

Health Practices and Perceptions of U.S. Adults with Noninsulin-Dependent Diabetes: Data From the 1985 National Health Interview Survey of Health Promotion and Disease Prevention

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Introduction

In recent years there have been notable attempts to summarize what is known about current and historical aspects of the magnitude, severity, scope, sources, and impact of diabetes mellitus as a public health problem in the United States and in other countries.¹⁻⁴ But much still remains to be clarified with regard to health practices and perceptions bearing on the self-care of diabetes mellitus. A major reason for this latter state of affairs has been the lack of appropriate sets of measurements on representative samples of persons with diabetes.

This report addresses selected aspects of these diabetes data needs for the United States based on information obtained through the 1985 National Health Interview Survey (NHIS) Health Promotion and Disease Prevention (HPDP) study. The data presented were obtained from a subsample of persons 18 years of age and over. A brief description of the procedures used in the 1985 NHIS, as well as in the HPDP study, is given in the Technical notes section of this report.

Background

Proper care and management of diabetes are essential for two reasons. No known cure for diabetes exists, and many of the acute and long-term complications of diabetes may be checked in varying degrees by appropriate treatment.⁵⁻⁶ Prescriptions for such care generally include an ongoing relationship with the health care system. Depending on the type and severity of diabetes and other patient characteristics, selective use or an optimal mix of diet, exercise, and administration of insulin or oral hypoglycemic agents constitute the essentials of treatment. A high premium also is placed on

good health practices, the use of preventive health services, and patient and family knowledge of the contribution of treatment modes to successful management of diabetes. Patient knowledge is important because, aside from regular contacts with a physician or other health care practitioners, health care of diabetes is primarily self-care.

However, until recently relatively little effort had been made to cull information describing these aspects of the management of diabetes from available national data resources. In the late 1970's, staff of the National Center for Health Statistics had collaborated with staff of the then National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases in a series of secondary analyses of data obtained through NHIS between 1973 and 1978 for persons 20 years of age and over with known diabetes. The results of those analyses were published in an article in *Health, United States, 1981*.⁷ That article described the utilization of health services (including the use of preventive health services) by adults with known diabetes and highlighted their use of diet, medication, and exercise, as well as their compliance with other good health practices. This report extends those earlier analyses.

Objective

The purpose of this report is twofold: (1) to provide more current information on selected health practices and perceptions of adults with known diabetes based on data obtained through the 1985 NHIS-HPDP study⁸⁻⁹ and (2) thereby to stimulate further analysis of this data base by diabetes researchers and by health care professionals with an interest in diabetes care. Although the information is presented without

textual summarization or detailed analytical commentary, the references cited in this introduction, in the footnotes to table 1, and in the Technical notes section of the report will guide the reader wishing to make accurate use of the information presented. Articles published in the November–December 1986 and January–February 1987 issues of the journal *Public Health Reports* are particularly helpful in locating the 1985 HPDP study's data elements in the general context of the Department of Health and Human Services' 1990 Objectives for the Nation.^{10–20}

Scope

Several aspects of the scope of this report require comment. First, "diabetes mellitus" is a term which refers to a heterogeneous group of disorders characterized by glucose intolerance.²¹ Generally, two major types of diabetes are distinguished: insulin-dependent diabetes and noninsulin-dependent diabetes. Based on an analysis of information collected in the 1976 NHIS on the age of onset of diabetes, history of medication use, and weight relative to height, it has been estimated that the vast majority (more than 90 percent) of adults with known diabetes, as ascertained through household interview surveys, have noninsulin-dependent diabetes.²² Because national health surveys, including NHIS, do not oversample insulin-dependent diabetics, national survey respondents with known diabetes are mainly persons with noninsulin-dependent diabetes. Persons with insulin-dependent diabetes are included in the NHIS sample, but in such few numbers as to have relatively little effect on the survey results. It is not possible to routinely distinguish NHIS sample cases with diabetes by the type of diabetes they have (the 1976 NHIS was an exception); therefore, users of the data presented in this report should be cautious not to generalize the information presented here to insulin-dependent diabetics 18 years of age and over. To emphasize this, the phrase "noninsulin-dependent diabetes" has been included in the title of this report, although a small number of insulin-dependent diabetics are included in the sample and in the results presented.

Because the 1985 HPDP study was not designed specifically as a survey of the health practices and perceptions of persons with known diabetes, there are some obvious aspects of their lifestyles with respect to health that are not included in this report. Questions on medication use, for example, were not asked in the 1985 HPDP study. Limited information on this latter topic from earlier NHIS surveys has been previously published.^{7,23}

Despite this limitation of the data, the 1985 HPDP study contains a wealth of information directly pertinent to a better descriptive understanding of the management of noninsulin-dependent diabetes in the United States. The information in the text table can be used to provide a current answer to the following kinds of questions: To what extent do adults with known diabetes practice what are generally considered "good" health practices? To what extent are adult diabetics knowledgeable about things that may or may not affect their chances of getting heart disease? To what extent do persons with diabetes experience stress in their lives, and to what extent do they perceive such stress to have any effect on

their health? To what extent do they engage in exercise, sports, or physically active hobbies, and what are the main types of exercise in which they engage? How many diabetics currently smoke cigarettes, and in what amounts? Are individuals with known diabetes aware of problems associated with smoking? To what extent do diabetics make use of alcoholic beverages, and to what extent are they aware of problems associated with heavy alcohol drinking? What do diabetics perceive to be the major ways of preventing tooth decay and gum disease? What do they know about reasons for tooth loss in adults? To what extent are they exposed on their jobs to occupational health hazards: noxious substances, working conditions that could endanger their health, or the risk of injury?

Because the responses to the 1985 HPDP study are presented in this report by diabetic status and age, readers also may explore age variations in health practices and perceptions among adult diabetics, as well as age-specific comparisons between persons with and without known diabetes. Also, because diabetics as a group are much older than nondiabetics,²⁴ it is important to consider whether apparent differences between diabetics and nondiabetics may simply reflect differences in practices and perceptions associated with age.

Organization of text table

Information bearing on the aforementioned kinds of questions is shown in the text table, which presents the responses to the HPDP questionnaire items in terms of estimated percents or percent distributions for all persons 18 years of age and over for three age groups by whether or not the person has known diabetes. Generally, except for the questions on knowledge of health practices where "don't know" is a legitimate response, "don't know" and other inappropriate responses were excluded from the denominator in the calculation of the estimates. In most cases, the actual question asked of the respondent is shown along with the response categories. In a few cases, there has been minor paraphrasing or combining of questions. Each question is referenced to the item number on the questionnaire.

The data in the table are organized into nine sections, as follows:

- General health habits.
- Injury control and child safety and health.
- High blood pressure.
- Stress.
- Exercise.
- Smoking.
- Alcohol use.
- Dental care.
- Occupational safety and health.

Most of the questions on knowledge of health practices have answers that currently are presumed to be correct (as determined by the Public Health Service agency with "lead" responsibility). An earlier publication in this series established the convention of highlighting these "correct" answer categories in boldface type;⁹ this convention has been continued here. However, it should be noted that the special

circumstances of persons with known diabetes were not explicitly considered by "lead" agencies in determining what a "correct response" to a particular item on the 1985 HPDP questionnaire might be.

