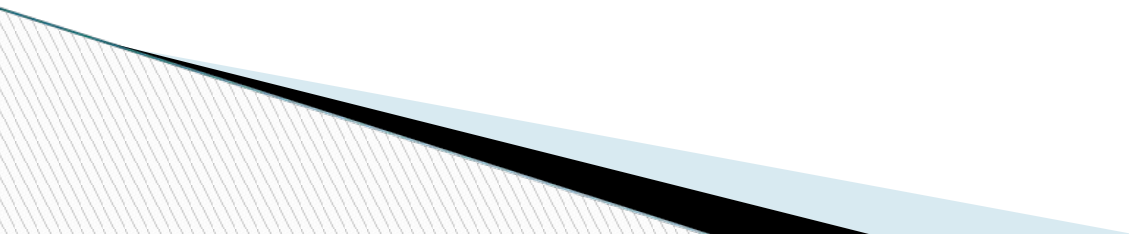


Block 6
Nutrition and Health Programmes

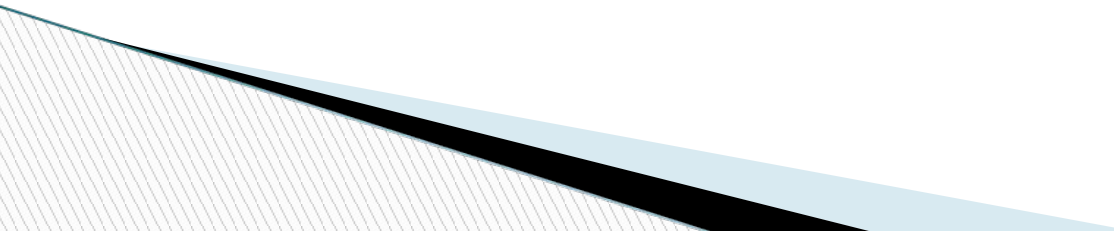


Unit 20

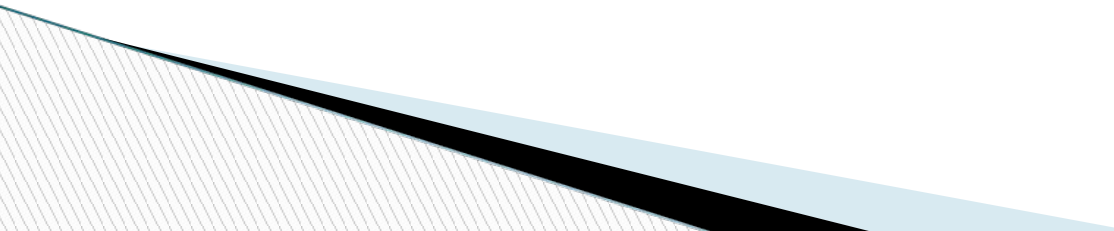
Assessment of Nutritional Status



How to find if the child is in good health

- Unit 2 talked about good signs of health
 - Measurement of body size
 - Child's food intake
 - This unit different methods and their applications in assessing nutritional status of individuals or groups
- 

Objectives

- **Describe the methods used in assessment of nutritional status**
 - **Discuss the relative significance of each method used**
 - **Explain the concept of growth monitoring, and**
 - **Use growth monitoring as a tool to assess nutritional/health status.**
- 

Methods of Assessing Nutritional Status

- **Nutritional status** refers to the state of health of an individual as it is affected by the intake and utilization of nutrients.
- However,
- Evaluation of **nutrient intake** alone cannot help judge the nutritional status of an individual. It is not so simple
- Growth failure may be caused due to heredity factors, infections/diseases, dietary lack or any other factor.
- So need info on
- Type of illness
- Signs
- levels of nutrients in blood and urine

No one simple procedure

- **4 major methods used to assess nutritional status:**
 - **Anthropometric measurement**
 - **Clinical method**
 - **Biochemical analysis**
 - **Diet survey**
- Each method has some strengths and some drawbacks

Anthropometric Measurements

- **Refer to measurements of body size.**
- **The four most commonly used and simple body measurements are:**
 - **Weight for Age**
 - **Height for Age**
 - **Weight for Height**
 - **Arm circumference for Age**

2 imp factors

Accurate age and standards for comparison

- **Average body measurements of well-nourished and healthy children who are medically and socially well-protected are referred to as standards and values are used for the purpose of comparison.**
- **Appendix 3 gives tables**

