Help for the Helper

Many readers of this publication are caring for seniors. Often the person needing care is a spouse; sometimes it is a parent or other relative. The people helping the senior with the basic activities of daily living have been called “informal caregivers.”

More than 7 million Americans are informal caregivers of seniors. (Family members who provide child care for relatives are also often called informal caregivers.) These caregivers are critical to the survival of senior loved ones. If these caregivers were to be replaced by paid home care staff, the cost to our nation would be almost $100 billion per year!

It is a myth that families don’t provide care for their aging members as much as they did in the past. Families provide 80% of the in-home care for older relatives with chronic impairments. Adult children are the primary caregivers for older widowed women and older unmarried men, and they are secondary caregivers in situations where the spouse of a senior is still living.

Patterns of informal caregiving for seniors have changed over the last few decades. Mainly because seniors are living longer, this is the first time in history that American couples have had more parents than children. The average woman today can expect to spend 18 years caring for an aging family member, compared to 17 years caring for a child. In 1900, a woman could expect to devote about 8 years caring for an aging parent or other relative. Back then, the average life expectancy was only 47 years and seniors comprised only 4% of the population (compared to 76 years and 13% today).
Another family trend in recent decades is the growth of "blended" or "reconstituted" families due to divorce and remarriage. Half of marriages end in divorce, but most of these people will remarry, sometimes several times. Caregiving for senior family members, who may not be legally related anymore, can get very complicated in these circumstances!

The typical caregiver is a 46-year-old woman who is employed and also spends around 18 hours per week caring for her mother who lives nearby. The average duration of caregiving is about 5 years. The typical recipient is a 77-year-old woman who lives alone and has a chronic illness.

Caregiving typically falls to women among all ethnic groups. There are some interesting differences, however. There is a higher incidence of informal caregiving of seniors among Asian-American (32%), African-American (29%) and Hispanic (27%) households than in the general population. These three minority groups are also more likely than the general population to provide care for more than one person, and they are more likely than White caregivers to live with the senior and to have help from other persons. Caregivers often do not realize they are even in a caregiving role; they simply see it as a usual part of their role as spouse, son or daughter.

The physical and emotional toll on informal caregivers can be serious. They dedicate an average of 20 hours per week to caregiving, and even more time when the senior has multiple disabilities or other family members also need care. Two out of three working caregivers report problems juggling work and caregiving.

Despite all the physical, financial and emotional demands of family caregiving, most family members are willing to assume primary caregiving responsibilities. Many find the experience rewarding in many ways, especially when they are in good
health themselves are have a good network of family and community support.

Advocates for caregivers are working to ensure that caregiver needs are considered in public policy. Federal legislation has been proposed that would support respite care, adult day care, caregiver training, in-home assistance, and related caregiver support services. Respite care, which is brief care by someone other than the informal caregiver, is particularly important because it provides some “time off” for the informal caregiver. Respite care provides an opportunity for the caregiver to do chores such as grocery shopping and doctor visits, or just getting away for some time alone. Many informal caregivers are unaware that these community supports may be available to them.

For more information about community support for informal caregivers, contact:
• the Eldercare Locator at 1.800.677.1116
• information from the federal Administration on Aging at www.aoa.gov/elderpage.html
• senior resource directory from the National Institute on Aging at www.aoa.gov/aoa/dir/intro.html


Preventing Falls On Home Stairs

Approximately 27,000 deaths in the United States in 1997 alone were attributed to unintentional home injuries. Falls made up a large percentage of those injuries. Nearly 7 million people suffered disabling injuries that resulted from home accidents. In 1996 984,000 people suffered an injury related to home stairs and steps.

Principal Types of Home Unintentional-Injury

<table>
<thead>
<tr>
<th>Fall</th>
<th>Poison (Solid, Liquid)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>Choking</td>
</tr>
<tr>
<td>Firearms</td>
<td>Suffocation</td>
</tr>
<tr>
<td>Poison (Gas, Vapor)</td>
<td>Fires</td>
</tr>
</tbody>
</table>

extremely different causes. The first of the two is home design factors - configuration of the stairs and the presence of floor obstacles. The second cause is host-related factors: falls associated with dizziness and
fainting, neurological disease, and other individual health factors. This article includes information on design factors, such as stairways.

A few common elements have been identified by researchers in falls on stairs. Slipping on steps is the primary cause of falls. Most falls that result in injury occur while people are walking down stairs. Absence of handrails accounts for a large percentage of falls on stairs. Also, unexpected location of stairs leads to many falls. For example, stairs that are made of just one or two steps in a hallway or doorway can be very hazardous, as people may not be aware of them.

Several other factors in stair design and construction have also been identified.

• Stairs made of only one or two steps are extremely hazardous.
• Treads less than 9" wide usually result in the largest number of missteps. Research has shown that riser height of 6 to 8 inches and tread widths of 10 to 13 inches are preferred by most people. The best dimensions to use are 7.2-inch riser heights with an 11- or 12-inch tread width.

STAIR CONSTRUCTION

One of the most important safety factors in stair construction is the uniformity of the tread widths and riser heights. Even a difference of just a 1/4-inch between riser heights can cause a fall. If you have stairs that are not uniform in dimension, they should be replaced with stairs that are correct in dimension.

STAIR MAINTENANCE

Treads that are broken, and carpet that is loose or torn can be extremely hazardous. Repairs to these kinds of hazards should be made immediately to prevent possible injury due to slipping, tripping, or falling. Non-slip surfaces placed on treads can help prevent accidents.

Articles such as toys or clothing left on stairs can also pose a potential hazard. Keep all stairways clear of any kind of “clutter.” A dimly lit stairway can be a danger as well.

