

# Curriculum Planning & Development Division, Ministry of Education

## Minerals Part 2

### ACTIVITY SHEET – ANSWERS

#### SECTION 1 – Match the minerals “Calcium” and “Iron” to the term that best describes it.

Calcium or **IRON**

Mineral	Terms
Calcium	New bone production in children and adults
<b>IRON</b>	Babies are born with a four month supply
Calcium	Needed by the foetus for skeleton development
<b>IRON</b>	Development of a growing baby’s blood supply
Calcium	Around age 30, this mineral starts to be lost and is not replaced
<b>IRON</b>	Lost during regular menstrual cycle and must be replaced
Calcium	To keep bones and joints strong
<b>IRON</b>	Helps with the transport of oxygen to cells for energy production
Calcium	Vegetarians can get this mineral from molasses, legumes & bok choy

#### SECTION 2 – Complete the following sentences using words from the “word bank.”

##### Word Bank:

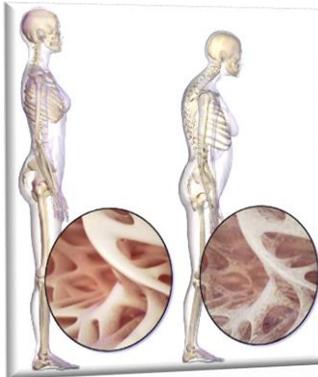
Oxalates                      Vitamin C                      Heme  
Non-heme                      Tannin                      Phosphorus  
Oily fish                      Whole grain                      Phytic

Heme iron found in animals is more readily absorbed than non-heme iron which is found in plants. Foods that contain Vitamin C enhances iron absorption from plant foods, while oxalates in spinach, phytic acid from some grains, leafy vegetables and soy protein and tannin acid in tea, coffee and nuts inhibit iron absorption.

Vitamin D helps to promote the absorption of phosphorus and calcium. A good supply of vitamin D can be found in oily fish. Calcium can be found in whole grain cereals, but when combined with phytic acid it is made unavailable to the body.

**SECTION 3 – Using the pictures below, identify the deficiency disease, the mineral associated with the disease and a sign/symptom of that disease.**

**Picture #1**



Deficiency Disease: **Osteoporosis**

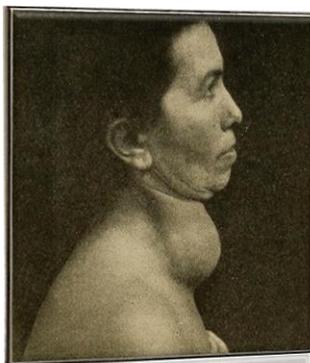
Associated Mineral: **Calcium**

Sign or Symptom: **Loss of height**

**Note:**

**Answers can also include** easily broken bones, pain especially in the back, weak and brittle bones

**Picture #2**



Deficiency Disease: **Goitre**

Associated Mineral: **Iodine**

Sign or Symptom: **Swelling in the neck**

**Note:**

**Answers can also include** difficulty breathing, difficulty swallowing, hoarseness, coughing, and tightness in the throat