

HEALTH AND WELLNESS NEWS ITEMS – January-February 2013

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If any of these abstracts seem relevant to your care, be sure to consult with your personal physician before changing your treatment.

1. **AN UPDATE: THE LOWDOWN ON SODIUM IN YOUR DIET**

According to U.S nutrition policy makers, public health experts, and the Institute of Medicine (IOM), Americans are consuming way too much sodium. These excesses are linked to increased blood pressure which in turn is linked to increases in the risk of heart disease and stroke. Decreasing sodium intake could save tens of thousands of lives. The 2010 Dietary Guidelines for Americans recommended that adults over 51, hypertensive individuals, and African-Americans lower their sodium intake to 1,500 mg/day and that the rest of the population limit its intake to 2,300 mg/day. Three years after these guidelines were published, Americans still average more than 3,400 mg/day.

Consequently, Congress has requested that the IOM develop strategies to reduce the country's sodium intake to healthy levels. A goal has been set to reduce Americans' salt intake by 20% over the next five years. A number of other developed nations have initiated such programs. Since 80% of our sodium intake comes from processed and prepared foods (less than 20% from foods and salt shakers), the strategy is focused on the food and restaurant industry. The industry has responded positively with some major companies already meeting their goals.

Individuals are encouraged to:

- 1) Read nutritional values on labels, menus, and websites.
- 2) Be particularly cautious in choosing processed foods, meat and pasta dishes, bread, pizza, condiments, cheese, desserts, and soups.
- 3) Eat more fruits and veggies.
- 4) Snack on fresh fruit and unsalted nuts.
- 5) Consider portion size.

Source: *Environmental Nutrition*, 35, Pgs. 1,6

2. **IMPROVING STRENGTH IN OLDER MEN**

When doing strength training, older men benefit most from increasing repetitions rather than increasing weight, researchers reported in the *Journal of Gerontology*. This is opposite the effect in younger men. The study looked at 12 younger men (average age 24) and 12 older men (average age 70). Improvement in muscle strength was quantified by leg muscle biopsies measuring increase in protein building. Doubling the number of sets resulted in greater protein synthesis in older men but had little or no impact in younger men; the effect of doubling was seen whether the men were using lighter or heavier weights. The results suggest that the less-sensitive muscles of older men need to do more work to activate their protein-making machinery. The take-home message for older men is that the number of times you repeat the lift is paramount.

Source: *Nutrition Action Health Letter*, October 2012

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3. **STEM CELL SCIENCE IS BECOMING STEM CELL MEDICINE**

"Many diseases (e.g., heart attack, stroke, Alzheimer's disease) involve the death of specialized cells that the body cannot naturally replace. A perfect treatment would replace these lost cells, with cells exactly like them, but the body cannot do that on its own.

The discovery of stem cells offered a possible approach for replacing these lost cells.” So begins an article in a 2012 *Harvard Health Letter* that proposed that stem cell benefits are getting closer.

Stem cells derived from embryos have the potential to develop into any specialized type of cell in the body, and thus embryos are the ideal source of cells for cell replacement therapy. However, two problems limit the practicality of the medical use of such “pluripotent stem cells.” First, part of our society has ethical concerns about using human embryos as the source; in addition, if you need embryonic cells, you need your own such cells, and they existed only before your birth. Recent cell research suggests that these problems can be avoided. Studies of the process by which stem cells become specialized cells has allowed scientists to reverse the process and convert specialized cells back into stem cells. Thus, human skin cells have now been turned into “induced pluripotent stem cells” that are very much like embryonic cells.

Meanwhile, a study at the University of Sheffield in the U. K. has demonstrated that auditory nerve cells created from human embryonic stem cells can restore hearing in gerbils. Transplanted stem cells were able to reconnect the inner ear to the brain of the gerbils. Ten weeks after the transplantation, signals to the brain were observed and hearing improved by nearly 50% in most animals. The researchers are optimistic that the technique will allow for the repair of damaged human ears.

Sources: *Harvard Health Letter*, 37, July 2012, Pgs. 1,7
Nature, 490, 11 October 2012, Pgs. 278-282

4. CALCIUM SUPPLEMENTS VERSUS CALCIUM-RICH FOODS

Many older people take calcium supplements to help prevent osteoporosis. Several recent studies note an increased risk of heart attack for women on the supplements, but find that the risk of heart attack has not been found when the calcium is ingested as calcium-rich foods.

Currently 1,000 to 1,200 mg of calcium per day is recommended to achieve good bone health. Because of the surge in calcium after taking a supplement, it has been proposed that calcium then accumulates in the arteries, leading to chest pain, high blood pressure, and heart attacks.

Dr. JoAnn Manson from Brigham and Women’s Hospital states that the greatest risk is when people exceed the suggested intake. In her observations, most women get 700 mg of calcium daily from foods (such as cheese, yogurt, soy products, sardines, canned salmon, fortified cereal, and dark leafy greens), making it necessary to supplement only 500 mg or less.