STAIR PLACEMENT

If your home has stairs that consist of just one or two steps, be sure that people can clearly see the steps. Falls occur on stairs of this size because people do not realize they are there! Most times, these steps are decorated in the same color as the rest of the flooring and are dimly lit, making it difficult to distinguish between the levels of flooring. Make sure that these steps are well lit and easily seen by using visual clues such as using different colors or adding a handrail.
STAIR USE
The behavior of the person using the stairs is a contributing factor to stair falls. Rushing or running and not being aware of your surroundings can contribute to a fall. Carrying items while walking down stairs is also often associated with falls.

HANDRAILS
Two ways that handrails help to prevent falls are:
- Handrails help to prevent a loss of balance for users ascending or descending stairs.
- Handrails provide a way for users to quickly recover balance after a slip.

Building codes and research findings do not completely agree on the height a handrail should be placed so that they may adequately serve the above functions. Research indicates that a handrail placed at a height of 36 to 40 inches is most effective in the prevention of falls when descending stairs. National and state building codes require a handrail height of 30 to 34 inches. The Human Factors Design Handbook suggests that a height of 34 inches (see figure 2) be used. This dimension falls within the range required by most building codes.

PINCH GRIP VS. POWER GRIP
A great deal research on the grip force capability of a human has been conducted. Research has shown that the power grip (figure 3) utilizes the full grip forces in the hand. A round shaped rail with a diameter of 1.5 inches gets the most out of an adult grip force, while a handrail with a diameter of between 1.125 and 1.25 inches utilizes the most grip force of a child. Some carpenters like to use a rectangular shaped board tipped on the edge as a handrail. These are very decorative and easier to install than a round handrail, but they require the
use of a pinch grip, the least effective grip to use when using a stairway. Use a round shaped handrail to maximize safety.

Falls on residential stairs result in deaths and injuries to many people in the United States each year. By utilizing the information in this article and by having a human-factors approach to the design, construction, and maintenance of the stairway, many injuries can be prevented. Reference: "House Facts Mail," April 2000.

Are Antioxidant Vitamin Supplements Helpful or Harmful?

The mixed messages you're hearing from a variety of sources may leave you wondering if taking some vitamin supplements will keep you healthy or put you at greater risk for some diseases.

Large doses of antioxidants, and beta-carotene, have been touted to help prevent the risk of chronic diseases such as cancer, heart disease, eye diseases, Alzheimer's, and Parkinson's. But, do they really work and are they safe?

Antioxidants are nutrients that protect cells from harmful oxidation. Although oxidation is a natural process, it is linked to many age-related diseases. Vitamins that act as antioxidants include vitamins A, C, E, and beta-carotene. The mineral selenium also has a protective role. These vitamins are found naturally in many foods, particularly fruits and vegetables. They are also available in supplement (pill) form.

A report on Dietary Reference Intakes (DRIs) from the Institute of Medicine says that there is not enough evidence to conclude that large doses of antioxidants prevent chronic diseases. Studies have shown that eating foods rich in antioxidants, such as fruits and vegetables, prevent cell damage from oxidation, but more research is needed to conclude that they actually prevent disease or that antioxidant supplements can do the same. In fact, the report states that high doses of antioxidant supplements may even be harmful.

The report gives new daily recommendations for the antioxidant nutrients, vitamins C, E, and selenium. It also gives an upper limit to reduce the risk of harm from high doses of supplements.

**Vitamin C** - The report increases the recommended daily intake for vitamins C and recommends an even larger amount for smokers. Foods rich in vitamin C include oranges, grapefruit, potatoes, strawberries, broccoli, and leafy green vegetables.

**Vitamin E** - Recommended daily intakes for vitamin E were increased
from the previous recommendations. There is some evidence that vitamin E may help prevent heart disease. Vitamin E is found in nuts, seeds, vegetable oils, wheat germ, liver, and leafy green vegetables.

**Selenium** - Recommended daily intake is 15 mg for both men and women. Food sources of selenium include seafood, liver, meat, and grains.

**Beta-carotene** - The report recommends caution with beta carotene supplements and does not encourage supplements except to correct vitamin A deficiency. Many of the studies with beta-carotene showed harmful effects. The report did not recommend a daily intake level for beta-carotene.

The jury is still out on the definite role antioxidants play in disease prevention. Also, there is not enough evidence on the use of supplements to recommend them. The results of several clinical trials now in effect and other future research may shed some more light on this issue. Until then, it is recommended to get your antioxidants from foods and forgo the pills.

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Recommended Daily Intake</th>
<th>Upper Limit (Adults)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>75 mg†</td>
<td>90 mg</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>15 mg</td>
<td>15 mg</td>
</tr>
<tr>
<td>Selenium</td>
<td>55 mcg</td>
<td>55 mcg</td>
</tr>
<tr>
<td>Beta-Carotene</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

† Add 35 mg for smokers
†† Natural vitamin E (d-alpha-tocopherol) form

mg = milligrams mcg = micrograms
IU = International Units


Strawberry Smoothie

1 cup sliced fresh strawberries
¾ cup fresh, diced pineapple
1 large banana
1 cup vanilla fat-free frozen yogurt
4 ounces orange juice
6-8 ice cubes

Add ingredients to blender and mix until smooth. Serves 3.

Serving size: approximately 8 ounces

Nutrition Analysis:

| Calories: 255 | Protein: 4 g |
| Fat: 1 g     | Carbohydrate: 57 g |
| Fiber: 4 g   | Sodium: 48 mg |
| Cholesterol: 0 mg |

mg = milligrams g = grams
Dear Friend:

SENIOR SENSE is a quarterly publication provided by your local county Extension Service office. It is prepared by Extension Family & Consumer Sciences specialists at The University of Georgia specifically for the educational needs of older Georgians.

Please contact your local Extension Service office for more information on these and related topics.

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