In most instances this presents no difficulty. But in one instance the boldface-type convention for indicating a "correct" response to an HPDP question in the earlier report has been removed in this report because there is no one correct answer for persons with diabetes; that is the case of the characteristics of exercise required for cardiovascular conditioning (items R.7a, R.7b, and R.7c in the table). As is pointed out in the American College of Sports Medicine (ACSM) *Guidelines for Exercise Testing and Prescription*,²⁵ the development of an exercise program for a person with diabetes has to be done with consideration for a number of factors, including the type of diabetes the person has, whether the person's diabetes is well controlled or not well controlled, the type and amount of medication the person is taking, whether the person is obese and thereby possibly at risk of orthopedic injuries from weight-bearing activities, and whether the person has any diabetic complications that require the avoidance of excessive jarring or marked increases in blood pressure. The extent to which diabetics' perceptions and ACSM guidelines are consistent with respect to prudent exercise behavior for persons with these different types of diabetes is a topic that further analysis of the 1985 HPDP data base might be able to elucidate. However, because such an analysis would require more fine-grained tabulations than are presented in this report, the "correct" answer categories that appeared in the earlier publication for items R.7a–R.7c have been removed.

Related publications, research opportunities, and public use data tapes

For some questions in the text table, references are provided to selected publications that present related data, at

least for the general population, from previous data collection by the National Center for Health Statistics. In certain instances, data from these earlier reports can be tabulated by diabetic status by matching NHIS public use computer records containing the information about health practices with the NHIS public use computer records containing information about diabetes conditions.

Further analysis of the information presented in this report by diabetic status can be accomplished more directly because the 1985 HPDP study questionnaire included an item on whether or not the respondent had known diabetes. A number of strategic research issues can be pursued with these 1985 HPDP study data, including clarification of patterns of exercise participation among persons with known diabetes. Readers interested in this area of research are encouraged to consult the growing body of literature on this topic.^{26–31} Discussions in the journal literature of the role of exercise in the management of diabetes generally have been written carefully so as to treat this topic in the context of the type of diabetes, medical complications, and other characteristics a person may have. Many important issues that need to be studied better in the laboratory and in the general population also have been highlighted in recent state-of-the-art reviews of the role of exercise in the management of noninsulin-dependent diabetes,³² including the Consensus Statement resulting from a recent National Institutes of Health Consensus Development Conference, "Diet and Exercise in Noninsulin-Dependent Diabetes Mellitus."³³

Information regarding the purchase of the public use data tapes for the 1985 NHIS–HPDP study can be obtained by contacting Dr. Owen T. Thornberry, Director, Division of Health Interview Statistics, National Center for Health Statistics, Room 2–44, 3700 East-West Highway, Hyattsville, Md. 20782 (telephone: (301) 436–7085).

Table 1. Estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Questionnaire on Health Promotion and Disease Prevention, by diabetic status and age: United States, 1985

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
		Percent of population							
	Total.....	100	100	100	100	100	100	100	100
GENERAL HEALTH HABITS									
N.1.	How often do you eat breakfast? ¹								
	Almost every day.....	79	59	75	92	54	44	62	86
	Sometimes.....	10	17	13	4	21	26	16	6
	Rarely or never.....	11	23	12	4	25	30	22	8
N.2.	Including evening snacks, how often do you eat between meals? ¹								
	Almost every day.....	39	42	42	34	39	42	38	30
	Sometimes.....	26	27	24	26	33	35	30	27
	Rarely or never.....	36	31	33	40	28	23	32	43
N.3.	When you visit a doctor or other health professional for routine care, is eating proper foods discussed?								
	Often.....	38	48	39	33	8	8	10	9
	Sometimes.....	23	21	25	23	16	16	15	15
	Rarely or never.....	37	30	33	44	66	66	64	67
	Don't visit for routine care.....	2	2	3	1	10	10	10	9
N.5.	In your opinion which of these are the two best ways to lose weight?								
	Don't eat at bedtime.....	31	25	35	30	29	28	30	32
	Eat fewer calories.....	77	75	79	76	74	73	78	73
	Take diet pills.....	1	2	1	2	2	2	1	1
	Increase physical activity.....	54	71	54	47	74	82	68	53
	Eat no fat.....	20	14	17	26	11	8	12	20
	Eat grapefruit with each meal.....	6	4	6	6	4	4	5	5
	Don't know.....	11	9	1	14	6	3	6	15
N.6.	Are you now trying to lose weight? ² (Yes).....	42	39	53	32	35	36	39	24
N.7.	Are you eating fewer calories to lose weight? ² (Persons trying to lose weight (yes) in N.6) (Yes).....	86	86	89	80	80	79	83	83
N.8.	Have you increased your physical activity to lose weight? ² (Persons trying to lose weight (yes) in N.6) (Yes).....	37	55	35	31	58	64	51	41
N.9.	Do you consider yourself overweight, underweight, or just about right? (If overweight) Would you say you are very overweight, somewhat overweight, or only a little overweight? ^{2,3}								
	Very overweight.....	17	19	22	11	8	7	11	6
	Somewhat overweight.....	21	21	22	20	17	16	21	13
	Only a little overweight.....	19	12	22	18	21	20	24	21
	About right.....	39	42	30	46	49	51	41	52
	Underweight.....	4	4	4	4	6	6	3	8
N.10.	On the average, how many hours of sleep do you get in a 24-hour period? ¹								
	Less than 7 hours.....	22	21	25	18	22	22	22	20
	7-8 hours.....	60	71	58	58	66	67	68	59
	9 or more hours.....	18	8	17	23	12	11	10	20
N.11.	Is there a particular clinic, health center, doctor's office, or other place that you usually go to if you are sick or need advice about your health? ⁴ (Yes).....	95	93	94	97	77	73	83	88
N.15.	About how long has it been since you had a Pap smear test? ⁵ (Females only)								
	Less than 1 year.....	32	52	31	27	46	55	38	25
	1 year.....	17	23	18	13	17	19	17	13
	2 years.....	13	14	14	12	10	8	13	12
	3-4 years.....	10	4	12	10	7	6	10	10
	5 or more years.....	17	7	21	18	11	5	18	26
	Never.....	10	2	5	19	7	7	4	14

See footnotes at end of table.