Source: *Harvard Health Letter*, October 2012, Pg. 3

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5. MALE MENOPAUSE

As men age, testosterone production gradually decreases and as a consequence some will experience seemingly nonspecific symptoms of aging such as low energy level, depressive symptoms, erectile dysfunction, and decreased libido. These clinical symptoms may adversely affect quality of life and life expectancy. In addition to the normal slow annual decline in serum testosterone, more serious conditions such as metabolic syndrome, type II diabetes mellitus, osteoporosis, renal failure, and anemia have been associated with testosterone deficiency. In the absence of clinical symptoms, testosterone replacement therapy (TRT) is discouraged; in the presence of symptoms, such therapy is available, but diagnosis and prediction of response is challenging. The symptoms of testosterone deficiency may be alleviated by healthy lifestyle changes including exercise, weight loss,

and diet modification.

Source: *Cleveland Clinic Journal of Medicine*, 79 (11), November 2012, Pgs. 797-806

6. **ALCOHOL CONSUMPTION AND CANCER RISK**

A study just published in the *American Journal of Public Health* makes a case for the association of drinking alcohol and cancer. Epidemiologic evidence shows alcohol is to blame for one in every 30 cancer deaths each year in the United States. A team at the U.S. National Cancer Institute compiled data from a variety of epidemiologic and survey sources. The connection with alcohol consumption was most pronounced in breast cancer, accounting for 15% of deaths. Cancers of the mouth, throat, and esophagus are also common causes of alcohol-related cancer deaths in both men and women--blamed for about 6,000 deaths each year.

Users of higher amounts of alcohol are at higher risk, but there is really no safe level of alcohol use. The report found that 30 percent of all alcohol-related cancer deaths are linked to drinking 1.5 drinks or less a day. Moderate drinking has been associated with heart benefits, but according to the researchers "in the broader context of all issues and all the problems that alcohol is related to, alcohol causes 10 times as many deaths as it prevents."

According to the American Cancer Society, it's not entirely clear how alcohol might raise cancer risk. Alcohol might damage cells by acting as a chemical irritant to sensitive cells, impeding their DNA repair. Or it might act as a "solvent" for other carcinogens, helping those chemicals enter into cells more easily. Or alcohol might affect levels of key hormones such as estrogen, upping odds for breast cancer.

Source: *HealthDay*, 14 February 2013

7. **EASY BRUISING IS COMMON AS SKIN THINS**

As we age our skin loses the protective fatty layer and the collagen that helps cushion the capillaries nearest the skin. Even a slight, unnoticed bump can lead to a bruise. This is especially common in women. Unless there is an underlying medical disorder or a family history of abnormal bleeding, bruising is usually just a cosmetic problem that can be slightly reduced by wearing long sleeves and long pants for cushioning. Blood thinners can increase the bruising.

Source: www.HealthLetter.MayoClinic.com, December 2012

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8. **MEDITERRANEAN DIET CUTS HEART DISEASE AND STROKE**

A five-year study of a Mediterranean diet with extra olive oil or nuts has demonstrated a remarkable reduction of heart attacks and strokes.

Published in the *New England Journal of Medicine*, the study involved 7,400 volunteers who followed a Mediterranean diet characterized by lots of salad, fruit, and vegetables, but only small quantities of fish, lean meat, and low-fat cheese. The diet was also high in fiber, vitamins, and minerals. Wine was served at meals. All volunteers got extra counseling. One group got a weekly supply of extra-virgin olive oil, a second group got 30 grams of mixed nuts, and a third group, acting as a control, was not on the Mediterranean diet and received no supplement of olive oil or nuts, but was "given advice to reduce dietary fat." The participants were age 55 to 80, all at high risk of heart disease because of diabetes, a family history of heart disease, high blood pressure, unhealthy cholesterol levels, overweight, or smoking. The study was done at the Carlos III Health Institute in Barcelona, Spain.

Overall, the optimized Mediterranean diets cut the risk of heart disease death, heart

attacks, and strokes by 30 percent. Many epidemiological studies have shown that people who eat a Mediterranean diet are less likely to die of heart disease. This study was powerful because it randomly assigned people to eat such a diet as part of their normal lives over several years. The results were startling enough for the study to be terminated early.

This study provides additional evidence for the benefits of diets containing “good” fats, such as those in olive oil and nuts, and minimizing the fat found in meats and cheese. Olive oil and nuts contain monounsaturated fats, which are better for artery health than the saturated fats found in animal products. Walnuts and fish are rich in omega-3 fatty acids, which have been shown to benefit heart health.

Source: Reported on NBC News, citing the *New England Journal of Medicine*, 25 February 2013

9. HEALTHY LIFESTYLE HAS SURVIVAL BENEFITS

A study published in the *British Medical Journal* notes that being physically active, having a rich social network, and not smoking may extend survival by 5 years for women and 6 years for men. Researchers in Sweden studied 1,810 adults who were 75 years and older and followed them for nearly two decades. They measured lifestyle activities, leisure activities, and social networks. Participants were classified as having a high-risk or low-risk profile on the basis of whether they smoked, drank alcohol, were overweight, participated in physical or mental activities, volunteered, and had contact with housemates, children, friends, or relatives.

Regular gymnastics, swimming, or walking had the strongest association with survival. Moderate alcohol consumption showed some advantage in survival compared to no alcohol consumption. A strong social network also was found to have a significant effect.

The study suggests that it is never too late to adopt healthier habits.

Source: *Consumer Reports on Health*, December 2012, Pg. 3