

CHAPTER 9

WATER AND MINERALS

REAL LIFE SCENARIO

Jana, a sophomore in high school, recently gave up drinking milk. She thought it would help her stay slim by avoiding all the calories in milk. Her mother is concerned about her diet change. One of her primary concerns is her future risk of osteoporosis. Jana needs an adequate source of calcium in her diet to aid with continued bone development and maintenance of the bone mass she already has. Jana also recently started smoking, and her only physical activity is practice for the Women's Glee Club.

Jana's diet on a recent day consisted of the following items. For breakfast, she had oatmeal made with water, a banana, and a cup of fruit juice. At midmorning, she bought a snack cake from the vending machine. At lunch, she had vegetable pasta, bread with olive oil, a side salad, 1 ounce of mixed nuts, and a soft drink. For dinner, she had a hamburger along with mixed vegetables and another soft drink. As an evening snack, she had some cookies and hot tea.

What factors place Jana at risk for osteoporosis in the future? What changes to her current diet could reduce that risk?