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HARVARD MEDICAL SCHOOL

NURSES' HEALTH STUDY II

HARVARD SCHOOL of PUBLIC HEALTH

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NURSES' HEALTH STUDY II Newsletter No. 1

This is the first edition of our study Newsletter. It will keep you informed and up-to-date on our progress and findings as they emerge. We plan to send you a newsletter every other year, to alternate with our biennial questionnaires.

Participant Profile

The Nurses' Health Study II is now the largest study of lifestyle practices, nutritional factors and the occurrence of breast cancer and other major illnesses specifically in young women. This study will provide important information about the influence of contraceptive practices, physical activity, diet and alcohol consumption on health outcomes.

Enrollment in this study is nearly complete; however, we continue to receive a few responses. At this time, we can give you a rough description of your co-participants. Among the registered nurses invited to participate, 116,000 have returned completed questionnaires, and form the Nurses' Health Study II cohort. The study includes 14 U.S. states; California, Connecticut, Indiana, Iowa, Kentucky, Massachusetts, Missouri, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Texas, and Wisconsin. Names and addresses on magnetic tape were obtained with the excellent cooperation of the boards of nursing registration in these states. Because exact dates of birth were not available for all women on these lists, we have had to exclude from the study a few nurses who were outside the eligible age range of 25 to 42 years in 1989. Social security numbers were provided by 97% of the 116,000 respondents; this information will be used only in the event of loss of contact but is critical to the validity of long-term follow-up.

The following tables present some statistics that describe the cohort in terms of employment status, age, and the prevalence of selected health practices and conditions.

TABLE I: Current Employment Status

Inpatient or E.R. Nurse	40.3%
Outpatient/Community Nurse	12.0%
Operating Room Nurse	5.0%
Nursing Education	4.4%
Nursing Administration	7.7%
Other Nursing	19.5%
Non-Nursing Employment	3.7%
Fulltime Homemaker	7.8%

Although all NHS II participants are trained as nurses, many may leave active nursing during this longterm study. A high rate of follow-up of the entire cohort is critical to the success of the study and the validity of the findings. Thus, all original participants are equally important regardless of current employment status.

TABLE II: Age Distribution

	Percent	%≥5yrs shift work	Mean no. children		
			none	1-2	3+
25-29	13.6%	27.0%	58.1	38.6	3.4
30-34	31.6%	33.2%	33.6	52.0	14.4
35-39	36.9%	33.9%	24.2	52.2	23.6
40-42	17.9%	33.3%	19.4	53.3	27.3

TABLE III: Prevalence of Selected Health Practices & Conditions

	Age			
	25-29	30-34	35-39	40-42
Physical exam past 2 yrs	92.4	89.9	87.7	87.2
Breast self-exam	87.2	88.2	89.0	88.2
Breast exam by physician	93.6	91.5	89.3	88.4
Mammogram (ever)	7.7	15.2	42.2	71.2
Ever oral contraceptive use	83.3	80.2	84.9	85.2
Multiple vitamin use	48.9	48.7	43.3	41.0
Current smoker	11.6	12.4	14.0	15.0
Past smoker	13.7	19.4	22.4	25.7

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TABLE III: Prevalence of Selected Health Practices & Conditions (contd.)

	Age			
	25-29	30-34	35-39	40-42
Benign breast disease	18.2	23.4	30.3	37.2
High blood pressure	2.6	3.7	6.0	8.6
Elevated cholesterol	8.1	8.4	10.6	13.8
Diabetes (non-gestational)	1.7	3.1	3.4	2.7
Migraine headaches	11.2	13.6	16.2	18.6
Polycystic ovaries	4.1	5.0	6.0	6.8
Family history breast cancer	15.7	15.5	16.0	16.3

TABLE IV: Current Contraceptive Method

None	30.6%	Condom	18.1%
Oral Contraceptive	13.1%	Foam or Jelly	6.8%
Sponge	13.4%	Rhythm/NFP	6.5%
Diaphragm/Cervical Cap	11.3%	Vasectomy	12.0%
Intrauterine Device	1.7%	Other	3.1%
Tubal Ligation	15.5%		

Your ID Number and Confidentiality

Each participant is assigned an ID number, and all individual data are stored in our computer according to this ID. Our computer is not linked with any network, and the list linking ID to name and address is stored in a separate location. We never give out the names and addresses to anyone under any circumstances, so you may be sure that the data are kept strictly confidential.

TABLE V: Current Weekly Physical Activity

	0-19 min	20m-1.5h	2+h
Walking/Hiking outdoors	28.6	39.1	32.2
Jogging	92.3	5.5	2.2
Running	95.0	2.7	2.3
Bicycling	72.1	19.6	8.3
Aerobics/Rowing machine	68.8	16.7	14.5
Tennis/Squash/Racquetball	94.4	3.8	1.8
Lap Swimming	91.5	6.1	2.4
Other aerobic recreation	59.1	28.4	12.5

Questionnaire Processing

The processing of the Nurses' Health Study II questionnaires is a detailed operation requiring a great deal of care to assure that your responses are correctly entered in the computer. As we receive surveys, they are first sorted, counted, and dated. Next, a member of our research staff carefully checks the questionnaire for omissions and codes your "write-in" responses onto the form. After coding, each questionnaire is optically scanned to capture and record your responses. Finally, each form is validated on our computer to assure that our information is as complete and accurate as possible.

Research News

We will keep you informed of study results as they are published. Annotated citations of research results from the study will be included in future biennial newsletters and abstracts of published articles will be sent with future questionnaire mailings. Although it will be a number of years before many of the major relationships between lifestyle practices and important health outcomes become clear, we will have some descriptive analyses earlier about the health practices of participants.

Two important sub-studies are now underway among 400 participants nationwide that will standardize the information on oral contraceptive use and current physical activity provided on the baseline questionnaire. Another sub-study is being initiated among NHS II nurses from Massachusetts and focuses on self-reported weight at age 18. These studies will provide important data on the validity of our questionnaire for collecting this information.

The oral contraceptive sub-study is being conducted among a random sample of 200 NHS II participants nationwide; it consists of a twenty minute telephone interview by a nurse-interviewer. The second phase of this sub-study is obtaining, with the nurses' permission, medical records that document the specific type of oral contraceptive prescriptions.

The physical activity sub-study is also being conducted among a random sample of 200 NHS II nurses; each subject will participate for one year. Four times during the year, each person will complete a past-week physical activity recall, followed by one week of 24-hour activity recalls. At the end of the year, each subject will be asked to complete a home fitness test. This will enable us to assess the capacity of the self-administered activity questionnaire to measure physical activity and predict aerobic capacity.

Address Changes

We want to keep you informed of study findings and need to know your current address. The validity of this study is highly dependent on complete follow-up. Please notify us about your address changes. We look forward to your future participation.

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