

Building Healthy Bones

This fact sheet is about osteoporosis. Osteoporosis (loss of bone mass) is a complication of highly active antiretroviral therapy (HAART). It can cause bone fracture, pain and disability. Bone loss occurs without symptoms. It may first be felt as back pain or seen in stooped posture or loss of height. Lessen the risk of osteoporosis by following the tips in this fact sheet.

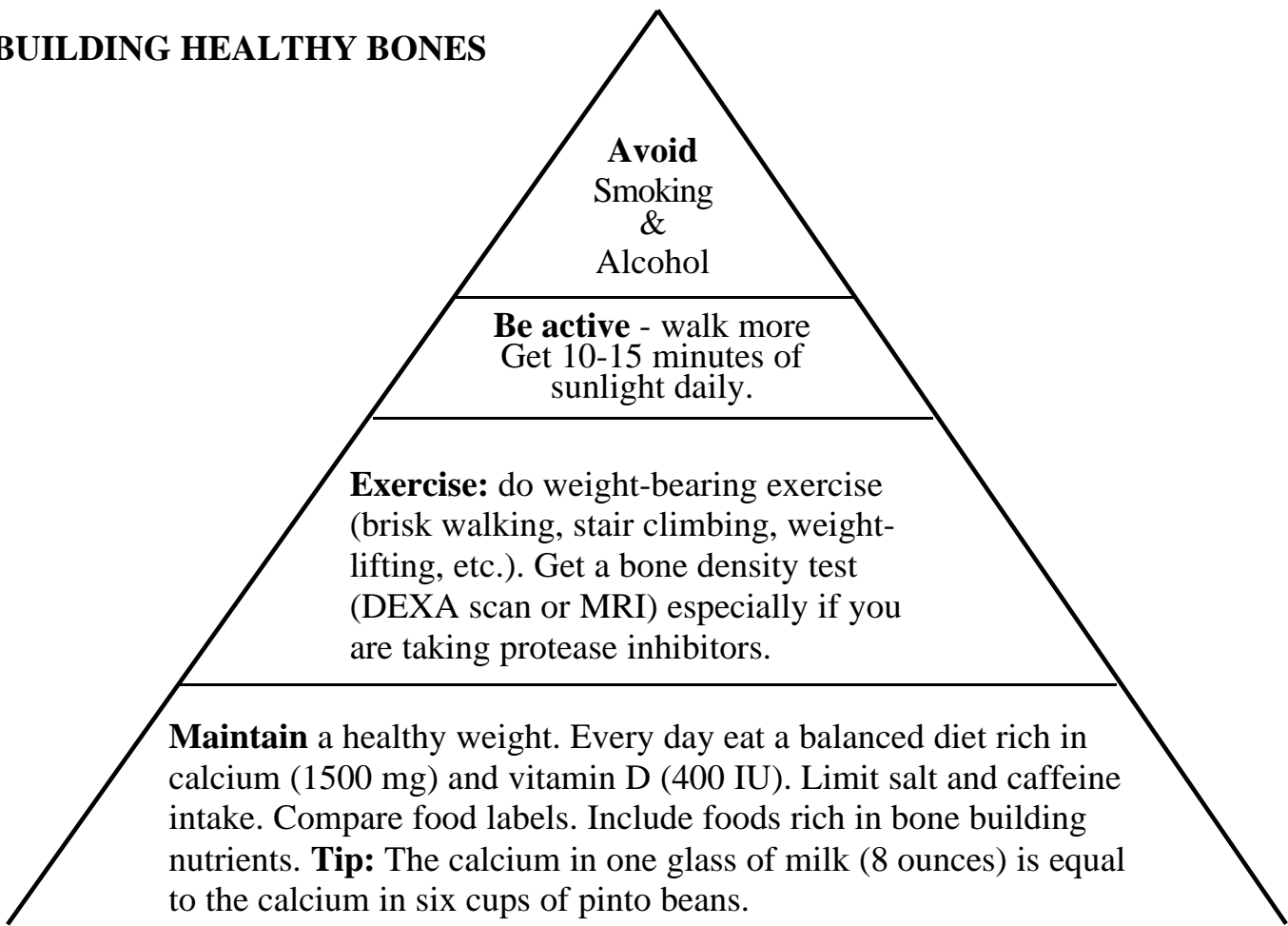
BONE BUILDERS

Bones need many nutrients.

- ◆ **Calcium** is the main building block of bones.
Food Sources: dairy products, calcium-fortified foods, almonds, canned sardines and salmon
- ◆ **Vitamin D** helps the body to absorb dietary calcium and build bones.
Food Sources: fortified food such as milk, butter, egg yolk and fatty fish
- ◆ **Vitamin C** is needed for collagen production, the tissue that holds bones together.
Food Sources: fruits, green leafy vegetables, melons, cabbage and potatoes

Other nutrients, especially minerals, are important for bone growth and maintenance. Eating a balanced diet helps the body to get all of the nutrients needed to build and maintain bones.

BUILDING HEALTHY BONES



Talk to a health care provider before increasing physical activity or starting an exercise program. Twisting motions and impact activities are harmful to some people with osteoporosis.

Many factors influence bone mass and increase the risk of having osteoporosis. Identify the factors below that may increase the risk of getting osteoporosis.

RISK FACTORS YOU CAN CHANGE

- ⊗ Physical inactivity
- ⊗ Cigarette smoking
- ⊗ Excessive alcohol intake
- ⊗ Diets with ↑ protein, ↓ calcium, ↑ salt or ↑ caffeine (more than 16 ounces per day)
- ⊗ Weight loss without ↑ calcium
- ⊗ Certain medications (such as antiretrovirals)
- ⊗ Low testosterone levels

OTHER RISK FACTORS

- ⊗ Certain conditions (anorexia nervosa, bulimia, diabetes, gastrointestinal disease, liver or pancreatic disease, and low thyroid)
- ⊗ Being Caucasian or Asian
- ⊗ Being thin or having a small body frame
- ⊗ Advanced age
- ⊗ Post menopause or no menstrual periods
- ⊗ Family history of osteoporosis

INCREASING CALCIUM INTAKE

Lactose intolerant people can try eating small portions of dairy products such as yogurt. Lactose-reduced dairy products or lactase replacement pills or liquid may help to increase calcium intake.

SUPPLEMENT TIPS

- ⊗ More than 1500 mgs of calcium per day can cause constipation, stomach bloating or gas. This amount includes calcium-fortified foods, calcium supplements, or antacids with calcium.
- ⊗ Calcium carbonate is well absorbed in most cases. People with low stomach acid can take calcium citrate.
- ⊗ Take calcium supplements in divided doses of **500 mgs or less** twice a day with meals.
- ⊗ The RDA for Vitamin D is 400 IU. Too much vitamin D may cause bone loss. Check multivitamin supplement labels. Do not take more than 400 IUs without a prescription.



SUN FACTS

- Aging decreases the skin's ability to make vitamin D.
- African Americans & Asians need a longer exposure to sunlight.
- During the Winter and in the North there is little or no production of vitamin D in the skin.
- Atmospheric pollution and clothing can block the skin production of vitamin D.
- Sunscreens with a sun protective factor (SPF) of 8 or more block sun-induced vitamin D production.