turns
3. light jogging
4. active running (the most strenuous)

37. How long do you usually exercise?

1. less than 15 minutes
2. 15 minutes - less than half an hour
3. half an hour - less than an hour
4. hour - less than 2 hours
5. over 2 hours

What kinds of free-time physical exercise do you do?

during the summer:

during the winter:
THE FOLLOWING QUESTIONS CONCERN YOUR TWIN PREGNANCY

38. Have there been other twins in your family?

1. not that I know of
2. yes, in my family (my mother or my mother’s sisters)
3. yes, with other family members
4. I am a twin myself

39. Have there been other twins in the family of the twin’s father?

1. not that I know of
2. yes, in the family of the father (grandmother or father’s sisters)
3. yes, with other family members
4. their father is a twin himself

40. Did you use birth control pills before your twin pregnancy?

1. no, never
2. yes – used the pill for a total of _____ years

41. Did you use any other hormonal drugs before your twin pregnancy?

1. no, never
2. yes – I used hormonal drugs for a total of _____ years and stopped _____ year _____ months before the beginning of the twin pregnancy

What was the name of the drug you used?___________________________

42. Have you ever had any treatment for difficulties getting pregnant?

1. no
2. yes

43. Had you been pregnant before your twin pregnancy?

1. no
2. yes – have you had any earlier twin pregnancies

1. no
2. yes, year _____

44. How much weight did you gain during your entire twin pregnancy?

_____kg

45. Comparing your weight before the birth of the twins to a
year after the birth of the twins, did your weight:

1. remain almost unchanged (within 2 – 3 kg)
2. increase
3. decrease
46. Have you during the twin pregnancy had any of the following symptoms or illnesses? (Circle also if the symptoms did not appear):

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea which lasted for past 3 months or which required hospital care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar in the urine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protein in the urine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High blood-pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early contractions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yellowness or rash</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

47. Were you treated in the hospital for any of the above mentioned symptoms?

1. no
2. yes

48. Did you smoke during your twin pregnancy?

1. during my pregnancy I smoked about _____ cigarettes daily
2. I stopped smoking during the _____ month of pregnancy
3. I’ve never smoked

49. Estimate your alcohol consumption during your pregnancy: I used alcohol during my twin pregnancy:

1. sometimes
2. sometimes, but decreased my alcohol consumption considerably compared to the time before the pregnancy
3. I never used alcohol during my pregnancy

50. Did anything happen to you during your twin pregnancy which you suspect might have affected how your pregnancy progressed?

1. nothing special happened
2. yes, tell us in more detail
THE FOLLOWING QUESTIONS CONCERN YOUR ALCOHOL USE

51. How often do you presently use alcohol? Which of the following choices best represents your use of beer, wine and liquor?

1. I do not use alcohol
2. once a year or less
3. 3-4 times a year
4. about once in a few months
5. about once a month
6. a few times a month
7. once a week
8. a few times a week
9. daily or nearly daily

52. How often do you presently drink more than five bottles of beer or more than a bottle of wine or more than a half of bottle of strong liquor (or a comparable amount of other alcoholic beverages)?

1. never
2. once a year or less
3. 3-4 times a year
4. about once in a few months
5. about once a month
6. a few times a month
7. once a week
8. a few times a week
9. daily or nearly daily

53. When you drink alcohol, do you usually drink (choose one of the following):

1. I do not use alcohol
2. beer
3. red wine
4. other wines
5. strong liquor or other alcohol beverages

54. How often do you drink alcohol until you get intoxicated?

1. never
2. once a year or less
3. 3-4 times a year
4. about once in a few months
5. about once a month
6. a few times a month
7. once a week
8. a few times a week
9. daily or nearly daily

55. How old were you, when you first drank at least a glass of some alcohol beverage?
________ years old
0 - never, I have always been an abstainer → move to question 58

56. Was your alcohol use about 12 years ago (before the twins were born) different from now?
1. I definitely used less alcohol then
2. I used somewhat less alcohol then
3. My alcohol use has not really changed
4. I used somewhat more alcohol then
5. I definitely used more alcohol then