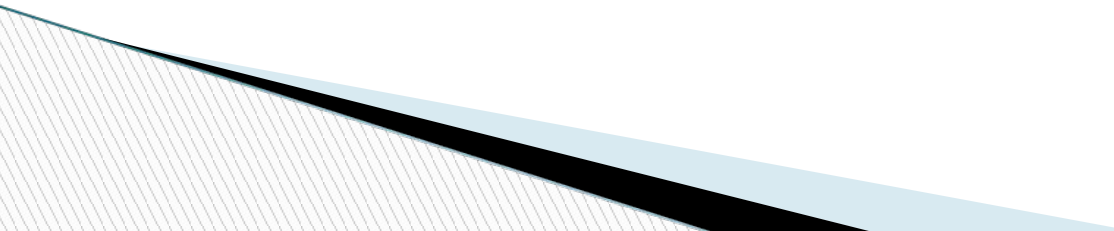
Weight for Age

- ❑ **Weight for age is a commonly used indicator of body size, and it reflects the level of food intake.**
- ❑ **The relative change of weight with age is more rapid than that of height.**
- ❑ **It is a very sensitive measure of short duration malnutrition.**
- ❑ **The weight recorded to be compared with standard weight.**
- ❑ **Low weight for age is called Underweight.**
- ❑ **Salter's scale – can be hung from a point**
- ❑ **Weighing machine**

Height for Age

- **Height is a very reliable measure.**
- **It reflects the total increase in size of the individual up to the moment it is determined.**
- **Height for age , is only a measure of long duration malnutrition. As height does not decrease it cannot indicate a deterioration in health.**
- **It cannot detect changes in growth pattern within a short time interval.**
- **Low Height for Age is indicative of Stunting and of chronic malnutrition.**
- **A vertical measuring tape scale fixed on wall**
- **Infantometer- wooden scale on which infant made to lie down.**

Weight for Height

- ❑ **It is a very good index for short duration malnutrition.**
 - ❑ **Can be used in populations where the child's age is not known.**
 - ❑ **A too low weight for height is called Wasting.**
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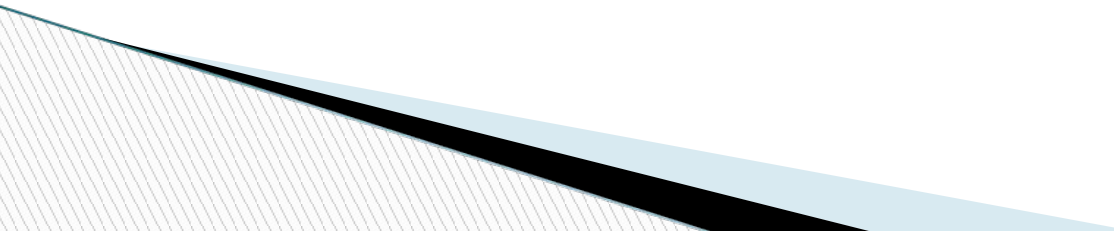
Mid Upper Arm Circumference

- Arm Circumference- bone, fat , muscle are energy and protein reserves
- **MUAC reduced in PEM.**
- **Between 1-5 years , arm circumference does not change much- so a good indicator of child's health**
- **MUAC for well nourished child is 15-16 cm.**

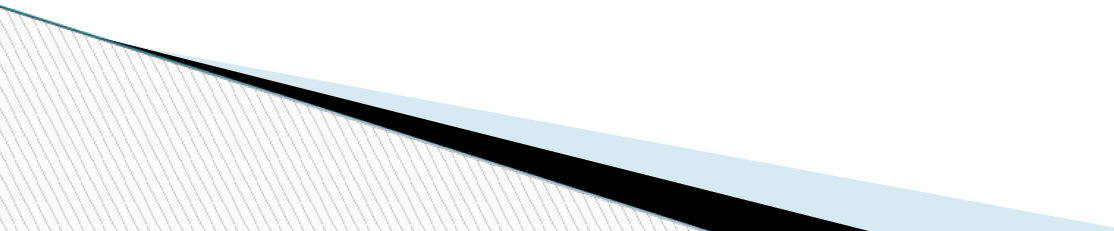
- **A measurement below 80% of the normal i.e. <12.5 cm – severe malnutrition**
- **12.5-13.5 cm-moderate malnutrition.**
- **Useful measure for assessing thinness or muscle wasting in children 1-5 years.**

- ❑ **Need not know exact age of the child. Useful in field situations. Used as a screening tool.**
- ❑ **Measuring tape placed around the middle part of the child's left arm.**
- ❑ **Tricolour arm tape- red zone 12.5 cm long, yellow zone is 1 cm long and remaining green.**
- ❑ **Red opposite green-normal,**
- ❑ **red opposite yellow-moderately malnourished,**
- ❑ **red opposite red-severely malnourished child.**

