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Use Habits Among Adults of Cigarettes, Coffee, Aspirin, and Sleeping Pills

United States, 1976

Statistics are presented on the number of persons in the civilian noninstitutionalized U.S. population 20 years of age and over who smoke cigarettes, drink coffee, use aspirin, and use sleeping pills. The data were collected in health interviews during 1976. The use and amounts of use of these four drugs or habit-forming substances, distributed by selected demographic and social characteristics, are described. Indicators of health are presented for persons who used and did not use them.

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COOPERATION OF THE U.S. BUREAU OF THE CENSUS

Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the Division of Health Interview Statistics, the Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

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USE HABITS AMONG ADULTS OF CIGARETTES, COFFEE, ASPIRIN, AND SLEEPING PILLS

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INTRODUCTION

A representative cross-sectional sample of the noninstitutionalized population of the United States was asked questions about the use of cigarettes, coffee, aspirin, and sleeping pills during the 1976 Health Interview Survey (HIS). This report presents data on the number of people who used these four common drugs or habit-forming substances in 1976 and the characteristics of users and nonusers. The relationships between the use of these substances and health are assessed.

A number of studies have investigated the relationship of the use of cigarettes, coffee, aspirin, and sleeping pills to health. It is commonly accepted that cigarette smoking is harmful to health,[1-3] as is the excessive use of aspirin and sleeping pills.[4,5] Although excessive coffee drinking is also suspected of being harmful to health, the evidence is inconclusive.[6-9]

A cross-sectional survey such as HIS is not the most efficient method of detecting and measuring associations between personal habits and health—this is especially true for causality. A longitudinal (cohort) survey is more efficient. However, HIS provides an opportunity to assess the relationship between such habits and health while simultaneously estimating the prevalence of the habits and the characteristics of the people who have the habits.

Highlights

In 1976, 42 percent of the men and 32 percent of the women in the population 20 years and over smoked cigarettes. Men and women in their late twenties and early thirties were more likely to smoke than people of other ages. Men of all ages were less likely to smoke in 1976 than their age counterparts in 1966 were, whereas this was true for women under age 45 only. The percent of people who smoked was higher among black than white people, higher among blue-collar than white-collar workers, generally higher among the less educated than the more educated, and higher among the separated or divorced than the never-married or currently married. About 3 out of 4 persons who had ever smoked had tried to stop smoking at one time or another. About 1 out of 4 persons who had ever smoked had been advised by a doctor to stop smoking. Usually the doctor's advice was based on the presence of a specific health condition. Although people advised by a doctor to stop smoking were more likely to try to stop than were other people, they were slightly less likely to have been able to stop. Smoking was related to health; persons who had never smoked were the healthiest group, according to data for a number of measures of health.

Coffee was drunk by 80 percent of the U.S. population 20 years of age and over in 1976, with coffee drinkers consuming an average of 3.2 cups each day. Heavy coffee drinking was concentrated in the middle adult years, with younger adults less likely to drink coffee regularly and older adults more likely to drink moderate amounts (1-2 cups a day). Men were more likely to drink coffee than women were, and white people were more likely to drink coffee

than black people. Persons who smoked were also likely to drink large amounts of coffee. However, although smoking was associated with ill health, persons who drank large amounts of coffee were no less healthy than persons who drank no coffee or a moderate amount of coffee.

Approximately three-fourths of the population 20 years of age and over used aspirin, and approximately one-fourth regularly used aspirin once a week or more. Weekly aspirin use was higher among women than among men, increased with age, and generally decreased with increased education or income. Regular users of aspirin had about twice the rate of ill health of other persons, largely because aspirin is used to relieve pain caused by health conditions. It was found that almost 44 percent of people who reported having arthritis used aspirin once a week or more, compared with about 18 percent of people who did not have arthritis.

Sleeping pills were used once a week or more by 6 percent of the U.S. adult population. Regular sleeping pill use increased with age, was higher among women than men and higher among black than white persons, decreased with increased education and income, and was higher among those with disrupted marriages than currently or never-married people. Regular sleeping pill use was highly related to health, and 89 percent of regular users used sleeping pills under a doctor's advice. Persons using sleeping pills regularly had rates of ill health 2-4 times those of people who did not use sleeping pills regularly. This pill use was related to aspirin use, but was not related to smoking or coffee drinking.

SOURCE AND LIMITATIONS OF THE DATA

The information from HIS is based on data collected in a continuing nationwide survey conducted by household interview. Each week a probability sample of households is interviewed by trained personnel of the U.S. Bureau of the Census to obtain information about the health and other characteristics of each member of the household in the civilian noninstitutionalized population of the United States. The population figures used to compute the rates given in this report are shown in table 11.

During the 52 weeks in 1976 the sample was composed of approximately 40,000 households containing about 113,000 persons. The total noninterview rate was about 3.7 percent, of which 2.1 percent was due to respondent refusal, and the remainder was due primarily to the failure to find an eligible respondent at home after repeated calls. Persons in enumerated households were subsampled at a 1:3 rate, with the questions on health habits asked of the approximately 23,000 persons in the subsample who were 20 years of age and over.

The majority of the HIS questions could be answered by one member of the household for all the other members. For the questions on health habits, however, each person was required to respond (unless physically or mentally unable). As a result, there were 1,680 subsample persons (7.3 percent) in interviewed households for whom no data on health habits were available. In addition, data for 93-484 persons (0.4-2.1 percent) were not obtained for individual questions. In many of the tables, especially where percent distributions are shown, persons with unknown characteristics were excluded from the analysis. This procedure for handling missing data requires an implicit assumption that persons for whom data are missing are similar to persons for whom data are known.

People whom the interviewer could not directly contact make up the largest part of the unknowns (90-95 percent). Those least likely to be contacted were young adult males. Whereas males constituted 47 percent of the population 20 years of age and over, they constituted about 72 percent of the unknowns. Whereas 53 percent of the persons 20 years of age and over were under 45, about 61 percent of the unknowns were under 45 years of age. Persons for whom health habit information was unknown were slightly more likely to be black, to live in suburbs of Standard Metropolitan Statistical Areas (SMSA's), to live in the South, to have higher educational attainment, and to have higher family incomes. Because of the greater numbers of unknowns among males than females, there are separate analyses for each sex in most cases.

Nonsampling error or bias is always a problem in data collection and analysis. Self-reporting on use of cigarettes, coffee, aspirin, and sleeping pills was required in HIS to avoid one known source of bias; potential error due to nonresponse has been considered. However, other errors may be present in the data due to the administration of the questionnaire, the way the questions were interpreted, and the accuracy of the response. None of these potential sources of bias has been investigated, and the extent to which they are present in the data is unknown.

A description of the design of the survey, the methods used in estimation, and general qualifications of the data are presented in appendix I. Since the estimates shown in this report are based on a sample of the population, they are subject to sampling error. Therefore, particular attention should be paid to the section "Reliability of Estimates." Sampling errors for most estimates are of relatively low magnitude; however, where an estimated number or the numerator or denominator of a rate or percent is small, the sampling error may be high. Charts of relative sampling errors and instructions for their use are shown in appendix I.

Certain terms used in this report are defined in appendix II. Some of them have specific meanings used in the survey. For example, estimates of the incidence of acute conditions include, with certain exceptions, those conditions which started within 2 weeks preceding interview and which involved either medical attention or restricted activity. The exceptions, listed in appendix II, are certain conditions, such as heart trouble and diabetes, which are always considered to be chronic regardless of duration or onset.

Estimates of the number of disability days associated with acute conditions are derived from the number of days of disability experienced during the 2-week period prior to the week of interview and include all such days reported even if the acute condition causing the disability had its onset prior to the 2-week period. Disability days associated with acute conditions are recorded on a condition basis. If an individual reports more than one illness or injury on the same day, the count of disability days will exceed the actual number of days disabled, i.e., person days of disability.

The 1976 questionnaire contained a variety of topics not routinely collected in HIS. In addition to health habits, these topics include the prevalence of skin and musculoskeletal conditions (previously collected in 1969); health insurance coverage (collected every other year); detailed information on diabetics, including their use of insulin and other medications; whether or not Aid to Families With Dependent Children or Supplemental Security Income was being received; and out-of-pocket health expenses for 1975.

Appendix III contains the part of the questionnaire with which information on health habits was obtained. The complete 1976 questionnaire is published elsewhere.[10]

In this report, terms such as "similar" and "the same" mean that no statistical significance exists between the statistics being compared. Terms relating to difference (e.g., "greater" and "less") indicate that differences are statistically significant. The *t*-test with a critical value of 1.96 (0.05 level of significance) was used to test all comparisons that are discussed. A lack of comment regarding the difference between any two statistics does not mean that the difference was tested and found to be not significant.

Related Health Habit Data

The data included in this report represent only a small amount of the total data on health habits produced by the National Center for Health Statistics (NCHS). Other data are or will be available in published form and on microdata tapes.

Data on cigarette smoking were collected in HIS during fiscal years 1965 and 1966 and during calendar years 1970, 1974, 1976, 1977, and 1978. In addition, NCHS collected cigarette smoking data in cooperation with the Current Population Survey in June 1966, August 1967, and August 1968. Data from years prior to 1976 are available in other reports.[3,11-15] This report contains data from the 1976 survey, and data for 1978 will soon be available.[16] Some 1966 data are also included for time comparison.

Questions about the purchase of prescription

and nonprescription drugs were included in the fiscal 1965 HIS and the data have been published.[17] The 1973 HIS also included questions on the purchase of prescription drugs. This report contains no comparison with these earlier data since the use of aspirin and sleeping pills (asked of each sample person) may be very different from the purchase of these medicines (asked of each family).

HIS has collected other types of data that relate to the health habits of the U.S. population. Questions on physical exercise and sports participation were asked in 1975.[18] The use of medical procedures associated with preventative health care was part of the 1973 survey.[19] The 1977 survey contained questions on sleeping, eating, and alcohol drinking habits; information on these will be analyzed in another report.

Data on health-related habits have been obtained in surveys other than HIS. Cigarette smoking data on persons deceased prior to the survey were obtained in 1966-68 through a special followback survey of next of kin from a sample of death certificates. Both cycles of the Health and Nutrition Examination Survey (1971-75 and 1976-80) included questions on medicine or pill use, consumption of alcoholic beverages, exercise, use of tobacco, and dietary intake in 24 hours.

USE HABITS OF PERSONS 20 YEARS AND OVER

Cigarettes

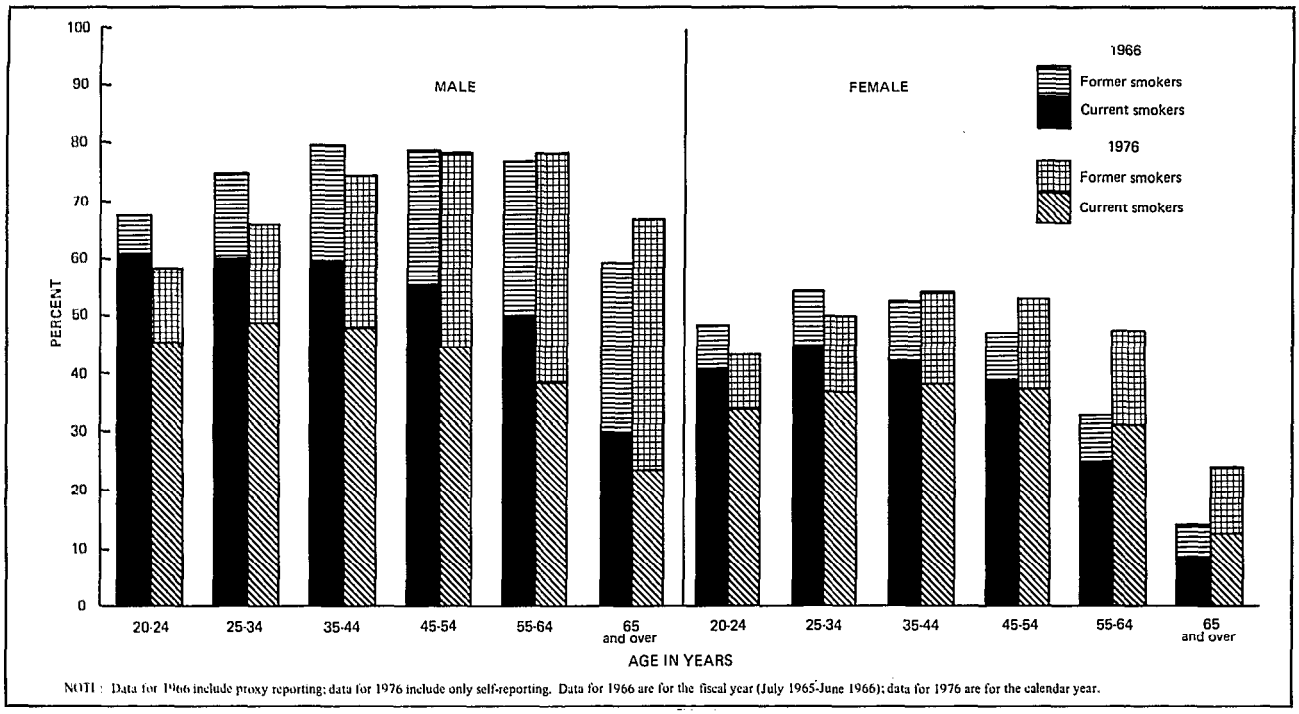
In 1976, 46 million persons 20 years of age and over smoked cigarettes (table 1). An additional 26 million persons had smoked at least 100 cigarettes in their life but were not smoking in 1976, and 54 million persons had never smoked. The smoking status of 11 million persons could not be determined. Although persons for whom smoking information was not obtained tended to be males under 65 years of age, the subsequent analysis, which controls for sex and age, excludes these persons, assuming that they have smoking status similar to that of people for whom data were available.

Table 1 shows that 36.4 percent of the population 20 years of age and over smoked cigarettes in 1976. Women were less likely to smoke than men, with 32 percent of women and 42 percent of men smoking. Smoking was related to age for both men and women. Among men, those 25-34 years of age were the most likely to smoke; among women, the highest smoking rate was for those 35-44 years of age. The relationship between smoking and age can be attributed to three factors: (1) changing use as a person ages, (2) different amounts of use by different birth cohorts (persons born, growing up, and reaching adulthood under different social conditions), and (3) differential mortality among smokers and nonsmokers.

Figure 1 compares the percents of smokers (former and current) in 1966 with those in 1976. There was a decline over the 10-year period in the percent of those who had ever smoked (current plus former) for men under 45, whereas there was either no change or an increase in the percent of those who had ever smoked for men 45 years of age and over. In contrast to the percent of those who had ever smoked, there was an 18-25 percent decline in the percent of men who were currently smoking for every age group. The greatest decline in smoking was among men 20-24 years of age: 61 percent smoked in 1966, and 46 percent smoked in 1976.

For women, the pattern of change in the percent of those who had ever smoked was the same as that for men: there were decreases in the percents of those who had ever smoked in the younger age groups, and no change or an increase in the older age groups. The pattern of change for current smokers among women was different from that for men. Women under 45 years of age in 1976 were less likely to smoke than women that age in 1966, whereas the women 55 years of age and over in 1976 were more likely to smoke than those of similar ages in 1966.

Figure 1 also shows a decline in the percent of persons currently smoking among birth cohorts of men and women as they age. Among the cohort of men born in 1932-41 (25-34 in 1966 and 35-44 in 1976), 60 percent smoked in 1966 whereas 48 percent smoked in 1976. Excess mortality among smokers could account for little of this decline since the percent of those



NOTE: Data for 1966 include proxy reporting; data for 1976 include only self-reporting. Data for 1966 are for the fiscal year (July 1965-June 1966); data for 1976 are for the calendar year.

Figure 1. Percent of present or former cigarette smokers among persons 20 years of age or over, by sex and age: United States, 1966 and 1976

who had ever smoked did not change: it was 75 percent for both time periods. Thus there were a substantial number of men in this age cohort who stopped smoking during the 10-year period. The same pattern can be traced for two other cohorts of men, those who were 35-44 years of age and 45-54 years of age in 1966. Women showed the same pattern of decline in smoking with age as men did. Among the cohort of women who were born in 1932-41 (25-34 in 1966 and 35-44 in 1976), 45 percent smoked in 1966, whereas 38 percent smoked in 1976. In both 1966 and 1976, 54 percent of this cohort of women had ever smoked.

Table 2 shows that more smokers smoked 15-24 cigarettes a day (about one pack) than any other amount, with the average amount smoked being 20 cigarettes per day. The number of cigarettes smoked each day was related to age in a curvilinear manner. Persons 45-54 years of age smoked the most (22.2 cigarettes per day on the average), and persons 75 years of age and over smoked the least (14.9 cigarettes per day). The average amount smoked by men (21.8 cigarettes per day) was greater than the amount smoked by women (18.1 cigarettes per day), but the relationship of the amount smoked to age was the same for both sexes.

Table 3 indicates that a greater percent of black than white people smoked, but the average amount smoked was less among black smokers than white smokers. Persons of other races were the least likely to smoke, although smokers of other races smoked about the same amount as did black smokers.

The percent of current smokers generally declined with increased education, with the exception that those with less than a ninth grade education were less likely to smoke than those with some high school education. Current smokers comprised 45.9 percent of the population with 9-11 years of school completed, in contrast to 26.9 percent of the population who had completed college. The average amount smoked varied in a similar manner.

Smoking also varied by occupation. A greater percent of blue-collar workers (48.1 percent) than white-collar workers (35.5 percent) smoked, with service and farm workers falling in between. Persons who were not in the labor force were the least likely to smoke, and persons who were unemployed were about as likely to

smoke as blue-collar workers. The average number of cigarettes smoked varied by occupation from a low of 19.0 to a high of 23.6. In general, those occupations in which a higher percent of persons smoked were also occupations in which a higher average number of cigarettes were smoked ($r = 0.55, n = 13$).

There was a small difference in the percent of male and female white-collar workers who smoked, but this is attributable to the concentration of women in clerical and kindred occupations, the only one of the four white-collar occupational groups to exhibit a significant difference between men and women in smoking. There was a large difference in smoking status between men and women in blue-collar occupations, specifically among operatives, which was the only blue-collar occupational group with a large number of women. Male service workers were much more likely to smoke than female service workers, and unemployed males were more likely to smoke than unemployed females.

