

# Medications

## *Prescription medications and dietary supplements*

**MIDUS**  
Midlife in the United States

A National Study of Health & Well-Being

Americans who watch an average amount of television may be exposed to over 30 hours of drug advertisements each year.<sup>1</sup> In light of such exposure, it is useful to examine medication use in the general population. MIDUS provides an opportunity to examine this question in a national sample of adults ranging in age from early adulthood to later life. Below we sketch what has been learned about use of prescription medications as well as use of alternative supplements. We find that patterns of usage are linked with many factors, such as one's gender, age, educational level, health status, and well-being.

**FIGURE 1**

### *PERCENTAGE OF ADULTS ON ANY PRESCRIPTION MEDICATIONS*

Age 32-44 49%



Age 45-54 60%



Age 55-64 74%



Age 65-74 82%



Age 75-84 88%



**P**rescription medication usage is quite high among MIDUS respondents, with nearly 68% indicating that they currently take at least one prescription medication and 24% reporting that they currently take three or more medications. Some respondents indicate they currently take as many as 12 medications. However, the prevalence of taking such medications varies substantially by a person's age and whether they are male or female.

- ◆ As age increases, adults are more likely to take at least one prescription medication (see Figure 1), with 49% of young adults (aged 32-44) taking prescription medications compared to 88% of older adults (aged 75-84).
- ◆ With increasing age, adults are especially more likely to take prescription medications for hypertension, cholesterol, heart conditions, and arthritis.
- ◆ Women are more likely than men to use prescription medications when they are younger or middle aged (aged 32-64), while there is little difference between women and men at older ages (65-84).

## WHAT PRESCRIPTION MEDICATIONS?

All MIDUS respondents were asked about prescription medications they were taking for specific conditions: hypertension, diabetes, lung problems, high cholesterol, a heart condition, ulcers, arthritis, hormone replacement, birth control, headaches, nerves/anxiety/depression, and pain. Unless otherwise indicated, all reports of prescription medication usage in this brochure are for the full sample of respondents from MIDUS. A smaller number of MIDUS respondents came to health clinics and provided more detailed information, including reports of all medications they were taking.

## Gender differences in types of medications

Men are more likely than women to take prescription medications for high cholesterol at all ages, as well as for diabetes (except for young adults) and for heart conditions (particularly among older adults).

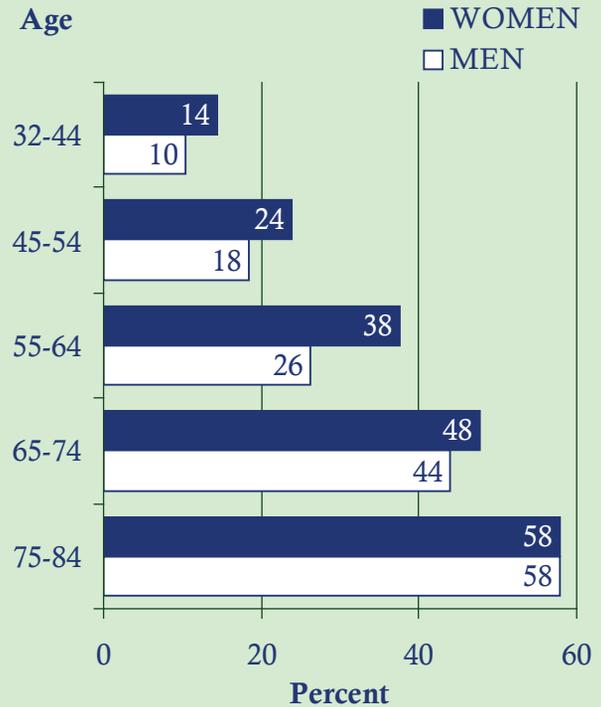
Women, conversely, are more likely to take medications for nerves/anxiety/depression, arthritis, headaches, and pain at all ages, as well as hypertension (except in early adulthood).

## Who takes four or more medications?

Younger adults take fewer prescription medications than older adults. Among a subsample of 744 respondents who participated in detailed medical assessments, information was obtained on all medications that respondents were currently taking. This revealed that, on average, adults aged

FIGURE 2

### PERCENTAGE TAKING FOUR OR MORE PRESCRIPTION MEDICATIONS BY AGE



32-44 take approximately 1.4 medications, those aged 55-64 take 2.9, and those aged 75-84 take 4.1. Additionally, 32% of this subsample reports taking four or more prescription medications, and 3% report taking at least 10 different medications.