Table 1. Estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Questionnaire on Health Promotion and Disease Prevention, by diabetic status and age: United States, 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
GENERAL HEALTH HABITS--Con.		Percent of population							
N.16a.	About how long has it been since you had a breast examination by a doctor or other health professional? ⁵ (Females only)								
	Less than 1 year.....	44	56	43	40	51	56	45	39
	1 year.....	18	24	20	14	18	19	18	14
	2 years.....	10	5	11	10	10	8	12	10
	3-4 years.....	8	-	11	8	7	6	8	8
	5 or more years.....	11	7	10	13	8	4	12	15
	Never.....	10	7	6	15	7	7	5	14
N.16b.	Do you know how to examine your own breasts for lumps? (Females only) (Yes).....	82	93	83	76	87	89	90	78
N.16c.	About how many times a year do you examine your own breasts for lumps? (Females only)								
	12 or more times.....	35	44	37	29	32	31	37	29
	7-11 times.....	1	1	2	1	2	3	2	2
	2-6 times.....	31	31	31	30	34	37	33	25
	Once a year.....	3	5	2	3	5	5	4	4
	Never.....	11	12	9	12	14	13	13	16
	Don't know how to examine own breast.....	20	7	18	26	13	11	11	25
INJURY CONTROL AND CHILD SAFETY AND HEALTH									
0.1a.	Have you ever heard about Poison Control Centers? (Persons in families with children under 10 years of age) (Yes).....	83	92	58	92	88	89	78	63
0.1b.	Do you have the telephone number for a Poison Control Center in your area? (Persons in families with children under 10 years of age) (Yes).....	52	64	24	64	61	62	49	32
0.3.	Have you heard about child safety seats, sometimes called car safety carriers, which are designed to carry children while they are riding in a car? (Persons in families with children under 5 years of age) (Yes).....	99	100	96	100	98	98	97	98
0.4.	Did a doctor or other health professional ever tell you about the importance of using car safety seats for your children? (Persons in families with children under 5 years of age) (Yes)....	38	46	25	31	45	46	33	19
0.10.	When driving or riding in a car, do you wear a seat belt ³ --								
	All or most of the time.....	30	37	28	30	36	36	36	34
	Some of the time.....	19	15	22	17	18	19	18	15
	Once in awhile.....	11	12	12	9	14	15	14	14
	Never.....	40	37	38	44	32	30	32	37
	Don't ride in car.....	2	0	2	3	1	0	1	2
	Does this home have any working smoke detectors? (Based on Items 0.11a.-c.) (Yes).....	54	61	52	53	60	61	61	57
0.12a.	Do you know about what the hot water temperature is in this home? (Yes).....	36	38	39	32	36	33	46	35
0.13.	In the past 12 months, have you (or has anyone in your household) used a thermometer to test the temperature of the hot water here? (Yes).....	3	5	2	2	4	4	4	3
0.14.	Above what temperature will hot water cause scald injuries?								
	127 degrees or less.....	9	14	9	6	14	18	10	6
	128-139 degrees (can produce burns in less than a minute).....	1	1	2	1	2	3	2	1
	140 degrees or above (can produce burns in 5 seconds or less)...	21	20	23	19	20	18	26	19
	Don't know.....	69	65	66	75	63	61	62	74

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Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
	HIGH BLOOD PRESSURE	Percent of population							
P.1.	I am going to read a list of things which may or may not affect a person's chances of getting heart disease. After I read each one, tell me if you think it definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting heart disease.								
	Cigarette smoking								
	Increases.....	84	91	85	81	91	94	90	82
	Definitely increases.....	62	67	64	57	67	70	66	59
	Probably increases.....	23	24	22	23	24	24	24	24
	Does not increase.....	5	5	4	6	4	3	4	5
	Probably does not increase.....	4	4	3	4	3	2	3	3
	Definitely does not increase.....	1	1	0	2	1	1	1	2
	Don't know/No opinion.....	11	4	11	14	5	3	6	13
	Worry or anxiety								
	Increases.....	83	87	86	79	85	85	88	81
	Definitely increases.....	43	43	47	38	40	38	45	38
	Probably increases.....	41	44	39	41	45	46	43	42
	Does not increase.....	7	8	6	7	8	10	6	6
	Probably does not increase.....	4	7	4	4	6	8	5	5
	Definitely does not increase.....	3	1	2	3	2	2	1	2
	Don't know/No opinion.....	10	6	8	14	7	6	6	13
	High blood pressure								
	Increases.....	90	93	93	86	92	94	92	85
	Definitely increases.....	67	68	71	61	69	72	70	59
	Probably increases.....	23	25	22	24	23	22	22	26
	Does not increase.....	2	4	1	3	3	2	3	3
	Probably does not increase.....	2	3	0	2	2	2	2	2
	Definitely does not increase.....	1	0	0	1	1	1	1	1
	Don't know/No opinion.....	8	4	6	11	5	4	5	12
	Diabetes								
	Increases.....	74	76	77	69	61	65	58	47
	Definitely increases.....	48	52	52	42	31	33	31	24
	Probably increases.....	26	24	25	27	29	32	27	23
	Does not increase.....	8	12	7	6	10	10	10	9
	Probably does not increase.....	5	9	4	4	7	8	7	6
	Definitely does not increase.....	3	2	3	2	3	3	3	3
	Don't know/No opinion.....	19	12	15	25	29	25	32	43
	Being very overweight								
	Increases.....	91	94	93	87	94	95	94	87
	Definitely increases.....	69	75	74	61	70	72	70	60
	Probably increases.....	22	19	19	26	24	23	24	27
	Does not increase.....	3	1	2	4	2	2	2	2
	Probably does not increase.....	2	1	1	2	1	1	2	1
	Definitely does not increase.....	1	1	1	2	1	1	1	1
	Don't know/No opinion.....	7	5	5	9	4	3	4	10
	Overwork								
	Increases.....	63	77	67	55	72	78	67	58
	Definitely increases.....	31	35	34	26	31	33	31	25
	Probably increases.....	32	42	32	28	41	44	36	33
	Does not increase.....	21	14	20	26	19	16	24	24
	Probably does not increase.....	14	10	13	18	13	12	16	16
	Definitely does not increase.....	7	3	7	9	6	4	8	8
	Don't know/No opinion.....	15	9	14	19	9	6	9	18
	Drinking coffee with caffeine								
	Increases.....	48	51	48	47	52	54	51	43
	Definitely increases.....	16	16	16	15	13	13	13	12
	Probably increases.....	32	35	32	32	39	42	38	31
	Does not increase.....	26	27	27	25	29	29	30	28
	Probably does not increase.....	19	23	19	17	22	23	22	19
	Definitely does not increase.....	8	5	8	8	7	6	8	9
	Don't know/No opinion.....	26	22	25	28	19	17	19	29

