


# Could resilience be a key to good health?

There's a lot of buzz lately about resilience. The dictionary defines it as "the capacity to recover quickly from difficulties; toughness." It may be one of the most important factors that influences our health and longevity.

We all know that experiences shape the individual; early life traumas, or later life adversity, often leave a profound imprint. Many people are permanently scarred emotionally, and consequently their health suffers. 

But most of us can cite examples where an individual with a hardscrabble upbringing transcends their background and achieves success and satisfaction. Or where soul-crushing tragedy is shouldered with equanimity.

People who overcome such challenges are said to be endowed with resilience.

*Is resilience an inherent part of character, or can it be acquired—even cultivated?*

Psychologists have long debated that question.

There's some evidence that resilience, to a certain extent, may be hard-wired in our genes. At least one chromosome locus, COMT, may be a major determinant of whether one succumbs to or surmounts stress. Newly-available genetic testing—via saliva or blood—can reveal one's COMT status.

COMT is a gene that is responsible for the degradation of dopamine, a neurotransmitter that is responsible for motivation and reward. Some individuals have a double hit (homozygous) on the chromosome locus that leaves them with insufficient dopamine. These individuals tend to be more intrepid—the "Warriors." Conversely, the opposite double hit causes some people to be flooded with dopamine—the "Worriers".

Of course, it's not as simple as that. Most people—including yours truly—have a mixed pattern (heterozygous). Some studies suggest that ultimately, these individuals are more successful in life; they're motivated to take risks and forge ahead, but their zeal is tempered with prudence. And they tend to have higher IQs.

High dopamine individuals tend to be more creative, but they're also more prone to ADHD. They get more pleasure out of life, but also more misery.

And, there may be a flip side to the intrepid tendencies of the low dopamine folk: they may be more lethargic, and more prone to depression and reckless or addictive behaviors ("dopamine junkies"). They're especially likely to experience psychological problems if they have an MTHFR mutation, which hampers methylation, necessitating more B12, folate, and B6 to promote synthesis of "feel-good" neurotransmitters.

Let's not get carried away—genes only have a very limited role in explaining personality. It can also be modified by diet, lifestyle, and life experience. That's why identical twins, if separated at birth and raised under different circumstances, can turn out quite different.

There's some thought about how to boost dopamine for those who might be deficient. Certain foods are rich in L-tyrosine, a building block for dopamine:

- Fava beans
- Duck
- Chicken
- Ricotta cheese
- Oatmeal
- Mustard greens
- Edamame
- Dark chocolate
- Seaweed
- Wheat germ

Of course, you can take L-tyrosine (or acetyl-l-tyrosine, which is said to cross the blood barrier more effectively) as a supplement. It works best when you take it away from meals. Try 1000 milligrams three times daily. Avoid taking it if you're on an MAO inhibitor drug.

But back to resilience. The closest thing to "courage in a capsule" might be DHEA. This adrenal supplement—available over the counter—helps patients who are low in DHEA recover their Mojo. Men can take 25 to 50 milligrams per day; women do best with 5 to 25.

It has also been conclusively demonstrated that testosterone supports motivation. The typical testosterone-deficient male—even female—suffers from inertia and lassitude.

Adrenal adaptogens also help patients cope with stress. They include ashwaganda, eleuthrococcus, rhodiola, and panax ginseng.

Other supplements that help focus and concentration, and possibly (but not necessarily) resilience include bacopa, ginkgo biloba, and l-theanine.

But it's mental and physical conditioning that are the best ways to boost resilience. Rigorous physical exercise teaches subjects how to surmount daunting challenges. Military boot camp has long been predicated on the notion that relentless exercise drills fortify not just physical stamina, but also mental toughness.

When confronted with a particularly thorny situation, I fall back on my memories of arduous triathlon training, and know that I can apply that fortitude to the task at hand. A similar survival strategy was likely invoked by Louis Zampieri, an Olympic runner who was a POW in World War II, recently the subject of the movie "Unbroken."

Establishing a personal narrative is an important element of resilience. When you make your life a saga of transcendence, momentary setbacks are put into proper context. For me, reading great literature and history provides me with inspirational story lines.

A spiritual outlook helps buoy resilience. A key element is cultivating gratitude, a theme of prayer in virtually all the world's religions. As is the notion of submission to a higher power.

Minimizing catastrophic thinking also seems to be a prerequisite to building resilience. But, while cultivating optimism is important, studies show that overly optimistic individuals aren't necessarily tougher. Perhaps, when their blithe optimism founders on the shores of inevitable bouts of adversity, the disappointment that ensues ultimately undermines their resilience.

Resilience training is finding its way into the realms of psychology, the military and business. And perhaps, in an era of increasing “helicopter parenting,” instead of just the “Three R’s”, we should be teaching our kids the “*Four R’s*.”

For more on resilience, check out my most recent **Clinical Focus** podcast on the subject.