

# managing MENOPAUSE

## How to Curb Hot Flashes, Bone Loss, and Other Symptoms

By David Schardt



### Hot Flashes

Hot flashes are the most common symptom women experience during menopause. Seventy-five percent of the 2,500 participants in the Massachusetts Women's Health Study, for example, reported having had hot flashes during menopause.

"It's been estimated that women suffer from hot flashes for one to five years, but I have seen several women in their 70s who were still dealing with them," says Wayne State University's Robert Freedman.

His research suggests that hot flashes are triggered when a woman's core body temperature rises slightly. (That's the temperature deep within the body, not what a regular thermometer measures.) Ordinarily, the rise wouldn't cause much discomfort.

"But in menopausal women, we think their tolerance for small increases in core body temperature, above what we call their thermoneutral zone, is greatly reduced," says Freedman. When that zone is breached, the result is flushing and sweating.

Researchers aren't sure why the tolerance for small changes in temperature shrinks during menopause.

"We don't have a good animal model to study hot flashes in menopause that occurs naturally, because very few animals live much beyond their reproductive years," notes Debra Barton, who studies non-hormonal treatments for menopausal symptoms at the Mayo Clinic in Rochester, Minnesota.

"The gold standard treatment is estrogen, which dramatically lowers the rate of hot flashes," says Freedman. But the hormone also raises the risk of heart disease, stroke, and dementia, so many women no longer take it.

While nothing curbs hot flashes as effectively as estrogen, several alternatives may provide some relief.

In 1900, a woman born in the U.S. could expect to live to age 48.

Today, she's more likely to reach age 80.

"Women are living one third of their lives after menopause," says Susan Hendrix of the Wayne State University School of Medicine in Detroit. So getting through the hot flashes and dealing with the increased risk of heart disease and bone and memory loss isn't just academic.

More than a million American women enter menopause each year in the prime of their lives. And research on preventing or curbing its symptoms is no longer considered an oddity.

"I started studying hot flashes more than 20 years ago, and when I told people what I was working on, they would giggle," remembers Robert Freedman of Wayne State University, the dean of hot flash research in the U.S. "They don't do that any more."

Here's some of what menopause researchers have learned over the past several decades.

■ **Paced breathing.** Using breathing exercises to relax can relieve hot flashes—sometimes the frequency, sometimes the intensity, sometimes both, says Freedman (see "Breathe After Me"). "In three of our studies, slow, controlled deep breathing cut the frequency of hot flashes by about half."

In his most recent trial, 24 women suffering at least five hot flashes a day were randomly assigned to practice either paced breathing or brainwave biofeedback. The number of hot flashes fell by half in the breathing group, but didn't budge in those doing biofeedback.<sup>1</sup>

And researchers in Sweden and at the Harvard Medical School have shown that relaxing through breathing can ease the intensity—and sometimes the frequency—of hot flashes.<sup>2,3</sup>

"We think the breathing expands the temperature zone a woman can tolerate, but we're not certain how," says Freedman.

■ **Keeping cool.** "Running the air conditioning or a fan should help," says Freedman, because lower room temperatures can blunt the rise in body temperature. That may seem obvious, but it's good to know that research backs it up.

When six women who were averaging 10 hot flashes a day spent eight hours in a room kept at 89° F, they had 12 hot flashes that lasted around six minutes each. But during eight hours in a room kept at 66° F, the number of hot flashes dropped to three, lasted an average of about two minutes, and were about half as intense.<sup>4</sup>

The optimal room temperature will vary from woman to woman, says Freedman.

"Wearing loose, layered clothing ought to work, too, although we haven't tested it," he adds. That increases air flow around the skin, which cools the blood flow and evaporates sweat better.

### ■ Losing weight and exercising.

Menopausal women who are overweight are likely to suffer more hot flashes or night sweats than menopausal women who aren't.<sup>5</sup> "It's possible that increased body weight gives you more insulation," says Freedman, "so you're going to have a little bit higher core body temperature."