Women are more likely than men to be taking four or more prescription medications until about age 75 (see Figure 2). This is especially prominent among middle-aged adults (aged 55-64), where 38% of women are taking at least four medications in comparison to 26% of men. By the age of 75, there is no longer a difference between women and men. Between the ages of 75 and 84, an astounding 58% of men and women are taking four or more prescription medications.



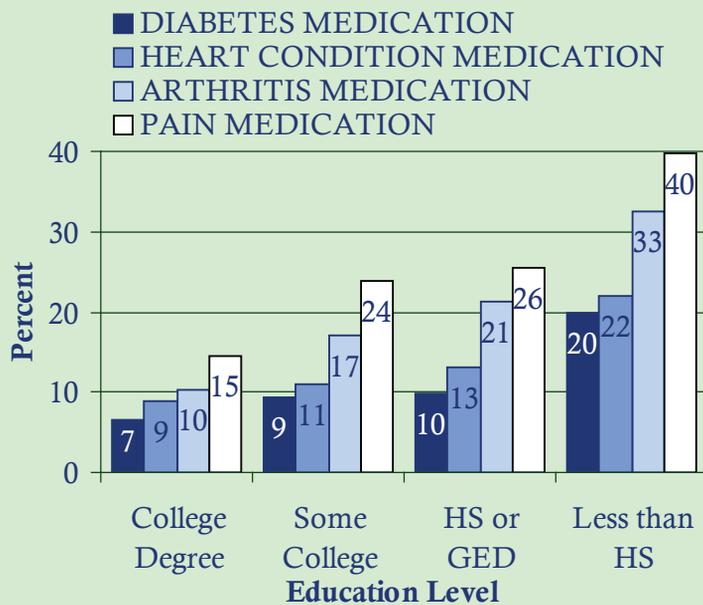
## More education means fewer medications

Adults with more education are less likely to take any prescription medications. This is especially prominent for diabetes, heart condition, arthritis, and pain meds (see Figure 3). For example, 15% of adults with a bachelor's degree or more are taking a prescription medication for pain in comparison to 40% of those with less than a high school education.

There are also gender differences for some medications. While women and men with a four-year college degree or more are equally likely to use meds for hypertension and arthritis, women with less than a college degree are more likely to use these medications.

Additionally, while men and women with less than a high school education are equally likely to use medications for diabetes and high cholesterol, men with a high school education or more are more likely to use these same meds.

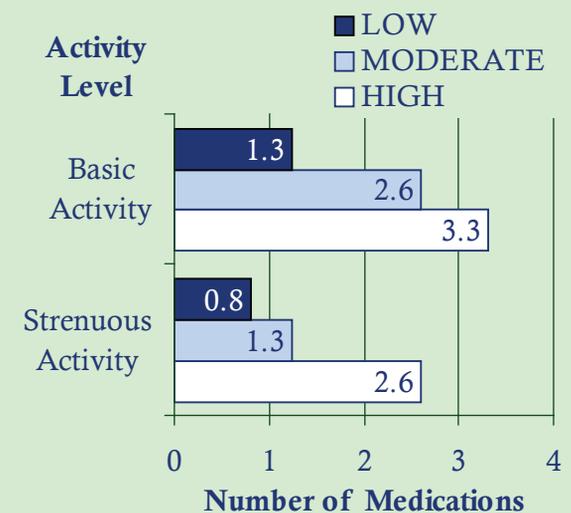
**FIGURE 3**  
*TYPES OF PRESCRIPTION MEDICATION USED BY EDUCATION LEVEL*



## Links between health and prescription medications

Adults who report more difficulty with basic activities, such as bathing, dressing, or walking one block, as well as more strenuous activities such as carrying groceries, climbing several flights of stairs, or walking several blocks, take more prescription meds (see Figure 4). Furthermore, among adults reporting high difficulty with basic activities, 28% take at least five medications, in comparison to 2% of adults reporting low difficulty.

**FIGURE 4**  
*NUMBER OF PRESCRIPTION MEDICATIONS USED BY DIFFICULTY WITH ACTIVITIES*



Adults who take any medications report feeling less control over their health, especially those who take meds for nerves/anxiety/depression, pain, and arthritis. Adults who feel low control over their health take, on average, 1.2 medications, in comparison to 2.4 among those who feel high control. However, adults who take prescription medications actually feel they put more thought and effort into their health than adults who do not take any medications.

