Physical activity

Information on physical activity levels has been collected at ages 36, 43, 53, 60-64 and 68-70yrs.

In **1982** four physical activity variables were created measuring physical activity during the working day [**EXWORK82**], Cycling and walking [**BWAB82**], Heavy gardening and DIY [**DIYHX82**], Sports and recreational activities [**EXER82**]. Each of these variables categorise people into three groups from most active through to least active, expect for physical activity during the working day which uses four categories. A three-category version of EXWORK82 has subsequently been derived [**EXWORK82C**].

In **1989** a three-category variable, as similar as possible to EXER82, which measures study members' participation in sports, vigorous leisure activities or exercise, was created [**EXER89X**]. A four-category version was also derived where the upper category of EXER89X is split into two groups [**EXER89CAT**].

In **1999** a single, three-category variable was derived measuring self-reported participation in sports, vigorous leisure activities or exercise in spare time in the last four weeks [**EXER99X**]. **Note:** this includes brisk walks for 30 minutes or more.

In **2006-10** a three-category variable was derived measuring participation in sports, vigorous leisure activities or exercise [**EXER09X**]. **Note:** In this data collection the question did not mention brisk walks for 30 minutes or more.

These data are not the only data on physical activity available in the NSHD archive. There are additional variables available at age 43 (in 1989). Variables on the frequency and duration of walking, cycling heavy lifting, vigorous housework, heavy gardening and heavy building were asked in addition to the participation in sports and vigorous leisure activity questions use to derive EXER89.

In **2006-10** many more data were collected on physical activity. In addition to the single, three-category repeated 1999 question, duration and frequency of participation in a range of leisure time activities and sports, outdoor activities and exercise (including activity at work and travel to work) were recorded on the pre-assessment questionnaires which were collected prior to the nurse interviews (home or clinic). A modified version of the EPAQ2 and monitored (combined heart rate and acceleration) data [Actiheart] were also collected in 2006-10. These data are documented separately.

 In **2014-16** a single, three-category variable was derived measuring self-reported participation in sports, vigorous leisure activities or exercise in spare time in the last four weeks [**EXER1415X**]. The question was asked on the Postal Questionnaire (PQ) then repeated at the Home Visit for people who didn't complete a PQ or left the question blank.

 Study members were also given the option to complete an additional physical activity form and wear an accelerometer for seven days.

EXWORK82

Purpose   : Physical activity during the working day at age **36yr**
Year   : 1982

1. Definition

This is a recoded version of DK's variable EXWORK9

1   Inactive
2   Less active
3   More active
4   Most active
9   Unknown

2. Specification

1=at least half the day sitting down
2=not classified in most or least active groups

EXWORK82C

Purpose   : Physical activity during the working day at age **36yr** [*3 category version*]
Year   : 1982

1. Definition

This is a recoded version of DK's variable EXWORK9

0   Inactive
1   Less active
2   Most active
9   Unknown

2. Specification

0=at least half the day sitting down
1=not classified in most or least active groups
2=either over ½ day spent walking OR frequently lifts and carries heavy things

---

BWAB82

Purpose   : Cycling/walking at age **36yr**
Year   : 1982

1. Definition

This is a recoded version of DK's variable BWAB9

0   Inactive
1   Less active
2   Most active
9   Unknown

2. Specification

0=does not normally ride or walks AND no reports of riding or walking in leisure time
1=normally rides or walks for les that ½ hour OR 1-11 rides or walks of ½ hr in leisure time in previous month
2= normally rides or walks for les that ½ hour OR 12 rides or walks of ½ hr in leisure time in previous month

DIYHX82

Purpose   : Heavy gardening/DIY at age **36yr**
Year   : 1982

1. Definition

This is a recoded version of DK's variable DIYHX9

0   Inactive
1   Less active
2   Most active
9   Unknown

2. Specification
This variable is derived using list of 10 heavy activities (e.g. digging earth, chopping wood, brick laying etc.)

0=No reported activity in previous month
1=1-4 times in previous month
2= 5 or more times in previous month

EXER82

Purpose   : Sport and recreational activities at age **36yr**
Year   : 1982

1. Definition

This is a recoded version of DK's variable NSPB9

0   Inactive
1   Less active
2   Most active
9   Unknown

2. Specification

0= No reported activity in previous month

1=1-4 times in previous month
2= 5 or more times in previous month

EXER89X

Purpose   : Participation in sports, vigorous leisure activities or exercise at **age 43yr** [3 categories]
Year   : 1989

1. Definition

0   Inactive
1   Less active
2   Most active
9   Unknown

2. Specification

0= None
1=1-4 times per month
2= 5 or more times per month

EXER89CAT

Purpose : Participation in sports, vigorous leisure activities or exercise at **age 43yr** [4 categories]
Year : 1989

1. Definition

0 Inactive
1 Less active
2 More active
3 Most active
9 Unknown

2. Specification

0= None
1=1-4 times per month (or less than once a week)
2=5-11 times per month (or 1-2 times per week)
3=12 or more times per month (or greater than or equal to 3 times per week)

EXER99X

Purpose : Self-reported participation in sports, vigorous leisure activities or exercises in spare time in   the last 4 weeks at **age 53yr** [3 categories]
Year : 1999

1. Definition

0 None
1 1-4 times
2 5 or more times
7 Unknown (participated in 1999 data collection but did not answer)
88 Not interviewed in 1999

2. Specification

0= None
1=1-4 times per month
2= 5 or more times per month

EXER09X

Purpose : Self-reported participation in sports, vigorous leisure activities or exercises in spare time in the last 4 weeks at **age 60-64yr** [3 categories]
Year : 2006-10

1. Definition

0 None
1 1-4 times
2 5 or more times
998 Reported activity but not frequency
999 Unknown (participated in 2006-10 data collection but did not answer)
777 Not interviewed in 2006-10

2. Specification

This variable is derived using wexer09 (q5a) and wexen09 (q5c) [Pre-Assessment Booklet]. This variable is the same as the 1999 variable **exer99x**.

0= if werer09=0 or wexen09=8

1=if wexen09 ge 1 and wexen09 le 4
2= if wexen09 ge 5 and wexen09 le 100
777=if wexer09=7 and wexen09=777
999=if wexer09=9 and wexen09=999
998=if wexer09=1 and wexen09=999

EXER1415X

Purpose   : Self-reported participation in sports, vigorous leisure activities or exercises in spare time in the
                 last 4 weeks at **age 68-70yr** [3 categories]
Year   : 2014-16

1. Definition

0   None
1   One to four times
2   Five or more times
3   Reported activity but not frequency
-9   Unknown (participated in 2014-16 data collection but did not answer)
-7   Not interviewed in 2014-16

2. Specification

This variable is derived using wexer14x (q56a) and wexen14x (q56b) [Postal Questionnaire]. This variable is the same
as the 1999 variable **exer99x**.

0= if werer14x=0 or wexen14x=8
1=if wexen14x ge 1 and wexen14x le 4
2= if wexen14x ge 5 and wexen14x le 100
3=if wexer14x=1 and wexen14x=999
-7=if wexer14x=7 and wexen14x=777
-9=if wexer14x=9 and wexen14x=999

Respondents who didn't complete a postal questionnaire or left the activity questions question blank were asked at
the subsequent home visit (if attended) and their data added in.