

Nutritional Assessment and Interventions for Individuals and Communities: 2004/2005

In Class Test: 01/02/05

There are 30 multiple choice questions (MCQ). Each MCQ has only one correct answer. The questions provide a brief summary of the range of topics introduced to you during the lectures.

Please answer all of the questions on the separate answer sheet provided. The duration of the in class test is 1 hour. Please hand in both your questions and answer sheet at the end of the test.

Good Luck.

MCQs

1. Common indicators for monitoring malnutrition in populations is low birth weight (LBW). LBW is defined as:
 - a. Less than 3000g
 - b. Less than 2000g
 - c. Less than 2500g
 - d. Less than 3500g
 - e. Less than 2750g

2. Which anthropometric indicator best monitors chronic malnutrition among the under fives:
 - a. Low weight for age
 - b. Low weight for height
 - c. Mid arm circumference
 - d. Low height for age
 - e. Skinfold thicknesses

3. Prevalence of Xerophthalmia is monitored internationally. It is a common consequence of which of the following micronutrient deficiencies:
 - a. Vitamin D
 - b. Iron
 - c. Vitamin A
 - d. Iodine
 - e. Zinc

4. The rate of low weight for age among the 0-5 year old age group is an official indicator of progress for which millennium development goal:
- Eradicate extreme poverty and hunger
 - Reduce child mortality
 - Improve maternal health
 - Achieve universal primary education
 - Combat HIV / AIDS, malaria and other diseases
5. There is a relationship between inadequate dietary intake and disease. Which of the following statements about this cyclic relationship is FALSE:
- Disease can cause appetite loss
 - Nutrients can be poorly absorbed during illness
 - Altered metabolism can lead to inadequate levels of nutrients in the body.
 - Inadequate dietary intake can lead to weight loss
 - Immunity is not impaired as a result of inadequate dietary intake
6. Which of the following statements about dietary assessment is FALSE:
- Dietary assessments can identify an actual amount of absorbed intake.
 - Dietary assessments can be used to investigate the relationship between food intake and health status of individuals.
 - Dietary assessments provide information on variety of food intake.
 - Dietary assessments can provide information on habitual food intake.
 - Dietary assessments can provide an evaluation of food intakes in relation to recommendations.
7. Which of the following statements about 24 hour food recall is FALSE:
- A single 24 hour food recall may exclude food items eaten infrequently.
 - A 24 hour food recall does not bias against people unable to read or write.
 - The 24 hour food recall is reliant on memory and may be less useful for use with young children.
 - A single 24 hour food recall is sufficient to provide information on usual dietary intakes.
 - 24 hour food recall is a quick dietary assessment, providing little time for subjects to change their eating patterns.

8. Which of the following statements about 3 day food diary is FALSE:
- a. A food diary, usually maintained by the subject, is a record of all food and drink consumed over 3 consecutive days.
 - b. Data collection using a food diary usually requires motivated participants.
 - c. Food diaries are a useful data collection method to gather dietary information in a large population survey.
 - d. Food quantities can be recorded in a food diary to calculate estimates of nutrient intake from food consumption tables.
 - e. Food diaries do not always take into account food that is left over or spillage.
9. Which of the following reasons for decreased food consumption when an individual is HIV positive is FALSE:
- a. Oral sores
 - b. Household food insecurity
 - c. Side effect of drugs
 - d. Change of mental state, depression.
 - e. Increased appetite
10. HIV infection can increase the body's requirement for energy by:
- a. 45-50%
 - b. 5-10%
 - c. 10-15%
 - d. 25-30%
 - e. 35-40%
11. The risks of HIV transmission from mother to child may be increased by a number of factors, which of the following factors is FALSE:
- a. Maternal immune status
 - b. Maternal malnutrition
 - c. Duration of breast feeding
 - d. Absence of breast abscesses
 - e. Presence of mastitis
12. Which of the following conditions is a result of severe protein energy malnutrition:
- a. Marasmus
 - b. Rickets
 - c. Goitre
 - d. Anaemia
 - e. Xerophthalmia

13. The first treatment step for the management of severe protein energy malnutrition is:

- a. Treat infections
- b. Cautious feeding
- c. Rebuild waste tissues
- d. Correct deficiencies of micronutrient deficiencies
- e. Treat/prevent hypoglycaemia

14. Which of the following statements DOES NOT describe community therapeutic care (CTC) for children with severe malnutrition:

- a. CTC is associated with the removal of the carer from the family during the time course of nutrition rehabilitation.
- b. CTC is consistent with the rights based approach to nutritional care
- c. CTC is associated with increased coverage of the affected population.
- d. CTC is associated with the engagement of local capacity.
- e. CTC is associated with the use of ready to use foods

15. The weight-for-age indicator is useful for which purpose:

- a. Identifying growth faltering in young children
- b. Admitting children to an emergency therapeutic feeding programme
- c. Quantifying obesity
- d. Quantifying the risk of micronutrient deficiencies
- e. Measuring the prevalence of wasting

