



The Adrenal Thyroid Connection: *What's Your Body Trying to Tell You?*

Aviva Romm, MD



The views and opinions expressed herein are solely those of the presenter and do not necessarily represent those of Genova Diagnostics. Thus, Genova Diagnostics does not accept liability for consequences of any actions taken on the basis of the information provided.





Christine Stubbe, ND
Medical Education Specialist - Asheville



Aviva Romm, MD

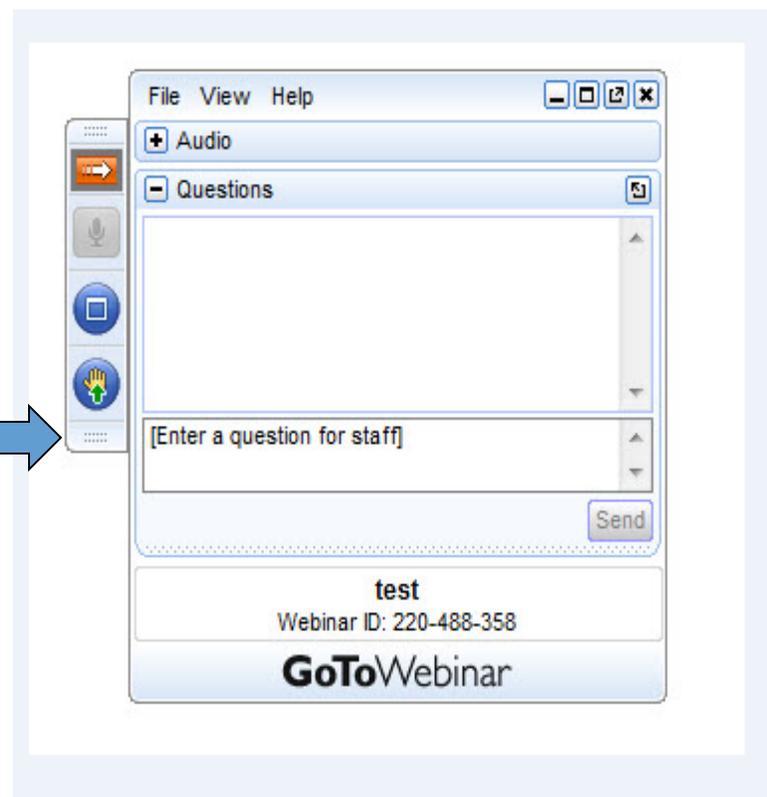
www.avivaromm.com



Technical Issues & Clinical Questions

Please type any technical issue or clinical question into either the “Chat” or “Questions” boxes, making sure to send them to “Organizer” at any time during the webinar.

We will be compiling your clinical questions and answering as many as we can the final 15 minutes of the webinar.





The Adrenal Thyroid Connection: *What's Your Body Trying to Tell You?*

Aviva Romm, MD



The views and opinions expressed herein are solely those of the presenter and do not necessarily represent those of Genova Diagnostics. Thus, Genova Diagnostics does not accept liability for consequences of any actions taken on the basis of the information provided.





What's Going On? *Epidemic of Overwhelm*



What Women Are Experiencing



What Women Are Hearing from Conventional Doctors

Good news! Your lab results look great.
Everything is normal; you are the picture of health.



