

Nutrition

Student's Name

Institution

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Abstract

Pregnant women who do not take vitamin supplements containing folic acid are more likely to develop megaloblastic anemia. Other people at risk include those who drink alcohol, people who are being treated for cancer, strict vegetarians who do not consume vitamin B9, and patients suffering from dialysis. The National Institutes of Health suggests that people of African descent are more likely to develop anemia than people in Northern Europe, or other parts of the world. The elderly group is also considered to be at greater risk than the young. Risk factors include genetics (family history), autoimmune disorders affecting the endocrine glands, taking certain drugs, intestinal diseases, and animal protein and vitamin B12. As such, it is important to avoid strict dieting. This paper will explain different types of anemia, as well as their signs and symptoms, the role of iron in the body, and the relationship between the health of the fetus and maternal iron status.

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Question 1 and 2

Megaloblastic anemia is caused by the macrocytic presence in the blood and mega regions in the bone marrow. In 95% of cases, anemia is caused by a lack of folate and vitamin B12. A rare risk factor also causes folate or B12 metabolism (Soundarya & Suganthi, 2017). Besides, ascorbic acid, tocopherol, and thiamine deficiencies may be associated with megaloblastic anemia. Risk factors include growth retardation, anorexia, weakness, glossitis, puller, and scleral lens.

Malignant anemia is a chronic condition characterized by abnormally large erythrocytes (RBCs). RBCs are usually very low in monochromic numbers. If left untreated, it can lead to irreversible nerve damage and death (Abebe & Alemneh, 2017). Hereditary autoimmune disorders caused by parietal cell antibodies' production are more likely to be caused by alcohol and smoking.

Normal but insufficient red blood cells characterize normocytic anemia. In this condition, bleeding can occur from the gastrointestinal tract or genitals due to diseases that affect such systems. Normocytic is dangerous on its own. It is ubiquitous in chronic diseases. Its prevalence increases usually between eight and five years.

It is one of the health problems facing people all over the world. The most common causes of iron deficiency in childhood are anemia and thalassemia (Singal, Taneja, Setia & Singal, 2019). The main population is women with low iron, GI problems, or postpartum or postpartum strut menstruation (Anchang-Kimbi et al., 2017). These include pale skin, conjunctivitis, and gum lines, shortness of breath, dizziness, fatigue, and tiredness. This is due to insufficient iron intake and weakening capacity to produce new RBCs.

Sickle cell anemia is more common in Africa, Central and South America, and the Mediterranean region. Blood cannot circulate in blood vessels because they resemble menopause or sickle. It instructs body to make hemoglobin due to a mutation in the gene. Sickle cell genes are passed down through the generations.

Hemolytic anemia in the newborn is usually associated with abnormally low hemoglobin levels. Other factors include reticulocyte counts and undiagnosed hyperbilirubinemia (Li & Luo, 2016). One cannot inherit a defective red blood cell gene from one or both parents. Some of the essential factors include immune disorders, infections, drug reactions, and hyperplasia.

Question 3

An essential role of iron in the body is its ability to carry oxygen. Hemoglobin, some enzymes, and many proteins and enzymes of good condition cause cell growth, effective immune and liver function, and free radicals (Zhang, Zhabyeyev, Wang & Oudit, 2019). It is essential to have enough iron during pregnancy because it plays a vital role in developing the baby's brain. Anemia or iron deficiency in infants can slow down the development of the auditory nervous system and impair a child's ability to understand sounds (Van Swelm, Wetzels & Swinkels, 2019).

Question 4

Another effect of iron on a baby is an effect on birth weight, gestational age, and maternal iron deficiency (Iqbal & Ekmekcioglu, 2019). The mother reflects the baby's iron status after birth before pregnancy (Mangla & Singla, 2016). Increased hemoglobin levels in the intestines of newborns and women suffering from anemia increase oxygen supply and promote the growth of fetal organs and tissues (Best, Pressman, Cao, Cooper, Guillet, Yost & O'Brien, 2016). A baby with persistent anemia is at risk of being affected by their cognitive, motor, and behavioral outcomes.

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