Over half of the people who were separated (51.1 percent) or divorced (56.7 percent) smoked cigarettes compared with just over a third of the people who had never married (34.6 percent) or who were currently married (36.6 percent). The low proportion of widows who smoked was due in part to their being older. Within each age group (data not shown), widowed persons were more similar in smoking status to never-married or currently married people than is indicated in table 3.

A large number of people had stopped smoking by the time of the interview. Table A shows that 36 percent of persons 20 years of age and

Table A. Percent distribution of persons 20 years of age and over who have ever smoked by current smoking status and whether they have tried to stop, according to sex and age: United States, 1976

Sex and age	Total ever smoked	Former smoker	Present smoker			Unknown
			Total	Tried to stop	Did not try to stop	
	Percent distribution					
Both sexes						
20 years and over	100.0	36.1	63.9	41.5	22.1	0.3
20-24 years	100.0	22.1	77.9	49.8	27.7	*0.4
25-34 years	100.0	26.6	73.4	48.9	24.2	*0.3
35-44 years	100.0	33.1	66.9	45.4	21.1	*0.5
45-54 years	100.0	37.2	62.8	40.2	22.4	*0.3
55-64 years	100.0	44.3	55.7	34.9	20.5	*0.3
65-74 years	100.0	56.6	43.4	27.5	15.7	*0.3
75 years and over	100.0	68.3	31.7	16.9	14.7	*0.2
Male						
20 years and over	100.0	40.8	59.2	39.2	19.5	0.4
20-24 years	100.0	21.0	79.0	49.6	28.9	*0.4
25-34 years	100.0	27.4	72.6	48.7	23.6	*0.3
35-44 years	100.0	36.5	63.5	44.6	18.4	*0.6
45-54 years	100.0	43.9	56.1	36.3	19.4	*0.4
55-64 years	100.0	51.4	48.6	32.2	16.0	*0.4
65-74 years	100.0	62.7	37.3	24.8	12.3	*0.1
75 years and over	100.0	74.6	25.4	15.3	9.8	*0.3
Female						
20 years and over	100.0	30.1	69.9	44.4	25.2	0.3
20-24 years	100.0	23.3	76.7	49.9	26.4	*0.3
25-34 years	100.0	25.6	74.4	49.2	24.9	*0.3
35-44 years	100.0	29.3	70.7	46.3	24.1	*0.3
45-54 years	100.0	28.6	71.4	45.1	26.3	*0.1
55-64 years	100.0	34.7	65.3	38.5	26.5	*0.2
65-74 years	100.0	45.7	54.3	32.2	21.7	*0.5
75 years and over	100.0	54.5	45.5	20.3	25.2	*-

over who had ever smoked had stopped smoking, and an additional 42 percent had tried to stop smoking. The percent of persons who had stopped smoking increased with age, ranging from 22 percent of those 20-24 years of age up to 68 percent of those 75 years of age and over. The percent of those who tried unsuccessfully to stop decreased with age. Half (49.8 percent) of the 20-24-year-olds indicated they had tried to stop but were still smoking. In contrast, one-sixth (16.9 percent) of those 75 years of age and over indicated that they had tried to stop but were still smoking.

There was a difference in the percents of men and women who had tried to stop smoking and who were successful. Men were more likely than women to try to stop and also more likely to be successful: 80 percent of men who had ever smoked and 75 percent of women had tried to stop smoking, and 41 percent of men and 30 percent of women had actually stopped. Among persons who had ever smoked cigarettes, the percents of males who had not tried to stop generally declined with age while the percents of women who had not tried varied little with age.

Coffee

Coffee was drunk by 101 million people 20 years of age and over in the United States in 1976—80 percent of the civilian noninstitutionalized population of this age range (table 4). Of those who drank coffee, more people drank 2 cups per day than any other amount, although 1 and 3 cups of coffee per day were fairly common. The average amount consumed by coffee drinkers was 3.2 cups per day, which is an average of 2.6 cups per day for all Americans 20 years of age and over.

Figure 2 shows that coffee drinking was related to age. More than half (57.5 percent) of the people in their early twenties did not drink coffee or drank less than 1 cup per day, whereas about 1 out of 15 (6.7 percent) drank 5 or more cups of coffee per day. Persons around 40 years of age were evenly divided among the four levels of coffee consumption, whereas elderly people were more likely to drink 1-2 cups of coffee per day than any other amount. Infrequent or no coffee drinking decreased to around age 50 and remained approximately constant for ages above

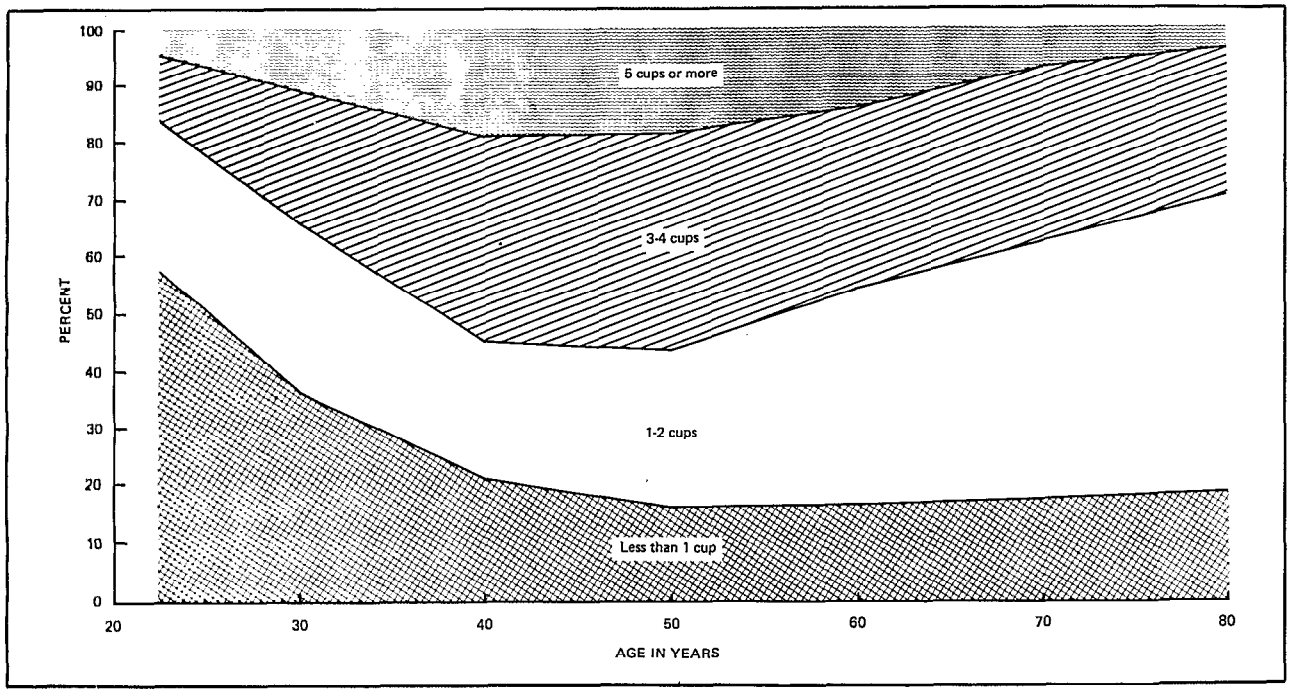


Figure 2. Percent of persons 20 years of age and over, by daily coffee consumption and age: United States, 1976

50. Heavy coffee drinking was curvilinearly related to age, with the middle adult age groups the most likely to drink 5 or more cups per day. (Five cups of coffee per day is used in this report as an indicator of heavy use despite the lack of agreement on what should be considered heavy or excessive coffee drinking.)

Although cross-sectional data cannot describe how a group of people change as they age, the overall pattern shown in figure 2 suggests that coffee consumption increases during the early adult years as people start to drink coffee regularly, and once they have started, they increase the number of cups they drink daily. Past age 50, however, coffee consumption declines. People begin to cut down to 1 cup of coffee per day but do not stop drinking coffee altogether.

Men were more likely than women to report drinking coffee (table 4): 81.4 percent of men and 78.7 percent of women drank coffee, and 20.3 percent of men and 15.8 percent of women drank 5 or more cups of coffee per day.

Table 5 shows that coffee drinking was related to a number of social and demographic characteristics. White persons were more likely to be heavy coffee drinkers (19.6 percent) than were either black persons (4.1 percent) or persons of other races (7.5 percent).

Heavy coffee drinking was related to family income, largely due to the relationship of income to age. When smaller age groups than those in table 5 were reviewed, there was little relalationship between income and heavy coffee drinking.

In general, persons with the most and persons with the least education were less likely to drink 5 or more cups of coffee per day than those with a medium amount of education.

Persons not in the labor force were less likely to drink 5 or more cups of coffee a day than almost any occupational group. There were variations in coffee drinking by occupational groups, but these were not consistent in all age-sex comparisons. However, the two occupational groups of managers-administrators and craftsmen-kindred workers tended to have higher percents of heavy coffee drinkers than other occupational groups.

Marital status was found to have a relationship to coffee drinking. Never-married persons were the least likely and divorced persons the most likely to drink 5 or more cups of coffee per day (the small numbers of young widowed persons and the large variation among widowed persons by age makes it undesirable to generalize about this group). Currently married and separated persons fell between those never married and divorced, with a greater percent of currently married persons than separated persons drinking 5 or more cups of coffee per day. In relationship to living arrangements, persons living with their spouse were the most likely to drink large amounts of coffee, regardless of sex or age.

Most coffee drinkers drank regular coffee (74.6 percent), and the rest drank either decaffeinated coffee (18.4 percent) or both decaffeinated and regular coffee (6.5 percent). Table B shows that the percent of coffee drinkers who

Table B. Percent distribution of persons 20 years of age and over who drink coffee by type of coffee, according to daily coffee consumption: United States, 1976

Daily coffee consumption	All coffee drinkers[1]	Type of coffee			
		Regular	Decaffeinated	Both	Unknown
	Percent distribution				
All amounts	100.0	74.6	18.4	6.5	0.5
Less than 1 cup	100.0	70.2	23.1	5.0	1.8
1 cup	100.0	70.8	25.1	3.7	0.4
2 cups	100.0	72.6	19.9	6.9	0.6
3 cups	100.0	74.4	17.8	7.4	0.4
4 cups	100.0	76.7	14.5	8.4	*0.4
5 cups	100.0	77.2	13.8	8.8	*0.1
6 or more cups	100.0	81.9	10.8	7.0	*0.3

[1]Excludes persons with unknown coffee consumption.

drank decaffeinated coffee decreased as the number of cups of coffee a day increased. The exception was people who drank less than 1 cup per day.

Coffee drinking was related to cigarette smoking. Table C shows that 8.3 percent of persons who had never smoked cigarettes drank 5 or more cups of coffee per day, whereas 17.3 percent of former smokers and 29.6 percent of current smokers drank 5 or more cups of coffee per day. The correlation between the number of cigarettes smoked a day with the number of cups of coffee drunk per day was 0.33.

Table C. Number of persons 20 years of age and over by cigarette smoking status and percent distribution of persons by daily coffee consumption, according to cigarette smoking status: United States, 1976

Cigarette smoking status	Number of persons[1] in thousands	Daily coffee consumption		
		Total	5 or more cups	Less than 5 cups
		Percent distribution		
Total[2]	126,429	100.0	17.9	82.1
Never smoked	54,078	100.0	8.3	91.7
Former smoker	25,852	100.0	17.3	82.7
Present smoker	45,740	100.0	29.6	70.4

[1]Excludes persons with unknown coffee consumption.
[2]Includes persons with unknown smoking status.

Aspirin

Aspirin or aspirin-type pills were estimated to have been used by 94 million persons 20 years of age and over during the 6 months preceding the interview. Table 6 shows that 29 million persons used aspirin regularly (once a week or more). Excluding those for whom aspirin use was unknown, 74.4 percent of the population used aspirin, with 23.0 percent of the population regularly using aspirin.

Figure 3 shows that the use of aspirin once a week or more increased with age for both men and women, with women more likely than men to regularly use aspirin. Among women, the regular use of aspirin increased from 17 percent at ages 20-24 to 35 percent at ages 75 and over. Among men, the regular use of aspirin increased from 10 percent at ages 20-24 to 25 percent at ages 75 and over. Overall, women were 49 percent more likely than men to use aspirin once a week or more (26.9 percent of women and 18.1 percent of men). In contrast to the regular use

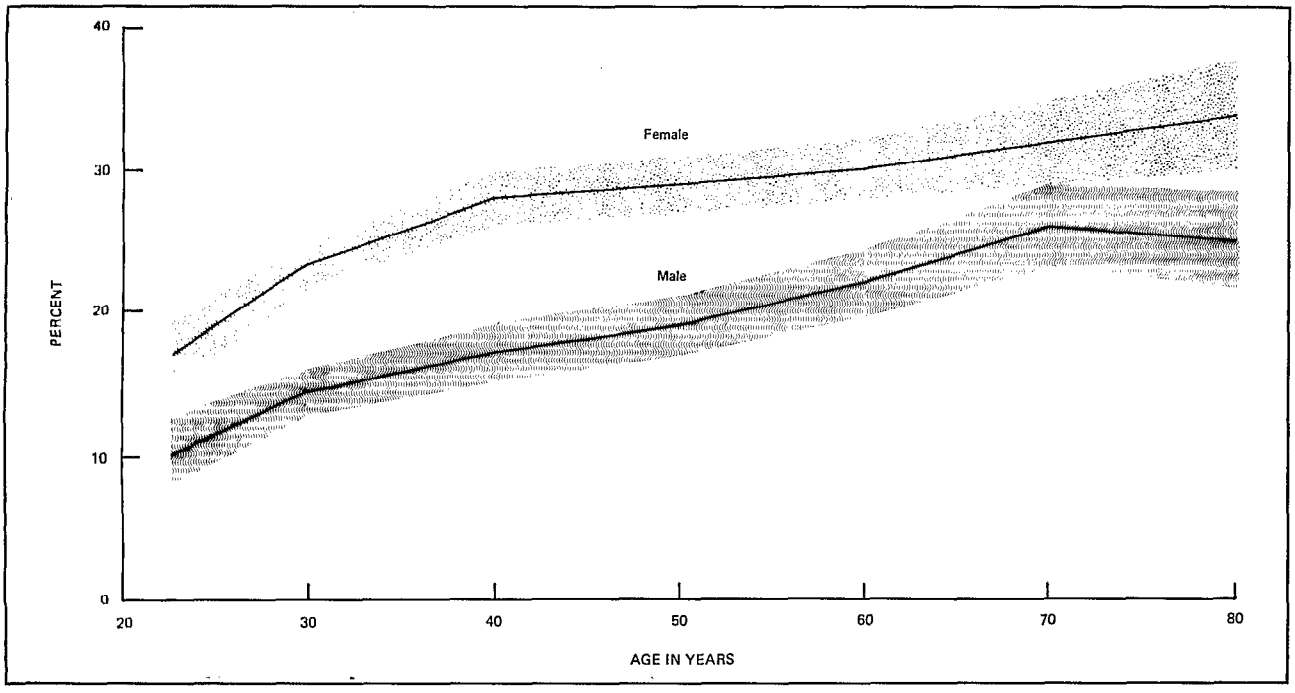


Figure 3. Percent of persons 20 years of age and over who use aspirin once a week or more, by sex and age: United States, 1976

of aspirin, the occasional use of aspirin generally declined with age and was about the same for men and women.

A greater percent of white persons (23.3 percent) than black persons (21.2 percent) used aspirin regularly, but this was due only to the differential use by persons 20-44 years of age (table 7).

There was a general decrease in the use of aspirin once a week or more with increased family income and increased education. The relationships were more pronounced among persons 45 years of age and over than among 20-44-year-old persons. Except for females aged 20-44 years, persons not in the labor force were much more likely to regularly use aspirin than persons of any occupational group. Much of the differential use may be attributed to the relationship of health and aspirin use, which is discussed later. There were few consistent differences among occupational groups in the use of aspirin.

Marital status and living arrangements had some relationship to aspirin use. Persons who had never been married and persons who were living with nonrelatives were generally less likely than other persons to have used aspirin once a week or more.

Former cigarette smokers were more likely to report using aspirin once a week or more than were persons who had never smoked (table D). The difference was small, however, and does not indicate a strong relationship between smoking and aspirin use. There was no statistically significant difference in the percents of light and heavy coffee drinkers who used aspirin one or more times a week.

Table D. Number of persons 20 years of age and over by cigarette smoking and daily coffee consumption and percent distribution of persons by aspirin use, according to cigarette smoking and daily coffee consumption status: United States, 1976

Cigarette smoking status and daily coffee consumption	Number of persons[1] in thousands	Aspirin use		
		Total	Once a week or more	Less than once a week
		Percent distribution		
Total[2]	126,483	100.0	23.0	77.0
Smoking status				
Never smoked	54,141	100.0	22.6	77.4
Former smoker	25,863	100.0	24.3	75.7
Present smoker	45,693	100.0	22.9	77.1
Coffee consumption				
5 or more cups	22,446	100.0	24.2	75.8
Less than 5 cups	103,329	100.0	22.8	77.2

[1]Excludes persons with unknown aspirin use.
[2]Includes persons with unknown smoking status or unknown coffee consumption.

Sleeping Pills

Medicine, drugs, or pills to relieve insomnia or help people sleep (all referred to hereafter as sleeping pills) were used by 14 million U.S. adults 20 years of age and over. Of these, about half used sleeping pills once a week or more. Table 8 shows that persons who used sleeping pills regularly constituted 5.7 percent of the population for whom data were known.

Figure 4 shows that the regular use of sleeping pills increased with age. About 1.6 percent of persons 20-24 years of age and about 12.4 percent of persons 75 years of age and over used sleeping pills once a week or more. A regression of the regular use of sleeping pills (y) on single years of age (x) showed an increase in the reported use of sleeping pills of 0.2 percentage points with each year increase in age ($\hat{y} = -3.1 + 0.20x; r = 0.15$).