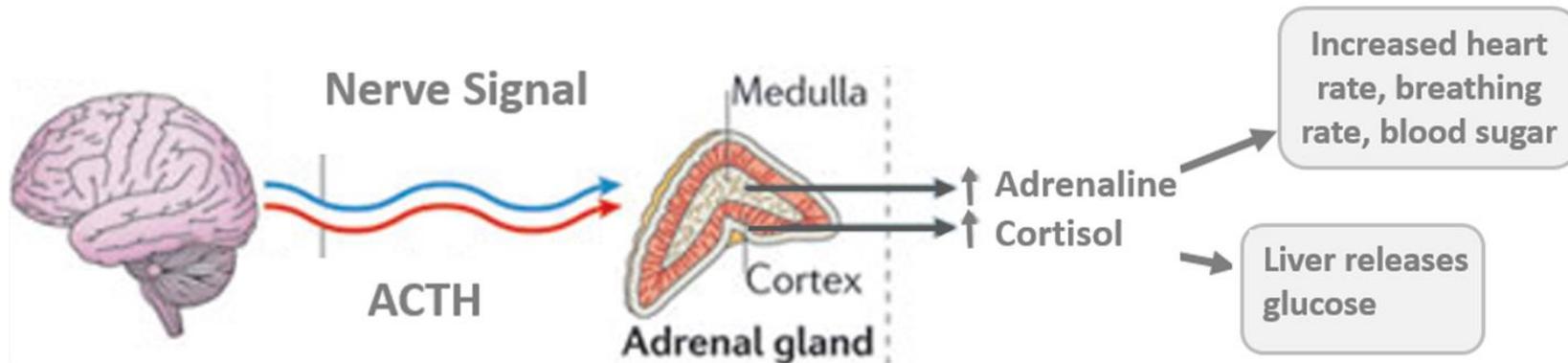


What's Really Going On? An Evolutionary Mismatch



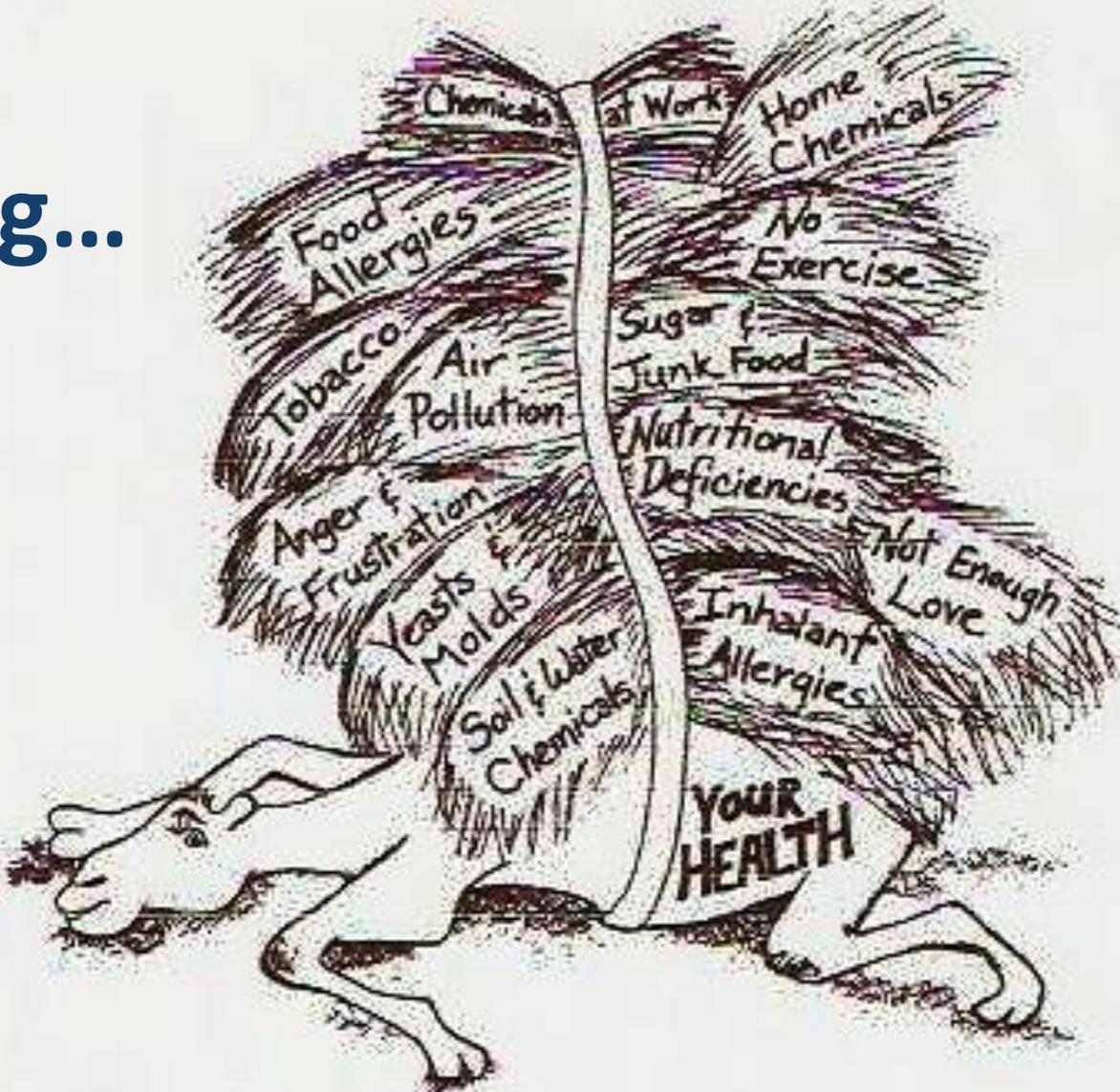


A Common Denominator: *The Adrenal Axis*





More Than a Feeling...





