

1. Mark your confusion.
2. Show evidence of a close reading.
3. Write a 1+ page reflection.

## Stress Drains Your Body's Battery. Here's How You Can Recharge It

Source: Elissa Epel, *Los Angeles Times*, January 3, 2023

My phone is showing that little red low-battery bar, and I need to plug it in immediately or lose my connection. What if I didn't recharge — no, that would stress me out. But what if, in addition to recharging my phone, I took a few minutes to recharge myself?

We have an energy crisis, not just the burning of fossil fuels ravaging our ecosystems. Inside, we are burning up energy like a wildfire with our chronic stress. And it's exhausting.

The 2022 American Psychological Assn. annual survey on stress showed a flashing red alert: More than a quarter of U.S. adults are feeling overwhelmed by stress — paralyzed, even numb. No wonder we are communally fatigued — stress uses a tremendous amount of energy.

We have fatigue from work, the long shadow of COVID and much more to contend with. We often relive our stress each day in a dystopic routine of unease. Like clockwork, we confront the same situations and worries that can squeeze the stress hormones adrenaline and cortisol out of our adrenal glands, making us feel agitated and ineffective. It's a rhythm we need to break.

After 25 years of studying stress and health, I'm convinced that one of the best things we can do to improve our mental health — and not feel like a fast-draining battery — is break our daily stress routine.

The organic compound adenosine triphosphate, or ATP, is our body's fuel, produced by our mitochondria. It's at the core of our well-being. ATP is needed to fight aging and repair our cells each day from the damage accrued by simply living and especially when under stress. When we are on overdrive, we rely on ATP to mount a super-energized stress response.

Our body has limited energy and carefully triages how it's used — it will always prioritize stress emergencies over repairing cells. Repair comes last, when everything feels safe and orderly. So it's critical to have restorative breaks from stress, to allow time for cellular repair and prevent accelerated biological aging.

Working with mitochondrial expert Martin Picard of Columbia University and others, our team of researchers at UC San Francisco found links between the emotions we feel and the energy level in our cells over long periods of time. Our results suggest that when people are under chronic stress for years, our mitochondrial enzymes weaken and have less capacity to create ATP. Our cells become prematurely aged and inflamed.

The good news is, when we feel positive emotions daily, our mitochondria are revved up, producing lots of energy each day. Here are a few ways to create that positivity and tame the beast of chronic stress:

### Tell yourself the truth.

Our primitive, automatic stress response is often exaggerated, overestimating a threat, burning up our ATP and mobilizing too much glucose. When something stressful happens, we often can't control that initial "gasp" response. But we control what happens next, with our beliefs and thoughts. Asking yourself "Is this situation really going to affect me in a year?" can give a truthful and calming perspective. It's possible to work *with*, rather than against, the stress response. Thank it and remind yourself of its function: "My body is excited, generating energy to help me cope." If you can make that pivot, you are changing the message to your adrenal gland from survival threat to positive challenge.

You are providing more oxygen to your brain so you can problem-solve better and recover more quickly, burning up less ATP.

### **Redirect attention from threat to joy.**

We can also shape our environments to protect us from constant red alerts. Our attention gravitates to threatening information, as our screens so frequently deliver. To protect your precious attention and energy stores, turn off unnecessary alerts on your devices. Create spacious breaks within the day to unplug and focus on something restorative. Shift your attention to being present, to what you can feel grateful for, to connection with others. Smiling can reduce stress. Joy recharges us. Plant something in your day that you look forward to.

### **Build stress fitness.**

You might think all your emotions reside in your brain, but the truth is, we feel them with our whole bodies. Helping your body metabolize stress can change how you feel. Short bursts of aerobic exercise can create a positive stress response (a type of hormetic, or beneficial, stress) and reduce depression. It also increases the number of mitochondria in our body, which means we can create more ATP. Early research suggests that heating up (as in a sauna) and cooling down (with cold showers or cryotherapy) may relieve anxiety and depression.

### **Immerse in green.**

Being in crowded and busy places sends our bodies signals of danger. People who live in cities tend to have exaggerated amygdala threat responses. Nature facilitates the opposite, calming our minds and reducing amygdala activity. Thus we can recharge our batteries with green space time — seek a park, gardens or plants for sensory immersion that signals safety to our bodies. (Yoga, meditation, or slow breathing, even for a few minutes, are also potent ways to recharge.)

The bottom line is that we can break our daily stress habits and create more energy. We can feel ease, contentment, and balance by letting go of embodied and unconscious stress. Life is short. It's even shorter living on half a battery.

### **Possible Response Questions**

- How might you regulate your stress? Explain.
- Did something in the article surprise you? Discuss.
- Pick a word/line/passage from the article and respond to it.
- Discuss a “move” made by the writer in this piece that you think is good/interesting. Explain.