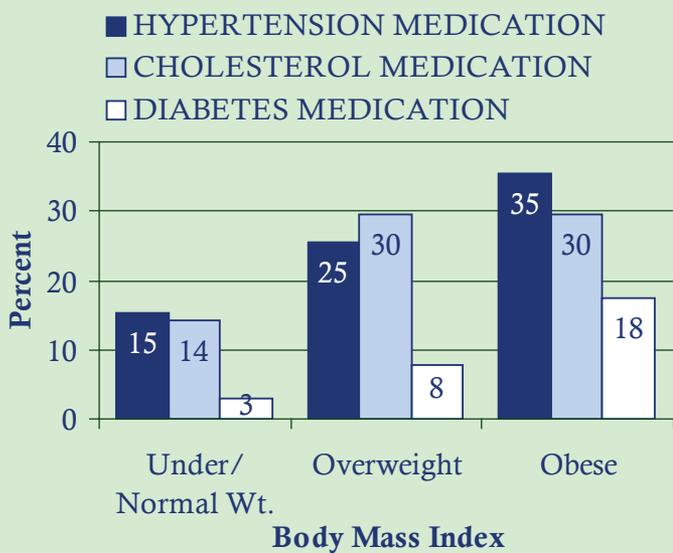


## Lower BMI means fewer medications

Body mass index (BMI) is a reliable indicator of total body fat. Adults who are underweight or normal take an average of 1.2 prescription medications, in comparison to 1.5 for overweight and 2.1 for obese adults. Furthermore, 12% of obese adults take at least five medications, in comparison to only 3% of adults who are normal weight.

Body mass index is also linked to the prevalence of using specific medications (see Figure 5). While 15% of underweight or normal adults take hypertension medications, 25% of overweight and 35% of obese adults take medications for hypertension. Overweight and obese adults are also more likely to take medications for high cholesterol (30%) than adults who are normal weight (14%). Obesity has a strong link to diabetes medications, as 18% of obese adults take medications for diabetes, in comparison to only 3% of adults who are normal weight.

**FIGURE 5**  
*TYPES OF PRESCRIPTION MEDICATION USED BY BODY MASS INDEX*

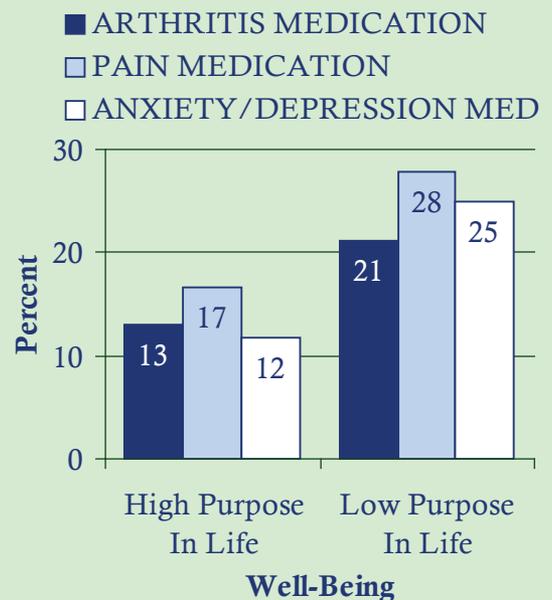


## Higher well-being means fewer medications

Adults who report high purpose in life are less likely to take any prescription medications (63%) than adults who report low purpose in life (73%). This is apparent for personal growth as well. However, adults are equally likely to take medications if they report high or low positive relationships with other people.

There are also links with specific medications. For example, 13% of adults reporting high life purpose take medications for arthritis and 17% for pain, in comparison to 21% and 28%, respectively, of adults reporting low life purpose (see Figure 6). In addition, 12% of adults with high life purpose are on nerves/anxiety/depression meds, while 25% of adults with low life purpose take these medications. These patterns are also evident for personal growth and positive relations with other people.

**FIGURE 6**  
*TYPES OF PRESCRIPTION MEDICATION USED BY PURPOSE IN LIFE*



## Focus on depression

Certain factors increase the likelihood of taking medications for nerves, anxiety, or depression, such as:

- ◆ Being a woman, especially during midlife (ages 45-64) or if education levels are lower
- ◆ Lower income
- ◆ Being unmarried, especially if the reason is separation or divorce
- ◆ Having low well-being or a low sense of control

MIDUS contains questions that measure whether an individual is suffering from depression or an anxiety disorder. Among adults who meet the criteria for these conditions, over half are on medication (see Figure 7). Among those who do not meet the criteria, 16% are taking medication. It is possible that these individuals previously had depression or anxiety and their medications have helped alleviate the symptoms. However, the findings also draw attention to the fact that many (54%) who are taking such medications still meet the criteria for depression or anxiety, while another substantial group (47%) report symptoms for these psychological problems but are not taking medications to treat them.