Survival Overdrive Syndrome





Sleep Impact





Mood Impact



Beyond Salt, Sugar, Fat: Weight Impact





Mind & Willpower



Immune Impact





Gut Health Impact





Cardiovascular Impact



Hormones & Reproductive Impact





Memory & Cognitive Function

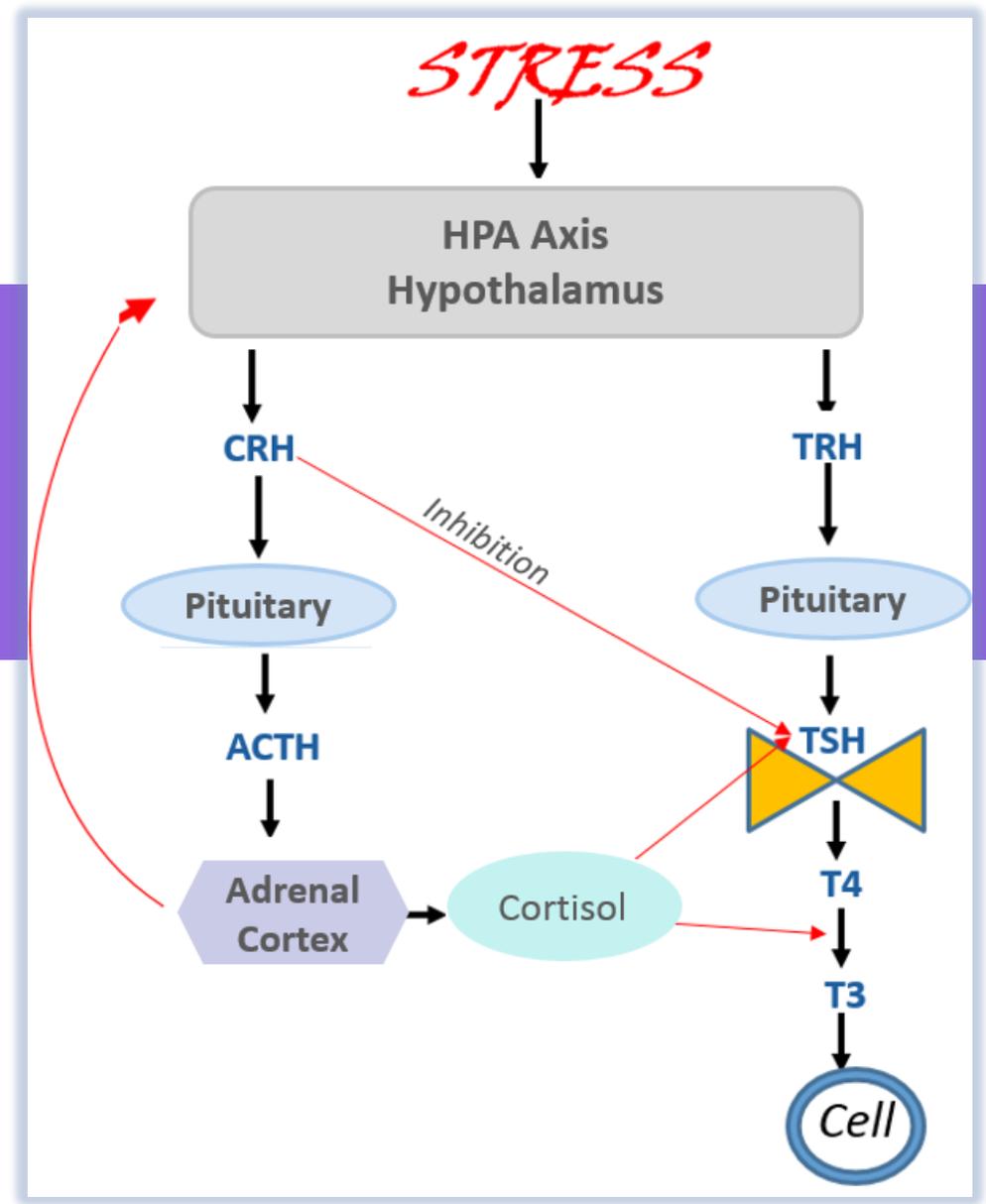


Inflamm-Aging





The Adrenal-Thyroid Connection



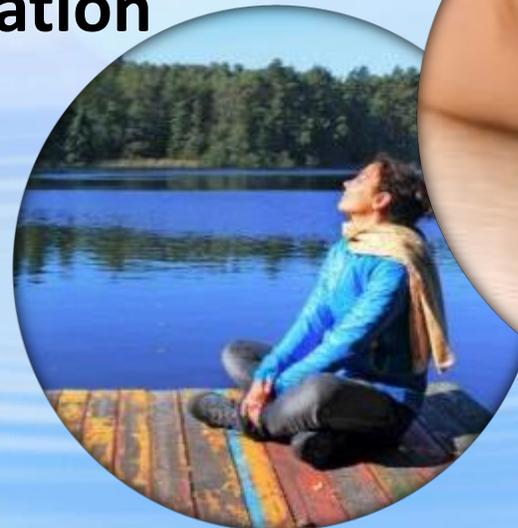


How You Can Help



Heal the Root Cause - OVERWHELM

Diet, Nutrition, & Blood Sugar
Stress and Circadian Rhythm Disruption
Gut Imbalances
Stealth Infection & Inflammation
Body Burden & Detoxification





Support Healing

Remember what SOS is saying:

Needs support for resilience and reserves

Replenish not push further

Baby steps and pacing

Self advocacy

Heal our lives to heal our bodies

Heal out bodies to heal our lives

Practical tools to help KISS



Identify SOS (Allostatic Load)

Primary Mediators

Cortisol (overnight)

