

Good Practices, Foods, and Nutrition for the Brain

Wong KV* and Miami U

Department of Mechanical and Aerospace Engineering, University of Miami, FL, USA

Abstract

This work is a careful listing of the significant practices which are good for the body, practices which are especially good for the brain, as well as foods and nutrition which are especially good for the brain. The objective is to help researchers and promote brain health among the public. It is suspected that several of the practices may not be commonly known. The generation of discussion is healthy in the field of science, and this is a secondary function of this publication. Any omissions of significant actions which can be easily adopted by anyone are regretted. This mini review also produced a listing of commonly available brain-healthy foods.

Keywords: Mental health; Exercise; GABA

*Corresponding author: Wong KV

✉ kwong@miami.edu

Department of Mechanical and Aerospace Engineering, University of Miami, FL, USA.

Tel: 305-553-0928

Citation: Wong KV, Miami U (2017) Good Practices, Foods, and Nutrition for the Brain. J Food Nutr Popul Health. Vol. 1 No. 2:15

Received: August 18, 2017; **Accepted:** August 25, 2017; **Published:** September 11, 2017

Introduction

Practices good for the body, including the brain

Below are the many ways to protect the health of one's body, including the brain.

- Eat a balanced diet of fruits and vegetables, whole grains, proteins and fats [1].
- Exercise regularly and properly.
- Avoid low quality foods that are designed to steal your diet.
- Read and comprehend the food contents of packaged and prepared foods. Avoid synthetic preservatives and food colorings [2-4].
- High quality nutrition is important. Avoid good-tasting foods which have been found risky for the body. If traditional/unavoidable e.g. turkey roasted at high temperatures, eat occasionally and as a seldom 'treat' [4-6].
- Try new recipes to inject variety, less boredom in one's diet.
- Think of food as one of the two essentials for a healthy body; the other being regular and proper exercise.
- Cut down on foods that is potentially harmful e.g. Gluten (wheat, rye, barley, and their products).

- Avoid hormones, pesticides from white and red meats, milk, eggs.
- Gut health is very important for the body's health, including the brain.
- Flossing one's teeth daily is a very desirable practice. Microbes from the mouth can reach the heart, if allowed to accumulate and multiply unchecked in the mouth.
- Get enough sleep, so that the body can rest and repair itself.

Practices especially good for the brain

- Below are the many ways to protect the health of one's brain.
- Physically protect your brain e.g. wearing a helmet while on a motor-cycle.
- Listen to music whenever appropriate to help maintain the brain in a good mood.
- If not a practice already, do not drink alcohol.
- Do not partake of mind-altering drugs, including marijuana.
- Participate in new learning e.g. a new language. This helps new neuron networks to be created from new brain cells, which if not challenged with new learning, dies in about 2 weeks [7-10].

- Learn a new dance, if possible. This activity improves brain and muscle coordination, in addition to encouraging new neuron networks to be formed from new brain cells [7-10].
- Add one simple practice at a time to one's routine. It is easier to adopt new practices that way.
- Eat nutritious, delicious foods first. Then fill up on lesser quality foods afterwards, if need still persists.
- Teach your family members about this and other good practices and conduct of life.
- Teach others about this and other good practices and conduct of life.
- Be the champion and lover of your brain. Never underestimate your brain's importance in your health.
- Think of your brain fitness like you would your body fitness. It is a fitness condition that can be sabotaged with unnecessary stress, not 'letting go' in matters out of your control.
- Be a goose, rather than a chicken. In other words, be a leader in matters of brain fitness rather than a follower.
- Practice meditation daily. This not only helps in the control of stress, but increases self-awareness as well as proper ways of breathing [11,12].
- Learn to know the reason for being a brain fitness champion. Keep this as the driver of your motivation. In other words, internalize your primary motivation to maintain and/or improve your brain health.
- Avoid unnecessary anesthetics (from invasive tests like colonoscopy, elective surgery, etc.)

Foods and nutrition especially good for the brain

Below are the major foods and nutrition that could help protect the health of one's brain.

- Eat dark chocolate. The essential ingredient here is cocoa [13,14].
- Keep one's body hydrated at all times.
- Avoid the 'weapons of mass destruction in the food world' [10], i.e., refined sugar, gluten, and low fiber prepared foods.
- Use spices like good supplements. Learn to eat daily amounts of good spices e.g., black or white pepper, turmeric, garlic, chili peppers, ginger, cumin, cinnamon, allspice, rosemary, coriander, thyme, sage, tamarind, celery seeds, oregano, chives, bay leaves, dill, basil, marjoram, cloves [15,16].
- Drink green tea, which has half the caffeine as coffee. There is Epigallocatechin gallate (EGCG) in green tea. It is the most plentiful catechin in tea, which is good for you.
- Eat two eggs (maximum) a day. Eggs contain choline, a proven brain food. Choline is an important nutrient that plays a crucial part in several metabolic paths and behaves as an important neurotransmitter. Choline aids in expanding one's memory and mental prowess [1,7].
- Eat more fruits and vegetables in the ratio of 1:2. The phytonutrients contained in fruits and vegetables are essential for health, and many helps protect against the major diseases, e.g. Type Two Diabetes Mellitus (T2DM), cancer, Alzheimer's Disease (A.D.) [1,7].
- Eat more healthy fats e.g. Omega 3's, fish oil. Sixty percent of the brain is fat. Because of the foods they are fed, many of the commercial eggs and meat have a higher ratio of Omega 6's to Omega 3's. Free-range chicken and animals that are fed worms (for chicken), seeds and grass rather than corn products, and wild-caught fish contain higher amounts of Omega 3's in general [1].
- Fats help you absorb vitamins. Do not have a fat-free diet. Do avoid trans-fats and excessive saturated fats [1].
- Eat a daily supplement e.g. multivitamin tablet suitable for your age group.
- If needs be, aim a brain supplement to one's brain type e.g. saffron, GABA (gamma-Aminobutyric acid), exercise (as a therapy to some brain types) [10-12].
- Eat nuts daily e.g. walnuts, almonds, hazel nuts, pistachios, Brazil nut, peanuts. Beware of any food allergies, especially to peanuts.