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Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
HIGH BLOOD PRESSURE--Con.		Percent of population							
P.1.	I am going to read a list of things which may or may not affect a person's chances of getting heart disease. After I read each one, tell me if you think it definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting heart disease.--Con.								
	Eating a diet high in animal fat								
	Increases.....	79	85	80	75	81	81	83	77
	Definitely increases.....	44	43	51	38	42	41	45	41
	Probably increases.....	35	42	29	38	39	40	38	36
	Does not increase.....	5	4	4	6	8	9	7	6
	Probably does not increase.....	4	3	3	5	6	7	5	4
	Definitely does not increase.....	1	1	1	1	2	2	2	2
	Don't know/No opinion.....	16	11	16	19	11	11	10	17
	Family history of heart disease								
	Increases.....	79	87	81	73	84	87	84	71
	Definitely increases.....	48	57	54	38	49	51	51	39
	Probably increases.....	31	31	27	35	35	36	33	32
	Does not increase.....	9	6	8	11	8	7	8	12
	Probably does not increase.....	6	4	5	7	5	4	5	7
	Definitely does not increase.....	4	2	3	4	3	3	3	5
	Don't know/No opinion.....	12	6	11	16	8	6	8	17
	High cholesterol								
	Increases.....	83	89	84	80	87	90	88	77
	Definitely increases.....	54	58	58	48	55	55	58	49
	Probably increases.....	29	31	26	32	32	34	30	29
	Does not increase.....	4	5	3	4	4	4	4	5
	Probably does not increase.....	2	3	2	2	3	3	3	3
	Definitely does not increase.....	1	2	1	2	1	1	1	2
	Don't know/No opinion.....	13	7	13	16	9	7	8	18
P.2.	The following conditions are related to having a stroke. In your opinion, which of these conditions most increases a person's chances of having a stroke?								
	Diabetes.....	7	5	7	7	4	5	3	3
	High blood pressure.....	71	78	71	70	78	77	81	76
	High cholesterol.....	13	10	15	12	12	13	10	10
	Don't know.....	9	6	7	11	6	5	6	11
P.3.	Which one of the following substances in food is most often associated with high blood pressure?								
	Sodium (or salt).....	58	67	60	51	59	60	62	51
	Cholesterol.....	23	23	24	22	25	26	24	24
	Sugar.....	10	4	9	14	9	9	7	10
	Don't know.....	9	6	7	12	8	6	8	15
P.12a.	About how long has it been since you last had your blood pressure taken by a doctor or other health professional? ^{2,3}								
	Less than 6 months.....	83	72	81	90	55	50	59	70
	6-11 months.....	10	14	11	8	18	20	15	13
	12 months to 23 months.....	4	11	5	1	14	16	13	8
	24 months and over.....	2	3	3	1	13	14	12	9
P.12b.	Blood pressure is usually given as one number over another. Were you told what your blood pressure was, in numbers? (Persons with blood pressure checked within 24 months in 12a) (Yes).....	66	69	66	64	68	67	71	67
P.14.	Have you ever been told by a doctor or other health professional that you had high cholesterol? (Yes).....	16	12	20	14	5	2	8	10

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Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
STRESS		Percent of population							
Q.1.	During the past 2 weeks, would you say that you experienced a lot of stress, a moderate amount of stress, relatively little stress, or almost no stress at all?								
	A lot of stress.....	20	29	24	12	20	23	19	11
	A moderate amount of stress.....	22	32	25	16	31	34	30	18
	Relatively little stress.....	20	22	18	22	23	23	22	21
	Almost none.....	34	15	30	45	25	19	27	46
	Don't know what stress is.....	4	2	3	6	2	1	2	4
Q.2.	In the past year, how much effect has stress had on your health?								
	A lot.....	18	23	23	10	12	13	13	9
	Some.....	28	40	27	24	31	34	29	21
	Hardly any or none.....	50	35	47	60	55	52	56	66
	Don't know what stress is.....	1	-	1	1	1	0	1	1
Q.3a.	In the past year, did you think about seeking help for any personal or emotional problems from family or friends? (Yes).....	10	22	10	5	15	20	9	4
Q.3b.	In the past year, did you think about seeking help for any personal or emotional problems from a helping professional or a self-help group? (Yes).....	9	20	11	4	11	14	8	4
Q.4.	Did you actually seek any help? (Yes) From whom did you seek help?								
	Family or friends.....	4	10	4	2	7	9	3	2
	Professional or self help group.....	7	11	8	4	7	8	5	3
EXERCISE									
R.2a.	In the past 2 weeks, have you done any of the following exercises, sports, or physically active hobbies ⁶ --								
	Walking for exercise.....	40	50	40	36	42	42	41	42
	Jogging or running.....	3	12	2	0	11	16	4	1
	Calisthenics or general exercise.....	10	19	7	10	23	29	16	11
	Biking.....	7	17	6	4	11	13	8	6
	Swimming or water exercises.....	3	8	2	1	10	13	6	3
R.3.	Do you exercise or play sports regularly? (Yes).....	26	41	21	24	41	47	32	30
R.4.	For how long have you exercised or played sports regularly?								
	Less than 1 year.....	4	9	3	3	5	7	4	2
	1-2 years.....	5	8	4	5	6	7	5	4
	3-4 years.....	4	6	4	4	4	4	3	3
	5 or more years.....	12	18	10	11	25	29	20	19
	Do not exercise regularly.....	75	60	79	76	60	54	69	72
R.5a.	Would you say that you are physically more active, less active, or about as active as other persons your age? ^{1,3} Is that (a lot more or a little more/a lot less or a little less) active?								
	A lot more.....	12	15	9	13	18	16	19	23
	A little more.....	10	8	8	14	16	15	16	17
	About as active.....	48	49	47	50	49	49	49	45
	A lot less.....	16	11	22	12	6	5	7	7
	A little less.....	13	18	14	10	12	14	8	7
R.7a.	How many days a week do you think a person should exercise to strengthen the heart and lungs?								
	Less than 3 days.....	4	9	3	3	6	7	4	3
	3-4 days.....	23	44	23	14	41	50	32	17
	5 days or more.....	43	33	46	45	38	34	44	46
	Don't know.....	30	14	28	38	15	8	20	34
R.7b.	For how many minutes do you think a person should exercise on each occasion so that the heart and lungs are strengthened?								
	Less than 15 minutes.....	10	8	9	11	6	4	7	9
	15 to 25 minutes.....	21	21	24	18	23	24	23	20
	More than 25 minutes.....	34	54	34	25	53	62	45	29
	Don't know.....	36	17	34	45	18	10	25	42

See footnotes at end of table.

Table 1. Estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Questionnaire on Health Promotion and Disease Prevention, by diabetic status and age: United States, 1985--Con.

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Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
EXERCISE--Con.		Percent of population							
R.7c.	During those (number in 7b) minutes, how fast do you think a person's heart rate and breathing should be to strengthen the heart and lungs? Do you think that the heart and breathing rate should be--								
	No faster than usual.....	7	5	7	9	3	2	3	7
	A little faster than usual.....	42	44	43	41	45	45	46	45
	A lot faster but talking is possible.....	18	35	19	10	35	43	29	12
	So fast that talking is not possible.....	1	-	1	0	1	1	1	0
	Don't know.....	32	16	31	40	16	9	21	36
SMOKING									
	Cigarette smoking status (Based on Items S.1-3)								
	Never.....	44	42	35	55	46	48	37	49
	Former.....	33	21	37	34	24	18	30	34
	Current (Includes unknown amount smoked).....	22	37	28	11	30	33	32	16
	Less than 15.....	8	10	10	4	9	11	8	6
	15-24.....	7	16	7	4	13	14	13	7
	25 and over.....	7	11	10	2	8	8	10	3
S.3.	On the average, about how many cigarettes a day do you now smoke? (Current smokers)								
	Less than 15.....	34	26	37	41	32	33	27	38
	15-24.....	34	44	26	40	42	42	43	43
	25 and over.....	32	30	37	19	26	26	31	19
S.4.	Tell me if you think cigarette smoking definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting the following problems?								
	Emphysema								
	Increases.....	88	86	89	86	91	92	92	87
	Definitely increases.....	72	69	75	70	73	74	75	71
	Probably increases.....	16	17	15	16	18	18	17	16
	Does not increase.....	2	4	2	2	2	2	2	2
	Probably does not increase.....	1	1	1	2	1	1	1	1
	Definitely does not increase.....	1	3	1	0	1	1	1	1
	Don't know/No opinion.....	10	10	8	12	7	6	6	11
	Bladder cancer								
	Increases.....	34	29	34	36	35	38	34	31
	Definitely increases.....	13	8	16	13	12	12	12	12
	Probably increases.....	21	22	19	23	24	26	21	19
	Does not increase.....	19	32	18	15	25	29	22	14
	Probably does not increase.....	12	19	12	9	18	21	14	9
	Definitely does not increase.....	7	13	6	6	8	8	8	5
	Don't know/No opinion.....	47	39	48	49	39	33	44	55
	Cancer of the larynx or voice box								
	Increases.....	81	82	83	78	88	91	87	76
	Definitely increases.....	50	53	52	46	56	59	55	47
	Probably increases.....	31	29	31	33	32	32	32	30
	Does not increase.....	4	5	3	5	3	3	3	4
	Probably does not increase.....	2	3	1	3	2	2	2	2
	Definitely does not increase.....	2	3	2	2	1	1	1	2
	Don't know/No opinion.....	15	12	14	17	9	6	10	20
	Cataracts								
	Increases.....	16	18	15	16	16	18	13	12
	Definitely increases.....	5	3	6	5	4	5	4	3
	Probably increases.....	10	15	8	11	11	13	9	8
	Does not increase.....	33	42	34	27	43	47	40	30
	Probably does not increase.....	16	17	17	13	22	25	19	14
	Definitely does not increase.....	17	25	17	14	20	22	21	15
	Don't know/No opinion.....	52	40	51	57	42	35	47	59