16. Which indicator is the most useful for rapid screening of children in an emergency nutrition programmes

- a. Weight -for-height
- b. Weight- for-age
- c. Height for age
- d. MUAC
- e. BMI

17. Cluster sampling is often used in nutrition surveys because:

- a. It gives the lowest design effect
- b. It will give the smallest confidence intervals
- c. It is often the most feasible sampling method
- d. Clusters are always found close together
- e. Random sampling is not important in emergency surveys

18. Which of the following is NOT an important source of potential bias in nutrition surveys of children:
- Inaccurate age estimation
 - Security constraints on the movement of survey teams
 - Badly made height boards
 - Old scales that have not been calibrated
 - A low proportion of acute malnutrition
19. How should the height of children below 24 months of age be measured:
- Standing up
 - Lying down
 - Sitting
 - Using arm span as a proxy
 - Using MUAC as a proxy
20. A sample size of 900 children is often used in emergency nutrition surveys to determine the prevalence of malnutrition because:
- That is the minimum sample size that is always required to measure wasting with good precision
 - The sample size will usually give acceptable precision and is routinely used by operational agencies
 - A sample size of 900 children will also be adequate to measure the crude mortality rate of the population.
 - With 900 children you can also measure the prevalence of all micronutrient deficiencies
 - A sample of 900 will be adequate to remove the recall bias associated with age measurements
21. Z-scores are useful in describing the weight of height indicator because:
- They always give the same result as the percentage of median
 - The results are comparable between different ages
 - They can be calculated easily by hand without the use of reference tables
 - Staff can be taught to use them more easily than other methods
 - All malnourished children have the same z-score

22. The advantage of an international reference for anthropometric measurements (such as the CDC/WHO reference) is that:

- a. An international reference is always politically more acceptable to country governments
- b. The population of the USA shows optimal growth
- c. An international reference allows comparison of surveys conducted in different countries.
- d. Groups of malnourished children will always have the same average z-score
- e. Secular changes in height are the same in all countries and are reflected in the international reference

23. The most prevalent micronutrient deficiency in the world is currently thought to be:

- a. Iron deficiency
- b. Beriberi
- c. Iodine deficiency
- d. Protein deficiency
- e. Calcium deficiency

24. Micronutrient deficiency has NOT been associated with:

- a. Impaired economic development
- b. Increased morbidity
- c. Increased mortality
- d. Lower cognitive ability
- e. High diet diversity

25. Blood tests for micronutrient deficiencies are sometimes used because:

- a. Using clinical signs to detect deficiencies has a high sensitivity and specificity
- b. Blood tests are always cheap and are widely available for all deficiencies
- c. Blood collection is easier than clinical examination
- d. No methods are available for testing urine
- e. Clinical signs may be difficult to interpret and lack specificity

26. In a household survey it is essential to ask questions about all family members for the assessment of which indicator:

- a. underweight
- b. Wasting
- c. Stunting
- d. Child morbidity
- e. Crude mortality

27. Rickets is definitely NOT associated with which of the following:
- a. Low calcium intake and low sun exposure
 - b. Cultural and religious practices limiting exposure to sunlight
 - c. Low vitamin D status
 - d. Consumption of fish
 - e. An early age of onset
28. Which UN agency is primarily responsible for food aid:
- a. UNHCR
 - b. WFP
 - c. WHO
 - d. FAO
 - e. UNICEF
29. In humanitarian food aid programmes which one of the following criteria should be used in targeting food aid:
- a. Political affiliation
 - b. Religion
 - c. Gender and Age
 - d. Need
 - e. Media coverage
30. The most common method for biochemical assessment of iodine deficiency is:
- a. testing blood for the concentration of iodine
 - b. testing urine for the concentration iodine
 - c. testing saliva for the concentration of iodine
 - d. measuring serum retinol
 - e. measuring circulating levels of RBP

Quantitative Research Methods 2005 -in class test

This test is closed book and should be completed individually in the form of short notes. Answers should be legibly handwritten, single-sided please. There is a one hour limit to this test.

Choose only four questions from the following:

- (1) Four of the most common types of self-administered surveys are: direct mail survey, telephone interview, online survey and drop-off surveys. Provide an example for each of these.
- (2) There are three main approaches to selecting a representative sample: random sampling, stratified random sampling, and ad hoc sampling. Discuss the relative pros and cons of each approach.
- (3) What is a risk ratio and when is it used?
- (4) In your opinion, what is the most important aspect in designing good research? Justify your answer.
- (5) What are the specific strengths and limitations, in using measures of sensitivity and specificity?
- (6) Consider the following statement: "Even though most of the research we read about in journals and scientific papers is good research, there is no such thing as perfect research". Discuss this, illustrating your reasoning.