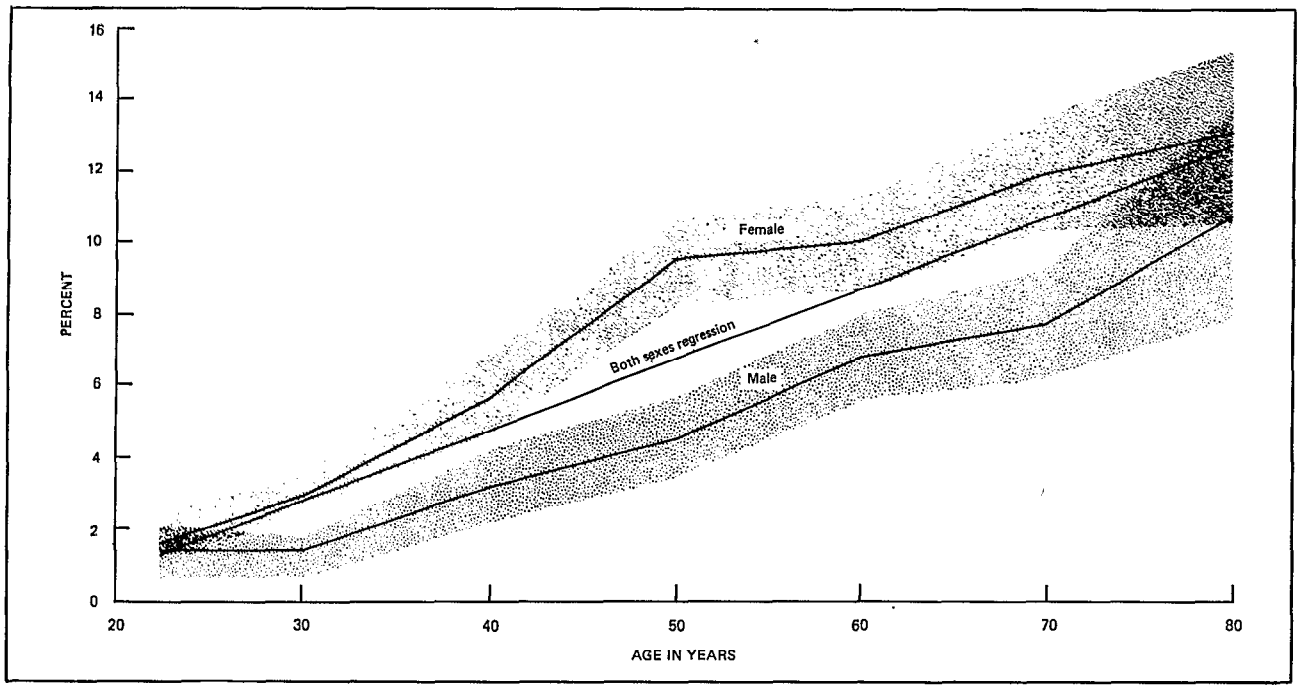


Figure 4. Percent of persons 20 years of age and over who use sleeping pills once a week or more, by sex and age: United States, 1976

Women were more likely than men to have used sleeping pills once a week or more: 7.0 percent of women used sleeping pills regularly compared to 4.2 percent of men (table 8). There was no significant difference between men and women in the use of sleeping pills among persons 20-24 years of age and 75 years of age and over, but there was a sex difference for all the intervening age groups.

Table 9 shows that black persons, persons with low family incomes, and persons with little education were among the groups most likely to use sleeping pills on a regular basis. Sleeping pills were used regularly by 7.0 percent of black people 20 years of age and over, whereas they were used regularly by 5.6 percent of white people. The use of sleeping pills once a week or more declined with increasing family income up to $25,000 and then increased: 10.3 percent of persons with family incomes under $5,000 regularly used sleeping pills, compared to 3.5 percent of those with family incomes of $15,000-$24,999. This pattern cannot be attributed to age or sex differences since it was observed in each of the age-sex groups shown in the table. Unlike the relationship of sleeping pill use to income, there was a completely linear relationship between sleeping pill use and education. The use of sleeping pills once a week or more was reported by 9.6 percent of persons with less than 9 years of education, and the percentage declined to 3.3 percent among persons with 16 or more years of education.

Never-married or currently married people were less likely to use sleeping pills than were people whose marriages had been terminated by death, separation, or divorce. When living arrangements were considered, persons living with their spouse were least likely to report using sleeping pills once a week or more.

Most people used sleeping pills on the advice of a physician. Table E shows that 78.7 percent of all users and 88.9 percent of those who used sleeping pills once a week or more did so under a physician's advice. Men were less likely than women to use sleeping pills under a doctor's advice, but only among infrequent users. For regular users, there was no sex difference in the percents of those who had been advised by a doctor.

Table F shows the interrelationship of sleeping pill use with use of cigarettes, coffee, and

Table E. Number of persons 20 years of age and over who have used sleeping pills within the previcus 6 months by sex and frequency of use and percent distribution of persons by whether the pills were used under a doctor's advice, according to sex and frequency of use: United States, 1976

Sex and sleeping pill use	Number of users in thousands	Sleeping pill use under doctor's advice			
		All sleeping pill users	Yes	No	Unknown
Both sexes	13,945	100.0	78.7	19.0	2.4
Once a week or more	7,227	100.0	88.9	10.2	0.9
Less than once a week	6,718	100.0	67.6	28.5	3.9
Male	4,519	100.0	75.9	22.6	1.4
Once a week or more	2,357	100.0	88.3	11.4	*0.2
Less than once a week	2,162	100.0	62.4	34.8	*2.8
Female	9,426	100.0	80.0	17.2	2.8
Once a week or more	4,871	100.0	89.1	9.6	*1.3
Less than once a week	4,556	100.0	70.1	25.5	4.4

Table F. Number of persons 20 years of age and over by cigarette smoking status, coffee consumption status, and frequency of aspirin use and percent distribution of persons by sleeping pill use, according to cigarette smoking status, coffee consumption status, and frequency of aspirin use: United States, 1976

Cigarette smoking status, daily coffee consumption, and frequency of aspirin use	Number of persons[1] in thousands	Sleeping pill use		
		Total	Once a week or more	Less than once a week
		Percent distribution		
Total[2]	125,980	100.0	5.7	94.3
Smoking status				
Never smoked	53,854	100.0	5.5	94.5
Former smoker	25,709	100.0	6.1	93.9
Present smoker	45,612	100.0	5.8	94.2
Coffee consumption				
5 or more cups	22,376	100.0	5.1	94.9
Less than 5 cups	102,896	100.0	5.9	94.1
Aspirin use				
Once a week or more	28,805	100.0	11.8	88.2
Less than once a week	96,503	100.0	3.9	96.1

[1]Excludes persons with unknown use of sleeping pills.
[2]Includes persons with unknown smoking status, coffee consumption per day, or aspirin use.

aspirin. Sleeping pills were used regularly by 11.8 percent of the people who used aspirin regularly, but by only 3.9 percent of the people who did not use aspirin once a week or more. However, there was no significant difference between heavy coffee drinkers and light coffee drinkers in the percent of persons who regularly used sleeping pills. Similarly, there were no sig-

nificant differences among the smoking status groups in the percents of those who regularly used sleeping pills.

USE HABITS AND HEALTH

One rationale for collecting information on the use of cigarettes, coffee, aspirin, and sleeping pills is to assess the relationship, if any, of the excessive use of these four drugs or habit-forming substances to health. The most effective mechanism for investigating associations between suspected hazards and health is a prospective (cohort) study, whereby groups of people with varying degrees of exposure to these substances would be followed over time and compared for changes in health. A second epidemiological approach would be to compare use histories between groups selected for different health conditions—a retrospective (case control) study. However, useful information can be obtained in cross-sectional surveys such as HIS, even though the biases might present greater problems.

The findings described in this section do not demonstrate cause and effect relationships; they only indicate degrees of association. Documentation of causal associations between use of drugs or habit-forming substances and adverse health effects must always rely on clinical trials in which the substances are assigned to subjects experimentally. However, logistical and ethical considerations frequently preclude such clinical trials, and judgments must be based on an amalgamation of other evidence, including information obtained in surveys such as HIS.

Cigarettes

Table 10 shows a general pattern for persons 20 years and over, with persons who had never smoked being healthier than smokers and smokers healthier than former smokers. Out of seven measures of ill health, persons who had never smoked had lower rates than smokers for five measures. However, only for acute conditions was the difference statistically significant: persons who had never smoked had 159.4 conditions per 100 compared to 194.1 conditions per 100 present smokers. The other difference that was statistically significant was for chronic conditions causing limitation of activity, for which people who had never smoked were in poorer health than present smokers: 29.8 conditions causing limitation of activity were reported for every 100 people who had never smoked compared to 26.1 per 100 present smokers. Smokers had lower rates of ill health than former smokers for six of the seven measures, with two of those comparisons being statistically significant: smokers had fewer restricted-activity days and fewer chronic conditions than former smokers. Persons who had never smoked were significantly healthier than former smokers on four of the measures of health (restricted-activity days, bed days, chronic conditions, and percent with poor or fair health) and healthier, although not significantly so, on the other three measures. Overall, 14.7 percent of former smokers said they were in poor or fair health, while 13.0 percent of people who had never smoked said they were in poor or fair health. Smokers were in between in the self-assessment of health.

Since both health problems and smoking are related to age, it is instructive to control for age. Age controls reduced the differences between present and former smokers but increased the health advantage of those who had never smoked. Out of the possible 21 comparisons (7 health measures for 3 age groups), the rates of ill health among people who had never smoked were lower than for present smokers in 19 comparisons. Of these 19, 5 comparisons were statistically significant. People who had never smoked had fewer restricted-activity days than smokers for both age groups under 65; they had fewer bed days for the age group 20-44; they had fewer chronic conditions which limited activity for ages 45-64; and a smaller percentage of never-smokers ages 20-44 said they were in poor or fair health. People who had never smoked exhibited a similar health advantage over former smokers in 15 of the 21 comparisons, with 6 being statistically significant. Never-smokers had fewer limiting chronic conditions than former smokers in all three age groups; they had fewer acute conditions than former smokers for ages 20-44; they had fewer restricted-activity days than former smokers for

Table G. Percent distribution of persons 20 years of age and over who have ever smoked cigarettes by whether a doctor advised them to stop smoking, according to cigarette smoking status: United States, 1976

Doctor's advice	Total	Former smoker	Present smoker
	Percent distribution		
Total	100.0	100.0	100.0
Advised to stop smoking	26.0	22.4	28.0
Specific condition	15.5	14.9	15.8
No specific condition	9.6	6.3	11.4
Unknown if condition	0.9	1.2	0.7
Not advised to stop smoking	72.2	73.8	71.4
Unknown if advised	1.8	3.9	0.6

ages 20-44; and those 65 years and over had fewer bed days than former smokers of the same age.

Within the three age groups shown in table 10, the health of present smokers was not consistently better or worse than the health of former smokers. Of 21 possible comparisons, present smokers had lower rates of ill health in 10, former smokers had lower rates in 10, and the rates were identical in 1. Two of the first 10 comparisons and 1 of the second 10 comparisons were statistically significant. Present smokers 45 years and over had fewer limiting chronic conditions than former smokers of those ages. On the other hand, former smokers aged 20-44 were less likely to report poor or fair health than were present smokers. Persons who had never smoked exhibited a fairly consistent pattern of better health than persons within the same age groups who had ever smoked, but there was no consistent pattern of advantage between former smokers and present smokers when age was controlled.

Smoking status may have an effect on health, but health may also have an effect on smoking status. Table G shows that just over

Table H. Percent of smokers 20 years of age and over who have stopped smoking or who tried to stop smoking by whether a doctor advised to stop smoking: United States, 1976

Sex and age	Percent of smokers who have stopped			Percent of smokers who have stopped or tried to stop smoking		
	All advice[1]	Advised to stop	Not advised to stop	All advice[1]	Advised to stop	Not advised to stop
	Percent					
Both sexes						
20 years and over	36.1	31.1	36.8	77.6	85.1	74.8
20-24 years	22.1	15.3	22.8	71.9	82.3	69.9
25-44 years	29.4	21.9	30.8	76.8	83.9	74.5
45-64 years	40.4	34.5	42.0	78.2	86.3	74.3
65 years and over	59.6	53.1	61.2	84.3	85.9	83.2
Male						
20 years and over	40.8	38.9	40.5	80.1	87.3	77.5
20-24 years	21.0	17.2	21.0	70.6	85.1	68.6
25-44 years	31.4	26.5	32.0	78.2	84.2	76.8
45-64 years	47.3	41.8	49.0	81.8	88.8	78.2
65 years and over	65.9	61.1	66.8	88.2	89.7	86.9
Female						
20 years and over	30.1	21.6	32.1	74.5	82.5	71.5
20-24 years	23.3	13.8	25.0	73.3	80.1	71.4
25-44 years	27.2	17.8	29.5	75.1	83.8	71.9
45-64 years	31.3	24.3	33.0	73.5	82.8	69.4
65 years and over	47.7	35.3	51.5	77.1	77.3	76.9

[1]Includes persons for whom it is unknown whether or not a doctor ever advised to stop smoking.

one-fourth (26.0 percent) of the persons who had ever smoked had been advised by a doctor to stop smoking. For most of these persons (15.5 percent), there was a specific medical condition that prompted the doctor's advice. Former smokers were less likely to have been advised by a doctor to stop smoking (22.4 percent) than were present smokers (28.0 percent), and former smokers were almost as likely as present smokers to have had a specific medical condition that prompted the doctor to advise stopping.

Table H shows that 36.1 percent of people who had ever smoked had stopped smoking, while 77.6 percent had either stopped or tried to stop. People advised by a doctor to stop smoking (31.1 percent) were less likely to have stopped than people who had not been so advised (36.8 percent). This lower stopping rate among those advised by a doctor is observed for both sexes and within all age groups. However, it should not be concluded that the doctor's advice had a negative effect since that advice may have been sought by or given to the heaviest smokers and those who had smoked the longest. This group would probably have a harder time changing habits. Table H supports this interpretation: 85.1 percent of persons advised by a doctor to stop smoking had tried to stop, whereas 74.8 percent of persons who received no advice from a doctor had tried. The success rate of stopping smoking, given that a person had tried, was higher among those not advised by a doctor (49 percent) than among those advised by a doctor (37 percent).

Coffee

There is no evidence (table 10) that heavy coffee drinking—5 or more cups per day—is related to poor health. The only statistically significant relationship in this direction shows that among persons 20-44 years of age, persons who drank 5 or more cups of coffee per day had more chronic conditions causing limitation of activity (15.5 per 100) than those who drank less than 5 cups per day (11.3 per 100). However, all the other significant relationships were in the opposite direction: persons 45 years and over who drank 5 or more cups of coffee per day had fewer restricted-activity days, bed days, hospital days, and chronic conditions limiting activity and rated themselves in better health than persons 45 years and over who drank less than 5 cups per day.

Doctors were much less likely to advise a person to cut down on coffee drinking than to stop smoking: 8.8 percent of the population 20 years of age and over had been advised to cut down on coffee drinking (table J), while 26.0

Table J. Percent of persons 20 years of age and over who had been advised to change coffee habits, by daily coffee consumption: United States, 1976

Advised to change coffee habits	Daily coffee consumption			
	All amounts	5 or more cups	Some, but less than 5 cups	Does not drink coffee
	Number			
Number of persons[1]	126,429	22,576	78,441	25,412
Cut down on amount	Percent distribution			
Total	100.0	100.0	100.0	100.0
Yes	8.8	14.6	7.8	6.6
No	90.2	85.2	91.9	89.8
Unknown	1.0	*0.3	0.3	3.6
Use decaffeinated coffee[2]				
Total	...	100.0	100.0	...
Yes	...	10.5	9.1	...
No	...	89.1	90.3	...
Unknown	...	0.4	0.6	...

[1]Excludes persons with unknown amount of daily coffee consumption.
[2]Doctor's advice to use decaffeinated coffee was not asked of those who did not drink coffee.

percent of people who ever smoked had been advised to stop smoking (table G). Even among heavy coffee drinkers, only 14.6 percent had been advised to reduce the amount of coffee drunk. Heavy coffee drinkers were more likely to have been advised to cut down on coffee than to use decaffeinated coffee (14.6 percent compared to 10.5 percent in table J). The opposite was found for those who drank less coffee: 7.8 percent had been advised to cut down the amount of coffee drunk, whereas 9.1 percent had been advised to use decaffeinated coffee.

Aspirin

Persons who regularly used aspirin once a week or more were less healthy than persons who did not use aspirin once a week or more. On every measure of health included in table 10 for all ages combined, those who used aspirin regularly had rates of disability days, conditions, and poor or fair health about twice the rates of persons who did not. Each of the three age groups exhibited the same relationship as the whole adult population, with 17 of the 21 differences statistically significant.

The regular use of aspirin may have no causal effect on health, but the reverse causal relationship exists. Aspirin is used regularly for the relief of pain associated with a number of conditions, one of which is arthritis. Since arthritis was one of the musculoskeletal conditions specifically asked about in the 1976 survey, it was possible to compare aspirin use by persons with and without arthritis. Of the 23 million persons who had arthritis in 1976, 43.6 percent used aspirin once a week or more (table K); 18.4 percent of persons who did not have arthritis used aspirin once a week or more.

Sleeping Pills

The use of sleeping pills was closely related to almost all measures of poor health. For all ages combined and for each of the three age groups shown in table 10, persons who used sleeping pills once a week or more had more restricted-activity days, bed days, work-loss days, hospital days, and chronic conditions causing limitation of activity, and they rated themselves in poorer health than persons who did not use sleeping pills once a week or more did. The exception was work-loss days for persons 65 years of age and over where the number of persons currently working was so small that the figures were unreliable. The rates or percents of ill health for persons using sleeping pills regularly were 4 times those of persons with less use for ages 20-64 and twice those of persons with less use for ages 65 years and over.

Table K. Number of persons 20 years of age and over by presence of arthritis and percent distribution by aspirin use, according to presence of arthritis: United States, 1976

Presence of arthritis	Number of persons[1]	Aspirin use		
		Total	Once a week or more	Less than once a week or no use
		Percent distribution		
Total	126,483	100.0	23.0	77.0
With arthritis	23,053	100.0	43.6	56.4
Without arthritis	103,429	100.0	18.4	81.6

[1]Excludes persons with unknown aspirin use.

