Don’t Digress When Trying to Reduce Stress

Kyle Terpak

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WHAT IF I TOLD YOU THAT WE HEARD IT ALL BEFORE...
Americans are stressed

Average U.S. Stress Levels

Stress levels are declining but still higher than “healthy” levels
Industry Fellows are stressed

- **Current Stress Level**
  - National: 4.9
  - Fellowship: 6.5

- **Healthy Stress Level**
  - National: 3.7
  - Fellowship: 4.0

Top Stressor

Top De-Stress Activity

Stress wears your *body* out

**Symptoms**

- Irritability/anger
- Anxiety
- Lack of motivation
- Fatigue
- Depression

**Long Term Effects**

- Headaches
- Psychological Burnout
- Hypertension
- Heart Attack
- Heart Failure
- ↑ **Cortisol**, NE, Epi.
- Diabetes
- Acid Reflux
- Stomach Pain / Nausea
- Diarrhea or Constipation
- *Male*: ↓ Testosterone, ↓ sperm, ↑ Impotence
- *Female*: Irregular cycle, worse PMS
Stress wears your *brain* out

Chronic stress causes neuronal atrophy

You may feel fine now...

Alzheimer’s Disease
Amyloid plaques form 20 years before dementia symptoms

Type 2 Diabetes
Insulin resistance begins 15 years before onset of diabetes

Reduced Stress & Improved Health
Reduced Stress & Improved Health
Brain Derived Neurotrophic Factor

- Stress suppresses BDNF expression
- Suppressed BDNF is partly mediated by cortisol
- Decreased BDNF leads to neuronal atrophy and self-pruning
- Sustains viability of neurons
- Promotes neurogenesis and synaptic plasticity
- Strengthens learning and memory

BDNF acts as “Brain Fertilizer”

Endurance training increases the release of BDNF, even when resting.

Main reason for not exercising
Break down the barriers

<table>
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<th>Barrier</th>
<th>Suggestion for Overcoming</th>
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<td>Time</td>
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Reduced Stress & Improved Health
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Dr. Terry Wahls, MD, MBA

• Clinical Professor of Internal Medicine
• University of Iowa, Carver College of Medicine
• MD @ University of Iowa
• Diagnosed with Secondary-Progressive Multiple Sclerosis
Nutrients

Nutrients from broccoli are absorbed by the gut, supporting the growth of beneficial bacteria. These bacteria, in turn, influence brain function and overall health.
Nutrients

10x Cells
150x Genes
1000+ Species
Altered microbiota

Brain Effects

- Disrupted brain chemistry
- Increased susceptibility to anxiety & depression
- Altered cognitive function

Fiber
Reduced Stress & Improved Health
Reduced Stress & Improved Health
Sleep is essential

Why Sleep?

Avoid for Better Quality Sleep

EFFECT ON MELATONIN
Blue light has the greatest power to switch off the production of melatonin, the hormone that makes us sleepy at night.

Technology for the technology

f.lux

Twilight
Matt Killingsworth:

Want to be happier?
Stay in the moment

TEDxCambridge · 10:16 · Filmed Nov 2011
Subtitles available in 30 languages

View interactive transcript
60 Minutes - Mindfulness