

Sample NACS Pre- and Post-tests

Excerpt from Zambia Ministry of Health, Ministry of Community Development and National Food and Nutrition Commission. 2016. *Nutrition Assessment, Counselling and Support (NACS): An Approach to Preventing and Treating Malnutrition: Training Manual: Facilitators' Guide*. Lusaka. Zambia.

Answer the following questions by indicating TRUE (T) or FALSE (F) in the right-hand column. (3 points each)	
1. Malnutrition can be caused by eating too much as well as eating too little.	T
2. Good nutrition can improve the effectiveness of medicines.	T
3. Bilateral pitting oedema is a clinical sign of kwashiorkor.	T
4. Asymptomatic people with HIV) need to consume 15–30 percent more energy than HIV-negative people of the same weight, sex and activity level.	F
5. Asymptomatic HIV-positive children with weight loss need to eat 20–30 percent more energy than HIV-negative children of the same age, weight, sex and activity level.	T
6. According to WHO, people with HIV do not need more protein or micronutrients than people without HIV.	T
7. People taking medicine, including ART, can manage medication-food interactions and side effects by changing their diets.	T
8. Rapid weight loss—more than 5 percent of usual body weight over 2–3 months—is associated with opportunistic infections.	T
9. People with nausea or vomiting should eat large, infrequent meals.	F
10. Bilateral pitting oedema is a sign of severe acute malnutrition.	T
11. Telling someone what to do is the surest way to change their behaviour.	F
12. HIV-positive mothers should never breastfeed their babies.	F
13. MUAC can be measured on any part of the arm.	F
14. After washing your hands, you should dry them on a cloth.	F
15. Feeding a baby other foods or liquids in addition to breast milk during the first 6 months of life decreases the risk of HIV transmission.	F

Write the answers to the following questions:

<p>16. Why is good nutrition important for good health? (10 points)</p> <p>Possible ANSWERS:</p> <ul style="list-style-type: none"><i>It helps people feel strong and look healthy.</i><i>It strengthens the immune system.</i><i>It helps people stay productive.</i><i>It helps prevent wasting.</i><i>It improves medication adherence and effectiveness.</i>
<p>17. How does HIV affect nutrition? (5 points)</p> <p><i>HIV increases energy needs but decreases appetite and nutrient absorption.</i></p>
<p>18. What are four types of nutrition assessment? (5 points)</p> <p><i>Anthropometric, biochemical, clinical and dietary</i></p>
<p>19. What anthropometric measurement should be used to assess the nutritional status of pregnant and postpartum women? (5 points)</p> <p><i>MUAC</i></p>
<p>20. What body mass index (BMI) indicates undernutrition and a high risk of illness? (5 points)</p> <p><i>< 18.5 cm</i></p>
<p>21. What is the weight-for-height z-score cutoff for severe acute malnutrition (SAM) in children under 5? (5 points)</p> <p><i>< -3</i></p>
<p>22. Why is food and water safety especially important for people with HIV? (5 points)</p> <p><i>Their weak immune systems can't protect them against infection from contaminated food or water.</i></p>
<p>23. List the Critical Nutrition Actions. (15 points)</p> <ol style="list-style-type: none"><i>1. Get weighed regularly and have weight recorded.</i><i>2. Eat a variety of nutritious foods and increase energy intake.</i><i>3. Maintain good hygiene and sanitation.</i><i>4. Practice positive living.</i><i>5. Get regular exercise.</i><i>6. Drink plenty of boiled or treated water.</i><i>7. Seek prompt treatment of infections and manage symptoms through diet.</i><i>8. Manage medication-food interactions and medication side effects through diet.</i>

Excerpt from Republic of Uganda Ministry of Health. 2016. *Integrating Nutrition Assessment, Counselling, and Support into Health Service Delivery: Training Course for Facility-Based Providers: Facilitator's Manual*. Ministry of Health.

Answers to Pre-Test and Post-Test for Course Participants

Answers to Part A

	True (T) or False (F)
Nutrition Assessment, Counselling, and Support	
1. Malnutrition is categorized as either undernutrition or overnutrition.	T
2. Deficiencies of iron, vitamin A, zinc, and iodine are a type of undernutrition.	T
3. Z-scores and BMI are anthropometric measurements used to determine an individual's nutritional status.	F
4. Bilateral oedema on only the feet and legs is classified as grade +++.	F
5. Therapeutic food and referral are components of patient support.	T
Maternal and Young Child Nutrition	
1. Pregnant and lactating mothers and women who are sick, especially with HIV, are at a higher risk of malnutrition and mortality.	T
2. Undernutrition weakens a woman's ability to survive childbirth and give birth to a healthy baby.	T
3. A healthy mother is the first defence for a child against death, malnutrition, and the cycle of poverty and sickness.	T
4. Girls with low birth weight may eventually become stunted women and perpetuate the cycle of malnutrition among women.	T
5. Early initiation of breastfeeding (within the first hour of birth) and exclusive breastfeeding from 0–6 months is key to child survival.	T
Nutrition Care and Support for People Living with HIV and Tuberculosis (TB)	
1. HIV and TB infection does not affect energy requirements for people who have HIV or TB.	F
2. The side effects of antiretroviral (ARV) and TB medication do not affect food consumption.	F
3. Malnutrition increases progression of TB infection to TB disease.	T
4. People with TB infection are at an increased risk of malnutrition.	T
5. Nutrition care is important for people living with HIV but not people with TB.	F
System Strengthening	
1. Health care quality improvement has three key principles.	F
2. Monitoring is more important than evaluation in quality improvement.	F
3. Quality improvement may mean applying appropriate methods to close the gap between current and expected level of quality/performance as defined by standards.	T
4. Periodic assessment of the change in expected results that can be attributed to program intervention is called monitoring.	F
5. Routine tracking of key elements of programme performance, like inputs and outputs, is called evaluation.	F

