

## **Bone Health and Breast Cancer**

After the age of 35 our bone strength decreases. This is a normal part of the aging process. Some people experience a considerable weakening of bones and this can lead to osteoporosis.

### **What is osteoporosis?**

Osteoporosis means softening of the bones. Our bones are made of a thick outer shell. Inside it is lighter but strong and looks like honeycomb with struts of bone in between. When the struts of bone become thin, our bones become weaker and fracture easier. This is called osteoporosis.

### **Why is breast cancer related to osteoporosis?**

In certain forms of breast cancer the tumor will grow with the presence of the hormone estrogen. Treatment will stop the ovaries producing estrogen and will result in early menopause. However, a sudden reduction in estrogen can cause rapid bone weakening and this can lead to osteoporosis.

Causes are

- Some forms of chemotherapy for breast cancer can prevent new bone formation and loss of bone density.
- Treatment for breast cancer itself can cause the bones to be dissolved.
- Women who have already gone through the menopause and take aromatase inhibitors may also be prone to osteoporosis.

### **What can I do to maintain healthy bones?**

#### **Diet**

Maintain a healthy diet with five portions of fruit and vegetable per day. Reduce fat intake and get enough protein and carbohydrates.

Calcium is important for healthy bones so eat food that is a good source of calcium:

- Dairy produce - cheese, milk, yogurt (especially low fat varieties)
- Green leafy vegetables – spinach, broccoli, khubaisa, gargeer
- Beans and seeds – sesame seeds, green beans, fasolia bayda
- Oily Fish – sardines, pilchards including the soft bones
- Nuts and dried fruit – almonds, apricots and figs

Vitamin D is important for the absorption of calcium. The best source of vitamin D is sunlight. Approximately 15-20 minutes of sun exposure to the face and hands every day in Egypt will provide enough vitamin D. Other sources are oily fish and egg yolk.

#### **Exercise**

Weight bearing exercise like walking, running, skipping, aerobics, yoga, weight lifting and tennis are good forms of exercise that give bone strength. Try to exercise three times a week for 20 minutes.

It is important to:

- Reduce caffeine intake as this can affect calcium absorption.

- Stop smoking as smoking has a toxic effect on the bone.

### **How do I now if I have osteoporosis?**

If you feel you may be at risk from osteoporosis the contact your doctor. However, most women only discover they have osteoporosis after the first fracture.

### **What do I do if I have osteoporosis?**

If you have had a fracture, then contact your doctor and he or she will give you a bone density test. If you do have osteoporosis, the doctor will give you medication that will increase the bone density and reduce the risk of fractures. Taking medication is not sufficient on its own. It is also important to follow the advice given above on maintaining healthy bones with proper diet and exercise.

Making a few lifestyle changes can keep your bones healthy.