Iron deficiency anemia is a common medical condition characterized by a deficiency of iron in the body, leading to a reduced production of red blood cells and a subsequent decrease in the body's ability to transport oxygen. Iron deficiency anemia can be caused by various factors, including inadequate dietary iron intake, poor absorption of iron from the gastrointestinal tract, increased iron loss due to chronic bleeding, or increased iron requirements during pregnancy or rapid growth in children. It is essential for the synthesis of hemoglobin, and when iron levels are inadequate, the body is unable to produce enough red blood cells to carry oxygen effectively. When there is insufficient iron in the body, the production of hemoglobin is impaired, resulting in anemia.