



# Health Bits & Pieces

By Dan Kenner, Ph.D., LAc



◆ **Electromagnetic Hazards.** The safety of new wireless technologies like Wi-Fi and cell phones is evaluated by standards that are obsolete, based on a plethora of studies on the effects of electromagnetism on health. Old safety standards consider radiation to be safe if it is not ionizing like X-rays and nuclear radiation, or heat-producing like microwaves. Accumulating research evidence shows that these standards are far behind scientific progress in understanding effects of extremely low frequency (ELF) and radio frequency (RF) radiation on health. Some of the most serious disorders associated with ELF and RF exposures include childhood and adult leukemia, childhood and adult brain tumors, and increased risk of the neurodegenerative diseases such as Alzheimer's and amyotrophic lateral sclerosis (ALS). There are also reports of increased risk of breast cancer, pathological leakage of the blood-brain barrier, altered immune function including increased allergic and inflammatory responses, miscarriage, and some cardiovascular effects and sleep disruption. [C. Sage, D.O. Carpenter, "Public health implications of wireless technologies," *Pathophysiology* (2009), doi:10.1016/j.pathophys.2009.01.011]

◆ **And Then Some.** The risk of developing malignant glioma, a type of brain cancer, is doubled in individuals that have used a mobile phone for 10 or more years, with the risk being elevated only on the side of the head on which the phone is used. The risk seems to be even greater in children. There is 5.2-fold elevated risk in children who begin use of mobile phones before the age of 20 years after even just 1 or more years of use, whereas for all ages the odds ratio was 1.4. This is over three times the risk of cancer development compared to adults. [L. Hardell, M. Carlberg, F. Söderqvist, K. Hansson Mild, "Meta-analysis of long-term mobile phone use and the association with brain tumours," *International Journal of Oncology* 32 (2008) 1097–1103; L. Hardell, M. Carlberg, K. Hansson Mild, "Pooled analysis of two case-control studies on use of cellular and cordless telephones and the risk for malignant brain tumours diagnosed in 1997–2003," *International Archives of Environmental Health* 79 (2006) 630–639, doi:10.1007/s00420-006-0088-5]

◆ **Get Off Your Prostate and Exercise!** A man's risk of prostate cancer decreases in proportion to the amount of exercise he engages in. Men who reported more hours

per week of exercise were significantly less likely to have cancer on biopsy. Investigators from Duke University at the Durham Veterans Affairs Medical Center found that men who regularly engaged in moderate activity – anything equivalent to walking at a moderate pace for several hours per week – were significantly less likely to be diagnosed with prostate cancer. If they did develop prostate cancer, it was more likely to be a less-virulent form of the disease. [Duke Medicine, news release, Sept. 22, 2009 at <http://www.cancer.duke.edu/modules/news/article.php?storyid=219>]

◆ **Health Benefits of Bad Breath.** A substance found in garlic has significant cancer-preventive as well as anti-fungal properties. Ajoene, which is a metabolite of the pungent garlic component allicin, triggers the destruction of cancer cells. Ajoene also has significant anti-fungal properties against *Candida albicans* and a variety of other types of fungus. [Kaschula CH, Hunter R, Parker MI. Garlic-derived anticancer agents: Structure and biological activity of ajoene. *Biofactors* 2010 Jan;36(1): 78-85; Carrero S, Romero H, Apitz-Castro R., "In vitro inhibitory effect of ajoene on *Candida* isolates recovered from vaginal discharges," *Revista Iberoamericana de Micología* 2009 Sep 30;26(3): 189-193]

◆ **Fatigue Syndrome Marker.** Chronic fatigue sufferers may have a deficiency of Coenzyme Q-10 (CoQ-10). Patients diagnosed with myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS) may have a deficiency of Coenzyme Q-10. Symptoms such as fatigue and autonomic and neurocognitive symptoms in patients with ME/CFS may be caused by CoQ10 depletion. CoQ-10 is already known to have significant beneficial properties for cardiovascular health, cancer prevention, and even cancer treatment. It is known that low levels of CoQ-10 can result in development of cardiovascular disease, which could explain the reduced lifespan of people afflicted with chronic fatigue syndrome. Results of recent research suggest that patients with ME/CFS would benefit from CoQ10 supplementation. [Maes M, Mihaylova I, Kubera M, et al, "Coenzyme Q10 deficiency in myalgic encephalomyelitis / chronic fatigue syndrome (ME/CFS) is related to fatigue, autonomic and neurocognitive symptoms and is another risk factor explaining the early mortality in ME/CFS due to cardiovascular disorder," *Neuroendocrine Letters* 2009;30(4): 421-551] 