

Hey there. It's me, your brain. Thanks for taking me on this walk in the woods, it's just what I needed. Ah, nature. So lovely. So relaxing.

Wait, wow, what was that noise? Over there, coming from those bushes right next to the path? That huge thing covered in black fur, rearing up on its hind legs and baring its teeth? A bear, you say?

Okay. No problem. Here's what I'm going to do. First, my hypothalamus is going to alert the sympathetic nervous system, telling your adrenal glands to release adrenaline (aka epinephrine). It'll give you a massive boost of energy by releasing stored up glucose (sugar) and fatty acids into your bloodstream. You might need that energy to climb a tree! Wait, bears can climb trees. Well, the adrenaline will also increase your breathing, heart rate, and blood pressure. That will fill your brain and muscles with lots of oxygen-rich blood. Feel it? Now we're talking. Your senses are sharper. You're focused! You're even less sensitive to pain (but lets hope it doesn't come to that).

Now were ready for fight or flight! But, uh, fight doesn't seem like such a good idea, so back away, slowly, no sudden movements. Now that I've got your adrenaline flowing, I'm going to tell those adrenal glands to release cortisol. Adrenaline's rush goes away in a few minutes, but cortisol will keep your blood pressure high, feed you energy, and keep your mind on high-alert for as long as it takes. Hey, the bear turned around. All right, lets use all that energy and run!

Whoo, nice work, we escaped! It's great to be back in the safety of civilization. What's next? Oh, you've got that speech to make in front of all those people? How stressful! Don't worry, I'll keep that cortisol flowing! Boy, it's lucky we weren't mauled, that would have totally messed up your big speech. What's that? You can't remember your speech? Well, yeah, that cortisol has a way of messing with your long-term memory — sorry about that! Hmm, feeling a little sick? Oh, yeah, well, I kinda had to put your immune system on hold there for a while. I

need to shut down all unnecessary functions to deal with these stressful situations. What are you going to do about the audience waiting for your speech? I don't know, can't you just fight them? No? What about fleeing, is that a possibility? Oh. Well, maybe all that cortisol wasn't such a good idea after all. How was I supposed to know? It was so useful when we ran into that bear!"

Ref: <http://brainworldmagazine.com/this-is-your-brain-on-stress/>