

Common Nutritional deficiencies affect by children's of India and it controlling measures

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Introduction:

In the last few decades, India has made significant progress in reducing the number of child deaths from various diseases. Malnutrition, on the other hand, remains a major issue affecting children throughout the country. Malnutrition can be caused by a lack of access to nutritious food, poor sanitation and hygiene, and insufficient healthcare. This article discusses the most common nutritional deficiencies affecting children in India, as well as preventative measures.

Deficiency in iron:

Iron deficiency is the most common nutritional deficiency among Indian children. According to the National Family Health Survey, approximately 58% of children aged 6 to 59 months suffer from anaemia caused by iron deficiency. Anaemia can cause fatigue, weakness, and cognitive impairment. Iron is a necessary nutrient for the body's production of haemoglobin. Because the body cannot produce iron on its own, it must be obtained through diet. Inadequate iron intake or poor iron absorption in the body can result in iron deficiency and anaemia. Many children in India do not consume enough iron-rich foods, and their diets may be deficient in nutrients as a result of poverty and food insecurity.

Public health interventions, such as providing iron-rich foods and supplements, promoting exclusive breastfeeding, and improving access to healthcare, are required to address iron deficiency and anaemia in children. Furthermore, community-based education and awareness programmes can assist parents and

carers in understanding the importance of a balanced diet as well as how to prevent iron deficiency and anaemia in children.

Control measures include:

Iron-rich foods such as green leafy vegetables, beans, lentils, and meats are the best way to control iron deficiency. Under the supervision of a healthcare professional, iron supplements can also be administered. Furthermore, education and awareness campaigns can be carried out to educate parents on the importance of iron-rich foods in their children's diet.

Deficiency of vitamin A:

Vitamin A deficiency is a major issue in India, particularly in rural areas. The World Health Organisation (WHO) estimates that India accounts for roughly 70% of the global burden of vitamin A deficiency. A lack of vitamin A can cause blindness, impaired immune function, and an increased risk of death from infectious diseases. Vitamin A is a necessary nutrient that aids in vision, immune function, and growth and development. Because the body cannot produce vitamin A, it must be obtained through diet. Vitamin A deficiency can occur as a result of insufficient intake of vitamin A-rich foods or poor absorption of vitamin A in the body.

Vitamin A deficiency can lead to serious health problems such as night blindness and other eye problems, impaired immune function, and an increased risk of death from infectious diseases such as measles and diarrhoea. Pregnant women who are deficient in vitamin A are at a higher risk of maternal mortality and morbidity, as well as poor foetal and infant development.

Public health interventions, such as promoting the consumption of vitamin A-rich foods, providing vitamin A supplements, and improving access to

healthcare, are required to address vitamin A deficiency. Community-based education and awareness programmes can also help raise awareness about the importance of a healthy diet and the dangers of vitamin A deficiency. Furthermore, efforts to increase agricultural productivity and promote the cultivation of vitamin A-rich foods can aid in increasing the availability of these essential nutrients in the diet.

Control measures include:

The distribution of vitamin A supplements is the most effective way to control vitamin A deficiency. The Indian government has launched the National Vitamin A Prophylaxis Programme, which provides high-dose vitamin A capsules to children aged 6 months to 5 years. Educating parents about the importance of vitamin A-rich foods like dark green and yellow vegetables can also help.

Deficiency in iodine:

Iodine deficiency is a major issue in India, with only about 22% of households having access to iodized salt. Iodine deficiency can cause goitre, mental retardation, and growth problems. Iodine is a necessary nutrient for the production of thyroid hormones, which play an important role in regulating metabolism, growth, and development. Inadequate iodine intake or low iodine levels in the soil can result in iodine deficiency and a variety of health problems.

Iodine deficiency can cause goitre, mental retardation, impaired growth, and developmental delays, among other things. Iodine deficiency increases the risk of miscarriage, stillbirth, and other adverse pregnancy outcomes in pregnant women.

To address iodine deficiency, public health interventions such as promoting the use of iodized salt, providing iodine supplements, and improving access to

healthcare are required. Community-based education and awareness programmes can also help to raise awareness about the importance of iodine in the diet as well as the dangers of iodine deficiency. Furthermore, efforts to improve agricultural practises and promote the cultivation of iodine-rich foods can contribute to an increase in the availability of these essential nutrients in the diet.

Control measures include:

The universal salt iodization programme is the most effective way to control iodine deficiency. The Indian government has put in place this programme to ensure that all salt sold in the country is iodized. Furthermore, educational and awareness campaigns can be carried out to educate parents on the importance of using iodized salt in their cooking.

Deficiency in calcium:

Calcium deficiency is a major issue in India, with 70-90% of the population calcium deficient. Calcium deficiency can impair bone growth and development, increase fracture risk, and cause osteoporosis later in life. Calcium is a necessary nutrient for the development and maintenance of strong bones and teeth, as well as other vital bodily functions such as muscle function, nerve transmission, and blood clotting. Inadequate calcium intake or poor calcium absorption in the body can result in calcium deficiency and a variety of health problems.

Calcium deficiency can cause a variety of health issues, including impaired bone growth and development, an increased risk of fractures, and later-life osteoporosis. Children with calcium deficiencies may have stunted growth and development, whereas adults may be at increased risk of bone loss, fractures, and osteoporosis.

Public health interventions, such as promoting the consumption of calcium-rich foods, providing calcium supplements, and improving access to healthcare, are required to address calcium deficiency. Community-based education and awareness programmes can also help to raise awareness about the importance of calcium in the diet as well as the dangers of calcium deficiency. Furthermore, efforts to improve agricultural practises and promote the cultivation of calcium-rich foods can contribute to an increase in the availability of these essential nutrients in the diet.

Control measures include:

Calcium-rich foods such as milk, cheese, and yoghurt are the most effective way to control calcium deficiency. Educating parents about the importance of calcium-rich foods in their child's diet can also be beneficial.

Deficiency in zinc:

Zinc deficiency is a significant problem in India, affecting approximately 69% of children under the age of five. Zinc deficiency can impair immune function, stunt growth, and increase the risk of diarrhoea and respiratory infections. Zinc is a necessary mineral for the proper functioning of many enzymes in the body. It is necessary for immune function, wound healing, growth, and development. Zinc deficiency and a variety of health problems can result from insufficient zinc intake or poor zinc absorption in the body.

Zinc deficiency can cause a variety of health issues, including impaired immune function, delayed growth, and an increased risk of diarrhoea and respiratory infections. Zinc deficiency in children can cause delayed wound healing, increased susceptibility to infections, and impaired cognitive function.

Public health interventions, such as promoting the consumption of zinc-rich foods, providing zinc supplements, and improving access to healthcare, are required to address zinc deficiency. Community-based education and awareness programmes can also help to raise awareness about the importance of zinc in the diet as well as the dangers of zinc deficiency. Furthermore, efforts to improve agricultural practises and promote the cultivation of zinc-rich foods can contribute to an increase in the availability of these essential nutrients in the diet.

Control measures include:

The most effective way to prevent zinc deficiency is to eat zinc-rich foods like meats, seafood, and legumes. Furthermore, education and awareness campaigns can be carried out to educate parents on the importance of zinc-rich foods in their children's diet.

Conclusion:

Finally, malnutrition is a significant issue affecting children throughout India. The most common nutritional deficiencies affecting children in India are iron deficiency, vitamin A deficiency, iodine deficiency, calcium deficiency, and zinc deficiency. Various measures, such as supplementation, education and awareness campaigns, and access to nutritious foods, can be implemented to control these deficiencies.

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