Catecholamines

DHEA-S

Secondary Mediators

Waist-to-Hip

S:D BP Ratio

Albumin

Total Cholesterol and HDL

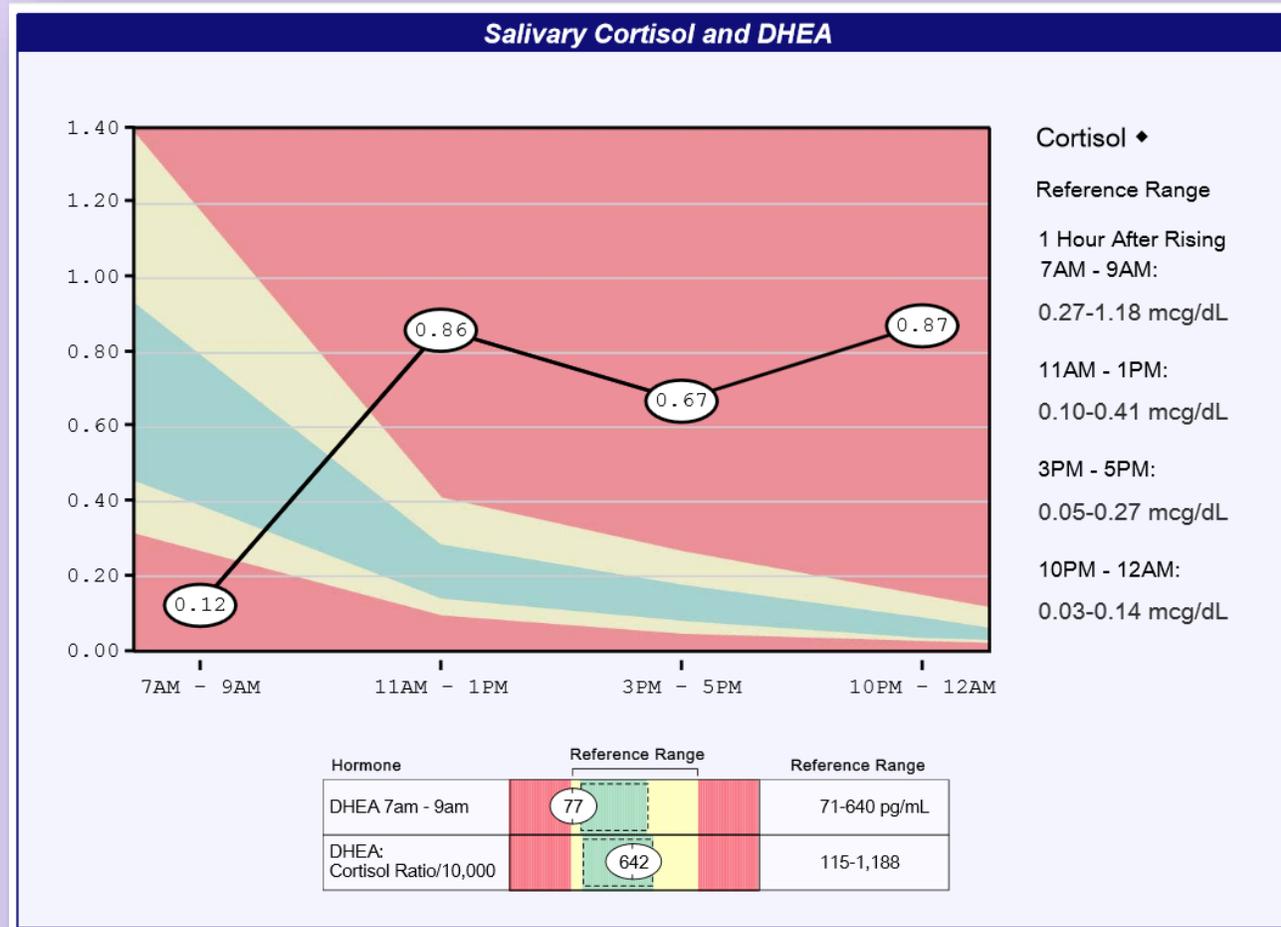
Hemoglobin

Fibrinogen

CRP



24 Hour Salivary Cortisol: Classic SOS Pattern!





Identify Thyroid Problems

TSH	FT3	FT4	TPO
TgAb	RT3	+ Iodine	+TBG/ SHBG

Adaptogens & Other HPA Support





**“When sleeping women wake,
mountains move.”**

~Chinese proverb

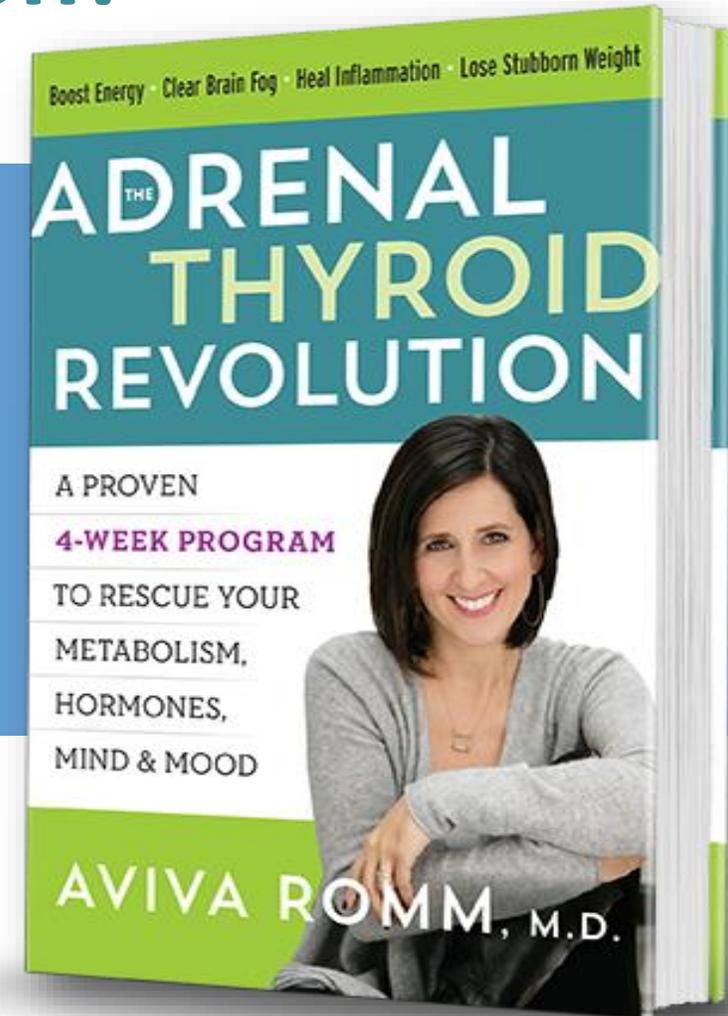


Next Step? Join the Revolution!

Coming Soon....

The NEW Medicine for Women Institute (NMWI)
Functional Medicine Professional Training Program

avivaromm.com





Christine Stubbe, ND
Moderator



Aviva Romm, MD
Presenter
www.avivaromm.com

Explore
WWW.GDX.NET
for more information and educational resources, including...

- LEARN **GDX** – Brief video modules
- LIVE **GDX** – Previous webinar recordings
- GI University** – Focused learning modules
- Conferences** – Schedule of events we attend
- Test Menu** – Detailed test profile information

MY **GDX** – Order materials and get results

Questions?



Additional Questions?

US Client Services: 800-522-4762

UK Client Services: 020.8336.7750

Please schedule a complimentary appointment with one of our Medical Education Specialists for questions related to:

- Diagnostic profiles featured in this webinar
- How Genova's profiles might support patients in your clinical practice
- Review a profile that has already been completed on one of your patients