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Table 1. Estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Questionnaire on Health Promotion and Disease Prevention, by diabetic status and age: United States, 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
SMOKING--Con.		Percent of population							
S.4.	Tell me if you think cigarette smoking definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting the following problems?--Con.								
	Cancer of the esophagus								
	Increases.....	73	75	74	71	80	83	78	69
	Definitely increases.....	36	34	39	34	43	46	41	36
	Probably increases.....	37	41	35	37	37	38	37	33
	Does not increase.....	7	11	6	6	6	6	7	6
	Probably does not increase.....	4	7	3	4	4	4	4	3
	Definitely does not increase.....	3	4	3	3	2	2	2	2
	Don't know/No opinion.....	20	14	20	23	14	11	15	25
	Chronic bronchitis								
	Increases.....	80	88	80	76	87	89	86	76
	Definitely increases.....	49	56	50	46	54	57	53	45
	Probably increases.....	30	32	30	30	32	32	33	32
	Does not increase.....	5	5	5	6	5	4	5	5
	Probably does not increase.....	3	3	3	4	3	3	3	3
	Definitely does not increase.....	2	2	2	2	2	1	2	2
	Don't know/No opinion.....	15	7	16	18	9	6	9	19
	Gallstones								
	Increases.....	11	9	11	12	11	13	9	9
	Definitely increases.....	4	2	5	4	3	3	3	3
	Probably increases.....	7	7	6	8	8	10	7	6
	Does not increase.....	36	49	36	30	46	51	43	32
	Probably does not increase.....	14	21	14	12	23	26	19	14
	Definitely does not increase.....	22	29	22	19	23	24	24	18
	Don't know/No opinion.....	53	42	52	58	43	37	47	59
	Lung cancer								
	Increases.....	89	94	90	86	95	97	94	88
	Definitely increases.....	72	75	73	69	80	84	76	72
	Probably increases.....	17	19	17	17	15	13	18	16
	Does not increase.....	3	2	2	4	1	1	2	2
	Probably does not increase.....	2	0	1	3	1	1	1	1
	Definitely does not increase.....	1	2	1	1	1	1	1	1
	Don't know/No opinion.....	8	4	8	11	4	2	4	10
S.4.	Does cigarette smoking during pregnancy definitely increase, probably increase, probably not or definitely not increase the chances of--(Persons under 45 years of age)								
	Miscarriage								
	Increases.....	74	74	-	-	74	74	-	-
	Definitely increases.....	34	34	-	-	35	35	-	-
	Probably increases.....	40	40	-	-	39	39	-	-
	Does not increase.....	8	8	-	-	12	12	-	-
	Probably does not increase.....	4	4	-	-	9	9	-	-
	Definitely does not increase.....	4	4	-	-	3	3	-	-
	Don't know/No opinion.....	18	18	-	-	14	14	-	-
	Stillbirth								
	Increases.....	68	68	-	-	65	65	-	-
	Definitely increases.....	25	25	-	-	28	28	-	-
	Probably increases.....	43	43	-	-	37	37	-	-
	Does not increase.....	11	11	-	-	14	14	-	-
	Probably does not increase.....	5	5	-	-	11	11	-	-
	Definitely does not increase.....	5	5	-	-	4	4	-	-
	Don't know/No opinion.....	21	21	-	-	20	20	-	-
	Premature birth								
	Increases.....	70	70	-	-	70	70	-	-
	Definitely increases.....	29	29	-	-	32	32	-	-
	Probably increases.....	41	41	-	-	38	38	-	-
	Does not increase.....	9	9	-	-	12	12	-	-
	Probably does not increase.....	5	5	-	-	9	9	-	-
	Definitely does not increase.....	4	4	-	-	3	3	-	-
	Don't know/No opinion.....	21	21	-	-	17	17	-	-

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(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
SMOKING--Con.		Percent of population							
S.4.	Does cigarette smoking during pregnancy definitely increase, probably increase, probably not or definitely not increase the chances of--(Persons under 45 years of age)--Con.								
	Low birth weight of the newborn								
	Increases.....	74	74	-	-	80	80	-	-
	Definitely increases.....	47	47	-	-	45	45	-	-
	Probably increases.....	27	27	-	-	35	35	-	-
	Does not increase.....	5	5	-	-	7	7	-	-
	Probably does not increase.....	3	3	-	-	5	5	-	-
	Definitely does not increase.....	2	2	-	-	2	2	-	-
	Don't know/No opinion.....	22	22	-	-	13	13	-	-
S.5a.	If a woman takes birth control pills, is she more likely to have a stroke if she smokes than if she does not smoke? (Persons under 45 years of age)								
	More likely.....	52	52	-	-	63	63	-	-
	Not likely.....	7	7	-	-	6	6	-	-
	Don't know.....	41	41	-	-	31	31	-	-
ALCOHOL USE									
T.1c.	Have you had at least one drink of beer, wine or liquor during the past year? ¹ (Yes).....	37	62	38	26	66	73	63	46
T.2.	In the past 2 weeks, on how many days did you drink any alcoholic beverages, such as beer, wine, or liquor? ^{1,3}								
	Did not drink in past year.....	63	38	62	74	34	28	37	55
	None.....	15	21	16	10	14	14	14	12
	1-4 days.....	14	29	13	10	33	39	27	16
	5-9 days.....	2	5	2	1	8	10	7	3
	10-14 days.....	5	5	6	4	11	9	14	14
T.3.	In the past 2 weeks, on the days that you drank alcoholic beverages, how many drinks did you have per day, on the average? ^{1,3}								
	Did not drink in past year.....	63	38	62	74	34	28	37	55
	None.....	15	21	16	10	14	14	14	12
	1 drink.....	9	10	7	10	17	16	19	18
	2 drinks.....	7	13	8	3	16	18	16	9
	3-4 drinks.....	3	7	3	2	13	16	9	4
	5 or more drinks.....	3	9	3	1	7	9	4	1
	Drinking Index (2-week daily drinking, based on items T.1-3) ⁷								
	Did not drink in past year.....	63	38	62	74	34	28	37	55
	None.....	15	21	16	10	14	14	14	12
	Light (.01 to .21 ounce absolute alcohol).....	12	20	11	9	25	27	24	16
	Moderate (.22 to .99 ounce absolute alcohol).....	6	11	7	3	20	23	17	12
	Heavier (1.00 ounces or more absolute alcohol).....	4	8	4	3	8	8	8	6
T.6.	During the past 12 months, on how many days did you have 9 or more drinks of any alcoholic beverage?								
	1 or more days.....	4	11	4	1	12	18	6	2
	5 or more days.....	3	7	3	0	7	10	4	1
T.7.	During the past 12 months, on how many days did you have 5 or more drinks of any alcoholic beverage? ¹								
	1 or more days.....	7	20	7	2	25	33	15	6
	10 or more days.....	4	9	4	2	13	17	8	3
T.8.	During the past year, how many times did you drive when you had perhaps too much to drink?								
	1 time.....	1	4	0	-	3	5	1	0
	2 or more times.....	2	6	1	0	7	11	3	0