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LIST OF DETAILED TABLES

Table 1. Number and percent distribution of persons 20 years of age and over by cigarette smoking status, according to sex and age: United States, 1976

[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 appendix I. Definitions of terms are given in appendix II]

Sex and age	Total	Cigarette smoking status			
		Never smoked	Former smoker	Present smoker	Unknown if smoked
	Number in thousands				
Both sexes					
20 years and over	137,478	54,397	25,968	46,036	11,078
20-24 years	18,662	8,199	1,874	6,597	1,992
25-34 years	31,137	12,050	4,416	12,206	2,465
35-44 years	22,631	7,485	4,283	8,661	2,202
45-54 years	23,402	7,547	5,138	8,692	2,024
55-64 years	19,849	7,036	5,065	6,365	1,384
65-74 years	13,831	6,760	3,650	2,800	621
75 years and over	7,967	5,320	1,540	717	390
Male					
20 years and over	64,556	16,563	16,379	23,741	7,872
20-24 years	8,997	3,200	935	3,508	1,354
25-34 years	15,097	4,372	2,418	6,401	1,906
35-44 years	10,869	2,285	2,492	4,341	51
45-54 years	11,273	2,126	3,402	4,346	,400
55-64 years	9,359	1,820	3,384	3,205	949
65-74 years	5,998	1,505	2,597	1,546	350
75 years and over	2,964	1,256	1,153	393	162
Female					
20 years and over	72,922	37,833	9,588	7 .94	3,206
20-24 years	9,666	4,999	940	3,089	639
25-34 years	16,040	7,678	1,99[illegible]	5,804	559
35-44 years	11,762	5,200	1,7	4,320	451
45-54 years	12,129	5,421	1 ,7	4,346	624
55-64 years	10,490	5,216	,681	3,159	434
65-74 years	7,833	5,255	1,053	1,254	271
75 years and over	5,003	4,034	388	323	228
	Percent distribution[1]				
Both sexes					
20 years and over	100.0	43.0	20.5	36.4	...
20-24 years	100.0	49.2	11.2	39.6	...
25-34 years	100.0	42.0	15.4	42.6	...
35-44 years	100.0	36.6	21.0	42.4	...
45-54 years	100.0	35.3	24.0	40.7	...
55-64 years	100.0	38.1	27.4	34.5	...
65-74 years	100.0	51.2	27.6	21.2	...
75 years and over	100.0	70.2	20.3	9.5	...
Male					
20 years and over	100.0	29.2	28.9	41.9	...
20-24 years	100.0	41.9	12.2	45.9	...
25-34 years	100.0	33.1	18.3	48.5	...
35-44 years	100.0	25.1	27.3	47.6	...
45-54 years	100.0	21.5	34.5	44.0	...
55-64 years	100.0	21.6	40.2	38.1	...
65-74 years	100.0	26.6	46.0	27.4	...
75 years and over	100.0	44.8	41.1	14.0	...
Female					
20 years and over	100.0	54.3	13.8	32.0	...
20-24 years	100.0	55.4	10.4	34.2	...
25-34 years	100.0	49.6	12.9	37.5	...
35-44 years	100.0	46.0	15.8	38.2	...
45-54 years	100.0	47.1	15.1	37.8	...
55-64 years	100.0	51.9	16.7	31.4	...
65-74 years	100.0	69.5	13.9	16.6	...
75 years and over	100.0	85.1	8.1	6.8	...

[1]Excludes persons with unknown cigarette smoking status.

Table 2. Number and percent distribution of present smokers 20 years of age and over by the number of cigarettes smoked daily according to sex and age, and average number of cigarettes smoked daily by present smokers: United States, 1976

[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 appendix I. Definitions of terms are given in appendix II]

Sex and age	Present smokers	Cigarettes per day							Average number of cigarettes daily
		Less than 5	5-14	15-24	25-34	35-44	45 or more	Unknown	
	Number in thousands								
Both sexes									
20 years and over	46,036	3,551	10,153	20,149	5,755	4,585	1,264	578	...
20-24 years	6,597	551	1,855	3,020	615	393	78	85	...
25-34 years	12,206	956	2,606	5,460	1,692	997	291	204	...
35-44 years	8,661	590	1,686	3,656	1,258	1,056	298	118	...
45-54 years	8,692	621	1,459	3,794	1,161	1,225	350	81	...
55-64 years	6,365	384	1,473	2,789	786	679	191	*63	...
65-74 years	2,800	329	834	1,166	182	210	*51	*28	...
75 years and over	717	119	241	264	*61	*26	*5	*-	...
Male									
20 years and over	23,741	1,544	4,141	10,517	3,467	2,863	958	252	...
20-24 years	3,508	250	846	1,732	384	222	*37	*38	...
25-34 years	6,401	432	1,174	2,887	1,044	567	202	95	...
35-44 years	4,341	232	609	1,769	751	693	240	*48	...
45-54 years	4,346	254	508	1,821	692	758	277	*36	...
55-64 years	3,205	147	480	1,484	438	481	153	*23	...
65-74 years	1,546	152	405	691	109	132	*45	*11	...
75 years and over	393	77	120	132	*49	*10	*5	*-	...
Female									
20 years and over	22,294	2,007	6,012	9,632	2,288	1,722	305	327	...
20-24 years	3,089	302	1,009	1,288	231	171	*41	*47	...
25-34 years	5,804	524	1,432	2,573	648	430	89	109	...
35-44 years	4,320	358	1,077	1,887	507	363	*58	70	...
45-54 years	4,346	367	952	1,972	470	467	74	*45	...
55-64 years	3,159	237	993	1,305	348	198	*38	*40	...
65-74 years	1,254	177	428	475	73	78	*6	*16	...
75 years and over	323	*42	121	132	*11	*16	*-	*-	...
	Percent distribution[1]								
Both sexes									
20 years and over	100.0	7.8	22.3	44.3	12.7	10.1	2.8	...	20.0
20-24 years	100.0	8.5	28.5	46.4	9.4	6.0	1.2	...	17.5
25-34 years	100.0	8.0	21.7	45.5	14.1	8.3	2.4	...	19.7
35-44 years	100.0	6.9	19.7	42.8	14.7	12.4	3.5	...	21.4
45-54 years	100.0	7.2	16.9	44.1	13.5	14.2	4.1	...	22.2
55-64 years	100.0	6.1	23.4	44.3	12.5	10.8	3.0	...	20.3
65-74 years	100.0	11.9	30.1	42.1	6.6	7.6	*1.8	...	17.1
75 years and over	100.0	16.6	33.6	36.8	*8.5	*3.6	*0.7	...	14.9
Male									
20 years and over	100.0	6.6	17.6	44.8	14.8	12.2	4.1	...	21.8
20-24 years	100.0	7.2	24.4	49.9	11.1	6.4	*1.1	...	18.3
25-34 years	100.0	6.9	18.6	45.8	16.6	9.0	3.2	...	20.9
35-44 years	100.0	5.4	14.2	41.2	17.5	16.1	5.6	...	24.0
45-54 years	100.0	5.9	11.8	42.3	16.1	17.6	6.4	...	24.8
55-64 years	100.0	4.6	15.1	46.6	13.8	15.1	4.8	...	23.1
65-74 years	100.0	9.9	26.4	45.0	7.1	8.6	*2.9	...	18.7
75 years and over	100.0	19.6	30.5	33.6	*12.5	*2.5	*1.3	...	15.1
Female									
20 years and over	100.0	9.1	27.4	43.8	10.4	7.8	1.4	...	18.1
20-24 years	100.0	9.9	33.2	42.4	7.6	5.6	*1.3	...	16.5
25-34 years	100.0	9.2	25.1	45.2	11.4	7.5	1.6	...	18.4
35-44 years	100.0	8.4	25.3	44.4	11.9	8.5	*1.4	...	18.8
45-54 years	100.0	8.5	22.1	45.8	10.9	10.9	1.7	...	19.6
55-64 years	100.0	7.6	31.8	41.8	11.2	6.3	*1.2	...	17.5
65-74 years	100.0	14.3	34.6	38.4	5.9	6.3	*0.5	...	15.1
75 years and over	100.0	*13.0	37.5	40.9	*3.4	*5.0	*-	...	14.5

[1]Excludes persons with unknown amount smoked.

Table 3. Percent present smokers 20 years of age and over and average number of cigarettes smoked daily by present smokers, by sex and selected social and demographic characteristics: United States, 1976

[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 appendix I. Definitions of terms are given in appendix II]

Characteristic	Both sexes		Male		Female	
	Percent presently smoke[1]	Cigarettes per smoker[1]	Percent presently smoke[1]	Cigarettes per smoker	Percent presently smoke[1]	Cigarettes per smoker[1]
Total[2]	36.4	20.0	41.9	21.8	32.0	18.1
Race						
White	36.0	20.8	41.2	22.7	31.8	18.8
Black	41.5	14.3	50.5	15.8	35.1	12.7
Other	24.5	14.1	30.3	14.7	20.3	13.3
Family income						
Under $5,000	33.5	18.5	42.5	20.1	28.3	17.1
$5,000 to $9,999	38.7	19.3	45.5	20.6	33.5	17.9
$10,000 to $14,999	38.7	20.5	45.4	22.0	32.5	18.7
$15,000 to $24,999	36.6	20.8	40.4	22.8	33.0	18.5
$25,000 or more	34.9	21.2	34.7	24.3	35.1	18.2
Education of individual						
Less than 9 years	32.0	19.3	40.9	21.0	23.8	16.8
9-11 years	45.9	20.7	51.7	22.7	41.5	18.9
12 years	38.9	20.2	45.3	22.1	34.8	18.6
13-15 years	36.4	20.3	41.9	22.2	31.3	17.9
16 years or more	26.9	19.1	29.5	21.1	23.7	15.7
Occupation of employed						
White-collar workers	35.5	20.7	36.6	22.7	34.3	18.5
Professional, technical, and kindred workers	29.6	19.9	30.0	21.6	29.1	17.5
Managers and administrators, except farm	41.1	23.6	41.0	24.3	41.6	21.2
Salesworkers	39.1	20.5	39.9	22.2	38.1	18.1
Clerical and kindred workers	36.0	19.0	40.4	20.8	34.8	18.4
Blue-collar workers	48.1	21.6	50.4	22.3	39.0	17.8
Craftsmen and kindred workers	47.5	23.0	48.0	23.2	40.5	19.1
Operatives, including transport	47.3	20.5	52.3	21.7	37.6	17.2
Laborers except farm	53.9	21.1	53.7	21.0	56.3	21.3
Service, including private household	41.9	19.3	47.2	22.6	39.0	17.1
Farm workers	36.2	19.7	36.9	20.1	31.3	16.2
Employment status						
Currently unemployed	48.5	20.8	56.8	21.7	40.0	19.5
Not in labor force	29.3	18.3	32.9	19.4	28.2	17.9
Marital status						
Never married	34.6	17.7	40.1	18.5	28.3	16.4
Currently married	36.6	20.4	41.1	22.4	32.4	18.0
Widowed	22.3	17.8	32.6	20.3	20.4	17.1
Separated	51.1	21.0	63.3	22.0	45.1	20.2
Divorced	56.7	21.7	59.9	24.4	54.8	20.0
Living arrangement						
Living alone	33.8	20.1	46.0	22.4	26.7	17.7
Living with nonrelatives	43.1	18.7	50.5	19.3	34.0	17.5
Living with spouse	36.5	20.4	41.0	22.4	32.3	18.0
Living with relatives, other	36.9	18.8	41.4	18.9	34.5	18.7

[1]Based on persons with known smoking status or with known number of cigarettes smoked.
[2]Includes persons with unknown family income, education, or occupation.

Table 4. Number and percent distribution of persons 20 years of age and over by daily coffee consumption, according to sex and age: United States, 1976

[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 appendix I. Definitions of terms are given in appendix II]

Sex and age	Total	Does not drink coffee	Daily coffee consumption								
			All amounts	Less than 1 cup	1 cup	2 cups	3 cups	4 cups	5 cups	6 cups or more	Unknown
Both sexes	Number in thousands										
20 years and over	137,478	25,412	101,017	9,066	18,588	22,532	16,846	11,408	6,647	15,930	11,049
20-24 years	18,662	7,288	9,380	2,301	2,268	2,009	1,065	629	329	779	1,994
25-34 years	31,137	7,948	20,659	2,555	3,723	4,592	3,010	2,061	1,360	3,358	2,529
35-44 years	22,631	3,133	17,269	1,175	2,062	3,212	2,975	2,236	1,530	4,077	2,229
45-54 years	23,402	2,413	18,941	1,002	2,577	3,829	3,272	2,499	1,722	4,041	2,047
55-64 years	19,849	2,023	16,470	949	2,849	4,038	3,090	2,113	984	2,447	1,356
65-74 years	13,831	1,620	11,645	708	2,947	2,967	2,237	1,246	554	985	566
75 years and over	7,967	987	6,653	376	2,162	1,885	1,197	624	167	243	326
Male											
20 years and over	64,556	10,552	46,071	4,110	7,613	9,602	7,866	5,374	3,277	8,230	7,933
20-24 years	8,997	3,012	4,610	1,156	1,034	998	531	314	145	433	1,375
25-34 years	15,097	3,354	9,775	1,139	1,585	1,993	1,607	1,050	712	1,689	1,968
35-44 years	10,869	1,261	7,852	527	881	1,365	1,369	1,075	732	1,904	1,757
45-54 years	11,273	1,024	8,820	496	1,066	1,587	1,531	1,118	861	2,162	1,429
55-64 years	9,359	848	7,569	394	1,186	1,781	1,363	1,005	452	1,389	942
65-74 years	5,998	634	5,038	274	1,149	1,209	1,018	553	291	544	326
75 years and over	2,964	419	2,408	125	712	670	448	259	85	110	137
Female											
20 years and over	72,922	14,860	54,946	4,956	10,975	12,930	8,981	6,034	3,370	7,700	3,116
20-24 years	9,666	4,276	4,770	1,146	1,234	1,011	535	315	184	346	620
25-34 years	16,040	4,594	10,885	1,416	2,138	2,599	1,403	1,011	648	1,669	561
35-44 years	11,762	1,872	9,417	648	1,182	1,847	1,607	1,161	799	2,173	473
45-54 years	12,129	1,389	10,121	506	1,511	2,242	1,741	1,381	861	1,879	618
55-64 years	10,490	1,176	8,900	555	1,663	2,257	1,727	1,109	533	1,058	414
65-74 years	7,833	986	6,607	434	1,798	1,758	1,219	693	263	442	241
75 years and over	5,003	569	4,245	251	1,449	1,215	749	365	82	133	189
Both sexes	Percent distribution[1]										
20 years and over	100.0	20.1	79.9	7.2	14.7	17.8	13.3	9.0	5.3	12.6	...
20-24 years	100.0	43.7	56.3	13.8	13.6	12.1	6.4	3.8	2.0	4.7	...
25-34 years	100.0	27.8	72.2	8.9	13.0	16.1	10.5	7.2	4.8	11.7	...
35-44 years	100.0	15.4	84.6	5.8	10.1	15.7	14.6	11.0	7.5	20.0	...
45-54 years	100.0	11.3	88.7	4.7	12.1	17.9	15.3	11.7	8.1	18.9	...
55-64 years	100.0	10.9	89.1	5.1	15.4	21.8	16.7	11.4	5.3	13.2	...
65-74 years	100.0	12.2	87.8	5.3	22.2	22.4	16.9	9.4	4.2	7.4	...
75 years and over	100.0	12.9	87.1	4.9	28.3	24.7	15.7	8.2	2.2	3.2	...
Male											
20 years and over	100.0	18.6	81.4	7.3	13.4	17.0	13.9	9.5	5.8	14.5	...
20-24 years	100.0	39.5	60.5	15.2	13.6	13.1	7.0	4.1	1.9	5.7	...
25-34 years	100.0	25.5	74.5	8.7	12.1	15.2	12.2	8.0	5.4	12.9	...
35-44 years	100.0	13.8	86.2	5.8	9.7	15.0	15.0	11.8	8.0	20.9	...
45-54 years	100.0	10.4	89.6	5.0	10.8	16.1	15.6	11.4	8.7	22.0	...
55-64 years	100.0	10.1	89.9	4.7	14.1	21.2	16.2	11.9	5.4	16.5	...
65-74 years	100.0	11.2	88.8	4.8	20.3	21.3	17.9	9.7	5.1	9.6	...
75 years and over	100.0	14.8	85.2	4.4	25.2	23.7	15.8	9.2	3.0	3.9	...
Female											
20 years and over	100.0	21.3	78.7	7.1	15.7	18.5	12.9	8.6	4.8	11.0	...
20-24 years	100.0	47.3	52.7	12.7	13.6	11.2	5.9	3.5	2.0	3.8	...
25-34 years	100.0	29.7	70.3	9.1	13.8	16.8	9.1	6.5	4.2	10.8	...
35-44 years	100.0	16.6	83.4	5.7	10.5	16.4	14.2	10.3	7.1	19.2	...
45-54 years	100.0	12.1	87.9	4.4	13.1	19.5	15.1	12.0	7.5	16.3	...
55-64 years	100.0	11.7	88.3	5.5	16.5	22.4	17.1	11.0	5.3	10.5	...
65-74 years	100.0	13.0	87.0	5.7	23.7	23.2	16.1	9.1	3.5	5.8	...
75 years and over	100.0	11.8	88.2	5.2	30.1	25.2	15.6	7.6	1.7	2.8	...

[1]Excludes persons with unknown daily coffee consumption.