We look forward to hearing from you!



Upcoming ^{LIVE} GDX Webinar Topics

May 24, 2017 – Melanie Dorion, NP Presents: *HPA Axis Dysfunction in Obesity*

Register for upcoming ^{LIVE} GDX Webinars online at WWW.GDX.NET

Genova Diagnostics Microbiome Symposium

May 6, 2017 · San Francisco, CA

A Full Day CME Event with Todd LePine, MD

Register at: WWW.GDX.NET

Listeners of today's broadcast receive \$100 off with code is MES100

The views and opinions expressed herein are solely those of the presenter and do not necessarily represent those of Genova Diagnostics. Thus, Genova Diagnostics does not accept liability for consequences of any actions taken on the basis of the information provided.





The Adrenal Thyroid Connection: *What's Your Body Trying to Tell You?*

Aviva Romm, MD



The views and opinions expressed herein are solely those of the presenter and do not necessarily represent those of Genova Diagnostics. Thus, Genova Diagnostics does not accept liability for consequences of any actions taken on the basis of the information provided.





References

- Adam, T. C., and E. S. Epel 2007. “Stress, eating and the reward system.” *Physiology & Behavior* 91 (4): 449–58. doi:10.1016/j.physbeh.2007.04.011.
- Ader, R., Cohen, N., and Felten, D. 1995. “Psychoneuroimmunology: Interactions between the nervous system and the immune system.” *Lancet* 345 (8942): 99–103. doi:10.1016/s0140–6736(95)90066–7.
