**Recommendations:**

Male 19-30: 1000mg/day  
Female 19-30: 1000mg/day

**Food sources:** Milk, yogurt, cheese, spinach, broccoli, oranges, salmon, and calcium fortified foods. Getting **3 servings of 8oz milk** gets you to the target of **1000mg**.

**Functions**

Calcium has many functions in the body such as **building bones**, **muscle contraction**, **nerve function**, and **blood clotting**. Calcium is so fundamental to maintain body functions that the body will do whatever it needs to maintain calcium blood levels, even taking it from your bones. This is why it is so important to make sure that you are getting enough calcium each day. A little absorption of calcium from bones is normal, but when having to be done in excess causes brittle bones or osteoporosis later in life.

**Importance**

Getting enough calcium as a child is important for reaching your potential adult height; a lack can cause a stunting of growth. But even now you need to keep getting your calcium in order to reach your **peak adult bone mass** at age 30 where bones reach their highest mass and density. After this, bones will at best be maintained and over time will lose calcium. The more you have when you reach 30 the better off you will be in old age. Besides getting your calcium, another way to reach peak adult bone mass is by doing **strength training exercises** such as weight lifting; this will cause bones to grow in thickness to be able to support the increase in muscle mass.

**Recommendations:**

Adult Male: 10mg/day  
Adult Women: 15mg/day

**Animal Sources (Heme):** beef, poultry, fish  
**Plant sources (Non-heme):** lentils, beans, spinach, iron fortified foods

**Absorption**

It is important to understand the two types of iron: **heme** and **non-heme**. Heme iron comes from animal tissue while non-heme comes from plant sources. Heme iron is absorbed easier than non-heme iron making it a better source for iron.

Non-heme iron is one of the main sources of iron for many people, especially when following a vegetarian lifestyle. This makes it important to increase absorption. **Vitamin C** rich foods help release more iron from plant sources. For example, you could pair **citrus fruits** with spinach salads or whole grain cereals as well as adding red bell peppers to whole wheat pasta dishes. Plan your meals to get as much iron as you can.

**Functions**

Iron is an essential component of **hemoglobin**, or blood. Without iron our blood would not be able to carry oxygen to our cells. When there is an iron deficiency a condition called **anemia** develops characterized by fatigue, weakness, and poor overall health.