Table 5. Percent of persons 20 years of age and over who drink 5 or more cups of coffee per day,[1] by sex, age, and selected social and demographic characteristics: United States, 1976

[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 appendix I. Definitions of terms are given in appendix II]

Characteristic	Both sexes			Male			Female		
	20 years and over	20-44 years	45 years and over	20 years and over	20-44 years	45 years and over	20 years and over	20-44 years	45 years and over
	Percent								
Total[2]	17.9	17.4	18.3	20.3	18.8	22.0	15.9	16.2	15.4
Race									
White	19.6	19.3	19.8	22.2	20.9	23.6	17.4	18.0	16.8
Black	4.1	3.4	4.9	4.6	2.4	7.2	3.7	4.0	3.2
Other	7.5	6.8	*9.3	*5.3	*2.8	*11.3	9.2	9.8	*7.6
Family income									
Under $5,000	12.4	13.0	12.1	14.9	14.7	15.0	11.0	11.9	10.5
$5,000 to $9,999	16.5	16.3	16.8	18.3	18.2	18.4	15.2	14.8	15.6
$10,000 to $14,999	18.7	17.2	21.1	20.6	18.9	23.6	17.0	15.7	19.0
$15,000 to $24,999	20.9	19.7	22.9	23.0	20.5	26.6	18.9	19.0	18.9
$25,000 or more	22.7	18.7	26.9	25.7	19.6	31.5	19.8	17.9	22.0
Education									
Less than 9 years	15.6	22.6	13.8	18.9	25.3	17.3	12.7	20.2	10.8
9-11 years	20.8	22.9	19.1	24.0	24.5	23.6	18.5	21.7	15.8
12 years	19.2	18.1	20.9	21.4	19.8	24.1	17.8	16.9	19.1
13-15 years	16.3	13.7	21.7	19.1	15.3	27.8	13.6	12.1	16.7
16 years or more	16.1	13.6	20.7	18.6	15.2	24.6	13.0	11.7	15.4
Occupation of employed									
White collar workers	20.9	17.4	26.9	22.7	18.6	29.0	19.0	16.4	24.4
Professional, technical and kindred workers	21.0	16.8	30.3	21.9	16.7	32.2	19.6	17.0	26.9
Managers and administrators, except farm	24.8	22.1	28.0	25.3	22.8	28.3	23.1	20.1	26.8
Salesworkers	22.2	19.8	25.4	21.4	18.5	25.6	23.2	21.6	25.2
Clerical and kindred workers	17.6	14.8	23.4	19.2	14.8	26.5	17.2	14.8	22.4
Blue-collar workers	21.5	19.6	24.9	22.5	20.4	26.4	17.7	16.5	19.5
Craftsmen and kindred workers	24.3	22.3	27.3	24.3	22.0	28.0	24.6	27.6	21.1
Operatives, including transport	19.6	17.8	23.2	21.8	19.8	26.0	15.6	13.7	18.8
Laborers except farm	18.7	18.1	20.3	17.6	16.7	19.7	29.0	*29.8	*26.6
Service, including private household	19.6	18.0	21.9	24.2	22.3	26.8	17.2	15.6	19.4
Farm workers	18.1	19.9	16.8	17.8	18.1	17.5	*20.6	*28.5	*10.0
Employment status									
Currently unemployed	17.1	15.4	21.2	17.1	15.6	20.1	17.2	15.3	22.6
Not in labor force	13.5	15.4	12.6	13.1	10.1	13.8	13.7	16.1	12.1
Marital status									
Never married	9.6	9.0	11.8	10.5	9.6	14.6	8.6	8.2	9.6
Currently married	19.8	19.1	20.5	22.3	21.7	22.8	17.4	17.1	17.9
Widowed	11.7	32.7	10.9	16.8	*28.3	16.5	10.8	33.4	9.9
Separated	16.8	15.2	19.7	18.4	17.8	19.4	16.0	14.1	19.8
Divorced	23.8	24.5	22.7	24.8	24.1	25.9	23.2	24.7	20.9
Living arrangement									
Living alone	14.2	15.2	13.7	17.2	14.6	20.1	12.4	16.0	11.5
Living with nonrelatives	11.6	11.8	11.0	14.8	15.4	*12.3	7.8	6.7	*10.2
Living with spouse	19.8	19.2	20.5	22.3	21.8	22.8	17.5	17.1	17.9
Living with relatives, other	13.2	12.9	13.6	12.0	10.2	17.1	13.8	14.7	12.5

[1]Excludes persons with unknown coffee consumption.
[2]Includes persons with unknown family income, education, or occupation.

Table 6. Number and percent distribution of persons 20 years of age and over by frequency of aspirin use, according to sex and age: United States, 1976

[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 appendix I. Definitions of terms are given in appendix II]

Sex and age	Total	Do not use	Aspirin use			Unknown
			All use	Once a week or more	Less than once a week	
	Number in thousands					
Both sexes						
20 years and over	137,478	32,322	94,161	29,084	65,077	10,995
20-24 years	18,662	3,810	12,889	2,294	10,595	1,963
25-34 years	31,137	5,325	23,312	5,572	17,740	2,499
35-44 years	22,631	4,145	16,260	4,806	11,454	2,226
45-54 years	23,402	5,423	15,920	5,223	10,697	2,059
55-64 years	19,849	5,968	12,471	4,921	7,550	1,410
65-74 years	13,831	4,720	8,579	3,874	4,705	532
75 years and over	7,967	2,931	4,729	2,394	2,335	306
Male						
20 years and over	64,556	16,995	39,566	10,261	29,305	7,995
20-24 years	8,997	2,074	5,559	767	4,792	1,363
25-34 years	15,097	2,892	10,238	1,879	8,359	1,966
35-44 years	10,869	2,390	6,712	1,629	5,083	1,767
45-54 years	11,273	3,109	6,711	1,891	4,819	1,453
55-64 years	9,359	3,065	5,312	1,896	3,416	982
65-74 years	5,998	2,280	3,390	1,491	1,899	328
75 years and over	2,964	1,185	1,644	708	935	135
Female						
20 years and over	72,922	15,327	54,595	18,823	35,772	3,001
20-24 years	9,666	1,736	7,330	1,527	5,803	599
25-34 years	16,040	2,433	13,074	3,694	9,381	533
35-44 years	11,762	1,754	9,548	3,177	6,371	459
45-54 years	12,129	2,314	9,209	3,332	5,877	606
55-64 years	10,490	2,903	7,159	3,025	4,134	428
65-74 years	7,833	2,440	5,189	2,383	2,806	205
75 years and over	5,003	1,747	3,085	1,685	1,400	171
	Percent distribution[1]					
Both sexes						
20 years and over	100.0	25.6	74.4	23.0	51.5	...
20-24 years	100.0	22.8	77.2	13.7	63.4	...
25-34 years	100.0	18.6	81.4	19.5	61.9	...
35-44 years	100.0	20.3	79.7	23.6	56.1	...
45-54 years	100.0	25.4	74.6	24.5	50.1	...
55-64 years	100.0	32.4	67.6	26.7	40.9	...
65-74 years	100.0	35.5	64.5	29.1	35.4	...
75 years and over	100.0	38.3	61.7	31.3	30.5	...
Male						
20 years and over	100.0	30.0	70.0	18.1	51.8	...
20-24 years	100.0	27.2	72.8	10.0	62.8	...
25-34 years	100.0	22.0	78.0	14.3	63.7	...
35-44 years	100.0	26.3	73.7	17.9	55.8	...
45-54 years	100.0	31.7	68.3	19.3	49.1	...
55-64 years	100.0	36.6	63.4	22.6	40.8	...
65-74 years	100.0	40.2	59.8	26.3	33.5	...
75 years and over	100.0	41.9	58.1	25.0	33.1	...
Female						
20 years and over	100.0	21.9	78.1	26.9	51.2	...
20-24 years	100.0	19.1	80.9	16.8	64.0	...
25-34 years	100.0	15.7	84.3	23.8	60.5	...
35-44 years	100.0	15.5	84.5	28.1	56.4	...
45-54 years	100.0	20.1	79.9	28.9	51.0	...
55-64 years	100.0	28.9	71.1	30.1	41.1	...
65-74 years	100.0	32.0	68.0	31.2	36.8	...
75 years and over	100.0	36.2	63.8	34.9	29.0	...

[1]Excludes persons with unknown aspirin use.

Table 7. Percent of persons 20 years of age and over who use aspirin once a week or more,[1] by sex, age, and selected social and demographic characteristics: United States, 1976

[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 appendix I. Definitions of terms are given in appendix II]

Characteristic	Both sexes			Male			Female		
	20 years and over	20-44 years	45 years and over	20 years and over	20-44 years	45 years and over	20 years and over	20-44 years	45 years and over
	Percent								
Total[2]	23.0	19.3	27.0	18.1	14.3	22.4	26.9	23.4	30.6
Race									
White	23.3	19.8	27.0	18.2	14.5	22.3	27.5	24.3	30.7
Black	21.2	15.9	28.0	18.5	12.7	25.2	23.2	18.0	30.2
Other	14.2	13.5	15.9	10.6	*11.1	*9.5	16.9	15.4	*21.2
Family income									
Undre $5,000	27.8	19.7	32.6	23.7	14.5	30.1	30.1	23.2	33.9
$5,000 to $9,999	24.1	18.3	29.8	20.5	14.2	26.3	27.0	21.3	32.6
$10,000 to $14,999	21.4	19.6	24.2	16.4	14.6	19.4	25.9	24.3	28.3
$15,000 to $24,999	21.1	19.5	23.7	16.9	15.1	19.6	25.1	23.4	28.2
$25,000 or more	21.9	19.7	24.1	15.4	12.6	18.1	28.1	26.0	30.4
Education									
Less than 9 years	28.9	23.6	30.2	25.1	19.8	26.5	32.3	27.0	33.6
9-11 years	25.6	23.7	27.2	20.0	17.6	22.1	29.6	28.2	30.9
12 years	21.9	19.0	26.3	16.0	13.3	20.6	25.6	22.8	29.5
13-15 years	20.5	18.0	25.9	15.5	13.3	20.7	25.1	22.5	30.2
16 years or more	18.1	16.8	20.5	15.1	13.7	17.6	22.0	20.6	24.6
Occupation of employed									
White-collar workers	19.5	18.3	21.6	15.7	14.2	18.0	23.2	21.9	25.9
Professional, technical, and kindred workers	18.4	18.5	18.4	15.7	15.2	16.7	22.3	22.6	21.4
Managers and administrators, except farm	18.5	16.4	20.9	16.0	13.8	18.5	26.7	24.7	29.3
Salesworkers	20.4	18.1	23.4	16.2	12.7	21.4	25.8	25.8	25.7
Clerical and kindred workers	20.8	19.1	24.3	14.2	13.2	16.0	22.5	20.5	26.8
Blue-collar workers	18.4	16.7	21.5	16.6	14.7	20.2	25.2	24.6	26.2
Craftsmen and kindred workers	15.8	14.6	17.9	15.2	13.7	17.6	23.8	27.1	20.1
Operatives, including transport	20.8	18.7	25.1	18.4	16.2	23.0	25.5	23.8	28.4
Laborers except farm	17.5	15.4	22.4	16.7	13.7	23.7	24.2	29.7	*7.8
Service, including private household	21.8	20.4	23.8	15.1	11.6	20.1	25.4	25.1	25.8
Farm workers	19.2	15.9	21.9	18.4	12.6	22.8	*24.3	*31.5	*14.5
Employment status									
Currently unemployed	20.2	18.6	24.0	14.1	12.5	17.5	26.3	24.2	32.2
Not in labor force	28.7	23.3	31.5	26.5	17.9	28.2	29.4	24.0	32.9
Marital status									
Never married	15.0	12.8	23.8	11.5	9.7	20.4	19.0	16.6	26.6
Currently married	23.4	21.0	26.0	19.3	16.0	22.5	27.1	24.9	29.8
Widowed	32.1	20.9	32.5	25.0	*23.2	25.1	33.4	20.5	33.9
Separated	24.5	19.0	34.0	18.8	13.8	26.1	27.3	21.3	38.7
Divorced	21.2	21.1	21.4	15.9	13.9	18.7	24.2	25.0	22.9
Living arrangement									
Living alone	24.2	13.7	29.1	15.5	8.9	22.9	29.2	21.0	31.2
Living with nonrelatives	16.8	15.7	20.0	12.3	10.8	18.4	22.2	22.7	21.2
Living with spouse	23.4	21.0	26.0	19.3	16.0	22.4	27.2	25.0	29.9
Living with relatives, other	21.4	15.9	30.6	14.6	11.8	22.3	24.9	18.6	33.2

[1] Excludes persons with unknown use of aspirin.
[2] Includes persons with unknown family income, education, or occupation.

Table 8. Number and percent distribution of persons 20 years of age and over by frequency of sleeping pill use, according to sex and age: United States, 1976

[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 appendix I. Definitions of terms are given in appendix II]

Sex and age	Total	Do not use	Sleeping pill use			Unknown
			All use	Once a week or more	Less than once a week	
Both sexes	Number in thousands					
20 years and over	137,478	112,035	13,945	7,227	6,718	11,499
20-24 years	18,662	15,641	973	268	705	2,048
25-34 years	31,137	26,486	2,008	607	1,402	2,642
35-44 years	22,631	18,539	1,783	898	885	2,309
45-54 years	23,402	18,602	2,702	1,582	1,120	2,098
55-64 years	19,849	15,661	2,736	1,585	1,151	1,452
65-74 years	13,831	11,067	2,169	1,346	822	596
75 years and over	7,967	6,040	1,574	941	633	353
Male						
20 years and over	64,556	51,842	4,519	2,357	2,162	8,196
20-24 years	8,997	7,270	336	116	220	1,390
25-34 years	15,097	12,386	655	192	463	2,056
35-44 years	10,869	8,515	548	262	286	1,806
45-54 years	11,273	8,988	826	452	374	1,458
55-64 years	9,359	7,376	1,002	588	414	981
65-74 years	5,998	4,970	675	439	237	352
75 years and over	2,964	2,335	477	308	169	152
Female						
20 years and over	72,922	60,193	9,426	4,871	4,556	3,303
20-24 years	9,666	8,370	637	152	485	658
25-34 years	16,040	14,100	1,354	415	938	587
35-44 years	11,762	10,024	1,235	635	600	503
45-54 years	12,129	9,613	1,876	1,130	746	639
55-64 years	10,490	8,285	1,734	998	737	471
65-74 years	7,833	6,096	1,493	908	585	244
75 years and over	5,003	3,704	1,097	633	464	201
Both sexes	Percent distribution[1]					
20 years and over	100.0	88.9	11.1	5.7	5.3	...
20-24 years	100.0	94.1	5.9	1.6	4.2	...
25-34 years	100.0	93.0	7.0	2.1	4.9	...
35-44 years	100.0	91.2	8.8	4.4	4.4	...
45-54 years	100.0	87.3	12.7	7.4	5.3	...
55-64 years	100.0	85.1	14.9	8.6	6.3	...
65-74 years	100.0	83.6	16.4	10.2	6.2	...
75 years and over	100.0	79.3	20.7	12.4	8.3	...
Male						
20 years and over	100.0	92.0	8.0	4.2	3.8	...
20-24 years	100.0	95.6	4.4	1.5	2.9	...
25-34 years	100.0	95.0	5.0	1.5	3.6	...
35-44 years	100.0	94.0	6.0	2.9	3.2	...
45-54 years	100.0	91.6	8.4	4.6	3.8	...
55-64 years	100.0	88.0	12.0	7.0	4.9	...
65-74 years	100.0	88.0	12.0	7.8	4.2	...
75 years and over	100.0	83.0	17.0	11.0	6.0	...
Female						
20 years and over	100.0	86.5	13.5	7.0	6.5	...
20-24 years	100.0	92.9	7.1	1.7	5.4	...
25-34 years	100.0	91.2	8.8	2.7	6.1	...
35-44 years	100.0	89.0	11.0	5.6	5.3	...
45-54 years	100.0	83.7	16.3	9.8	6.5	...
55-64 years	100.0	82.7	17.3	10.0	7.4	...
65-74 years	100.0	80.3	19.7	12.0	7.7	...
75 years and over	100.0	77.1	22.8	13.2	9.7	...

[1] Excludes persons with unknown use of sleeping pills.

Table 9. Percent of persons 20 years of age and over who use sleeping pills once a week or more,[1] by sex, age, and selected social and demographic characteristics: United States, 1976

[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 appendix I. Definitions of terms are given in appendix II]

Characteristic	Both sexes			Male			Female		
	20 years and over	20-44 years	45 years and over	20 years and over	20-44 years	45 years and over	20 years and over	20-44 years	45 years and over
	Percent								
Total[2]	5.7	2.7	9.0	4.2	1.9	6.7	7.0	3.4	10.8
Race									
White	5.6	2.5	8.9	4.1	1.8	6.6	6.9	3.1	10.7
Black	7.0	4.3	10.4	5.1	2.8	7.9	8.3	5.3	12.2
Other	*3.5	*2.9	*4.9	*0.7	*1.0	*-	*5.6	*4.3	*8.9
Family income									
Under $5,000	10.3	4.0	13.9	9.4	3.6	13.3	10.8	4.3	14.3
$5,000 to $9,999	6.5	3.1	9.8	5.1	2.5	7.4	7.6	3.5	11.7
$10,000 to $14,999	4.5	2.5	7.6	3.1	1.4	6.0	5.7	3.6	9.0
$15,000 to $24,999	3.5	1.9	6.0	2.2	1.2	3.8	4.7	2.6	8.4
$25,000 or more	4.8	2.9	6.7	3.5	2.5	4.4	6.0	3.3	9.0
Education									
Less than 9 years	9.6	5.8	10.5	8.1	*2.6	9.5	10.9	8.7	11.4
9-11 years	7.4	4.8	9.6	5.4	3.6	7.0	8.9	5.8	11.5
12 years	4.5	2.2	8.1	2.9	1.7	5.1	5.5	2.5	9.7
13-15 years	4.2	2.1	8.5	2.9	1.8	5.5	5.3	2.3	11.1
16 years or more	3.3	1.8	5.9	2.1	1.3	3.5	4.8	2.5	9.2
Occupation of employed									
White-collar workers	3.3	2.0	5.6	2.6	1.3	4.4	4.0	2.6	6.9
Professional, technical, and kindred workers	2.4	1.6	4.2	2.2	*1.3	4.0	2.7	2.0	*4.6
Managers and administrators, except farm	4.2	2.4	6.3	3.2	*1.8	4.9	7.4	*4.5	10.9
Salesworkers	3.2	*1.1	6.0	*2.0	*-	*4.9	4.8	*2.7	7.2
Clerical and kindred workers	3.6	2.5	5.9	*2.4	*1.8	*3.5	3.9	2.7	6.6
Blue-collar workers	2.9	2.1	4.5	2.4	1.6	3.8	5.1	4.1	6.9
Craftsmen and kindred workers	1.9	1.6	2.5	1.9	1.5	2.5	*2.6	*3.1	*1.9
Operatives, including transport	3.8	2.5	6.6	2.8	1.4	5.8	5.8	4.6	8.0
Laborers except farm	2.7	*2.1	*4.2	*2.8	*2.4	*3.9	*2.0	*-	*7.8
Service, including private household	4.0	2.2	6.6	3.0	*1.6	*4.8	4.6	2.5	7.5
Farm workers	*3.0	*1.5	*4.2	*2.4	*-	*4.2	*6.9	*8.7	*4.5
Employment status									
Currently unemployed	5.1	3.5	9.0	4.2	*3.5	*5.4	6.0	*3.3	13.6
Not in labor force	9.5	4.4	12.1	10.3	6.8	11.0	9.2	4.0	12.5
Marital status									
Never married	3.2	1.7	8.8	2.6	1.7	6.7	3.8	1.7	10.4
Currently married	5.2	2.5	8.0	4.2	1.8	6.4	6.1	3.1	9.8
Widowed	11.6	*6.6	11.8	9.2	*-	9.6	12.1	*7.8	12.2
Separated	9.4	7.1	13.4	6.4	*3.0	*11.4	10.9	9.0	14.7
Divorced	7.8	5.3	11.4	4.9	*3.8	*6.6	9.4	6.2	14.2
Living arrangement									
Living alone	8.2	2.4	11.0	4.3	*1.6	7.4	10.5	3.6	12.2
Living with nonrelatives	6.7	3.1	17.2	5.0	*2.6	*14.9	8.6	*3.8	19.1
Living with spouse	5.2	2.5	8.0	4.2	1.8	6.4	6.1	3.1	9.8
Living with relatives, other	6.2	3.4	10.8	3.6	2.2	7.6	7.5	4.3	11.8

[1] Excludes persons with unknown use of sleeping pills.
[2] Includes persons with unknown family income, education, or occupation.