- Alcock, J., C. C. Maley, and C. A. Aktipis. 2014. “Is eating behavior manipulated by the gastrointestinal microbiota? Evolutionary pressures and potential mechanisms.” *BioEssays* 36 (10): 940–49. doi:10.1002/bies.201400071.
- American Psychological Association. 2013. *Stress in America: Missing the Healthcare Connection*. Retrieved October 13, 2014. <https://www.apa.org/news/press/releases/stress/2012/full-report.pdf>.
- Anders, S., M. Tanaka, and D. K. Kinney. 2013. “Depression as an evolutionary strategy for defense against infection.” *Brain, Behavior, and Immunity* 31: 9–22.
- Aschbacher, K., A. O’Donovan, O. M. Wolkowitz, F. S. Dhabhar, Y. Su, and E. Epel. 2013. “Good stress, bad stress and oxidative stress: Insights from anticipatory cortisol reactivity.” *Psychoneuroendocrinology* 38 (9): 1698–1708. doi:10.1016/j.psyneuen.2013.02.004.
- Bird, A. R., I. L. Brown, and D. L. Topping. 2000. “Starches, resistant starches, the gut microflora and human health.” *Current Issues in Intestinal Microbiology* 1 (1): 25–37.
- Cassidy, A., K. J. Mukamal, L. Liu, M. Franz, A. H. Eliassen, and E. B. Rimm. 2013. “High anthocyanin intake is associated with a reduced risk of myocardial infarction in young and middle-aged women.” *Circulation* 127 (2): 188–96. doi:10.1161/circulationaha.112.122408.
- Cohen, S., D. Janicki-Deverts, and G. E. Miller. 2007. “Psychological stress and disease.” *Journal of the American Medical Association* 298 (14): 1685–87.



