3 Medical Research Studies that Support Common Sense

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Last year I wrote a HealthDiscovery.org article describing research on exercise, night owls and ewwwinspiring public restroom hand dryers. So, what's new in medical research studies since then? A trek around Google Health revealed interesting conclusions, released in 2019, about behavioral factors impacting heart health and bone health¹.

Medical Research Study No. 1:

Energy Drinks and Heart Disease

The results of a randomized trial, published in the Journal of the American Heart Association, reported a link between energy drinks and heart disease.

Specifically, that caffeinated energy drinks can alter the heart's electrical activity and raised blood pressure1.

The Study's Focus

- Energy drinks typically contain large amounts of caffeine as well as added sugars, vitamins and legal stimulants. They can also contain taurine, an amino acid that's naturally found in meat and fish, and L-carnitine, a substance in the body that helps turn fat into energy.
- The concern is that these vitamins, amino acids and herbals are often in higher concentrations than what naturally occurs in food or plants. When

- combined with caffeine, the effects of these substances may be enhanced.
- Study participants who drank 32 ounces of energy drinks in an hour had abnormal electrical activity in their hearts and higher blood pressure four hours later.

What the researchers say: people who take certain medications or who have a specific type of heart condition and use energy drinks could be at increased risk of a fatal irregular heartbeat.

Medical Research Study No. 2:

E-Cigarettes Risk to Heart Health

The rapid increase in e-cigarette use, especially among teens, has triggered concern among parents and the medical community. The flavorings have come under scrutiny for enticing young people to use e-cigarettes. A medical research study² evaluated the effects of chemicals used to flavor electronic cigarettes.

The Study's Focus

• Researchers exposed human endothelial cells which line the entire circulatory system from the heart to the smallest capillaries and play a key role in the development of new blood vessels—to six different flavors of e-cigarette flavoring liquid with varying levels of nicotine. They saw significant damage to endothelial cells from e-cigarette flavorings. The cells were less viable in the cultures and they began to exhibit multiple symptoms of dysfunction.

What the researchers say: Chemicals used for flavorings can damage cells that line blood vessels and may pose an e-cigarette risk to heart health in the long term. E-cigarettes appear not to be a safe alternative to traditional cigarettes.

Medical Research Study No. 3:

Osteoporosis and Younger Adults

Researchers set out to determine if osteoporosis is, in fact, just an older person's disease. According to a study published in the *Journal of the American Osteopathic Association*³, it's never too soon to pay attention to bone health.

The Study's Focus

- Researchers set out to assess the likelihood of low bone mineral density and its association with the development of osteopenia in early and middle age (35 to 50 years) in men and women.
- Low bone mineral density, which can cause osteopenia and lead to the development of osteoporosis, was found to occur at an earlier age than originally thought and affected both genders.
- Osteopenia was found in 28% of male and 26% of female study participants.
- What the researchers say: Preventive measures should be taken in childhood and early adolescence to combat low bone mineral density in young adulthood and beyond.

While medical research studies show a correlation of certain behaviors and health, they also seem to prove tried-and-true common sense—when it comes to heart health and bone health, behaviors matter.

- ² <u>Journal of the American College of Cardiology</u>, "Modeling Cardiovascular Risks of E-Cigarettes with Human-Induced Pluripotent Stem Cell–Derived Endothelial Cells"
- ³ <u>American Osteopathic Association</u>, "Bone Mineral Density Among Men and Women Aged 35 to 50 Years"

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¹ <u>American Heart Association</u>, "Energy Drinks May Provide Jolt to Heart, Blood Pressure"