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Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
ALCOHOL USE--Con.		Percent of population							
T.9.	Tell me if you think heavy alcohol drinking definitely increases, probably increases, probably does not, or definitely does not increase a person's chances of getting the following problems?								
	Throat cancer								
	Increases.....	45	36	47	48	40	38	41	44
	Definitely increases.....	21	12	21	24	15	12	16	21
	Probably increases.....	25	24	25	24	25	26	24	23
	Does not increase.....	23	35	22	18	34	40	30	18
	Probably does not increase.....	15	21	15	12	23	27	20	11
	Definitely does not increase.....	8	15	8	6	11	12	10	6
	Don't know/No opinion.....	32	28	31	34	26	22	30	38
	Cirrhosis of the liver								
	Increases.....	92	93	93	91	95	96	95	88
	Definitely increases.....	78	79	82	74	79	81	80	71
	Probably increases.....	14	14	11	17	15	15	15	17
	Does not increase.....	1	2	1	0	1	1	1	1
	Probably does not increase.....	0	0	1	0	1	0	1	1
	Definitely does not increase.....	0	2	-	0	0	0	0	0
	Don't know/No opinion.....	7	5	6	9	5	3	4	11
	Bladder cancer								
	Increases.....	65	68	67	61	67	70	63	58
	Definitely increases.....	30	24	32	30	28	29	27	26
	Probably increases.....	35	44	36	31	39	41	37	32
	Does not increase.....	8	12	8	7	11	13	11	7
	Probably does not increase.....	6	7	6	4	8	9	8	5
	Definitely does not increase.....	3	5	2	3	3	3	3	2
	Don't know/No opinion.....	27	20	25	32	22	17	25	35
	Cancer of the mouth								
	Increases.....	40	30	40	44	32	30	34	38
	Definitely increases.....	16	10	17	18	11	9	12	16
	Probably increases.....	23	20	22	26	22	22	21	21
	Does not increase.....	22	36	22	17	37	43	32	20
	Probably does not increase.....	14	21	14	12	24	29	20	12
	Definitely does not increase.....	8	15	9	5	13	14	12	8
	Don't know/No opinion.....	37	34	38	39	31	27	34	43
	Arthritis								
	Increases.....	17	15	18	16	15	15	15	14
	Definitely increases.....	6	4	5	7	4	3	4	4
	Probably increases.....	11	11	12	9	11	12	10	10
	Does not increase.....	35	43	35	30	47	52	42	31
	Probably does not increase.....	16	20	16	15	25	29	21	14
	Definitely does not increase.....	18	23	19	15	22	23	21	17
	Don't know/No opinion.....	49	42	47	54	39	33	43	55
	Blood clots								
	Increases.....	33	37	34	30	34	39	29	26
	Definitely increases.....	12	13	12	11	10	11	9	8
	Probably increases.....	21	24	22	19	24	28	20	18
	Does not increase.....	23	29	24	20	31	33	33	21
	Probably does not increase.....	12	16	12	11	19	21	18	11
	Definitely does not increase.....	11	14	12	9	13	12	14	11
	Don't know/No opinion.....	44	34	42	50	34	28	39	52
T.9.	Does heavy drinking during pregnancy definitely increase, probably increase, probably not or definitely not increase the chances of--(Persons under 45 years of age)								
	Miscarriage								
	Increases.....	82	82	-	-	86	86	-	-
	Definitely increases.....	48	48	-	-	48	48	-	-
	Probably increases.....	34	34	-	-	38	38	-	-
	Does not increase.....	3	3	-	-	4	4	-	-
	Probably does not increase.....	2	2	-	-	3	3	-	-
	Definitely does not increase.....	1	1	-	-	1	1	-	-
	Don't know/No opinion.....	16	16	-	-	10	10	-	-

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Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
ALCOHOL USE--Con.		Percent of population							
T.9.	Does heavy drinking during pregnancy definitely increase, probably increase, probably not or definitely not increase the chances of--(Persons under 45 years of age)--Con.								
	Mental retardation of the newborn								
	Increases.....	77	77	-	-	84	84	-	-
	Definitely increases.....	40	40	-	-	47	47	-	-
	Probably increases.....	37	37	-	-	37	37	-	-
	Does not increase.....	7	7	-	-	5	5	-	-
	Probably does not increase.....	4	4	-	-	4	4	-	-
	Definitely does not increase.....	3	3	-	-	1	1	-	-
	Don't know/No opinion.....	17	17	-	-	11	11	-	-
	Low birth weight of the newborn								
	Increases.....	83	83	-	-	84	84	-	-
	Definitely increases.....	41	41	-	-	46	46	-	-
	Probably increases.....	42	42	-	-	38	38	-	-
	Does not increase.....	3	3	-	-	4	4	-	-
	Probably does not increase.....	3	3	-	-	3	3	-	-
	Definitely does not increase.....	-	-	-	-	1	1	-	-
	Don't know/No opinion.....	14	14	-	-	11	11	-	-
	Birth defects								
	Increases.....	83	83	-	-	85	85	-	-
	Definitely increases.....	44	44	-	-	49	49	-	-
	Probably increases.....	39	39	-	-	36	36	-	-
	Does not increase.....	5	5	-	-	4	4	-	-
	Probably does not increase.....	4	4	-	-	3	3	-	-
	Definitely does not increase.....	1	1	-	-	1	1	-	-
	Don't know/No opinion.....	12	12	-	-	11	11	-	-
T.10.	Have you ever heard of Fetal Alcohol Syndrome? (Persons under 45 years of age) (Yes).....	54	54	-	-	56	56	-	-
DENTAL CARE									
U.1.	This next question is about preventing tooth decay. After I read each of the following, tell me if you think it is definitely important, probably important, probably not, or definitely not important in preventing tooth decay.								
	Seeing a dentist regularly								
	Important.....	93	95	95	91	96	97	95	92
	Definitely important.....	81	84	82	79	83	84	83	78
	Probably important.....	12	11	13	12	13	13	12	14
	Not important.....	2	3	2	3	2	2	3	2
	Probably not important.....	2	2	2	2	2	1	2	2
	Definitely not important.....	0	0	0	0	1	0	1	1
	Don't know/No opinion.....	4	2	3	6	2	1	2	6
	Drinking water with fluoride from early childhood								
	Important.....	70	81	72	62	80	85	77	63
	Definitely important.....	40	44	44	34	46	50	45	32
	Probably important.....	30	37	28	28	34	35	32	30
	Not important.....	9	7	9	10	8	8	8	8
	Probably not important.....	7	6	6	8	6	6	5	5
	Definitely not important.....	2	1	3	3	3	2	3	3
	Don't know/No opinion.....	21	11	19	28	12	7	15	29
	Regular brushing and flossing of the teeth								
	Important.....	96	98	97	94	98	99	97	95
	Definitely important.....	84	90	85	79	90	92	88	82
	Probably important.....	12	7	12	15	8	7	9	12
	Not important.....	1	0	0	1	1	0	1	1
	Probably not important.....	0	-	0	0	0	0	0	0
	Definitely not important.....	0	0	-	0	0	0	0	0
	Don't know/No opinion.....	4	2	3	5	2	1	2	5