**FIGURE 7**

### *MEDICATIONS FOR ANXIETY/ DEPRESSION DISORDERS*

	MED	NO MED
Meets Criteria for Depression/Anxiety	54%	47%
Does Not Meet Criteria	16%	84%

## WHAT VITAMINS AND SUPPLEMENTS?

MIDUS respondents were asked about certain vitamins, minerals, and supplements they were taking. The information presented here was asked in reference to the following: multi-vitamins, vitamin C, iron, and calcium. Respondents were also asked about the following supplements: St. John's Wort, ginkgo biloba, Echinacea, garlic, feverfew, ephedra/ma huang, glucosamine/chondroitin, fish oil, saw palmetto, and flaxseed.

## Vitamins, minerals, and supplements

Among MIDUS respondents, 70% of women and 56% of men take vitamins or minerals. Women are especially more likely to be taking calcium (44%) than men (13%), and are also more likely to be taking a multi-vitamin (57%) than men (49%). As age increases, adults are more likely to use vitamins or minerals, although usage levels off around age 65.

Some adults (27%) take supplements either with prescription medications or as alternatives, and the overall use of supplements increases until age 55, where it levels off. The prevalence of specific supplements is quite low, with the most frequently used including glucosamine/chondroitin (12%) and fish oil (10%). There is also an increase in the use of glucosamine/chondroitin until age 55. While only 4% of adults aged 32-44 are using this supplement, usage increases to 17% for those aged 55-64 and then levels off.



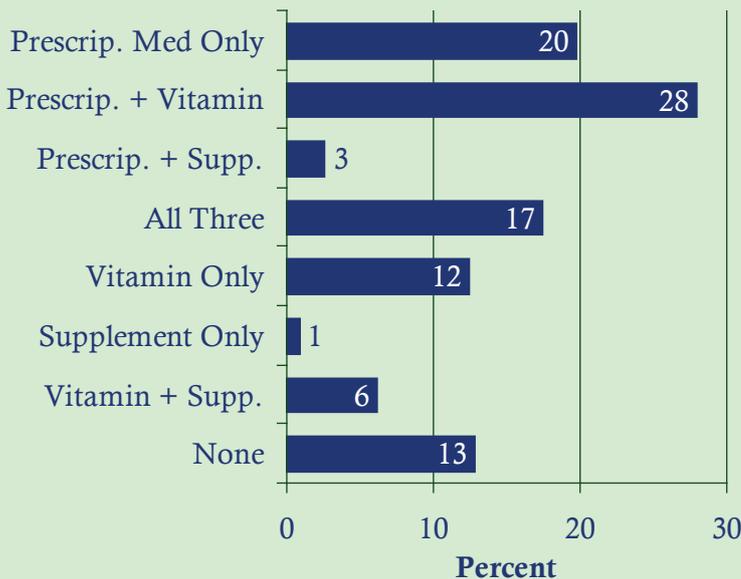
## Medication and supplement combinations

A number of MIDUS respondents combine medication usage with vitamins and minerals, and others include supplements with their regimen, as well. While 20% of adults only use prescription medications, 28% combine medications and vitamins/minerals, and an additional 17% take both of these as well as additional supplements (see Figure 8). Only 13% of adults do not take any medications, vitamins/minerals, or supplements.

**FIGURE 8**

### COMBINING MEDICATIONS, VITAMINS AND MINERALS, AND SUPPLEMENTS

#### Combination



## Who does not take any medications, vitamins, or supplements?

A number of characteristics are indicative of being more likely to be among the 13% of respondents who are not taking any medications, vitamins/minerals, or supplements. Individuals in this group are more likely to be:

- ◆ Men
- ◆ Younger adults (aged 32-54)
- ◆ Four year degree earners
- ◆ Individuals with greater income
- ◆ Those currently working for pay
- ◆ Adults who report less lifetime and daily discrimination
- ◆ Adults who report fewer stressful life events
- ◆ Adults who report better physical health, more control over their health, and that they put less thought and effort into their health
- ◆ Adults who have a lower body mass index and fewer chronic conditions (among the full sample, 22% report no chronic conditions, whereas 46% of adults not taking any medications, vitamins/minerals, or supplements report no chronic conditions).

1. Brownfield, E. D., Bernhardt, J. M., Phan, J. L., Williams, M. V., & Parker, R. M. (2004). Direct-to-consumer drug advertisements on network television: An exploration of quantity, frequency, and placement. *Journal of Health Communication, 9*, 491-497.

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