Researchers haven't tested whether losing weight suppresses the flashes.

Women who exercise daily also have far fewer severe hot flashes.<sup>6</sup> That may be due to the exercise, or women may be more likely to exercise if they're having fewer severe flashes.

■ **Low-dose antidepressants.** "The non-hormonal treatment with the best evidence of effectiveness is low doses of the antidepressants Effexor, Paxil, or Prozac," says the Mayo Clinic's Debra Barton.

"Well-controlled trials show that they decrease the frequency of hot flashes from 50 percent to 60 percent in a majority of women."<sup>7</sup> Since the drugs are used in doses lower than for the treatment of depression, "they have very tolerable side effects," says Barton.

■ **Herbal supplements.** "Soy can be put to rest as a potential therapy for hot flashes," says Barton. "Most of the numerous placebo-controlled trials—ours included—have shown no effect."<sup>8</sup>

It's not clear whether black cohosh, which is also touted as a hot-flash remedy, can alleviate symptoms.

A half dozen well-designed studies—including a trial by researchers at the Mayo Clinic in 132 women—are still in progress.

But the results may be overshadowed by an unpublished preliminary study in mice suggesting that the herb may stimulate the spread of breast cancer. And doctors have reported three cases of liver failure in women who were taking it (although it's not

certain that black cohosh was the culprit).<sup>9,10</sup>

Our advice: until researchers learn more, avoid supplements that contain black cohosh, especially if you've had breast cancer.

### Heart Attack, Stroke, Diabetes

"Within a short time after a woman stops having menstrual periods, her total cholesterol, LDL ["bad"] cholesterol, and triglycerides go up by about 10 to 20 percent and her HDL ["good"] cholesterol falls slightly," says researcher Molly Carr of the University of Washington in Seattle. That's partly why heart attack and stroke rates climb after women reach menopause.

"Other metabolic changes also occur during this time that may be as significant as the rise in cholesterol," she adds.

Before menopause, women typically are shaped like pears—that is, they accumulate fat in their thighs and buttocks. This subcutaneous fat lies just beneath the skin.

Men, on the other hand, typically are shaped like apples. They store excess fat in their abdominal cavity. "This intra-abdominal, or visceral, fat is deep fat wrapped around your organs," says Carr.

When women go through menopause, their fat storage often shifts from subcutaneous to visceral. In many cases, they don't gain weight; they just switch fruits—from pear to apple.

"What women tell me, and the studies bear this out," says Carr, "is that the scale reads the same but their clothes fit differently and the waistband on their pants is tighter."

This redistribution of fat may lead to the metabolic syndrome, Carr notes.

"That's a constellation of closely related risk factors, like elevated insulin and blood sugar levels, that put women at increased risk of diabetes and cardiovascular disease." Postmenopausal women are 60 percent more likely to have the metabolic syndrome than premenopausal women.<sup>11</sup>

"What's unclear," says Carr, "is whether this redistribution of fat happens to most women, or only to women who are genetically susceptible or physically inactive."

"Menopausal women should get out a measuring tape and check their waist circumference," she suggests. If it's more than 35 inches, that's a sign of excess visceral fat and puts the women at greater risk for the metabolic syndrome. (For men, risk rises at more than 40 inches.)

And doctors need to look beyond the LDL cholesterol levels of postmenopausal women, since most people with the metabolic syndrome have normal LDL.

"If your LDL is low, but your triglycerides are elevated and your HDL is reduced, you should have your fasting blood glucose tested to rule in or rule out the metabolic syndrome," says Carr. Higher-than-normal blood pressure is another sign.

If you have the syndrome, the first-line treatment is to lose weight by eating less and exercising more.

"When people lose weight with exercise, there is a preferential loss of fat from the abdominal cavity," says Carr. The National Academy of Sciences recommends an hour a day of brisk walking or other aerobic exercise to lose weight.

