

# COACH *Notes*



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Newsletter

## Your Healthy Brain: The Wisdom of Stress

As knowledge workers in the 21st century, our success depends on having a healthy, functioning brain. What can leading neuroscientists teach us about stress, effective coping skills and peak performance in the workplace?

While you cannot completely eliminate stress, you can make it work for you to improve your brain's ability to function. Your choices – and how you respond to stress – can make you smarter, stronger and wiser.

## The Mind-Body Connection

Most people know that when they exercise, they feel better – but they cannot explain the connection. They assume they're burning off stress, reducing muscle tension or boosting endorphins, all of which are true.

There's more to it than that. The real reason you feel better lies in basic physiology: When you get your blood pumping, your brain functions at its best. This is the true goal for exercise: to build and condition the brain. Building muscles and conditioning the heart and lungs are essentially side effects.

Today's technology-driven tasks put us in front of a computer screen most of the day. Even when you're out of the office, your mobile phone connects you to work tasks.

It's hard to remember that our bodies and brains were built to move. Our brains need physical activity and stimulation. We need to exert more energy than "keyboard calisthenics" allows.

Exercise is crucial to the way we think and feel. It:

- Cues the building blocks of learning in our brains
- Improves mood
- Lowers stress and anxiety
- Improves our ability to pay attention, focus and concentrate
- Helps stave off the deleterious effects of hormonal changes

Exercise increases levels of serotonin, norepinephrine

## UNLIMITED POTENTIAL



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*"Turning potential into performance"*

### Dreamers Welcome

*At Herdlinger Associates, I encourage people to dream. And the positive results have been astounding!*

*When individuals pursue their dreams, their lives percolate with purpose, passion, success, and fulfillment.*

*As a coach, I don't try to make my clients' dreams come true. That's their privilege...and responsibility.*

*My role – and my joy – is to stand by their side to encourage, guide, challenge, and cheer them on.*

*Are your dreams big enough? Let me help you unleash your potential and accomplish more than you ever dreamed possible.*

*...David Herdlinger*

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and dopamine – key neurotransmitters that traffic in thoughts and emotions. People with low levels often suffer from clinical depression and stress, which can erode the connections among the brain’s billions of nerve cells. Chronic depression actually shrinks certain areas of the brain.

Conversely, exercise unleashes a cascade of neurotransmitters and growth factors that can reverse this process. This is why physical activity is so important in our stress-filled workdays.

## Stress – It’s Everywhere

The term “stress” is overused and misunderstood, as it’s bandied about to describe both cause and effect:

- Cause: “There’s a lot of stress at work these days.”
- Effect: “I’m so stressed that I can’t think straight.”

Even scientists cannot always distinguish between the psychological state of stress and the physiological response to it. What is clear is that if we’re in a chronic state of high-level stress, emotional strain leads to physical consequences.

The body responds with anxiety and depression, as well as high blood pressure, heart problems and cancer. Chronic stress eats away at the brain’s connective tissue.

## Work Stress

In a recession, with increased job stress, there’s no getting away from a nerve-wracking environment. Either you’re unemployed and struggling to cope, or you’re employed and doing the job of more than one person.

How can we harness the power of stress to our advantage?

The body’s stress response is actually a built-in gift of evolution. Without it, we wouldn’t be able to survive. The trick lies in finding out how you can turn stress into strength.

## Stress Inoculation

There’s a widening gap between the evolution of biology and society. We no longer hunt lions, but a meeting with a rival brings about the same mental and physical responses.

How you choose to respond to, and cope with, stress can change not only how you feel, but its effect on your brain. If you react passively, the stress can be damaging. In contrast, active coping moves you out of pessimism, fear and retreat.

Research shows that a little stress is actually beneficial. In the 1980s, the U.S. Department of Energy studied

the impact of low dosages of radiation on nuclear shipyard workers. Those exposed to very low levels had a 24 percent lower mortality rate than workers who received no exposure.

Researchers had expected the opposite result. Somehow, instead of killing cells, the radiation dose made them stronger.

What we’ve learned since is that low levels of stress seem to inoculate the brain, just as vaccines protect the immune system. Our brain cells overcompensate to deal with stress, thus girding themselves against future demands.

## How Stress Affects the Brain

Severe stress activates the “emergency phase,” commonly known as the fight-or-flight response. It’s a complex physiological reaction that marshals resources to mobilize the body and brain to peak performance. It also engraves the memory so we can avoid this stressor in the future.

Any amount of stress triggers neurological systems that manage attention, energy and memory. Our ingrained reaction is essentially a three-step process:

1. Recognize the danger.
2. Fuel the reaction.
3. Remember the event for future reference.

## The Wisdom of Stress

When the brain employs this three-step process, stress actually becomes a building block for wisdom. It is powerfully linked to the formation and recall of memories. As long as we don’t go into panic, fear or pessimism, stress activates our ability to achieve peak performance.

This capacity complicates our lives dramatically. The mind is so powerful that we can set off a stress response just by imagining ourselves in a threatening situation.

In other words, we can think ourselves into a frenzy. And, conversely, we can also act ourselves out of this frenzy. Just as the mind can affect the body, the body can affect the mind. The simple act of taking a deep breath and smiling produces a calming effect.

What’s gotten lost amid all the usual self-help advice is that stressful challenges are what allow us to grow and learn. They help us rise to the occasion, making us more physically and mentally robust. What doesn’t kill us really does make us stronger.

As long as stress is not too severe and our neurons have time to recover, our mental machinery is destined to perform better.