- Dallman, M. (2003). Chronic Stress And Obesity: A New View Of “Comfort Food” *Proceedings of the National Academy of Sciences*, 100(20), 11696-11701.
- Dash, S., G. Clarke, M. Berk, and F. N. Jacka. 2015. “The gut microbiome and diet in psychiatry.” *Current Opinion in Psychiatry* 28 (1): 1–6.
- Dusenbery, Maya. 2015. “Is medicine’s gender bias killing young women?” *Pacific Standard*, March 23. Retrieved August 10, 2016. <https://psmag.com/is-medicine-s-gender-bias-killing-young-women-4cab6946ab5c#.tf4y6osaq>.
- Estruch, R. “Effects of Mediterranean diet on the primary prevention of cardiovascular disease.” <http://www.isrctn.com/ISRCTN35739639> doi:10.1186/isrctn35739639.
- Fassler, Joe. 2015. “How doctors take women’s pain less seriously.” *Atlantic*, October 15. Retrieved April 04, 2016. <http://www.theatlantic.com/health/archive/2015/10/emergency-room-wait-times-sexism/410515/>.
- Flier, J. S., L. H. Underhill, and B. S. Mcewen. 1998. “Protective and damaging effects of stress mediators.” *New England Journal of Medicine* 338 (3): 171–79.
- Fryar, C. D., M. D. Carroll, and C. L. Ogden. 2010. “Prevalence of overweight, obesity, and extreme obesity among adults: United States, trends 1960–1962 through 2007–2008.” Washington, DC: National Center for Health Statistics. Retrieved August 10, 2016. http://www.cdc.gov/nchs/data/hestat/obesity_adult_11_12/obesity_adult_11_12.htm.
- García-Prieto, M. D., F. J. Tébar, F. Nicolás, E. Larqué, S. Zamora, and M. Garaulet. 2007. “Cortisol secretary pattern and glucocorticoid feedback sensitivity in women from a Mediterranean area: Relationship with anthropometric characteristics, dietary intake and plasma fatty acid profile.” *Clinical Endocrinology (Oxford)* 66 (2): 185–91. doi:10.1111/j.1365–2265.2006.02705.x.
- Greendale, G. A., J. B. Unger, J. W. Rowe, and T. E. Seeman. 1999. “The relation between cortisol excretion and fractures in healthy older people: Results from the MacArthur Studies-Mac.” *Journal of the American Geriatrics Society* 47 (7): 799–803. doi:10.1111/j.1532–5415.1999.tb03835.x.



