



# Keeping it simple amidst complexity: tips to improve your wellbeing.

## Simple evidence-based strategies can transform your life

### **Professor Kay Wilhelm**

NOTE: This is the introduction to a series of modules exploring strategies to enhance well-being by effectively managing stress – and the science behind them. You can find the whole series here: <u>HETI Wellbeing Resource Corner</u> | <u>HETI Higher Education</u> (https://heti.edu.au/resources-and-links/heti-wellbeing-resource-corner)

These strategies all improve autonomic nervous system function and promote a sense of calm.

They are described in this module, with references and links.

- 1. Segals' Hand Brain Model as a great short cut to emotional regulation is described at. <u>https://www.youtube.com/watch?v=qFTljLo1bK8</u>
- Slow (diaphragmatic) breathing: "autonomically optimised respiration (6-10 breaths /min), with ↑tidal volume achieved by diaphragmatic activation". Russo at al state: "Controlled, slow breathing...is an effective means of maximising HRV and preserving autonomic function, both.associated with ↓mortality in pathological states and longevity in general population". It is a basis for many other techniques that promote mental and physical health and can add 10-20 years to your healthy life!
- 3. Some of the ideas for stimulating your vagus nerve are found at <a href="https://health.clevelandclinic.org/vagus-nerve-stimulation">https://health.clevelandclinic.org/vagus-nerve-stimulation</a>
- 1. **Ideas from Eastern practices include** humming and tapping for emotional regulation and yoga, for sleep. Mindfulness, meditation and tai chi are considered in the following module.
- 2. Healthy diet. Mindful eating and drinking (in the next module) are also useful.
- 3. Benefits of exercise and recommendations about various types of exercise.
- 4. Improving sleep quality. For yoga exercises for sleep in Staying Sane for Teams.
- 5. Tending social network.

## Some of the many resources available

#### Slow breathing

Breath: The New Science of a Lost Art, 2020 by James Nestor. A book devoted to breathing well.

Russo MA, Santarelli DM, O'Rourke D. The physiological effects of slow breathing in the healthy human. Breathe (Sheff). 2017 Dec;13(4):298-309. doi: 10.1183/20734735.009817.

https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-recovery-breathingexercises

#### Ideas from Eastern practices

Trivedi GY, Kathirvel S, Sharma K, Saboo B. Effect of various lengths of respiration on heart rate variability during simple Bhramari (humming). Int J Yoga 2023;16:123-31

Tapping 101 – Learn the Basics of the Tapping Technique (thetappingsolution.com)

Bernardi L, et al, Effect of rosary prayer and yoga mantras on autonomic cardiovascular rhythms: comparative effect of rosary prayer and yoga mantras on autonomic cardiovascular rhythms: comparative study, *BMJ* 2001;323:1446-1449.

Huston P, McFarlane B. Health benefits of tai chi:What is the evidence?Can Fam Physician.2016;62(11):881-90.

#### Healthy diet

Jacka, F. Brain Changer: The Good Mental Health Diet, 2019

Loughrey DG, et al. The Impact of the Mediterranean Diet on the Cognitive Functioning of Healthy Older Adults: A Systematic Review and Meta-Analysis. Adv Nutr. 2017 Jul 14;8(4):571-586

Fu J, et al. <u>Association between the mediterranean diet and cognitive health among healthy adults: A systematic review and meta-analysis.</u> Front Nutr. 2022 Jul 28;9:946361. doi: 10.3389/fnut.2022.946361.

#### **Physical activity**

Garcia L, et al. <u>Non-occupational physical activity and risk of cardiovascular disease, cancer, and mortality</u> <u>outcomes: a dose response meta-analysis of large prospective studies.</u> Br J Sports Med; *28 Feb 2023;* 

Piché F, Daneau C, et al (2023) Characteristics and impact of physical activity interventions during substance use disorder treatment excluding tobacco: A systematic review. PLoS ONE 18(4): e0283861.

Slomski A. Exercise delivers brain benefits. JAMA. 2019 Mar 26;321(12):1149. doi: 10.1001/jama.2019.2495.

Commonwealth of Australia | <u>Department of Health and Aged Care</u>. Physical activity and Exercise. <u>https://www.health.gov.au/topics/physical-activity-and-exercise</u>.

Inoue K, et al. Association of daily step patterns with mortality in US adults. JAMA Netw Open. 2023 Mar 1;6(3):e235174. Doi: 10.1001/jamanetworkopen.2023.5174. Erratum: JAMA Newt Open. 2023 Apr.

Stimpson N et al. Jogging' the Noggin: Towards a physiological understanding of exercise-induced cognitive benefits. Neurosis Biobehav Rev. 2018 May;88:177-186

#### Sleep

Michael Moseley, Fast Asleep, 2023, 2<sup>nd</sup> Edition. Short Books

Slomski A. Exercise delivers brain benefits. JAMA. 2019 Mar 26;321(12):1149.

Online program for insomnia https://thiswayup.org.au/how-we-can-help/courses/managing-insomnia/

Lillee A, et al. Effect of inhaled lavender and sleep hygiene on self-reported sleep issues: A randomized controlled trial J Altern Complementary Med. Jul 2015.430-438.

Yoga exercises for sleep in Wilhelm K, Staying Sane for Teams. 2022 <u>https://www.svhs.org.au/patients-visitors/wellbeing</u>

#### Tending social network

Fowler JH, Christakis NA. Dynamic spread of happiness in a large social network: longitudinal analysis over 20 years in the Framingham Heart Study. BMJ. 2008 Dec 4;337:a2338. doi: 10.1136/bmj.a2338.

Kelly ME, et al. <u>The impact of social activities</u>, social networks, social support and social relationships on the cognitive functioning of healthy older adults: a systematic review. Syst Rev. 2017 Dec 19;6(1):259.

Waldinger R. How to add new life to your relationships (even your best ones!) | (ted.com)