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Table 1. Estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Questionnaire on Health Promotion and Disease Prevention, by diabetic status and age: United States, 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
		Percent of population							
DENTAL CARE--Con.									
U.1.	This next question is about preventing tooth decay. After I read each of the following, tell me if you think it is definitely important, probably important, probably not, or definitely not important in preventing tooth decay.--Con.								
	Using fluoride toothpaste or fluoride mouth rinse								
	Important	84	93	87	78	90	94	87	75
	Definitely important.....	53	63	56	46	62	69	54	44
	Probably important.....	31	30	31	32	28	25	32	31
	Not important	5	2	5	6	4	3	6	6
	Probably not important.....	3	0	3	4	3	2	4	4
	Definitely not important.....	2	1	2	2	1	1	1	2
	Don't know/No opinion.....	11	5	8	16	6	3	8	19
	Avoiding between-meal sweets								
	Important	89	93	91	84	89	91	89	82
	Definitely important.....	62	61	64	60	60	61	62	53
	Probably important.....	27	32	27	25	30	30	27	29
	Not important	5	4	4	5	6	7	6	7
	Probably not important.....	3	2	3	4	5	5	4	5
	Definitely not important.....	2	2	1	1	1	1	2	2
	Don't know/No opinion.....	7	3	4	10	4	2	5	11
U.2.	Now I'm going to ask about preventing gum disease. In your opinion, how important or not important is each of the following in preventing gum disease?								
	Seeing a dentist regularly								
	Important	92	97	93	90	95	97	95	90
	Definitely important.....	79	86	80	77	83	84	83	76
	Probably important.....	13	11	13	13	12	12	11	14
	Not important	2	1	3	2	2	2	2	2
	Probably not important.....	2	1	2	2	1	1	2	2
	Definitely not important.....	1	0	1	0	1	0	1	1
	Don't know/No opinion.....	5	2	4	8	3	1	3	8
	Drinking water with fluoride from early childhood								
	Important	60	66	62	54	66	71	62	53
	Definitely important.....	32	33	34	31	34	37	32	27
	Probably important.....	27	33	28	24	32	34	30	26
	Not important	13	20	11	12	16	17	17	11
	Probably not important.....	9	16	7	8	12	13	12	7
	Definitely not important.....	4	4	5	4	4	4	5	4
	Don't know/No opinion.....	27	14	26	33	17	11	21	36
	Regular brushing and flossing of the teeth								
	Important	93	96	94	91	96	98	96	91
	Definitely important.....	76	82	77	73	84	87	82	75
	Probably important.....	17	14	17	18	12	10	13	16
	Not important	1	1	1	2	1	1	1	1
	Probably not important.....	1	0	1	1	1	1	1	1
	Definitely not important.....	1	1	1	1	0	0	0	0
	Don't know/No opinion.....	5	3	5	7	3	2	3	8
	Using fluoride toothpaste or fluoride mouth rinse								
	Important	75	83	76	72	78	82	73	68
	Definitely important.....	43	46	44	41	48	53	42	39
	Probably important.....	32	36	32	30	30	29	31	29
	Not important	9	10	9	10	12	12	14	9
	Probably not important.....	7	6	6	7	9	9	10	6
	Definitely not important.....	3	4	3	3	3	3	4	3
	Don't know/No opinion.....	15	7	15	18	10	6	14	23
	Avoiding between-meal sweets								
	Important	83	84	85	81	81	83	80	76
	Definitely important.....	54	52	54	54	50	51	52	48
	Probably important.....	30	33	31	27	31	33	28	28
	Not important	7	10	6	6	12	12	11	9
	Probably not important.....	4	7	4	4	9	10	8	6
	Definitely not important.....	2	3	2	2	3	3	3	3
	Don't know/No opinion.....	10	6	9	13	7	5	9	15

See footnotes at end of table.

Table 1. Estimates of the percent of population with selected behaviors and knowledge from the 1985 National Health Interview Survey Questionnaire on Health Promotion and Disease Prevention, by diabetic status and age: United States, 1985--Con.

(Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in technical notes.)

Section and item number	Health behaviors and knowledge	Diabetic				Nondiabetic			
		18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
DENTAL CARE--Con.		Percent of population							
U.3.	In your opinion, which of the following is the main cause of tooth loss in children?								
	Tooth decay.....	61	63	60	62	58	56	60	62
	Gum disease.....	9	6	10	8	9	8	9	9
	Injury to the teeth.....	23	30	25	17	29	34	27	17
	Don't know.....	8	1	5	13	4	2	5	12
U.4.	In your opinion, which of the following is the main cause of tooth loss in adults?								
	Tooth decay.....	42	41	40	43	40	39	40	44
	Gum disease.....	50	56	53	45	54	57	54	43
	Injury to the teeth.....	2	2	3	1	3	3	2	2
	Don't know.....	6	1	4	10	3	2	4	10
U.5a.	Have you ever heard of dental sealants? (Yes).....	15	25	18	9	23	25	23	14
U.5b.	Which of the following best describes the purpose of dental sealants--to prevent gum disease, to prevent tooth decay, or to hold dentures in place? (Persons who have heard of dental sealants (yes) in U.5a.								
	Prevent gum disease.....	8	5	8	9	4	4	4	7
	Prevent tooth decay.....	76	86	69	78	80	81	81	70
	Hold dentures in place.....	11	7	16	5	12	12	10	13
	Don't know.....	6	2	7	8	4	3	5	9
OCCUPATIONAL SAFETY AND HEALTH									
V.1a.	In your present job, are you exposed to any substances that could endanger your health, such as chemicals, dusts, fumes or gases? ³ (Currently employed persons) (Yes).....	34	37	35	15	35	37	32	17
V.2a.	In your present job, are you exposed to any work conditions that could endanger your health, such as loud noise, extreme heat or cold, physical or mental stress, or radiation? ³ (Currently employed persons) (Yes).....	35	44	35	9	36	38	33	14
V.3a.	In your present job are you exposed to any risks of accidents or injuries? ³ (Currently employed persons) (Yes).....	38	44	38	18	40	42	36	26

