

Food Fax[®]

Brains over Bones

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☀ Consumer Knowledge of the Role of Calcium

Several health-related organizations have made persistent nutrition education efforts over the past decade to inform the public about the need to protect bone health through adequate consumption of the mineral calcium, at every stage of the lifecycle. The work is paying off. Health Focus Inc., a well-respected American consumer research company, reported from their year 2000 survey that Americans are making the connection between calcium intake and strong bones. In Canada, a recent National Institute of Nutrition survey reported similar findings.

Much less known by consumers is the role of calcium in maintaining a healthy nervous system. Equally overlooked is the critical importance the body places on insuring that the calcium needs of the central nervous system (brain) are satisfied first, even at the expense of bones if necessary.

☀ Where Calcium is Stored in the Body

Calcium is one of the most plentiful minerals in the body. 99% of the body's calcium is found in bones and teeth. The remaining 1% circulates in the blood system, keeping the calcium close to the nervous system. Calcium is involved in every single nerve action that takes place. Calcium entry into the nerve is essential for proper nerve functioning.

☀ Bank on it!

An easy way to understand the movement of calcium between blood and bones is to think of bank accounts. Consider calcium in the blood as a 'calcium checking account'; calcium in the bones as a "calcium savings account". When the calcium circulating in the checking account (blood system) starts to fall, unless enough calcium is available

from the diet, the body pulls the required calcium from the bones (savings account). Continual withdrawals from the savings account make bones less strong for the future. The result is osteoporosis (meaning, 'porous' or 'soft') bones. The human body, in its beauty and complexity, places highest priority on the nervous system, which is controlled by the brain. While the body may be able to carry on for some time with weakened bones, it cannot operate with an unstable or malfunctioning nervous system. Hence, the body insists 'brains before bones!'

☀ Scientists in the Know

Nutritional and neurological scientists are aware of the critical role of calcium in the nervous system. A google search (www.google.com) for 'calcium and osteoporosis' resulted in 202,000 'hits'. A google search for 'calcium and nervous system' resulted in more — 210,000 hits. It appears timely for consumers to become familiar with the equally important relationship between calcium intake and a strong and reliable central nervous system.

☀ Some Nutrition and Health Facts

Bone hardness peaks around age 35. Healthy bones are relatively strong and have the breaking strength of cast iron. Calcium is best absorbed into the body and deposited into the bones with adequate intake of Vitamin D. The Required Daily Amount of calcium for adults 25-51 years of age is 800 mg, and higher amounts for children and lactating women. Best sources of calcium are dairy products; milk (which provides about 300 mg per serving), cheese, yoghurt. Fortified milk products, fatty ocean fish and skin exposed to sunlight supply Vitamin D. If using calcium supplements, choose one with added Vitamin D.

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