Clinical Method

- ❑ **Clinical signs and symptoms – changes in the body which are indicative of a particular deficiency. Exp bitot spots, lethargy, paleness.....**
 - ❑ **With training one can learn to recognize signs**
 - ❑ **Table 20.1 given in unit**
 - ❑ **Clinical signs alone are not enough**
 - ❑ **Correlate with complete diet, medical history, physical examination (anthropometric) and biochemical testing for good testing.**
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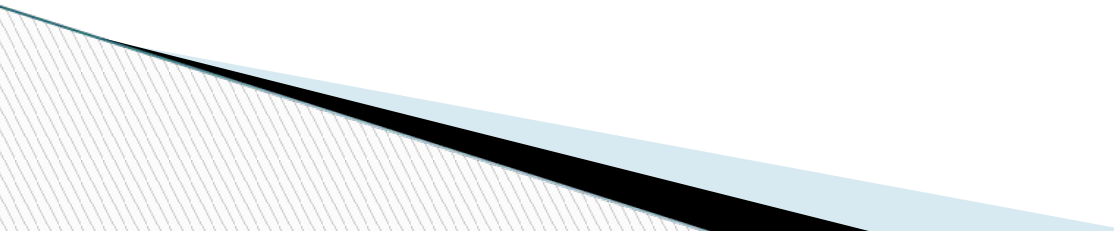
Biochemical Assessment

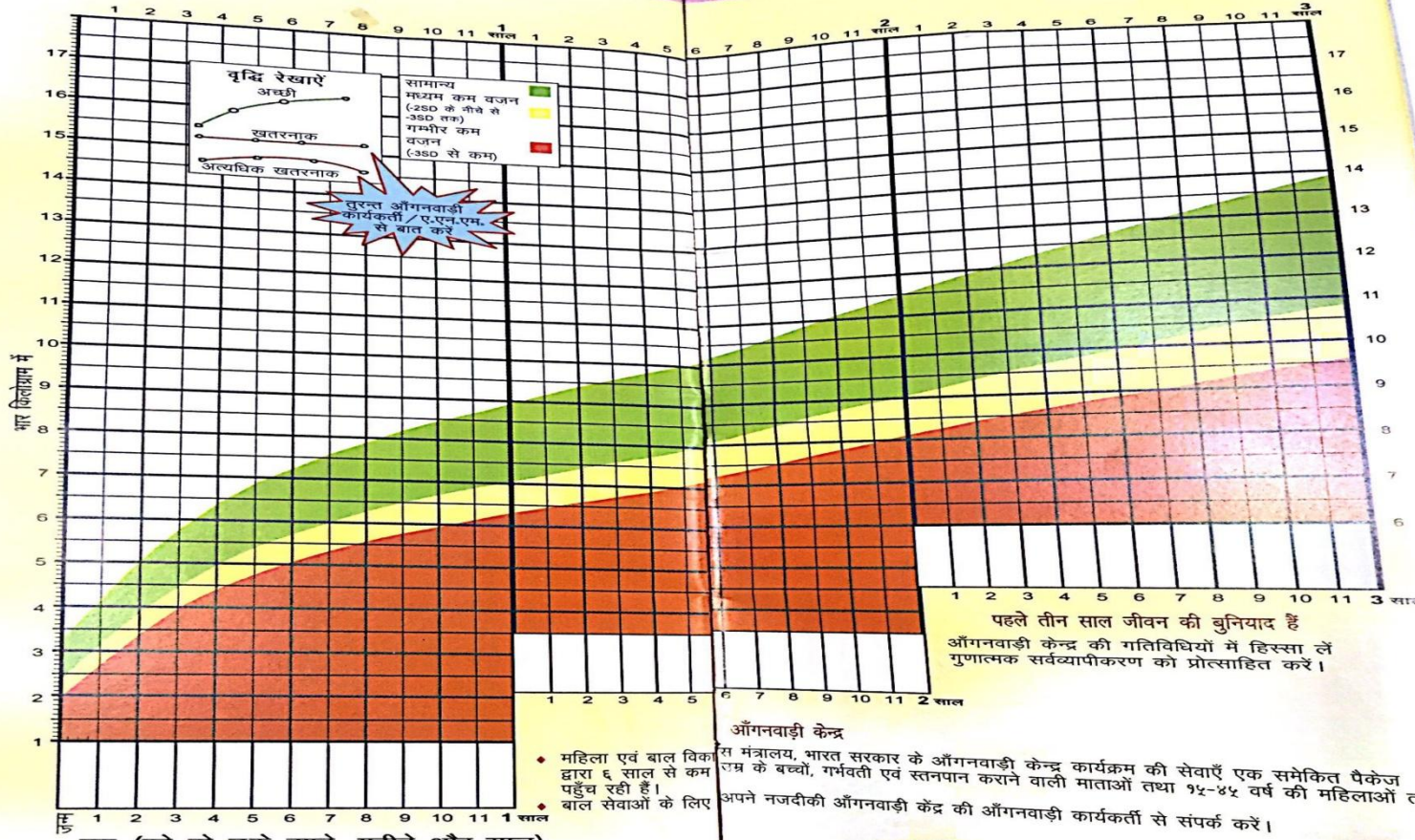
- It deals with measuring the level of essential dietary constituents in the body fluids(**blood and urine normally**) which is helpful in evaluating the possibility of malnutrition.
 - Haemoglobin in blood- anaemia
 - Vitamin A in blood
 - Thiamine in urine
- 

