

Stressed? Your body has the answer



We all know the face of stress: the clenched jaw, the furrowed brow, the intense stare. And, really, it's not a bad look. We all do some of our best work under pressure. Adrenaline and other stress hormones give us the kick start we need to meet deadlines and generally get ahead in life.

But when stress runs too hot for too long, the look changes. People who are stressed for years don't merely appear driven or focused. They look beaten down. In large doses, stress can wear the body and speed up the clock on aging.

The wear and tear of stress can show up in every part of the body: individual cells, bones, skin. You can even see it in photographs. A Dutch study from 2012 asked volunteers to guess the age of nearly 300 people from photos. The researchers also checked all of the photo subjects for cortisol, a key stress hormone. The results were telling: People with high levels of cortisol almost always looked older than they really were. The researchers estimated that each tiny increase in cortisol – each micromole per liter, to be exact – aged a person by about half a year.

Ronald Nathan, an author and psychologist who runs a men's-only practice in Albany, N.Y., says he can see the telltale signs of stress in his clients. Wrinkles are one giveaway.

“They have the No. 11 between their eyebrows,” he says. “I think the Botox industry is largely based on trying to erase the signs of stress.”

Why does stress leave so many marks? As Nathan explains, cortisol and other stress hormones trigger a “fight or flight” mind-set—something that was very helpful when our species was competing with lions and cave bears. “But in modern life, we don’t have a lot of fights, and there’s no place to run,” he says. The body turns that tension inward, sometimes with disastrous results.

Here are just a few ways that stress can wear down the body. As Nathan frequently tells his patients, stress-related problems can often be avoided. Lifestyle changes, counseling and relaxation exercises can take much of the sting out of stress, he says.

Grinding teeth. Lots of people take out their stress on their teeth, says Eugene Antenucci, a fellow of the American Academy of General Dentistry who has a practice in Huntington, N.Y. As he explains, teeth grinding, or bruxism, is a natural extension of the clenched jaw that most people have in times of stress. When patients come in with newly chipped or worn-down teeth, they’re usually going through a rough patch in their lives. “I hear it all the time. Their jobs are tough. They have money issues. Someone has passed away. They need to deal with stress to stop the grinding.”

Gum disease. Studies have found that people with the most cortisol in their blood, an unmistakable sign of stress, are especially likely to suffer from periodontal disease. And that leads to tooth loss and root canals, as if they didn’t already have enough stress in their lives. It’s not entirely clear how trouble at work or home can lead to unhealthy gums, but Antenucci says that stressed-out people often have dry mouths, one of the major causes of gum disease. “They also don’t take very good care of themselves. When you’re under stress,

brushing every day is something that might not happen.”

Inflammation. Lots of people are literally inflamed with stress, says Sheldon Cohen, professor of psychology at Carnegie Mellon University. He explains that cortisol and other stress hormones trigger inflammation all over the body. In small doses, that’s OK, because a little inflammation can help fight infections and speed up healing from injury. But when people are too stressed out for too long, inflammation can get out of control, setting the stage for a long list of potential problems, including pain, heart disease and a weakened immune system. Cohen’s own research has found that stressed people get more than their fair share of colds.

Thinning hair. Most people dealing with hair loss can put the bulk of the blame on their genes. But stress certainly doesn’t help. A 2012 study of 98 pairs of identical female twins found that sisters who reported the most stress in their lives also had the most hair loss. Perhaps not entirely coincidentally, thinning hair was also especially common in women who had the most children.

Thinning bones. One of the pernicious side effects of cortisol is that it keeps bones from absorbing calcium. A 2012 Israeli study of 135 post-menopausal women found that depression, anxiety and stress were all associated with low bone mineral density.

Weight gain. Recent studies have found that stress can upset the balance of hormones that help control appetite. But it’s no secret that stressed people often turn to food for comfort. A 2012 study of 457 women by researchers at UC San Francisco found that women with the most stressful lives also had the biggest problems with overeating.