



KARYN SHANKS MD

Heart, Hope, Healing

Toxic

BY KARYN SHANKS MD | NOVEMBER 25, 2018



I'm writing you this week from one of the most polluted places in the world.

You guessed it—Northern California.

Emissions from the Camp Fire fires accumulated downstream in the San Francisco bay area, reaching record levels exceeding the most polluted cities on the planet.

Experiencing this level of toxicity has been profoundly eye opening about the human cost of uncontrolled pollution and escalating wildfires.

My husband and I arrived just a few days after the fires started, completely unaware of the bay area impact. We'd come to celebrate our son's 22nd birthday and were looking forward to sharing some favorite bay area experiences.

We were alerted to the magnitude of the problem when we noticed the city and ocean were obscured by smoke as we landed at the SF International airport. My chest, throat, eyes, and sinuses burned as soon as we stepped out.

The following day we hiked beloved trails in Muir Woods—home of giant redwoods, expecting to be buffered by the forest and ocean breezes. What we found instead were spectacular views of the San Francisco bay completely obliterated by smoke trapped within the competing currents of land and ocean meeting in the bay, and dense smoke eerily filtering the sunlight amongst the trees.

By the end of our hike I felt unusually exhausted, achy, and generally ill. It took an hour's rest in our air-conditioned hotel room to feel somewhat better. How lucky was I to have that refuge?

We calculated that our time in Muir Woods, according to the pollution index that day, was like smoking half a pack of cigarettes! No wonder...

We sucked in small particulates as well as gaseous products of combustion—the primary toxicants of woodland fires.

The small particulates cause the most injury. They find their way deeply into the lungs and mucus membranes, triggering an immediate and vigorous immune response. This is what I've experienced as respiratory irritation and fatigue. Exposure to wood fire particulates are what send so many to emergency rooms for respiratory and vascular emergencies. They are also linked to carcinogenesis with more long-term exposure.

Gaseous emissions include carbon monoxide, nitrous oxides, benzenes, polycyclic aromatic hydrocarbons, aldehydes, and volatile organic compounds—all toxic, all linked to carcinogenesis, though perhaps less of a problem than the particulates due to the potential for rapid dispersion into the atmosphere.

In response to the potential impact of the fire emissions toxicity, my son's classes at UC Berkeley were cancelled and campus virtually closed down. The Cal-Stanford football game (a hugely anticipated rivalry) was rescheduled. People, still taking to the streets, have been milling around in masks (that probably do little, but it's something).

I've also been thinking, with great alarm and acutely realized insight, about the folks living near the fires, exposed to intense toxicity layered on the trauma of losing their homes, communities, and lives of loved ones. And of the rescue workers—the heroes who volunteer to be there—in the center of the toxic storm. Bless them all.

Landing in the middle of all this reminds me about how much we can't control. Wild fires have been part of the cycle of Nature forever. And what we can control about environmental vulnerability to these disasters may not be immediately remedied.

But we are not completely helpless. We can bolster ourselves in the face of these unexpected challenges.

I believe that if it weren't for my vigilant approach to self-care, I would be faring way worse this weekend.

I'm using this experience as a wakeup call and a swift reminder to make all the improvements I possibly can.

For me the call is to:

- Bolster and optimize internal detoxification mechanisms.
- Reduce the overall load of toxicity and unnecessary inflammation—to minimize the effect these events can have on me.

How?

Eat well. Food provides the building blocks for biological resilience to all life's challenges through both nutrient density and avoiding irritants.

Support **detoxification** 24/7. This is not something we can expect to accomplish with just a seasonal detox program.

Reduce excesses of stress to support overall energy production. Detoxification is energy expensive!

Address common triggers of excess **inflammation.**

Sleep well. Sleep is a critical time for detoxification and energy support.

Connect. Human connection is powerful anti-inflammatory and detoxification support.

And, finally, do what I can to clean up and protect my environment, and assist the victims and heroes of environmental disasters in whatever ways I can.

Have a Beautiful day!

Karyn

Resources

National Geographic. [Wildfires: How They Form and Why They're So Dangerous.](#) 2017.

The American Red Cross—[Helping Fire Victims.](#)

[Wildfire Relief Fund.](#)

Karyn Shanks MD. [Foundational Intensive Nutrition Energy \(FINE\) Food Plan.](#) 2018.

Karyn Shanks MD. [Detox is About Letting Go: Part One of a Series.](#) 2016.

Karyn Shanks MD. [Detox is About Letting Go: Part Two of a Series.](#) 2016.

Karyn Shanks MD. [Spring Detox: Five Easy Action Steps for Energy Renewal.](#) 2017.

Karyn Shanks MD. [Insomnia Solution—Part One: The Power of Deep Sleep](#). 2017.

Karyn Shanks MD. [Insomnia Solution—Part Two: Treat the Root Cause](#). 2017.

Karyn Shanks MD. [Inflammation: Beauty, Not the Beast](#). 2017.

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Karyn Shanks, MD, is a physician who lives and practices in Iowa City. Her work is inspired by the science of Functional Medicine, body-mind principles, and wisdom gleaned from the transformational journeys of thousands of clients over her twenty-five-year career. Her work honors each individual and the power of their stories, their inner wisdom, and innate healing potential. She believes that the bones of healing are in what we do for ourselves. She is the author of *Liftoff*, a manual of energy recovery and healing through essential self-care practices.

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