Table 10. Number of persons 20 years of age and over, number of employed persons, number of disability days per person by type of disability day, number of poor health conditions per 100 persons by type of condition, and percent of persons reporting poor or fair health, by age and use of habit-forming substances: United States, 1976

[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 appendix I. Definitions of terms are given in appendix II]

Age and use of habit-forming substances	Number of persons in thousands		Disability days per person				Poor health conditions per 100 persons		Percent reporting poor or fair health
	Total	Employed	Restricted-activity days	Bed days	Work-loss days[1]	Hospital days	Acute conditions	Chronic conditions causing activity limitation	
20 years and over[2]	137,478	80,742	22.2	8.2	5.3	1.4	173.0	29.3	12.7
Smoking status									
Never smoked	54,397	27,835	21.1	7.2	4.8	1.5	159.4	29.8	13.0
Former smoker	25,968	15,503	26.8	9.7	5.9	1.6	170.7	37.9	14.7
Present smoker	46,036	29,260	21.9	8.0	5.7	1.3	194.1	26.1	14.0
Coffee consumption									
5 or more cups per day	22,576	15,097	18.3	6.0	5.6	1.0	182.9	25.7	11.3
Less than 5 cups per day	103,853	57,474	23.4	8.5	5.3	1.5	171.9	31.0	14.2
Aspirin use									
Once a week or more	29,084	14,037	39.5	13.7	7.7	2.0	221.4	53.0	22.8
Less than once a week or never	97,399	58,512	17.5	6.3	4.8	1.2	160.1	23.2	11.0
Sleeping pill use									
Once a week or more	7,227	2,356	78.2	34.1	16.8	5.2	210.3	95.4	40.6
Less than once a week or never	118,752	68,822	19.2	6.5	5.0	1.2	171.6	26.2	12.0
20-44 years	72,430	51,066	14.6	5.7	5.1	0.9	207.2	11.8	6.7
Smoking status									
Never smoked	27,734	18,383	12.9	4.6	4.6	0.8	193.0	10.8	5.7
Former smoker	10,574	7,841	16.7	6.3	5.7	0.8	243.0	13.0	6.9
Present smoker	27,463	19,473	16.4	6.4	5.7	0.9	221.2	12.8	9.3
Coffee consumption									
5 or more cups per day	11,432	8,338	16.7	6.2	5.9	0.9	213.0	15.5	8.0
Less than 5 cups per day	54,234	37,275	14.5	5.5	5.1	0.8	212.3	11.3	7.2
Aspirin use									
Once a week or more	12,672	8,173	25.6	10.8	7.5	1.1	265.9	19.9	13.2
Less than once a week or never	53,070	37,512	12.4	4.4	4.7	0.8	200.7	10.1	5.9
Sleeping pill use									
Once a week or more	1,773	932	56.5	24.8	19.9	3.4	282.5	48.2	29.2
Less than once a week or never	63,657	44,454	13.8	5.1	4.9	0.8	210.4	11.0	6.7
45-64 years	43,251	26,895	25.6	8.6	5.9	1.6	148.8	37.1	17.5
Smoking status									
Never smoked	14,583	8,153	23.2	7.7	5.4	1.6	135.3	32.6	18.3
Former smoker	10,203	6,846	27.3	8.7	6.6	1.5	130.1	43.1	18.3
Present smoker	15,056	9,284	28.2	9.6	5.8	1.7	166.2	39.3	20.1
Coffee consumption									
5 or more cups per day	9,194	6,404	18.6	5.7	5.6	1.1	158.1	31.1	13.2
Less than 5 cups per day	30,653	17,914	28.4	9.6	6.0	1.7	141.0	39.7	20.7
Aspirin use									
Once a week or more	10,144	5,238	45.9	15.0	8.3	2.3	206.8	64.0	29.6
Less than once a week or never	29,638	19,010	19.4	6.5	5.2	1.4	123.6	28.7	15.3
Sleeping pill use									
Once a week or more	3,167	1,229	86.1	38.9	16.5	5.0	196.4	98.5	45.4
Less than once a week or never	36,534	22,938	21.0	6.1	5.3	1.3	140.7	32.7	16.6

See footnotes at end of table.

Table 10. Number of persons 20 years of age and over, number of employed persons, number of disability days per person by type of disability day, number of poor health conditions per 100 persons by type of condition, and percent of persons reporting poor or fair health, by age and use of habit-forming substances: United States, 1976—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 appendix I. Definitions of terms are given in appendix II]

Age and use of habit-forming substances	Number of persons in thousands		Disability days per person				Poor health conditions per 100 persons		Percent reporting poor or fair health
	Total	Employed	Restricted-activity days	Bed days	Work-loss days[1]	Hospital days	Acute conditions	Chronic conditions causing activity limitation	
65 years and over	21,798	2,781	40.9	15.7	3.8	3.0	107.6	71.9	22.9
Smoking status									
Never smoked	12,080	1,298	37.6	12.5	*3.7	2.9	111.4	69.9	23.4
Former smoker	5,191	815	46.6	18.6	*2.1	3.5	103.1	78.3	23.8
Present smoker	3,516	503	38.3	13.8	*4.8	2.5	102.2	73.2	25.5
Coffee consumption									
5 or more cups per day	1,950	356	26.0	*5.9	*-	1.4	122.5	60.1	21.2
Less than 5 cups per day	18,956	2,285	40.9	15.0	*3.9	3.0	106.3	73.4	23.8
Aspirin use									
Once a week or more	6,268	626	57.5	17.7	*5.0	3.5	155.2	101.9	31.3
Less than once a week or never	14,691	1,990	32.2	12.9	*2.9	2.7	87.2	59.6	20.4
Sleeping pill use									
Once a week or more	2,287	196	84.2	34.6	*3.9	6.8	173.4	127.5	42.6
Less than once a week or never	18,562	2,431	34.3	11.9	*3.3	2.5	99.3	65.4	21.2

[1]Work-loss days per employed person.
[2]Includes persons with unknown use of various habit-forming substances.

Table 11. Number of persons 20 years of age and over, by sex, age, and selected social and demographic characteristics: United States, 1976

[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 appendix I. Definitions of terms are given in appendix II]

Characteristic	Both sexes			Male			Female		
	20 years and over	20-44 years	45 years and over	20 years and over	20-44 years	45 years and over	20 years and over	20-44 years	45 years and over
	Number in thousands								
Total[1]	137,478	72,430	65,048	64,556	34,962	29,593	72,922	37,467	35,455
Race									
White	121,617	63,094	58,523	57,477	30,825	26,652	64,140	32,269	31,871
Black	14,021	8,018	6,003	6,223	3,530	2,693	7,798	4,488	3,310
Other	1,840	1,317	523	856	607	249	985	710	274
Family income									
Under $5,000	20,644	7,745	12,899	7,800	3,243	4,557	12,843	4,502	8,342
$5,000 to $9,999	28,027	14,089	13,937	12,678	6,446	6,231	15,349	7,643	7,706
$10,000 to $14,999	28,394	17,606	10,789	13,977	8,868	5,109	14,417	8,738	5,680
$15,000 to $24,999	31,745	19,701	12,044	16,184	9,812	6,372	15,561	9,889	5,672
$25,000 or more	16,841	8,699	8,143	8,604	4,317	4,287	8,237	4,381	3,856
Education									
Less than 9 years	25,242	5,396	19,845	12,402	2,775	9,627	12,840	2,622	10,218
9-11 years	20,495	9,581	10,914	9,098	4,337	4,761	11,397	5,243	6,153
12 years	49,251	29,836	19,415	20,237	12,926	7,311	29,014	16,911	12,104
13-15 years	20,681	14,154	6,527	10,330	7,262	3,069	10,350	6,892	3,458
16 years or more	19,548	12,687	6,861	11,295	7,238	4,056	8,253	5,449	2,805
Occupation of employed									
White-collar workers	41,935	26,718	15,217	21,619	13,109	8,510	20,316	13,610	6,707
Professional, technical, and kindred workers	13,595	9,441	4,154	8,153	5,434	2,719	5,441	4,007	1,435
Managers and administrators, except farm	9,911	5,389	4,522	7,768	4,196	3,572	2,143	1,193	950
Salesworkers	4,730	2,700	2,030	2,788	1,657	1,130	1,942	1,042	900
Clerical and kindred workers	13,699	9,189	4,510	2,909	1,821	1,088	10,790	7,368	3,422
Blue-collar workers	26,342	17,307	9,035	21,357	14,166	7,191	4,986	3,141	1,844
Craftsmen and kindred workers	11,011	6,877	4,133	10,271	6,471	3,800	740	406	334
Operatives, including transport	12,391	8,339	4,052	8,418	5,813	2,605	3,972	2,526	1,446
Laborers except farm	2,941	2,091	850	2,667	1,881	786	274	209	*64
Service, including private household	9,542	5,560	3,983	3,569	2,122	1,447	5,974	3,438	2,536
Farm workers	2,215	1,001	1,213	1,946	847	1,099	269	154	114
Employment status									
Currently unemployed	5,669	4,018	1,652	3,006	2,043	963	2,663	1,975	688
Not in labor force	51,066	17,346	33,720	12,615	2,359	10,256	38,451	14,987	23,465
Marital status									
Never married	18,435	14,834	3,601	10,194	8,522	1,672	8,241	6,312	1,929
Currently married	97,224	51,074	46,151	48,938	24,259	24,680	48,286	26,815	21,471
Widowed	11,787	457	11,330	1,826	81	1,746	9,961	376	9,584
Separated	3,262	2,050	1,212	1,100	638	462	2,162	1,412	750
Divorced	6,769	4,014	2,755	2,496	1,463	1,034	4,273	2,552	1,721
Living arrangement									
Living alone	15,472	4,962	10,510	5,716	3,002	2,715	9,756	1,960	7,795
Living with nonrelatives	3,680	2,735	945	2,015	1,608	407	1,665	1,126	538
Living with spouse	96,024	50,453	45,571	48,404	24,055	24,349	47,620	26,398	21,222
Living with relatives, other	22,302	14,280	8,022	8,420	6,298	2,122	13,882	7,982	5,900

[1]Includes persons with unknown family income, education, or occupation.

APPENDIXES

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APPENDIX I

TECHNICAL NOTES ON METHODS

Background of This Report

This report is one of a series of statistical reports prepared by the National Center for Health Statistics (NCHS). It is based on information collected in a continuing nationwide sample of households in the Health Interview Survey (HIS).

The Health Interview Survey utilizes a questionnaire which obtains information on personal and demographic characteristics, illness, injuries, impairments, chronic conditions, and other health topics. As data relating to each of these various broad topics are tabulated and analyzed, separate reports are issued which cover one or more of the specific topics.

The population covered by the sample for the Health Interview Survey is the civilian noninstitutionalized population of the United States living at the time of the interview. The sample does not include members of the Armed Forces or U.S. nationals living in foreign countries. It should also be noted that the estimates shown do not represent a complete measure of any given topic during the specified calendar period since data are not collected in the interview for persons who died during the reference period. For many types of statistics collected in the survey, the reference period covers the 2 weeks prior to the interview week. For such a short period, the contribution by decedents to a total inventory of conditions or services should be very small. However, the contribution by decedents during a long reference period (e.g., 1 year) might be sizable, especially for older persons.

Statistical Design of the Health Interview Survey

General plan. The sampling plan of the survey follows a multistage probability design which permits a continuous sampling of the civilian noninstitutionalized population of the United States. The sample is designed in such a way that the sample of households interviewed each week is representative of the target population and that weekly samples are additive over time. This feature of the design permits both continuous measurement of characteristics of samples and more detailed analysis of less common characteristics and smaller categories of health-related items. The continuous collection has administrative and operational advantages as well as technical assets since it permits fieldwork to be handled with an experienced, stable staff.

The overall sample was designed so that tabulations can be provided for each of the four major geographic regions and for urban and rural sectors of the United States.

The first stage of the sample design consists of drawing a sample of 376 primary sampling units (PSU's) from approximately 1,900 geographically defined PSU's. A PSU consists of a county, a small group of contiguous counties, or a standard metropolitan statistical area. The PSU's collectively cover the 50 States and the District of Columbia.

With no loss in general understanding, the remaining stages can be combined and treated in this discussion as an ultimate stage. Within PSU's, then, ultimate stage units called segments are defined in such a manner that each segment

contains an expected six households. Three general types of segments are used.

Area segments which are defined geographically.

List segments, using 1970 census registers as the frame.

Permit segments, using updated lists of building permits issued in sample PSU's since 1970.

Census address listings were used for all areas of the country where addresses were well defined and could be used to locate housing units. In general the list frame included the larger urban areas of the United States from which about two-thirds of the HIS sample was selected.

The usual HIS sample consists of approximately 12,000 segments containing about 50,000 assigned households, of which 9,000 were vacant, demolished, or occupied by persons not in the scope of the survey. The 41,000 eligible occupied households yield a probability sample of about 120,000 persons.

Descriptive material on data collection, field procedures, and questionnaire development in the HIS has been published[20,21] as well as a detailed description of the sample design[22] and a report on the estimation procedure and the method used to calculate sampling errors of estimates derived from the survey.[23]

Collection of data.—Field operations for the survey are performed by the U.S. Bureau of the Census under specifications established by the National Center for Health Statistics. In accordance with these specifications the Bureau of the Census participates in survey planning, selects the sample, and conducts the field interviewing as an agent of NCHS. The data are coded, edited, and tabulated by NCHS.

Estimating procedures.—Since the design of the HIS is a complex multistage probability sample, it is necessary to use complex procedures in the derivation of estimates. Four basic operations are involved.

1. *Inflation by the reciprocal of the probability of selection.*—The probability of selection is the product of the probabilities of selection from each step of selection in the design (PSU, segment, and household).
2. *Nonresponse adjustment.*—The estimates are inflated by a multiplication factor which has as its numerator the number of sample households in a given segment and as its denominator the number of households interviewed in that segment.
3. *First-stage ratio adjustment.*—Sampling theory indicates that the use of auxiliary information which is highly correlated with the variables being estimated improves the reliability of the estimates. To reduce the variability between PSU's within a region, the estimates are ratio adjusted to the 1970 populations within 12 color-residence classes.
4. *Poststratification by age-sex-color.*—The estimates are ratio adjusted within each of 60 age-sex-color cells to an independent estimate of the population of each cell for the survey period. These independent estimates are prepared by the Bureau of the Census. Both the first-stage and poststratified ratio adjustments take the form of multiplication factors applied to the weight of each elementary unit (person, household, condition, and hospitalization).

The effect of the ratio-estimating process is to make the sample more closely representative of the civilian noninstitutionalized population by age, sex, color, and residence, which thereby reduces sampling variance.

As noted, each week's sample represents the population living during that week and characteristics of the population. Consolidation of samples over a time period, e.g., a calendar quarter, produces estimates of average characteristics of the U.S. population for the calendar quarter. Similarly, population data for a year are averages of the four quarterly figures.

For prevalence statistics, such as number of persons with speech impairments or number of persons classified by time interval since last physician visit, figures are first calculated for each calendar quarter by averaging estimates for

NOTE: A list of references follows the text.

all weeks of interviewing in the quarter. Prevalence data for a year are then obtained by averaging the four quarterly figures.

For other types of statistics—namely those measuring the number of occurrences during a specified time period—such as incidence of acute conditions, number of disability days, or number of visits to a doctor or dentist, a similar computational procedure is used, but the statistics are interpreted differently. For these items, the questionnaire asks for the respondent's experience over the 2 calendar weeks prior to the week of interview. In such instances the estimated quarterly total for the statistic is 6.5 times the average 2-week estimate produced by the 13 successive samples taken during the period. The annual total is the sum of the four quarters. Thus the experience of persons *interviewed during a year*—experience which actually occurred for each person in a 2-calendar-week interval prior to week of interview—is treated as though it measured the total of such experience *during the year.* Such interpretation leads to no significant bias.

Explanation of hospital recall.—The survey questionnaire uses a 12-month-recall period for hospitalizations. That is, the respondent is asked to report hospitalizations which occurred during the 12 months prior to the week of interview. Information is also obtained as to the date of entry into the hospital and duration of stay. Analysis of this information, and also the results of special studies, has shown that there is an increase in underreporting of hospitalizations with increase in time interval between the discharge and the interview. Exclusive of the hospital experience of decedents, the net underreporting with a 12-month recall is in the neighborhood of 10 percent, but underreporting of discharges within 6 months of the week of interview is estimated to be less than 5 percent. For this reason hospital discharge data in this report are based on hospital discharges reported to have occurred within 6 months of the week of interview. Since the interviews were evenly distributed according to weekly probability samples throughout any interviewing year, no seasonal bias was introduced by doubling the 6-month-recall data to produce an annual estimate for that year of interviewing. Doubling the 6-month data in effect imputes to the entire year preceding the interview the rate of hospital discharges actually observed during the 6 months prior to interview. However, estimates of the number of persons with hospital episodes (as opposed to estimates of the number of hospital discharges) are based on 12-month recall data since a person's 12-month experiences cannot be obtained by doubling his most recent 6-month experience.

General Qualifications

Nonresponse.—Data were adjusted for nonresponse by a procedure which imputes to persons in a household who were not interviewed the characteristics of persons in households in the same segment who were interviewed.