Diet Survey

- ❑ It is a systematic inquiry into the food supplies and food consumption of individuals and population groups.
- ❑ 24 – hour recall:
- ❑ most widely used. Subject asked to recall food intake for the past 24 hrs. For Children, ECCE worker may ask mother to recall foodstuffs used, preparations made and distribution to the child.
- ❑ It should not be correlated with biochemical or clinical findings. For this, repeated 24 hr recall (2-3 days) may be done.

Growth Monitoring

- ❑ **Keeping a regular track of the change in weight over a period of time is growth monitoring.**
 - ❑ **Growth chart is a means of monitoring and interpreting changes in weight over time. It is a graph on which weight is plotted against age so that growth can be followed graphically in comparison with reference standards.**
- 



पहले तीन साल जीवन की बुनियाद है
 ऑगनवाड़ी केन्द्र की गतिविधियों में हिस्सा लें
 गुणात्मक सर्वव्यापीकरण को प्रोत्साहित करें।

ऑगनवाड़ी केन्द्र

संघ मंत्रालय, भारत सरकार के ऑगनवाड़ी केन्द्र कार्यक्रम की सेवाएँ एक समेकित पैकेज
 उम्र के बच्चों, गर्भवती एवं स्तनपान कराने वाली माताओं तथा 9५-४५ वर्ष की महिलाओं तक
 अपने नजदीकी ऑगनवाड़ी केन्द्र की ऑगनवाड़ी कार्यकर्ता से संपर्क करें।

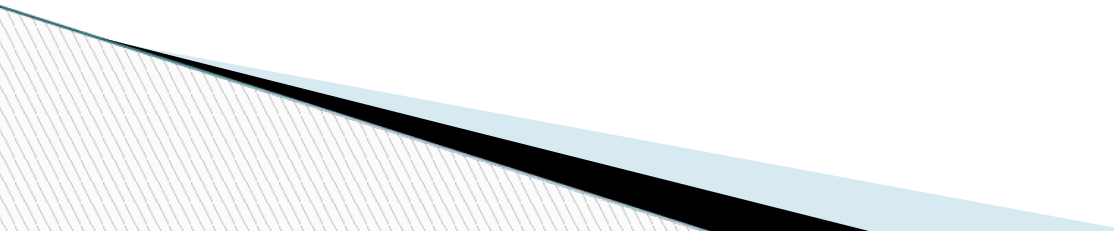
- महिला एवं बाल विकास द्वारा ६ साल से कम पहुँच रही हैं।
- बाल सेवाओं के लिए

ऑगनवाड़ी केन्द्र सेवाएँ

- पूरक पोषाहार तथा वृद्धि निगरानी और प्रोत्साहन
- पोषण एवं स्वास्थ्य शिक्षा
- टीकाकरण
- स्वास्थ्य जाँच
- रेफरल सेवाएँ

- प्रारंभिक बाल्यावस्था देखभाल एवं स्कूल-पूर्व शिक्षा

Steps in Growth Monitoring

- ❑ **Determining correct age of the child**
 - ❑ **Accurate weighing of the child**
 - ❑ **Plotting the weight accurately on the growth chart**
 - ❑ **Interpreting the direction of the growth curve of the child.**
 - ❑ **Analysis and follow-up action**
- 

Interpreting the direction of the Growth Curve

- ❑ An upward growth curve indicates that the child is growing and is healthy.
- ❑ A flat growth curve indicates no weight gain, faltering growth, requires attention
- ❑ A downward growth curve indicates loss of weight, matter of concern and requires prompt action
- ❑ Another aspect that needs interpretation is the nutritional grade the curve falls in. The child's weight should fall in area called 'normal'. Lower the position of the curve, the higher the degree of malnutrition.

Then Analysis and follow-up action