Discussion and Conclusion

Mindful meditation has been shown to be useful in many health situations, including controlling stress. Meditation has also been used as therapy for U.S. military personnel with Post-Traumatic Stress Disorder (PTSD). Meditation is a popular practice/observance in Hinduism and Buddhism. Hence, many practitioners of this healthful activity can be found in India and Southeast Asia. One could view meditation as exercise for one's brain.

Regular, appropriate exercise that employs all the body's muscles is advanced as one of the two significant pillars of physical health. In other words, everyone should move daily and try to avoid being too sedentary. The second pillar for one's health is a balanced and nutritious diet, which would lead to an appropriate weight range and good mental health. Good practices for the brain are highlighted, which makes use of the fact that the brain generates new cells periodically, but just as often dies, if not employed to form new neural networks when the person learns new activities. In other words, 'use it or lose it' applies to neurons as well as muscles. Foods and nutrition which are particularly good for the brain are listed and briefly discussed. This work also produced a catalogue of usually obtainable brain-healthy foods. Eggs are advanced as the standard source of good proteins. It was stated that the "117th birthday of Emma Morano, the world's oldest living person, was celebrated on Nov. 29, 2016. The Italian supercentenarian, who has been single since kicking her husband out in 1938, credits her longevity in eating 2 raw

eggs a day. She is widely thought of as the last person alive born in the 19th century.' That she eliminated an incompatible spouse

in the first third of her long life, provides evidence that lowering one's mental stress does contribute to mental health.

References

- 1 Wong KV (2016) Optimization of Healthy Fats in One's Daily Diet. *EC Nutrition* 5: 1232-1237.
- 2 Wong KV (2016) Nutritional and Health Issues and Public Policies. *JIRMEPS, IK Press*, 9: 13-17.
- 3 Rostkowska K, Zwierz K, Róžański A, Moniuszko-Jakoniuk J, Roszczenko A (1998) Formation and metabolism of N-nitrosamines. *Polish J Environ Stud* 7: 321-325.
- 4 Wong KV (2016) Consumption of Red Meat and its Possible Role in the Etiology of Colorectal Cancer. *Journal of Disease and Global Health, IK Press* 6: 51-55.
- 5 Cross AJ, Sinha R (2004) Meat-related mutagens/carcinogens in the etiology of colorectal cancer. *Environmental and Molecular Mutagenesis* 44: 44-55.
- 6 Jägerstad M, Skog K. Genotoxicity of heat-processed foods. *Mutation Research* 2005; 574(1–2):156–172.
- 7 Wong KV (2012) Perspective about Anesthesia Use and Alzheimer's Disease and Dementia. *Research and Reviews: J Medical Health Sciences* 1: 23-30.
- 8 Shors TJ (2009) Saving New Brain Cells. *Scientific American*, pp: 47-54.
- 9 Gould E, Reeves AJ, Graziano MSA, Gross CG (1999) Neurogenesis in the Neocortex of Adult Primates. *Science* 286: 548-552.
- 10 Amen DG (2012) *Use your Brain to change your Age*, Random House Inc, New York, 2012. Also, Amen's TV shows on Public Broadcasting Service (PBS) in the USA.
- 11 Kabat-Zinn J (2009) *Wherever you go, there you are: Mindfulness meditation in everyday life*. Hachette UK, 2009 Jul 1.
- 12 Davidson RJ, Kabat-Zinn J, Schumacher J, Rosenkranz M, Muller D, et al. (2003) Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine* 65: 564-570.
- 13 Balzer J, Rassaf T, Heiss C, Kleinbongard P, Lauer T, et al. (2008) Sustained benefits in vascular function through flavanol-containing cocoa in medicated diabetic patients: a double-masked, randomized, controlled trial. *Journal of the American College of Cardiology* 51: 2141-9.
- 14 Desideri G, Kwik-Urbe C, Grassi D, Necozone S, Ghiadoni L, et al. (2012) Benefits in Cognitive Function, Blood Pressure, and Insulin Resistance Through Cocoa Flavanol Consumption in Elderly Subjects With Mild Cognitive Impairment Novelty and Significance. *Hypertension* 60: 794-801.
- 15 Wong KV (2012) Nutritional Perspective about Prostate Cancer Disparity between the West and the Rest of the World. *Food Science and Technology Letters* 3: 14-19.
- 16 TIME magazine, 12/12/16 issue.