The interview process.—The statistics presented in this report are based on replies obtained in interviews with persons in the sample households. Each person 19 years of age and over present at the time of interview was interviewed individually. For children and for adults not present in the home at the time of the interview, the information was obtained from a related household member such as a spouse or the mother of a child.

There are limitations to the accuracy of diagnostic and other information collected in household interviews. For diagnostic information, the household respondent can usually pass on to the interviewer only the information the physician has given to the family. For conditions not medically attended, diagnostic information is often no more than a description of symptoms. However, other facts, such as the number of disability days caused by the condition, can be obtained more accurately from household members than from any other source since only the persons concerned are in a position to report this information.

Rounding of numbers.—The original tabulations on which the data in this report are based show all estimates to the nearest whole unit. All consolidations were made from the original tabulations using the estimates to the nearest unit. In the final published tables, the figures are rounded to the nearest thousand, although these are not necessarily accurate to that detail. De-

vised statistics such as rates and percent distributions are computed after the estimates on which these are based have been rounded to the nearest thousand.

Population figures.—Some of the published tables include population figures for specified categories. Except for certain overall totals by age, sex, and color, which are adjusted to independent estimates, these figures are based on the sample of households in the HIS. These are given primarily to provide denominators for rate computation, and for this purpose are more appropriate for use with the accompanying measures of health characteristics than other population data that may be available. With the exception of the overall totals by age, sex, and color mentioned above, the population figures differ from figures (which are derived from different sources) published in reports of the Bureau of the Census. Official population estimates are presented in Bureau of the Census reports in Series P-20, P-25, and P-60.

Reliability of Estimates

Since the statistics presented in this report are based on a sample, they will differ somewhat from the figures that would have been obtained if a complete census had been taken using the same schedules, instructions, and interviewing personnel and procedures.

As in any survey, the results are also subject to reporting and processing errors and errors due to nonresponse. To the extent possible, these types of errors were kept to a minimum by methods built into survey procedures.[21] Although it is very difficult to measure the extent of bias in the Health Interview Survey, a number of studies have been conducted to study this problem. The results have been published in several reports.[24-28]

The standard error is primarily a measure of sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the standard error also reflects part of the variation which arises in the measurement process. It does not include estimates of any biases which might be in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error and about 99 out of 100 that it would be less than 2½ times as large.

Standard error charts.—The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate. For this report, asterisks are shown for any cell with more than a 30-percent relative standard error. Included in this appendix are charts from which the relative standard errors can be determined for estimates shown in the report. In order to derive relative errors which would be applicable to a wide variety of health statistics and which could be prepared at a moderate cost, a number of approximations were required. As a result, the charts provide an estimate of the approximate relative standard error rather than the precise error for any specific aggregate or percentage.

Three classes of statistics for the health survey are identified for purposes of estimating variances.

1. *Narrow range.*—This class consists of (1) statistics which estimate a population attribute, e.g., the number of persons in a particular income group, and (2) statistics for which the measure for a single individual during the reference period used in data collection is usually either 0 to 1 on occasion may take on the value 2 or very rarely 3.

2. *Medium range.*—This class consists of other statistics for which the measure for a single individual during the reference period used in data collection will rarely lie outside the range 0 to 5.

3. *Wide range.*—This class consists of statistics for which the measure for a single individual during the reference period used in data collection can range from 0 to a number in excess of 5, e.g., the number of days of bed disability.

NOTE: A list of references follows the text.

In addition to classifying variables according to whether they are narrow-, medium-, or wide-range, statistics in the survey are further classified as to whether they are based on a reference period of 2 weeks, 6 months, or 12 months.

General rules for determining relative standard errors.—The following rules will enable the reader to determine approximate relative standard errors from the charts for estimates presented in this report. These charts represent standard errors of HIS data. They should be used in preference to the charts which have appeared in all previous Series 10 publications.

Rule 1. *Estimates of aggregates:* Approximate relative standard errors for estimates of aggregates such as the number of persons with a given characteristic are obtained from appropriate curves, figures I and II. The number of persons in total U.S. population or in an age-sex-color class of the total population is adjusted to official Bureau of the Census figures and is not subject to sampling error.

Rule 2. *Estimates of percentages in a percent distribution:* Relative standard errors for percentages in a percent distribution of a total are obtained from appropriate curves, figure III. For values which do not fall on one of the curves presented in the chart, visual interpolation will provide a satisfactory approximation.

Rule 3. *Estimates of rates where the numerator is a subclass of the denominator:* This rule applies for prevalence rates or where a unit of the numerator occurs, with few exceptions, only once in the year for any one unit in the denominator. For example, in computing the rate of visual impairments per 1,000 population, the numerator consisting of persons with the impairment is a subclass of the denominator, which includes all persons in the population. Such rates if converted to rates per 100 may be treated as though they were percentages and the relative standard errors obtained from the percentage charts for population estimates. Rates per 1,000, or on any other base, must first be converted to rates per 100; then the percentage chart will provide the relative standard error per 100.

Rule 4. *Estimates of rates where the numerator is not a subclass of the denominator:* This rule applies where a unit of the numerator often occurs more than once for any one unit in the denominator. For example, in the computation of the number of persons injured per 100 currently employed persons per year, it is possible that a person in the denominator could have sustained more than one of the injuries included in the numerator. Approximate relative standard errors for rates of this kind may be computed as follows:

(a) Where the denominator is the total U.S. population or includes all persons in one or more of the age-sex-color groups of the total population, the relative error of the rate is equivalent to the relative error of the numerator, which can be obtained directly from the appropriate chart.

(b) In other cases the relative standard error of the numerator and of the denominator can be obtained from the appropriate curve. Square each of these relative errors, add the resulting values, and extract the square root of the sum. This procedure will result in an upper bound on the standard error and often will overstate the error.

Rule 5. *Estimates of difference between two statistics (mean, rate, total, etc.):* The standard error of a difference is approximately the square root of the sum of the squares of each standard error considered separately. A formula for the standard error of a difference,

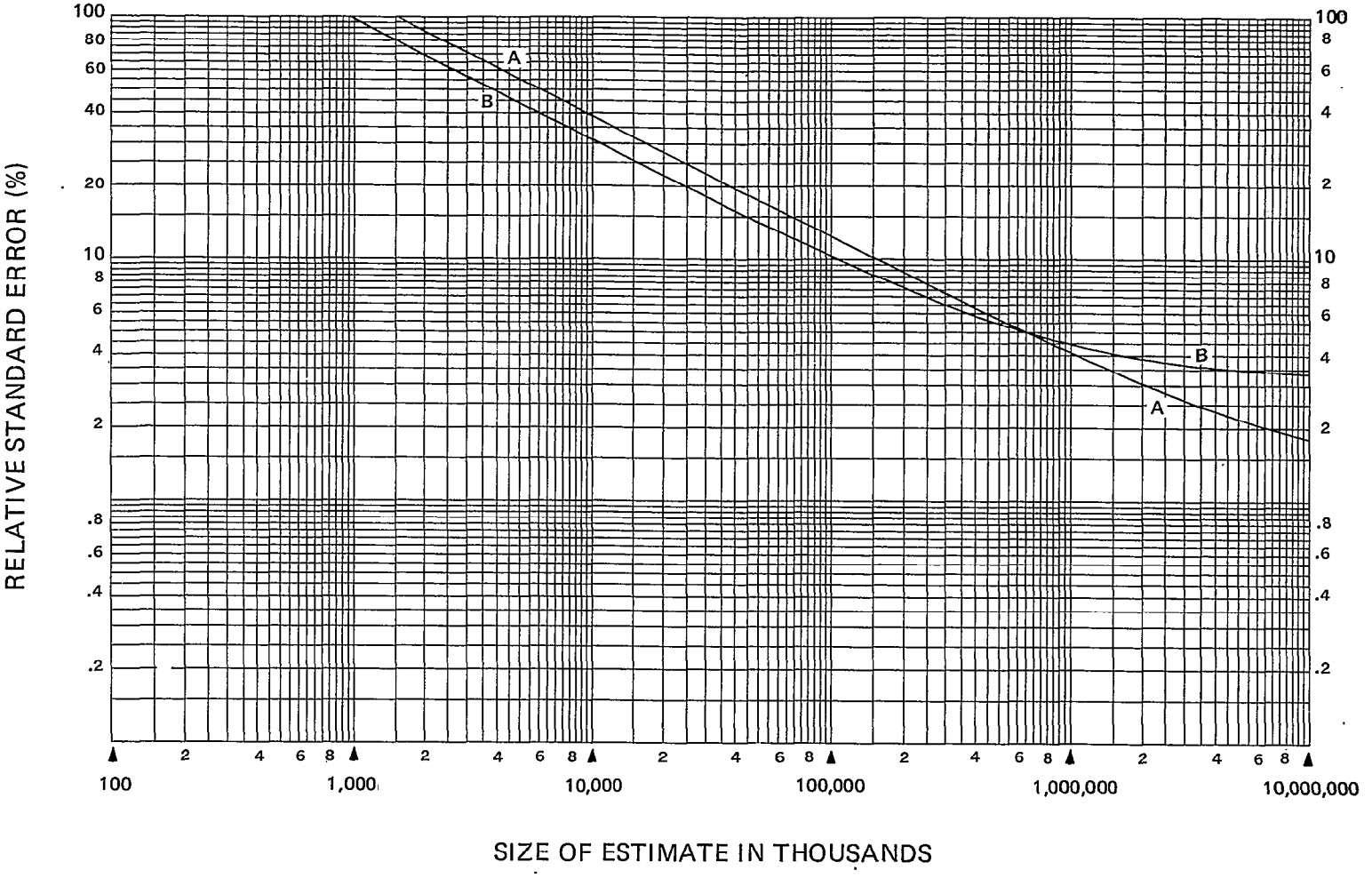
$$d = X_1 - X_2$$

is

$$\sigma_d = \sqrt{(X_1 \ V_{x1})^2 + (X_2 \ V_{x2})^2}$$

where X_1 is the estimate for class 1, X_2 is the estimate for class 2, and V_{x1} and V_{x2} are the relative errors of X_1 and X_2 respectively. This formula will represent the actual standard error quite accurately for the difference between separate and uncorrelated characteristics although it is only a rough approximation in most other cases. The relative standard error of each estimate involved in such a difference can be determined by one of the four rules above, whichever is appropriate.

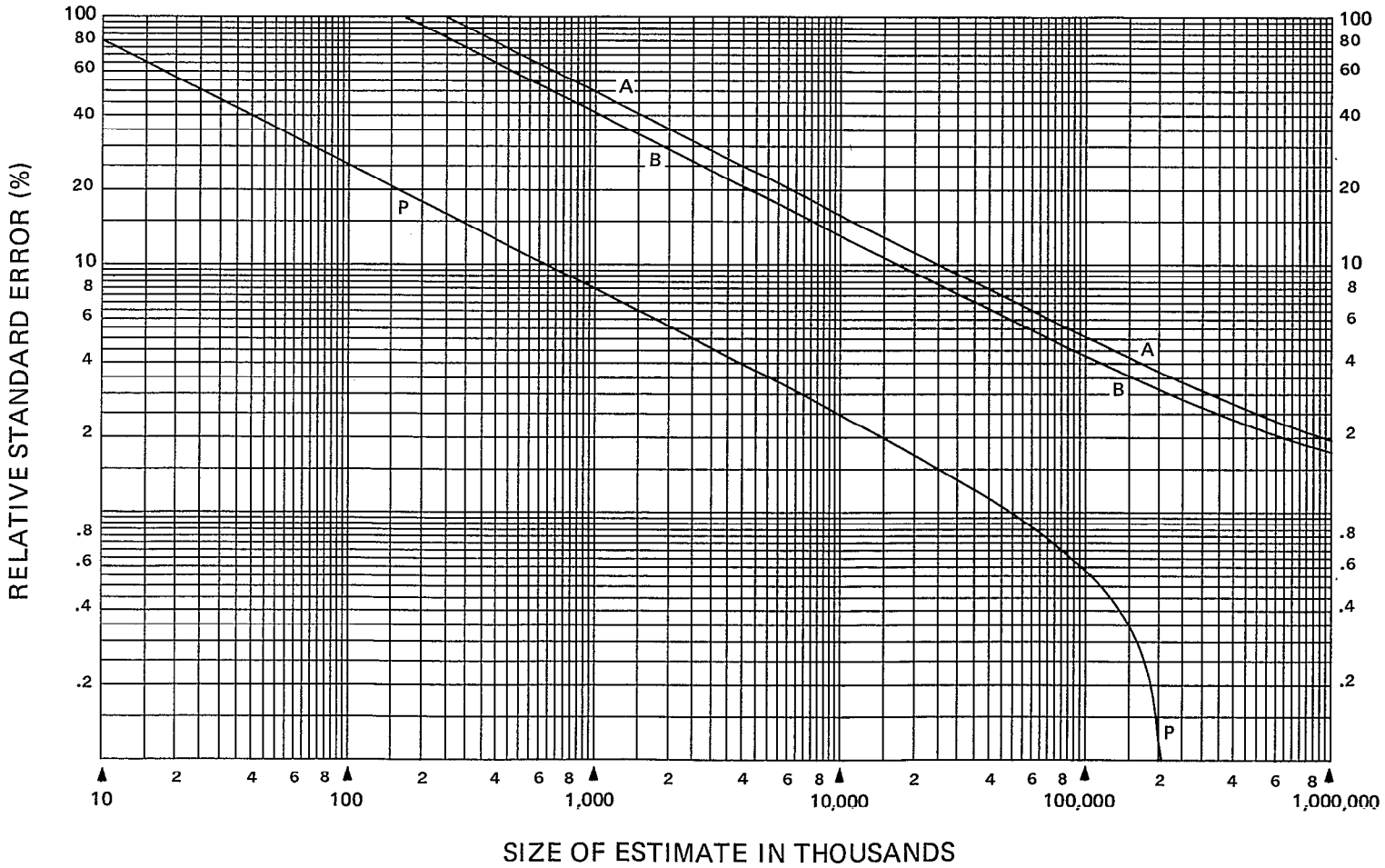
Figure I. RELATIVE STANDARD ERRORS FOR DAYS OF RESTRICTED ACTIVITY OR BED DISABILITY (A) AND FOR DAYS LOST FROM WORK (B)[1]



[1]These curves represent estimates of relative standard errors based on 1 to 4 quarters of data collection for wide range estimates of aggregates using a 2-week reference period

Example of use of chart: An estimate of 100,000,000 days of restricted activity (on scale at bottom of chart) has a relative standard error of 12 percent (read from curve A on scale at left side of chart), or a standard error of 12,000,000 (12 percent of 100,000,000).

Figure II. RELATIVE STANDARD ERRORS FOR NUMBER OF SHORT-STAY HOSPITAL DAYS (A), NUMBER OF ACUTE CONDITIONS (B), AND POPULATION CHARACTERISTICS (P)[1]

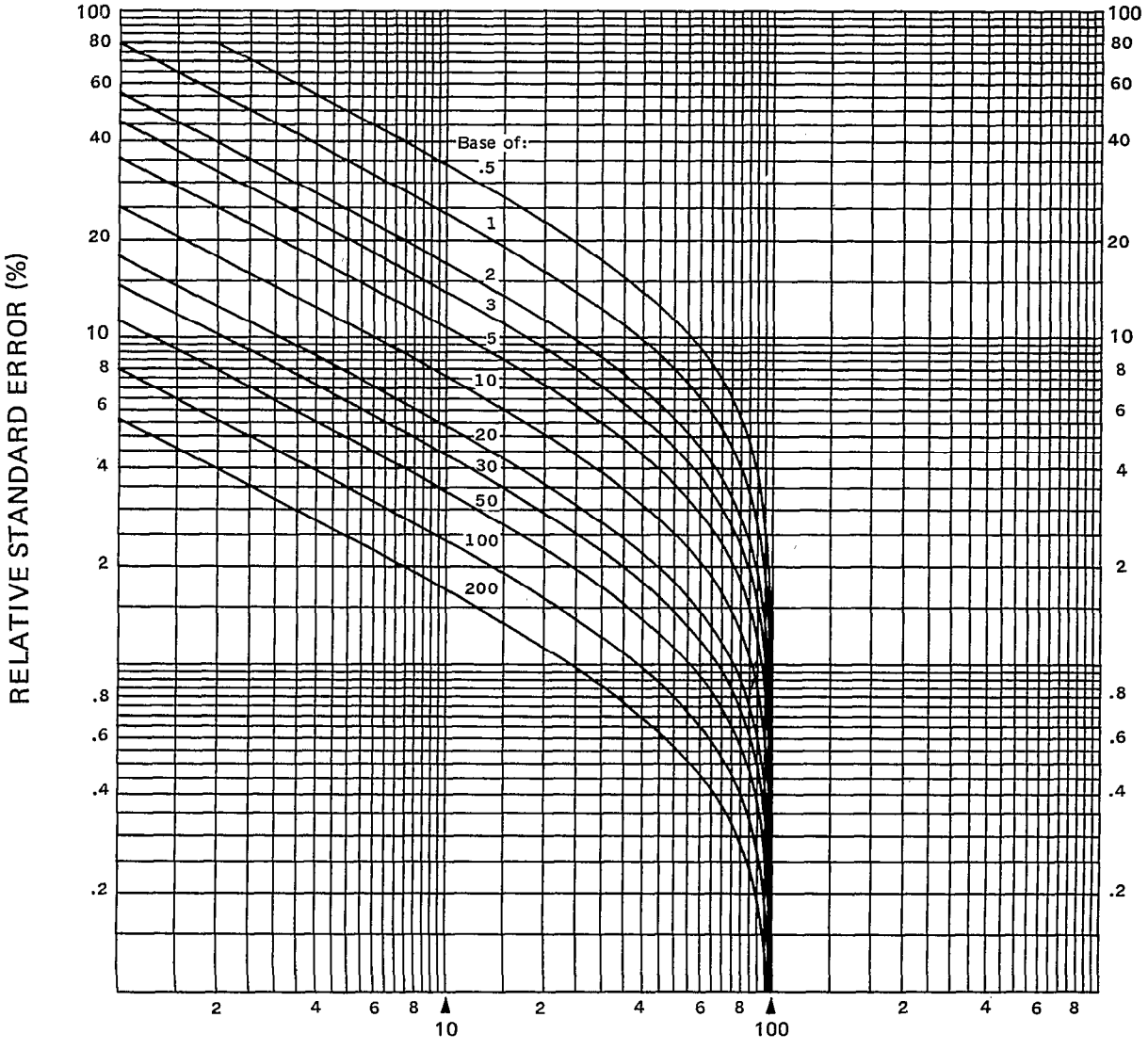


[1]The curve related to short-stay hospital days is based on 4 quarters of data collection for wide range estimates of aggregates using a 6-month reference period; the curve for population characteristics is based on 4 quarters of data collection for narrow range estimates of aggregates; the curve for acute conditions is based on 4 quarters of data collection for narrow range data using a 2-week reference period.