57. The following questions deal with present and previous incidents and experiences related to your alcohol use.

a. Have you ever had a habit of drinking a glass of alcohol before going to a party / gathering? Yes No
b. Have you ever had a habit of drinking a bottle of wine, a corresponding amount of beer or other alcoholic beverages during the weekend? Yes No
c. Have you ever daily drank a small amount of alcohol to relax yourself? Yes No
d. Have you ever had to drink more alcohol than before for the same effects that you had before? Yes No
e. Have you ever had difficulties of drinking less than your friends? Yes No
f. Have you ever fallen asleep after drinking a moderate amount of alcohol without knowing how you got to bed? Yes No
g. Have you ever had bad conscience after using alcohol? Yes No
h. Have you ever had small drinks to cure a hangover? Yes No
i. Have you ever tried to avoid alcohol use for a known period of time, for one week, for example? Yes No
j. Have you ever felt it to be hard to stop drinking after one drink, once you have started drinking? Yes No
k. Have you ever felt that someone close to you or a friend from work thinks that you should drink less alcohol? Yes No

The following questions concern your cigarette use.

58. Have you smoked more than 5-10 pacs of cigarettes in your lifetime?
1. no → move to question 62
2. yes
59. Do you smoke or have you ever smoked cigarettes regularly, in other words daily or nearly daily?

1. no → move to question 62
2. yes

60. At what age did you start to smoke cigarettes on a regular basis?

____ years old

61. Do you still smoke cigarettes regularly?

1. no
2. yes

What age were you when you stopped?

____ years old

How many cigarettes do you smoke on a daily average?

1. none
2. under 5 cigarettes
3. 5-9 cigarettes
4. 10-14 cigarettes
5. 15-19 cigarettes
6. 20-24 cigarettes
7. 25-39 cigarettes
8. more than 40 cigarettes

62. Have you ever throughout your whole life smoked more than 50-75 cigars or cigarillos, or more than 3-5 packs of pipe tobacco?

1. no
2. yes

63. Do you work in an inside-area where smoking is regular?

1. I do not work outside the home
2. I mainly work outdoors
3. At my workplace, there is no smoking or hardly any smoking
4. At my workplace, people smoke regularly

Next, we will ask you questions regarding smoking at home when the twins were small.

64. Did anyone at your home smoke inside on a regular basis when the twins were under a year old?

1. no
2. yes

65. Did anyone at your home smoke inside on a regular basis when the twins were 1-6 years old?

1. no
2. yes

66. Does anyone smoke inside your home presently?
1. no one smokes inside
2. only one family member smokes inside
3. more than one family members smoke inside
4. someone else smokes inside, for example, a regular guest, relative or acquaintance

Questions regarding your housing.

67. How long has your family lived in your current residence?
   ____ years  ____ months

68. In how many residences have you lived since the twins were born?
   ____ residences

69. What kind of residence do you live in now?
   1. own house
   2. duplex
   3. row house
   4. apartment building
   5. other, what?

70. What is the floor-area of your residence?
    ____ square meters

THE FINAL QUESTION CONCERNS SATISFACTION

71. Are you satisfied with the following?

<table>
<thead>
<tr>
<th></th>
<th>Completely</th>
<th>Mainly Yes</th>
<th>Somewhat</th>
<th>Mainly No</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spending your free time at home</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Spending your free time outside the home</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Your family's financial situation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Your housing conditions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Your living environment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Your relationship with your spouse</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Your relationship with your children</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Your family life in general</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Your own health</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Mother’s /Father’s questionnaire, additional questions for cohort 1983:

58 Have there been damp areas on the ceiling, floor or walls in your home?
1 no
2 yes, in the last 12 months
3 yes, only over 12 months ago

59 Have you noticed any visible mold/mildew in your home?
1 no
2 yes, in the last 12 months
3 yes, only over 12 months ago

60 In the last year, have you smelled mold/mildew in your home?
1 no
2 yes, nearly every daily
3 yes, 1-3 days a week
4 yes, 1-5 days a month
5 yes, less than one day a month

61 Has there ever been any rather large water damage in your home?
1 no
2 yes, in the last 12 months
3 yes, over 12 months ago

(FOR COHORT 1983 THE PREGNANCY QUESTIONS WERE NOT INCLUDED IN THE MOTHER’S QUESTIONNAIRE, BUT THEY WERE SENT AS A SEPARATE QUESTIONNAIRE - THUS THE NUMBERING OF QUESTIONS DIFFER)

These were the last of the actual questions. We kindly request you to make sure that you have answered all questions according to the instructions.

We thank you for your assistance in this medical study.

Next, you may add any information that did not come out in our questions about your health.