- Horwitz, J., and J. Kaplan. 2007. "Hypothyroidism: A women's health issue." *Women's Health Activist*, January 1. Retrieved August 1, 2016. <https://www.highbeam.com/doc/1G1-158389325.html>.
- Iacovides, A., K. N. Fountoulakis, S. Kaprinis, and G. Kaprinis. 2003. "The relationship between job stress, burnout and clinical depression." *Journal of Affective Disorders* 75 (3): 209–21.
- Jacobson, D. L., S. J. Gange, N. R. Rose, and N. M. H. Graham. 1997. "Epidemiology and estimated population burden of selected autoimmune disease in the United States." *Clinical Immunology and Immunopathology* 84:223–43.
- Johansson, L., Xinxin Guo, Paul R. Duberstein, et al. 2014. "Midlife personality and risk of Alzheimer disease and distress: A 38-year follow-up." *Neurology* 83 (17): 1538–44. doi:<http://dx.doi.org/10.1212/WNL.0000000000000907>. Published online before print.
- Montgomery, John. 2012. "Survival mode and evolutionary mismatch." Retrieved May 12, 2016. *Psychology Today*. <https://www.psychologytoday.com/blog/the-embodied-mind/201212/survival-mode-and-evolutionary-mismatch>.
- North, C. J., C. S. Venter, and J. C. Jerling. 2009. "The effects of dietary fibre on C-reactive protein, an inflammation marker predicting cardiovascular disease." *European Journal of Clinical Nutrition* 63 (8): 921–33. doi:10.1038/ejcn.2009.8.
- O'Connor, D., H. Hendrickx, T. Dadd, et al. 2009. "Cortisol awakening rise in middle-aged women in relation to psychological stress." *Psychoneuroendocrinology* 34 (10): 1486–94. doi:10.1016/j.psyneuen.2009.05.002.
- Österberg, K., B. Karlson, and Å. M. Hansen. 2009. "Cognitive performance in patients with burnout, in relation to diurnal salivary cortisol." *Stress* 12 (1): 70–81.
- Rodondi, N., W. P. den Elzen, D. C. Bauer, et al. 2010. "Subclinical hypothyroidism and the risk of coronary heart disease and mortality." *Journal of the American Medical Association* 304 (12): 1365–74. doi:10.1001/jama.2010.1361.
- Rutters, F., S. L. Fleur, S. Lemmens, J. Born, M. Martens, and T. Adam. 2012. "The hypothalamic-pituitary-adrenal axis, obesity, and chronic stress exposure: Foods and HPA axis." *Current Obesity Reports* 1 (4): 199–207. doi:10.1007/s13679-012-0024–9.



- Sattar, N., D. Preiss, H. M. Murrar, et al. 2010. “Statins and risk of incident diabetes: A collaborative meta-analysis of randomised statin trials.” *Lancet* 375 (9716): 735–42.
- Seeman, T. E., L. F. Berkman, P. A. Charpentier, D. G. Blazer, M. S. Albert, and M. E. Tinetti. 1995. “Behavioral and psychosocial predictors of physical performance: MacArthur Studies of Successful Aging.” *Journals of Gerontology Series A: Biological Sciences and Medical Sciences* 50 (4): M177–83.
- Segerstrom, S. C., and G. E. Miller, 2004. “Psychological stress and the human immune system: A meta-analytic study of 30 years of inquiry.” *Psychological Bulletin* 130 (4): 601–30.
- Selye, H. 1946. “The general adaptation syndrome and the diseases of adaptation.” *Journal of Clinical Endocrinology & Metabolism* 6:117–230.
- Sherman, H., Y. Genzer, R. Cohen, N. Chapnik, Z. Madar, and O. Froy. 2012. “Timed high-fat diet resets circadian metabolism and prevents obesity.” *FASEB Journal* 26 (8): 3493–3502. doi:10.1096/fj.12–208868.
- Stein, Jill, Ted Schettler, Ben Rohrer, and Maria Valenti. n.d. *Environmental Threats to Healthy Aging: With a Closer Look at Alzheimer’s and Parkinson’s Diseases*. Edited by Nancy Myers. Boston: Greater Boston Physicians for Social Responsibility and Science and Environmental Health Network.
- Walsh, S., and L. Rau. 2000. “Autoimmune diseases: A leading cause of death among young and middle-aged women in the United States.” *American Journal of Public Health* 90 (9): 1463–66.
- Whitacre, C. C. 2001. “Sex differences in autoimmune disease.” *Nature Immunology* 22:777–80.
- Wilson, C. B., L. D. Mclaughlin, A. Nair, P. J. Ebenezer, R. Dange, and J. Francis. 2013. “Inflammation and oxidative stress are elevated in the brain, blood, and adrenal glands during the progression of post-traumatic stress disorder in a predator exposure animal model.” *PLOS ONE* 8 (10). Retrieved August 11, 2016. <http://dx.doi.org/10.1371/journal.pone.0076146>.