

**NHIS Adult Physical Activity Recodes
Energy Expenditures Values**

The following kilocalorie expenditure values are assigned in SAS programs HP98_KCAL.sas, HP95_KCAL.sas, HP91_KCAL.sas, HP90_KCAL.sas, and HP85_KCAL.sas. All variables associated with the activities are shown.

Activity # 1991, 1995, 1998	Activity # 1985, 1990	Variables				Energy expenditures values corresponding to perceived heart rate change reported for the activity ¹		
		Exercise/ Activity Column A	Frequency Activity (*_T) Column B	Duration Activity (*_M) Column C	Heart Rate Change (*_H) Column D	Small or none, unknown (*_I) = 1, 4, 7-9) Column E	Moderate (*_I) =2 Column F	Large (*_I) =3 Column G
1	1	WALK	WALK_T	WALK_M	WALK_H	3	4	5
2	4	YARD	YARD_T	YARD_M	YARD_H	3	5	7
3	na	STRETCH	STRT_T	STRT_M	STRT_H ²	2	2	2
4	14	WTLIFT	LIFT_T	LIFT_M	LIFT_H	3	5	7
5	2	RUN	RUN_T	RUN_M	RUN_H	9	11	13
6	5	AEROBICS	AERO_T	AERO_M	AERO_H	4	6	9
7	11	BIKE	BIKE_T	BIKE_M	BIKE_H	3	7	10
8	na	STAIRS	STAIR_T	STAIR_M	STAIR_H	4	6	8
9	12	SWIM	SWIM_T	SWIM_M	SWIM_H ³	3	5	9
10	9	TENNIS	TENNIS_T	TENNIS_M	TENNIS_H	4	6	10
11	10	BOWL	BOWL_T	BOWL_M ⁴	BOWL_H ⁴	2	2.5	3
12	8	GOLF	GOLF_T	GOLF_M ⁴	GOLF_H ⁴	3	3	3
13	16	BASEBALL	BASEBL_T	BASEBL_M	BASEBL_H	3	4	5
14	20	RACQUET	RACQ_T	RACQ_M	RACQ_H	6	9	12
15	na	SKI_DH	SKI_DH_T	SKI_DH_M	SKI_DH_H ⁵	4	6	8
16	na	SKI_CR	SKI_CR_T ⁵	SKI_CR_M ⁵	SKI_CR_H ⁵	5	9	13
17	na	SKI_WAT	SKI_WA_T	SKI_WA_M ⁵	SKI_WA_H ⁵	5	7	9
18	15	BASKETBL	BASKET_T*	BASKET_M	BASKET_H	6	8	11
19	19	VOLLEYBL	VOLLEY_T	VOLLEY_M	VOLLEY_H	5	6	8
20	18	SOCCER	SOCCER_T	SOCCER_M	SOCCER_H	5	7	11
21	17	FOOTBALL	FOOTBL_T	FOOTBL_M	FOOTBL_H	5	6	7.5
22	23	OTR_ACT1	OTR_A1_T	OTR_A1_M	OTR_A1_H	3	4	5
23	24	OTR_ACT2	OTR_A2_T	OTR_A2_M	OTR_A2_H	3	4	5
na	3	HIKE	HIKE_T	HIKE_M	HIKE_H	3	6	8
na	6	DANCE	DANCE_T	DANCE_M	DANCE_H	4	5	7
na	7	CALIST	CALIST_T	CALIST_M	CALIST_H	3.5	5.5	8.5
na	13	YOGA	YOGA_T	YOGA_M	YOGA_H	2	2	2
na	21	SKATE	SKATE_T	SKATE_M	SKATE_H	4.5	7	10.5
na	22	SKI_DH	SKI_DH_T	SKI_DH_M	SKI_DH_H ⁵	4	7	10

na= not asked

¹ Adapted from: Stephens T, Craig CL. Fitness and activity measurement in the 1981 Canada Fitness Survey. In: National Center for Health Statistics: Assessing Physical Fitness and Physical Activity in Population-based Surveys. Thomas F. Drury, ed. DHHS Pub. No. (PHS) 89-1253. Public Health Service. Washington. U.S. Government Printing Office. 1989.

² STRETCH asked only from 1991 forward. Heart rate (STRT_H) not asked but imputed.

³ The question wording differed between the two set of questions. In 1985 and 1990, the question asked about 'swimming or water exercises.' The value assigned for large heart rate change for these years was '7' instead of the '9' shown here. The question in 1991 and later asked about "swimming for exercise."

⁴ GOLF_M, GOLF_H, BOWL_M, AND BOWL_H: Duration and heart rate changes were asked in 1985 and 1990 but not in the 1991, 1995 or 1998. For these later years, duration was imputed: BOWL_M= 90 minutes; GOLF_M=120 minutes and heart rate was assigned the lowest intensity.

⁵ The skiing question did not specify type of skiing in 1985 or 1990 but duration and intensity were asked during these years. The variables for the 1985 and 1990 recodes are renamed to SKI_DH for convenience although they are not identical to the variables of the same name found in the later years. In 1991, 1995, and 1998, specific types of skiing were asked: SKI_DH (downhill skiing) SKI_CR (cross-country), SKI_WA (water)], but duration and intensity were asked only for cross-country. Values for duration for the other two types were imputed: SKI_DH=120 minutes and SKI_WA=120 minutes. Heart rate intensity was coded to unknown and treated accordingly in creating the recodes.