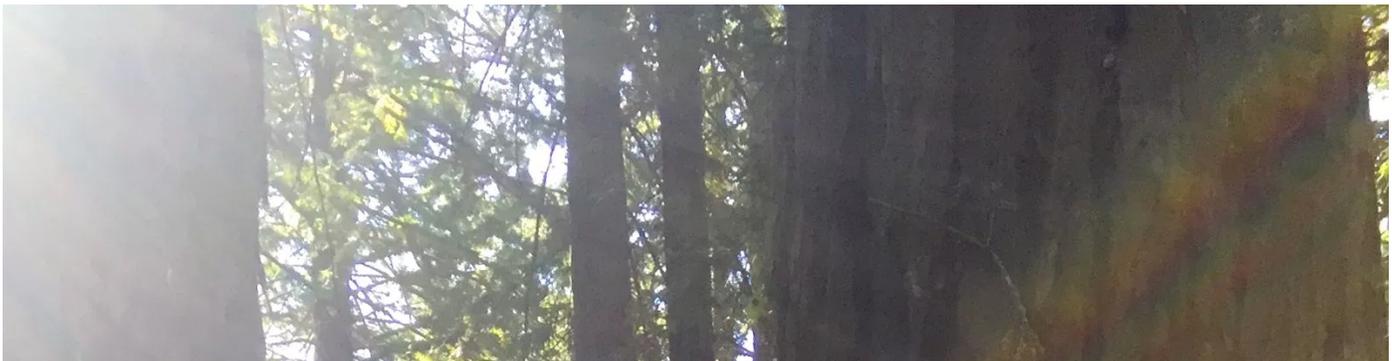

QUARTZ

TREES PLEASE

The Japanese practice of 'forest bathing' is scientifically proven to improve your health

Ephrat Livni | October 12, 2016





📷 Wilderness does wonders. (Ephrat Livni)

The tonic of the wilderness was Henry David Thoreau’s classic prescription for civilization and its discontents, offered in the 1854 essay *Walden: Or, Life in the Woods*. Now there’s scientific evidence [supporting eco-therapy](#). The Japanese practice of [forest bathing](#) is proven to lower heart rate and blood pressure, reduce stress hormone production, boost the immune system, and improve overall feelings of wellbeing.

Forest bathing—basically just being in the presence of trees—became part of a national public health program in Japan [in 1982](#) when the forestry ministry coined the phrase *shinrin-yoku* and promoted topiary as therapy. Nature appreciation—picnicking en masse under the cherry blossoms, for example—is a national pastime in Japan, so forest bathing quickly took. The environment’s wisdom has long been evident to the culture: [Japan’s Zen masters](#) asked: *If a tree falls in the forest and no one hears, does it make a sound?*

To discover the answer, masters do nothing, and gain illumination. Forest bathing works similarly: Just be with trees. No hiking, no counting steps on a Fitbit. You can sit or meander, but the point is to relax rather than accomplish anything.

“Don’t effort,” says Gregg Berman, a registered nurse, wilderness expert, and [certified forest bathing guide](#) in California. He’s leading a small group on the Big Trees Trail in Oakland one cool October afternoon, barefoot among the redwoods. Berman tells the group—wearing shoes—that the human nervous system is both of nature and attuned to it. Planes roar overhead as the forest bathers wander slowly, quietly, under the green cathedral of trees.

From 2004 to 2012, Japanese officials spent about [\\$4 million dollars](#) studying the

physiological and psychological effects of forest bathing, designating 48 therapy trails based on the results. Qing Li, a professor at Nippon Medical School in Tokyo, measured the activity of human natural killer (NK) cells in the immune system before and after exposure to the woods. These cells provide rapid responses to viral-infected cells and respond to tumor formation, and are associated with immune system health and cancer prevention. In a [2009 study](#) Li's subjects showed significant increases in NK cell activity in the week after a forest visit, and positive effects lasted a month following each weekend in the woods.

This is due to various essential oils, generally called phytoncide, found in wood, plants, and some fruit and vegetables, which trees emit to protect themselves from germs and insects. Forest air doesn't just feel [fresher and better](#)—inhaling phytoncide seems to actually improve immune system function.



📷 The essence of health. (Ephrat Livni)

Experiments on [forest bathing](#) conducted by the Center for Environment, Health and

Field Sciences in Japan's Chiba University measured its physiological effects on 280 subjects in their early 20s. The team measured the subjects' salivary cortisol (which increases with stress), blood pressure, pulse rate, and heart rate variability during a day in the city and compared those to the same biometrics taken during a day with a 30-minute forest visit. "Forest environments promote lower concentrations of cortisol, lower pulse rate, lower blood pressure, greater parasympathetic nerve activity, and lower sympathetic nerve activity than do city environments," the study concluded.

In other words, being in nature made subjects, physiologically, less amped. The parasympathetic nerve system controls the body's rest-and-digest system while the sympathetic nerve system governs fight-or-flight responses. Subjects were more rested and less inclined to stress after a forest bath.

Trees soothe the spirit too. A study on forest bathing's [psychological effects](#) surveyed 498 healthy volunteers, twice in a forest and twice in control environments. The subjects showed significantly reduced hostility and depression scores, coupled with increased liveliness, after exposure to trees. "Accordingly," the researchers wrote, "forest environments can be viewed as therapeutic landscapes."

City dwellers can benefit from the effects of trees with just a visit to the park. Brief exposure to greenery in [urban environments](#) can relieve stress levels, and experts have [recommended](#) "doses of nature" as part of treatment of attention disorders in children. What all of this evidence suggests is we don't seem to need a lot of exposure to gain from nature—but regular contact appears to improve our immune system function and our wellbeing.

Julia Plevin, a product designer and urban forest bather, founded San Francisco's 200-member Forest Bathing Club Meetup in 2014. They gather monthly to escape technology. "It's an immersive experience," Plevin explained to Quartz. "So much of our lives are spent interacting with 2D screens. This is such a bummer because there's a whole 3D world out there! Forest bathing is [a break from your phone](#) and computer... from all that noise of social media and email."

Before we crossed the threshold into the woods in Oakland, Berman advised the forest

bathers to pick up a rock, put a problem in and drop it. “You can pick up your troubles again when you leave,” he said with a straight face. But after two hours of forest bathing, no one does.

Joy Chiu, a leadership and life coach on the forest bath led by Berman, explained that this perspective on problems lasts long after a bath, and that she returns to the peace of the forest when she’s far from here, feeling harried. “It’s grounding and I go back to the calm feeling of being here. It’s not like a time capsule, but something I can continually return to.”

BURN IT ALL DOWN

The US election is ending in a dumpster fire—and that’s just what America deserves

Daniel R. DePetris | 4 hours ago



📷 No one to blame but ourselves. (Reuters/Gary Cameron)

The American people want this election season to be over. And they wanted it to be over yesterday.