## Breathe After Me

*Here's the breathing exercise that slashed the number of hot flashes in half in three small studies. The technique can also be used by anyone to relax.*

1. Sit in a quiet room in comfortable clothing if possible. Don't lie down (you might fall asleep).
2. Inhale slowly and deeply through your nose for five seconds, then exhale slowly for five seconds. Focus on the air going in and out. When you inhale, breathe into the bottom part of your lungs (your upper lungs and chest will fill up automatically). Your belly should expand as you breathe in and contract as you breathe out.
3. When your mind wanders and distracting thoughts arise, let them pass and return your focus to your breath.
4. Repeat for 15 minutes in the morning and 15 minutes in the afternoon. You can also do the exercise whenever you feel a hot flash coming on.



## Bones

"Our old thinking was that every woman going through menopause will lose bone, but we now know that isn't true," says Clifford Rosen, director of the Maine Center for Osteoporosis Research at the University of Maine.

"Some women lose virtually no bone, while others lose a fairly significant amount of bone very quickly."

Researchers aren't certain why, but they know that genes play a role. "The area we least understand," says Rosen, "is who is genetically more predisposed to bone loss when estrogen declines with menopause."

There are clues, though. Women who have had a bone fracture of any kind, even from an accident, are at greater risk, as are those whose mothers have had osteoporosis or a bone fracture. Small-framed women with small wrists also seem to have a higher risk.

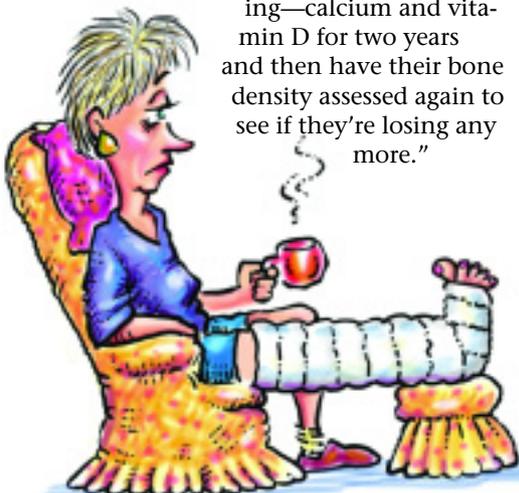
It makes sense for women who are approaching menopause to take calcium and vitamin D, and to talk to their doctors about a bone density scan, says Rosen. (Sun exposure also supplies vitamin D, but not in the winter if you live north of the line roughly connecting Los Angeles and Atlanta.)

If bone density is low, it means that the woman either has lost bone during the previous few years or has a genetic predisposition to low bone density.

"Whichever the reason, those women can't afford to lose a lot of bone," says Rosen.

If a woman has a T-score below -2.5 SD (standard deviations) on a bone density scan, she has osteoporosis, says Rosen, and it's time to consider prescription drugs.

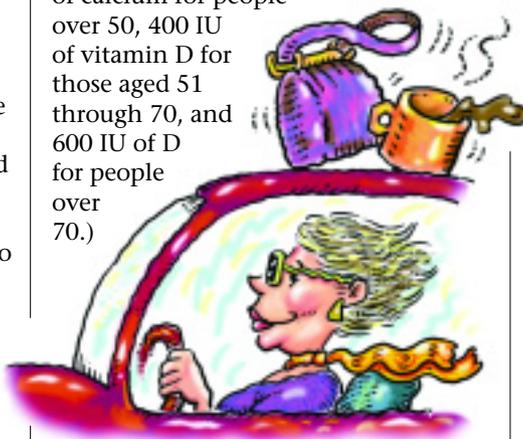
Otherwise, "I usually recommend that they continue to take—or start taking—calcium and vitamin D for two years and then have their bone density assessed again to see if they're losing any more."



Illustrations: Loel Barr.

How much should they get?

