Worried about your bone density? Anti-osteoporosis drug makers hope you are. Osteoporosis is represented as a deadly disease, a silent killer affecting millions of women who go about their daily lives, unaware that their bones are dwindling to kindling. A 1995 book for consumers states, 'If osteoporosis gets bad enough, a woman who has it could suffer a broken arm lifting a casserole out of the oven or reaching back to zip up her dress. She could break her foot stepping out of bed or a rib upon sneezing.\(^1\)

The National Osteoporosis Foundation (NOF) says: 'Osteoporosis is a major public health threat for an estimated 44 million Americans, or 55% of the people 50 years of age and older. In the U.S., 10 million individuals are estimated to already have the disease and almost 34 million more are estimated to have low bone mass, placing them at increased risk for osteoporosis.\(^2\) Seems to me that if more than half the population over 50 is so deficient in bone mass there should be a lot more people found in crumpled heaps by their ovens and beds.

NOF's website also says: 'A hip fracture...can impair a person's ability to walk unassisted and may cause prolonged or permanent disability or even death.' Another suspect statement. Breaking an arm doesn't kill people; why should breaking a hip? Associations between hip fracture, disability, and death are misleading because hip fracture is a marker for frailty. If you're a frail and elderly (especially if you have other medical problems), being hospitalized for any major surgery, including to fix a hip fracture, can kill you.

The average age of hip fracture is 80. As one researcher put it, 'High mortality, particularly in the first three months, is probably due to the combination of trauma, major surgery in elderly people with concurrent medical problems, and a low physiological reserve.\(^3\) O ne study of 2,448 patients admitted to the hospital with hip fracture found a high rate of postoperative complications. Patients with multiple medical problems before hospitalization did worse; about 10% died within a month, usually of chest infections or heart failure.\(^3\) This doesn't mean that hip fractures were the culprit. In fact, researchers state, 'Few of these deaths can be attributed to the hip fracture per se; most are due instead to chronic illnesses that led to both the fracture and to the patient's ultimate demise. Thus, whether prevention of hip fracture can extend life expectancy, and to what extent, is unclear.\(^4\)

Even if your bones look like Swiss cheese, avoiding falls is more important than building bone; falls cause more than 90% of hip fractures and 80% of other fractures. Preventing falls would prevent most fractures. Just increasing physical activity could cut falls by half. Fall risk factors include being older; having muscle weakness or limited mobility; being challenged by environmental hazards (e.g., throw rugs, slippery shoes); taking four or more medications or taking psychoactive drugs; having dementia, visual difficulties, or Parkinson's; and experiencing a stroke. Age is probably most important: women over 85 are nearly 8 times more likely to be hospitalized for hip fracture than women aged 65-74.

Nursing home residents contribute more than their fair share of broken bones and fall-related deaths to these statistics. Among older adults, the 5% who live in nursing homes suffer 20% of all fall-related deaths.\(^5\) Up to three out of four nursing home residents fall annually, twice the rate of seniors living in the community.\(^6\) Older, more than 1/3 of fall-related injuries in nursing homes occur to residents who weren't able to walk before the fall.\(^7\)

Despite the scary scenarios perpetuated by drug makers, the absolute risk of hip fracture is low, especially in 50-year-olds. The risk that a 50-year-old woman will fracture her hip in the next 10 years is just 0.4%. The 10-year risk for a 60-year-old is 1.5% at 70, the risk is 4.7% and at 80, is 11%. So, one 50-year-old of 250 will fracture her hip by age 60; at 70, one woman in 20 will fracture her hip in the next 10 years.

Osteoporosis is not a killer disease. It's not really a disease at all, but a structural abnormality. 'Osteopenia' is a term that's become popular recently as a way to expand market share for bone-building drugs. Let's see: osteoporosis is a risk factor for osteoporosis; which is a risk factor for hip fracture; which is a risk factor for surgery, immobility and complications; which is a risk factor for death, but primarily in frail elderly nursing home residents (and not just the women)! A multimodal fall prevention and mitigation program — including eye exams, medication adjustments, strength training, environmental modifications, hip protectors and appropriate antosteoporosis therapies could have a real effect on decreasing fall-related disability and death. Scaring ambulatory, community-dwelling women into taking antosteoporosis drugs benefits corporate coffers, not women's health.

**References**


Adriane Fugh-Berman, M.D., is an associate professor in the Georgetown University School of Medicine Department of Physiology, and a former chair of the NWHN.