SUMMARY

Minerals are the important part of typical human diet, but are essential for normal health and function. Macro minerals are defined as minerals that are required by adults in amounts greater than 100 mg/day. Trace elements (or trace minerals) are usually defined as minerals that are required in amounts between 1 to 100 mg/day by adults. Ultra-trace minerals generally are defined as minerals that are required in amounts less than 1 mg/day. This topic reviewed include, the physiological and biochemical functions, dietary requirements, and signs and symptoms of excess and deficiency for the essential trace minerals, including iron, zinc, copper, manganese, fluoride, and selenium. In addition, the toxicity of heavy metals on human health are discussed.