

VITAMIN A DEFICIENCE(XEROPHTHALMI A)

VIT A

DEFICIENCY(XEROPTHALMIA)

- **Biochemical definition:** Serum retinol level less than 0.70 micromol per litre.
- **Clinical definition;** presence of signs and symptoms of xerophthalmia.
- **Sources of vit A**
- Preformed vit A, liver, butter, milk, eggs etc. Provitamin A carotenoid, Dark green leafy vegetables, red palm oil, fruits like mangoes papaya etc.
- **RISK FACTORS OF VIT A DEFICIENCY**
- Age ie 1-4yrs...
- Males (boys) more than girls.
- Non breast fed children 3-4times or more at greater risk.

FUNCTIONS OF VIT A

- Vision : rod cells of retina require vit A to function. Rods contain a protein OPSIN attached to vitamin A to form a compound. 11-CIS RETINAL which is sensitive to light and on exposure to light a nerve impulse is generated from converted all trans retinal.
- **Other functions of vit A are**
 - Epithelial cell integrity against infections
 - Immune response(cell mediated)
 - Skeletal growth
 - Fertility

CLASSIFICATION OF VIT A DEFIECIENCE

- Night blindness.....XN
- Conjunctival xerosis.....X1A
- Bittot's spots.....X1B
- Corneal xerosis.....X2
- Corneal perforation/keratomalacia less than 1/3.....X3A
- Corneal perforation/keratomalacia greater than 1/3.....X3B

MANAGEMENT

- Vit A capsules on day 1,2 and 15 or 30 with dosage according to age. Prevention by- vit A supplementation every 6 months, Supply of Vit A to mothers just after delivery.
- Measles immunisation.
- Diarrhoea control.
- Improve nutrition.