ABC'S OF BONE HEALTH FOR PREMENOPAUSAL WOMEN

Bones are complex and important parts of us. Maintaining and building bone are not just about calcium—it is a "whole meal deal." Whatever genetic or osteoporosis risks we have at birth, it is still possible to build strong bones that will not put us at risk for osteoporosis with the normal bone losses of perimenopause and after menopause. These brief ABCs are to assist you to understand the many every-day generally healthy things that will help bones.

"A" is for Active

Bones build because of the forces on them from gravity and from muscle. Being active doesn't mean being an athlete. It means regularly choosing to climb stairs and walk, as well as doing active things for fun. Aim for a half an hour of walking or exercise every day.

"B" is for Brawny

Brawny? Weird! It means well-defined muscles, not model-thin. The slim ideal we see in models is not healthy for bones. Healthy bones require normal weight. Bone is so closely tied with weight that bone loss is inevitable with even the most slow and careful dieting. If weight loss is necessary, lose no more than half a pound a week, and take good care of yourself.

"C" is for Calcium

Calcium is an essential part of bone and also important for metabolism in muscles and other tissues. Recommended calcium intakes are 1000 mg a day of "elemental" calcium; this means the weight of calcium alone. If blood calcium drops (as it does at night when no food calcium is present for absorption) the body takes calcium from bones. Each glass (250 ml) of milk or fortified beverage, ³/₄ cup yogurt or hunk of cheese gives 300 mg of calcium. Therefore 3 to 4 high-calcium foods are needed daily. Because calcium is not stored (except by bones) ensure you get 200-300 mg of calcium with each meal as well as at bedtime. If food sources are not possible or insufficient, replace each high-calcium food with a supplemental form of calcium. If periods are absent, irregular or not ovulatory, or if weight loss is necessary or stress unavoidable, take 2000 mg of calcium each day (it is safe up to 2,500 mg a day).

"D" is for Vitamin D

Vitamin D that is naturally in some foods (cod or halibut liver oil!) and made from the sun's action on our skin is

needed to make calcium useful. A multiple-vitamin usually includes 400 IU of Vitamin D. To ensure adequate Vitamin D during the dark days of winter it is wise to take a multiple-vitamin daily. Doses of 1000-1200 IU a day may be recommended for those at risk for or who have osteoporosis. Vitamin D is stored in body fat so it can be taken all at once.

"E" is for Easygoing

A positive, relaxed approach to life helps bones! When we are tense, worried or depressed our bodies make too much cortisol, a stress hormone that causes bone loss. Even worry about whether what we eat will make us gain weight increases cortisol and is hard on bones. Daily relaxation is a helpful strategy for optimal bone health.

"F" is for Fertile

That doesn't mean making babies. It is a way of saying that menstrual cycles are normal: 3 to 5 weeks apart, and with normal ovulation and progesterone production most cycles. Bones need the monthly rising and falling levels of both estrogen and progesterone in the ovulatory cycle. Ovulation (egg release) and the length of the luteal phase (from ovulation until next flow) are often disturbed by stressors or weight loss.

If cycles are irregular, or you can't tell by the way that you feel that your period is coming, your estrogen and progesterone levels may not be appropriate for building bone. Cyclic progesterone therapy will help. (link to cyclic progesterone handout)

"G" and "H" are for Good Habits

That means regular meals and sleep, not smoking, and drinking no more than three caffeinated drinks per day (such as coffee or colas). Cigarettes interfere with estrogen, probably paralyze new bone formation and cause bone loss. Excess caffeine itself and especially in colas when combined with high phosphoric acid levels, causes calcium loss through the urine.

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