"Women should be getting at least 1,000 mg of calcium and 400 IU to 800 IU of vitamin D every day, regardless of the results of a bone scan," says Rosen. That's from food and supplements combined. (The National Academy of Sciences recommends 1,200 mg of calcium for people over 50, 400 IU of vitamin D for those aged 51 through 70, and 600 IU of D for people over 70.)



Rosen also recommends that women take a daily multivitamin that contains vitamin K. In several studies, women who consumed roughly 50 to 100 mcg a day of vitamin K from food and supplements had a higher risk of hip fracture than women who consumed roughly 110 to 250 mcg.<sup>12</sup>

(Don't count on getting your vitamin K from a multi. None of the ones we looked at last year contained more than 100 mcg. Only half had 25 mcg or more, and many didn't have any, because the vitamin interferes with blood-thinning drugs. The richest food sources are spinach, kale, broccoli, Brussels sprouts, lettuce, and other leafy greens.)

Weight-bearing exercise like walking, dancing, or aerobics—almost anything but swimming and bicycling—also helps prevent bone loss, says Rosen.

About half of all women are still losing bone after taking calcium and vitamin D for two years.

"The good news is that even if women have lost a little bone over the two years, it can be restored quite easily with the medications we have," says Rosen.

Drugs like raloxifene (Evista) and tamoxifen (Nolvadex) protect against bone loss as well as breast cancer. They can cause side effects like hot flashes and vaginal dryness, though. Alendronate sodium (Fosamax) won't protect against breast cancer, but has fewer side effects.

"I think that's where we're headed, designing drugs like these that will protect against bone loss and not lead to life-threatening side effects in the high-risk individuals who don't respond to calcium and vitamin D," Rosen predicts.

## Memory & Cognition

"Most women in midlife are concerned about a decline in their memory and mental skills," says Pauline Maki, a cognitive neuropsychologist at the University of Illinois at Chicago.

A majority of those in the Seattle Midlife Women's Health Study, for example, said that their ability to remember names, telephone numbers, and other information wasn't as good as it was when they were younger.<sup>13</sup>

"Yet when the memory and mental skills of women experiencing menopause are tested, they don't perform any worse than women who haven't reached menopause yet," says Maki.<sup>14</sup>

Unpublished data from the Baltimore Longitudinal Study may help explain the discrepancy.

"Among women going through menopause, only those who reported being bothered by symptoms—mostly mood complaints—performed significantly worse on memory and other cognitive tests," says Maki.

"Women should feel comforted by this," she adds, "because it suggests that the problems with memory and mental skills during menopause are temporary." It also suggests that anything that improves symptoms should improve memory.

"If a woman takes an antidepressant to relieve mood complaints, for example," says Maki, "in theory that should also help her cognition." And when menopause ends, the memory and other cognitive problems should end, too. 🍷

<sup>1</sup> *Amer. J. Obstet. Gynecol.* 167: 436, 1992.

<sup>2</sup> *J. Behav. Ther. Exp. Psych.* 28: 251, 1997.

<sup>3</sup> *J. Psychosom. Obstet. Gynaecol.* 17: 202, 1996.

<sup>4</sup> *J. Therm. Biol.* 17: 43, 1992.

<sup>5</sup> *Obstet. Gynecol.* 101: 264, 2003.

<sup>6</sup> *Amer. J. Epidemiol.* 152: 463, 2000.

<sup>7</sup> *Mayo Clin. Proc.* 77: 1207, 2002.

<sup>8</sup> *J. Clin. Oncol.* 18: 1068, 2000.

<sup>9</sup> *Med. J. Aust.* 177: 440, 2002.

<sup>10</sup> *Med. J. Aust.* 179: 390, 2003.

<sup>11</sup> *J. Clin. Endocrinol. Metab.* 88: 2404, 2003.

<sup>12</sup> *Amer. J. Clin. Nutr.* 71: 1201, 2000.

<sup>13</sup> *J. Womens Health Gen. Based Med.* 10: 351, 2001.

<sup>14</sup> *Neurology* 61: 801, 2003.