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Symbols

- - -	Data not available
. . .	Category not applicable
-	Quantity zero
0.0	Quantity more than zero but less than 0.05
Z	Quantity more than zero but less than 500 where numbers are rounded to thousands
*	Figure does not meet standards of reliability or precision
#	Figure suppressed to comply with confidentiality requirements

Technical notes

The National Health Interview Survey (NHIS) is a continuous, cross-sectional nationwide survey conducted by household interview. Each week a probability sample of households in the civilian noninstitutionalized population is interviewed by personnel of the U.S. Bureau of the Census to obtain information on the health and other characteristics of each member of the household. The 1985 NHIS sample consisted of 36,399 eligible households. The total noninterview rate for the basic health and demographic household questionnaire was about 4 percent—about 2-3 percent of which was due to respondent refusal and the remainder primarily due to an inability to locate an eligible respondent at home after repeated calls. A more detailed description of the survey design, methods used in estimation, and general qualifications of the NHIS data is provided in *Current Estimates From the National Health Interview Survey, 1985*.³⁴

Objectives and sponsorship of the 1985 NHIS Health Promotion and Disease Prevention study

The 1985 NHIS Health Promotion and Disease Prevention (HPDP) study was designed to monitor progress toward one of the major initiatives of the Department of Health and Human Services. This initiative was described in *Healthy People—The Surgeon General's Report on Health Promotion and Disease Prevention, 1979*.³⁵ In that report, broad goals were established for the improvement of the health of Americans. The 1980 Public Health Service report, *Promoting Health/Preventing Disease: Objectives for the Nation*,³⁶ detailed specific objectives necessary for attaining those goals in each of 15 priority areas. Because the target date for achieving those objectives is 1990, current data collection plans call for readministering the 1985 HPDP questionnaire in 1990 for the purpose of monitoring progress achieved in the intervening 5 years.

The planning and development of the questionnaire used

in the 1985 HPDP study was carried out in collaboration with the following Federal agencies, some of which also provided partial funding for the study:

- Office of the Assistant Secretary for Health
 - Office of Disease Prevention and Health Promotion
 - Office on Smoking and Health
- Alcohol, Drug Abuse, and Mental Health Administration
 - National Institute on Alcohol Abuse and Alcoholism
- National Institutes of Health
 - National Heart, Lung, and Blood Institute
 - National Cancer Institute
 - National Institute of Dental Research
 - National Institute of Child Health and Human Development
- Health Resources and Services Administration
 - Centers for Disease Control
 - Center for Prevention Services
 - Center for Infectious Diseases
 - Center for Environmental Health
 - Center for Health Promotion and Education
 - National Institute for Occupational Safety and Health
- Food and Drug Administration
 - Bureau of Foods
- Department of Transportation
 - Office of Driver and Pedestrian Research
- The President's Council on Physical Fitness and Sports

HPDP questionnaire content and administration

The 1985 Health Promotion and Disease Prevention study was devoted primarily to the collection of baseline data on the following topics: general health habits (including nutrition), injury control and child safety and health, high blood pressure, stress, exercise, smoking, alcohol use, dental care, and occupational safety and health. These topics were selected after consultation with the Office of Disease Prevention and Health Promotion (Assistant Secretary for Health) as well as with the agencies designated by the Assistant Secretary for Health as having "lead" responsibility for implementing and monitoring progress toward achieving the 1990 objectives. Within

each agency, subject matter experts were consulted during the development of the questionnaire.

Self-response was required for the Health Promotion and Disease Prevention questionnaire, and one adult per family was selected randomly as the respondent. This procedure resulted in an additional nonresponse of about 7 percent. The number of completed Health Promotion and Disease Prevention questionnaires was 33,630, representing an estimated 90 percent of eligible respondents.

Populations used in the computation of percents shown in this report

The estimated population for each of the age categories of diabetics and nondiabetics used as a denominator for one of the percents or more discussed in this report is shown in table I. This information allows readers to derive estimates of the number of persons in the United States with a given characteristic by diabetic status and age.

Reliability of estimates

Because the estimates shown in the text table are based on a sample of the population rather than on the entire population, they are subject to sampling error. Some estimates in the table are small for given characteristics. When an estimate or the numerator or denominator used in the computation of a percent is small, the sampling error may be relatively high. Approximate standard errors for estimates in this report are shown in table II.

Nonsampling errors

The data presented in this report are also subject to a variety of nonsampling errors, some of which represent random measurement error; others, more systematic error. In recent years, a number of review articles have appeared codifying the current state of knowledge about these kinds of errors in the study of selected health-related behaviors and characteristics, including smoking,³⁷ alcohol use,³⁸ reported height and weight,³⁹ exercise behaviors,⁴⁰ reports of stress,⁴¹ and dietary patterns.⁴²

Table I. Estimates of selected civilian noninstitutionalized populations by diabetic status and age: United States, 1985

Selected population	Diabetic				Nondiabetic			
	18+ years	18-44 years	45-64 years	65+ years	18+ years	18-44 years	45-64 years	65+ years
	Population in thousands							
Total adult population	6,144	1,036	2,580	2,528	161,589	96,765	40,994	23,830
Females	3,385	523	1,377	1,485	85,251	49,688	21,464	14,099
Population in families with children under 10 years of age	821	509	238	74	44,186	40,641	3,161	384
Population in families with children under 5 years of age	503	301	154	48	28,894	27,195	1,538	161
Currently employed population	2,212	767	1,204	241	103,330	73,525	26,848	2,957

Table II. Standard errors, expressed in percentage points, of estimated percents by diabetic status and age: National Health Interview Survey Questionnaire on Health Promotion and Disease Prevention, United States, 1985

<i>Estimated percent</i>	<i>Diabetic</i>				<i>Nondiabetic</i>			
	<i>18+ years</i>	<i>18-44 years</i>	<i>45-64 years</i>	<i>65+ years</i>	<i>18+ years</i>	<i>18-44 years</i>	<i>45-64 years</i>	<i>65+ years</i>
	Standard error in percentage points							
5 or 95	0.69	1.67	1.07	1.07	0.13	0.17	0.27	0.35
10 or 90	0.95	2.30	1.47	1.47	0.18	0.24	0.37	0.48
15 or 85	1.13	2.74	1.75	1.75	0.22	0.28	0.44	0.57
20 or 80	1.26	3.07	1.96	1.97	0.25	0.32	0.49	0.64
25 or 75	1.36	3.32	2.12	2.13	0.27	0.34	0.53	0.69
30 or 70	1.44	3.52	2.24	2.25	0.28	0.36	0.56	0.73
35 or 65	1.50	3.66	2.33	2.34	0.29	0.38	0.58	0.76
40 or 60	1.54	3.76	2.40	2.41	0.30	0.39	0.60	0.78
45 or 55	1.57	3.82	2.43	2.44	0.31	0.40	0.61	0.80
50	1.58	3.84	2.45	2.46	0.31	0.40	0.61	0.80

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