Example of use of chart: An estimate of 10,000,000 hospital days (on scale at bottom of chart) has a relative standard error of 15.8 percent (read from curve A on scale at left side of chart), or a standard error of 1,580,000 (15.8 percent of 10,000,000). An estimate of 10,000,000 acute conditions (curve B) has a relative standard error of 13.0 percent. An estimate of 1,000,000 persons (curve P) has a relative standard error of 8.0 percent.

Figure III. RELATIVE STANDARD ERRORS OF PERCENTAGES OF POPULATION CHARACTERISTICS[1]

(Base of percentage shown on curves in millions)



[1]These curves represent estimates of relative standard errors of percentages of population characteristics based on 4 quarters of data collection for narrow range estimates

Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of 10,000,000 has a relative standard error of 5.1 percent (read from the scale at the left side of chart), the point at which the curve for a base of 10,000,000 intersects the verticle line for 20 percent. The standard error in percentage points is equal to 20 percent X 5.1 percent, or 1.02 percentage points.

APPENDIX II

DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

Terms Relating to Conditions

Condition.—A morbidity condition, or simply a condition, is any entry on the questionnaire which describes a departure from a state of physical or mental well-being. It results from a positive response to one of a series of "medical-disability impact" or "illness-recall" questions. In the coding and tabulating process conditions are selected or classified according to a number of different criteria such as whether they were medically attended, whether they resulted in disability, or whether they were acute or chronic; or according to the type of disease, injury, impairment, or symptom reported. For the purposes of each published report or set of tables, only those conditions recorded on the questionnaire which satisfy certain stated criteria are included.

Conditions except impairments are classified by type according to the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States,*[29] with certain modifications adopted to make the code more suitable for a household interview survey.

Acute condition.—An acute condition is defined as a condition which has lasted less than 3 months and which has involved either medical attention or restricted activity. Because of the procedures used to estimate incidence, the acute conditions included in this report are the conditions which had their onset during the 2 weeks prior to the interview week and which involved either medical attention or restricted activity during the 2-week period. However, excluded are conditions which are always classified as chronic even though the onset occurred within 3 months prior to week of interview.

Chronic condition.—A condition is considered chronic if (1) the condition is described by the respondent as having been first noticed more than 3 months before the week of the interview or (2) it is one of the conditions listed below which are always considered chronic regardless of the date of onset.

Allergy, any
Arthritis or rheumatism
Asthma
Cancer
Cleft palate
Club foot
Condition present since birth
Deafness or serious trouble with hearing
Diabetes
Epilepsy
Hardening of the arteries
Hay fever
Heart trouble
Hemorrhoids or piles
Hernia or rupture
High blood pressure
Kidney stones
Mental illness
Missing fingers, hand, or arm—toes, foot, or leg
Palsy
Paralysis of any kind
Permanent stiffness or deformity of the foot, leg, fingers, arm, or back
Prostate trouble
Repeated trouble with back or spine

NOTE: A list of references follows the text.

Rheumatic fever
Serious trouble with seeing, even when wearing glasses
Sinus trouble, repeated attacks of
Speech defect, any
Stomach ulcer
Stroke
Thyroid trouble or goiter
Tuberculosis
Tumor, cyst, or growth
Varicose veins, trouble with

The prevalence of chronic conditions is defined as the number of chronic cases reported to be present or assumed to be present at the time of the interview. Those assumed to be present at the time of the interview are cases described by the respondent in terms of one of the diseases on the list of conditions always considered chronic (see definition of chronic condition above) and reported to have been present at some time during the 12-month period prior to the interview.

Arthritis.—Arthritis is the only specific condition group mentioned in the report. Arthritis is a chronic condition which includes ICDA codes 710-715. It was one of the chronic musculoskeletal conditions specifically probed in 1976.

Terms Relating to Disability

Disability.—Disability is the general term used to describe any temporary or long-term reduction of a person's activity as a result of an acute or chronic condition.

Disability day.—Short-term disability days are classified according to whether they are days of restricted activity, bed days, hospital days, work-loss days, or school-loss days. All hospital days are, by definition, days of bed disability; all days of bed disability are, by definition, days of restricted activity. The converse form of these statements is, of course, not true. Days lost from work and days lost from school are special terms which apply to the working and school-age populations only, but these too are days of restricted activity. Hence "days of restricted activity" is the most inclusive term used to describe disability days.

Restricted-activity day.—A day of restricted activity is one on which a person cuts down on his usual activities for the whole of that day because of an illness or an injury. The term "usual activities" for any day means the things that the person would ordinarily do on that day. For retired or elderly persons, usual activities might consist of almost no activity, but cutting down on even a small amount for as much as a day would constitute restricted activity. On Sundays or holidays, usual activities are the things the person usually does on such days—going to church, playing golf, visiting friends or relatives, or staying at home and listening to the radio, reading, looking at television, and so forth. Persons who have permanently reduced their usual activities because of a chronic condition might not report any restricted-activity days during a 2-week period. Therefore absence of restricted-activity days does *not* imply normal health.

Restricted activity does not imply complete inactivity, but it does imply only the minimum of usual activities. A special nap for an hour after lunch does not constitute cutting down on usual activities, nor does the elimination of a heavy chore such as cleaning ashes out of the furnace or hanging out the wash. If a farmer or housewife carries on only the minimum of the day's chores, however, this is a day of restricted activity.

A day spent in bed or a day home from work or school because of illness or injury is, of course, a restricted-activity day.

Bed-disability day.—A day of bed disability is one on which a person stays in bed for all or most of the day because of a specific illness or injury. All or most of the day is defined as more than half of the daylight hours. All hospital days for inpatients are considered to be days of bed disability even if the patient was not actually in bed at the hospital.

Work-loss day.—A day lost from work is a day on which a person did not work at his job or business for at least half of his normal workday because of a specific illness or injury. The number of days lost from work is determined only for persons 17 years of age and over who reported that at any time during the 2-week period covered by the interview they either worked at or had a job or business.

Hospital day.—A hospital day is a day on which a persons is confined to a short-stay hospital. The day is counted as a hospital day only if the patient stays overnight. Thus a patient who enters the hospital on Monday afternoon and leaves Wednesday noon is considered to have had 2 hospital days. A short-stay hospital is one for which the type of service provided by the hospital is general; maternity; eye, ear, nose, and throat; children's; or osteopathic; or it may be the hospital department of an institution.

For this survey a hospital is defined as any institution meeting one of the following criteria: (1) named in the listing of hospitals in the current *American Hospital Association, Guide to the Health Care Field*, or (2) found on the Master Facility Inventory List maintained by the National Center for Health Statistics.

Chronic activity limitation.—Persons are classified into four categories according to the extent to which their activities are limited at present as a result of chronic conditions. Since the usual activities of preschool children, school-age children, housewives, and workers and other persons differ, a different set of criteria is used for each group. There is a general similarity between them, however, as will be seen in the following descriptions of the four categories:

1. *Persons unable to carry on major activity for their group* (major activity refers to ability to work, keep house, or engage in school or preschool activities)

   Housewives:
   Inability to do any housework.

   Workers and all other persons:
   Inability to work at a job or business.

2. *Persons limited in amount or kind of major activity performed* (major activity refers to ability to work, keep house, or engage in school or preschool activities)

   Housewives:
   Limited in amount or kind of housework, e.g., cannot lift children, wash or iron, or do housework for long periods at a time.

   Workers and all other persons:
   Limited in amount or kind of work, e.g., need special working aids or special rest periods at work, cannot work full time or for long periods at a time, or cannot do strenuous work.

3. *Persons not limited in major activity but otherwise limited* (major activity refers to ability to work, keep house, or engage in school or preschool activities)

   Housewives:
   Not limited in housework but limited in other activities such as church, clubs, hobbies, civic projects, or shopping.

   Workers and all other persons:
   Not limited in regular work activities but limited in other activities such as church, clubs, hobbies, civic projects, sports, or games.

4. *Persons not limited in activities* (includes persons whose activities are not limited in any of the ways described above)

Terms Relating to Use Habits

Cigarette smoking status.—Persons who had never smoked 100 cigarettes in their life were classified as "never smoked." Persons who had smoked 100 or more cigarettes were classified as "ever smoked," this category being divided into "former smokers" and "present smokers" depending of whether respondents reported at the time of interview—that they currently smoked cigarettes. Present smokers were classified further by the number of cigarettes they smoked per day on the average. Answers in terms of packs were converted, with one pack equal to 20 cigarettes.

Stopped or tried to stop smoking.—Former smokers, by definition, had stopped smoking. Present smokers were asked if they had ever tried to stop smoking and were classified as "tried to stop" or "did not try to stop" depending on their answer, regardless of whether they actually stopped for a while.

Advised to stop smoking.—Ever-smokers were asked if a doctor had ever advised them to stop smoking and were classified as "advised to stop" or "not advised to stop" depending on their answers. Ever-smokers advised by a doctor to stop smoking are further classified depending on whether or not they reported a specific medical condition as the basis for the doctor's advice.

Daily coffee consumption.—A person who reported never drinking coffee was classified as "does not drink coffee." All others were classified as to the average number of cups of coffee drunk per day. Consumption of 5 or more cups of coffee per day is referred to as "heavy" coffee drinking.

Type of coffee.—Persons who drank coffee were classified as drinking "regular," "decaffeinated" or "both." A person who drank regular coffee occasionally when decaffeinated coffee was not available was classified as drinking decaffeinated coffee. Acid-free coffee was considered regular coffee.

Advised to change coffee habits.—Persons who drank coffee could have been advised by a doctor to modify their coffee drinking by reducing the amount of coffee drunk per day, to using decaffeinated coffee, or both. Those who had ever been advised by a doctor to modify their coffee consumption were classified as "yes" to the particular type of advice, and those never so advised were classified as "no."

Aspirin use.—A person was classified as "does not use aspirin" if he or she reported no use of aspirin or aspirin-type pills during the 6 months preceding the interview. "Use aspirin less than once a week" means the person reported using aspirin during the preceding 6 months but less than once a week on the average. When only two categories are shown, persons who did not use aspirin and those who used aspirin less than once a week are combined.

Sleeping pill use.—"Sleeping pills," as used in this report, refer to any type of medicine, drug, or pill used for insomnia or to help the person sleep. Persons who did not use sleeping pills in the 6 months preceding interview were classified as "do not use sleeping pills"; those who use sleeping pills during the 6-months preceding interview but on the average used them less than once a week were classified as "use sleeping pills less than once a week"; those who use sleeping pills once a week or more were so classified. When only two categories are shown, persons who did not use sleeping pills and those who used them less than once a week were combined. Persons who used sleeping pills once a week or more are sometimes referred to as "regular" users.

Sleeping pill use under doctor's advice.—A person who used sleeping pills, regardless of frequency, was asked if a doctor advised them to take the medicine, drugs, or pills for insomnia or to help them sleep. They were classified by whether they answered "yes" or "no" to this question.

Demographic Terms

Age.—The age recorded for each person is the age at last birthday. Age is recorded in single years and grouped in a variety of distributions depending on the purpose of the table.

Race.—The population is divided into three racial groups, "white," "black," and "other." "Other" includes American Indian, Chinese, Japanese, and any other race. Mexican persons are included with "white" unless definitely known to be Indian or of another race.

Income of family or of unrelated individuals.—Each member of a family is classified according to the total income of the family of which he is a member. Within the household all persons related to each other by blood, marriage, or adoption constitute a family. Unrelated individuals are classified according to their own income.

The income recorded is the total of all income received by members of the family (or by an unrelated individual) in the 12-month period preceding the week of interview. Income from all sources is included, e.g., wages, salaries, rents from property, pensions, and help from relatives.

Education.—The categories of education status show the years of school completed by the individual. Only years completed in regular schools, where persons are given a formal education, are included. A "regular" school is one which advances a person toward an elementary

or high school diploma or a college, university, or professional school degree. Thus education in vocational, trade, or business schools outside the regular school system is not counted in determining the highest grade of school completed.

Occupation of employed.—Currently employed persons are classified according to occupation. Currently employed persons are persons 17 years of age and over who reported that at any time during the 2-week period covered by the interview they either worked at or had a job or business are currently employed. Current employment includes paid work as an employee of someone else; self-employment in business, farming, or professional practice; and unpaid work in a family business or farm. Persons who were temporarily absent from a job or business because of a temporary illness, vaction, strike, or bad weather are considered as currently employed if they expected to work as soon as the particular event causing the absence no longer existed.

A person's occupation may be defined as his prinicpal job or business. For the purposes of this survey, the principal job or business is defined in one of the following ways. If the person worked during the 2-week reference period of the interview, or had a job or business, the question concerning his occupation (or what kind of work he was doing) applies to his job during that period. If the respondent held more than one job, the question is directed to the one at which he spent the most time. For an unemployed person, this question refers to the last full-time civilian job he had. A person who has a job to which he has not yet reported, and has never has a previous job or business, is classified as a "new worker."

The occupation classes presented in this report and their code numbers as found in the *Classified Index of Occupations and Industries* of the U.S. Bureau of the Census are shown below.

Currently unemployed.—Persons 17 years and over who during the 2-week period prior to interview did not work or had no job or business but were looking for work and those who had a job but were on layoff or looking for work are considered currently unemployed.

Occupation classification	*Census code*
White-collar workers	
Professional, technical, and kindred workers	001-195, N
Managers and administrators, except farm	201-245
Salesworkers	260-285
Clerical and kindred workers	301-395, P,Q
Blue-collar workers	
Craftsmen and kindred workers	401-580, R,S
Operatives, including transport	601-715, T,U
Laborers, except farm	740-785, V
Farm workers	
Farm and farm managers	801-802, W
Farm laborers and farm foremen	821-824
Service workers	
Service workers, except private household	901-965, X,Y
Private household workers	980-984, Z
Unknown	990, 995

Not in labor force.—Persons not in the labor force are all persons under 17 years of age and other persons who did not at any time during the 2-week period covered by the interview have a job or business, were not looking for work, and were not on layoff from a job. In general, persons excluded from the labor force are children under 17, retired persons, physically handicapped persons unable to work, and housewives or charity workers who receive no pay.

Marital status.—Marital status categories in this report are as follows:

Currently married includes all married persons not separated from their spouses. Persons with common-law marriage are considered as married.

Never married includes persons who were never married and persons whose only marriage was annulled.

Separated includes married persons who have a legal separation or who have parted because of other reasons. This does not include persons separated from their spouses because of the circumstances of their employment or service in the Armed Forces; these persons are considered married.

Widowed and *divorced* include, respectively, all persons who said they were either widowed or legally divorced.

Living arrangement.—The four categories of living arrangements shown in this report are as follows:

Living alone.—Living alone is defined as living in a one-member household.

Living with nonrelatives.—Living with nonrelatives is defined as living in a household with another person or persons none of whom are related to the person by blood, marriage, or adoption.

Living with spouse.—This category includes married persons who are living in a household with their spouse.

Living with relatives—other.—This category includes children living with parents or relatives; it also includes person who are widowed, divorced, separated, or never married who are living in a household with another person or persons one or more of whom are related to them by blood, marriage, or adoption.

APPENDIX III

QUESTIONNAIRE ITEMS ON USE HABITS

HEALTH HABITS PAGE	R1	1 ☐ Not SP or SP under 19 *(NP)* 2 ☐ SP 19 + callback required *(NP)* 3 ☐ SP 19 + avail. *(1–5)*
1a. During the past 6 months, did you use any medicines, drugs or pills for insomnia or to help you sleep?	1a.	1 Y 2 N *(2)*
b. On the average, do you use this medication one or more times per week?	b.	1 Y 2 N
c. Did a doctor advise you to take this medication?	c.	1 Y 2 N
2a. During the past 6 months, did you use any aspirin or aspirin type pills?	2a.	1 Y 2 N *(3)*
b. On the average, do you use these pills one or more times per week?	b.	1 Y 2 N
3a. Do you drink coffee?	3a.	1 Y 2 N *(3e)*
b. On the average, how many cups a day do you drink?	b.	_____ Cups 00 ☐ Less than one per day
c. Do you usually drink decaffeinated coffee or regular coffee?	c.	1 ☐ Decaffeinated 2 ☐ Regular
d. Were you EVER advised by a doctor to use decaffeinated coffee?	d.	1 Y 2 N
e. Have you EVER been advised by a doctor to cut down or to stop drinking coffee?	e.	1 Y 2 N
4a. Do you drink hot tea?	4a.	1 Y 2 N *(4c)*
b. On the average, how many cups a day do you drink?	b.	_____ Cups 00 ☐ Less than one per day
c. Do you drink iced tea?	c.	1 Y 2 N *(4f)*
d. In which season do you drink the MOST iced tea?	d.	1 ☐ Same for all seasons ☐ Other *(Specify)* _____
e. (During the _____(season)_____) On the average, how many glasses a day do you drink?	e.	_____ Glasses 00 ☐ Less than one a day
f. Have you EVER been advised by a doctor to cut down or to stop drinking tea?	f.	1 Y 2 N
5a. Have you smoked at least 100 cigarettes in your entire life?	5a.	1 Y 2 N *(6)*
b. Do you smoke cigarettes now?	b.	1 Y 2 N *(5e)*
c. On the average, ABOUT how many cigarettes a day do you smoke?	c.	_____ Cigarettes
d. Have you EVER tried to stop smoking?	d.	1 Y 2 N
e. Have you EVER been advised by a doctor to stop smoking?	e.	1 Y 2 N *(6)*
f. Was this because of a specific condition you had at that time?	f.	1 Y 2 N *(6)*
g. What condition was it? Any other condition?	g.	_____
▶ *ASK QUESTION 6 ONLY DURING CALLBACK* 6. Compared to other persons your age, would you say that your health is excellent, good, fair, or poor?	6.	1 E 2 G 3 F 4 P
R2	R2	1 ☐ Responded for self Person_____was respondent *(Footnote reason)*

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