Answers to Part B

1. Which of the following is an underlying cause of malnutrition?

- a) Inadequate care and feeding practices
- b) Inadequate health services
- c) Food insecurity
- d) All of the above

Answer: (d)

2. The following are body measurements that are used as a proxy for determining the nutritional status of individuals:

- a) Weight
- b) Height
- c) Mid-upper arm circumference
- d) All of the above

Answer (d)

3. How should physicians treat patients who they suspect are incapable of keeping follow-up appointments?

- a) Encourage patients to educate themselves and take responsibility for their health
- b) Establish a system of penalties to increase retention rate
- c) Disregard patients' incapacities and fit them into the schedule
- d) Discuss the importance of personal responsibility before administering follow-up care

Answer: (d)

4. What is one reason that NACS is important for people living with HIV?

- a) Nutrition support can improve adherence to antiretroviral therapy (ART)
- b) Can slow progression of HIV
- c) Helps to manage side effects
- d) All of the above

Answer: (d)

5. Which of the following is an appropriate approach to feeding ill children?

- a) Reduce the amount of fluid given until diarrhoea subsides
- b) Continue feeding as much or more than they did before and provide more fluid
- c) Feed only matooke to the child
- d) Stop breastfeeding

Answer: (b)

Answers to Part C

1. List the three components of the NACS approach.
Nutrition assessment, nutrition counselling, nutrition support
2. List three groups of essential macronutrients needed by the body.
Carbohydrates, proteins, fats
3. List two groups of essential micronutrients needed by the body.
Vitamins, minerals
4. Define the term anthropometry.
The measurement of the human body.
5. List three body measurements used to determine the nutritional status of individuals.
Mid-upper arm circumference (MUAC), weight, height
6. List four anthropometric indices used to determine nutritional status of individuals.
Weight-for-height, weight-for-age, height-for-age, BMI-for-age, BMI
7. List the three types of care options for clients with acute malnutrition.
Outpatient therapeutic care (OTC), inpatient therapeutic care (ITC), supplementary feeding programme (SFP)/nutrition counselling
8. What are five exit outcomes of patients enrolled in an outpatient therapeutic care (OTC) programme.
Cured, death, defaulter, non-respondent, medical transfer, transfer to inpatient care, transfer to other OTC
9. List the four key principles of health care quality improvement.
Client focus, teamwork, focus on systems and processes, testing changes and emphasising the use of data
10. What does the abbreviation 'PDSA' in quality improvement stand for.
Plan, do, study, act
11. List three nutrition supplies necessary for effective management of acute malnutrition.
Ready-to-use therapeutic food (RUTF); F-75; F-100
12. List three tools used in logistics management of NACS supplies.
Stock card, dispensing log, order form
13. List the '7 Rights' of a logistics management system.
Right quantities, right goods, right place, right time, right condition, right cost, right person
14. Mention two counselling skills.
Listening, eye contact, encouraging, giving time, asking 'open' questions, reflecting back, use of nonjudging words, giving relevant information, empathy

15. Mention three indicators of NACS services that are reported in the monthly or quarterly health management information system (HMIS) reporting form.
- No. of clients who received nutrition assessment on each clinic visit using colour-coded MUAC tapes*
 - No. of clients who received nutritional assessment and have malnutrition*
 - No. of newly identified malnourished clients who received nutrition counselling*
 - No. of HIV-positive pregnant mothers in care who are assessed for malnutrition*
 - No. of HIV-positive pregnant mothers in care who are assessed for malnutrition and found to have malnutrition*
 - No. of HIV-exposed infants reported to be exclusively breastfed for the first 6 completed months during the reporting period*
 - No. of malnourished clients referred from the community*
 - No. of all acutely malnourished clients who received treatment according to recommended protocol and who improved*
 - No. of HIV-positive children in care who were assessed for malnutrition at least once in 3 months*
 - No. of HIV-positive adults in care who were assessed for malnutrition at least once in 3 months*
 - No. of HIV-positive clients in care assessed for malnutrition within the last 3 months and found with acute malnutrition*
 - No. of HIV-positive acutely malnourished clients in care who received treatment according to recommended protocol and who improved*
16. Give two reasons why documentation and collecting data are important components of NACS programmes.
- Generates information and knowledge, tells us where we are, helps planning and projection, helps keep track of performance*
17. Give three reasons why it is important to link health facilities to communities when providing nutrition care for people living with HIV.
- (1) Timely identification and referral for treatment and care, which can reduce cases of moderate and severe acute malnutrition (MAM and SAM); (2) provides follow-up mechanisms between health workers and community volunteers for clients on ARVs; (3) increases access to services such as HIV testing and treatment of opportunistic infections for clients who come to the health facility for nutrition services, thus increasing recovery rates*
18. How can health workers support community volunteers in their work to strengthen nutrition when caring for clients with HIV or TB?
- Warmly receive clients referred by community volunteers and refer them to relevant departments for further assessment*
 - Counsel and provide treatment for enrolled patients (as needed) and refer them back to the community for continued support from the community volunteers*
 - Screen, identify, and refer individuals for malnutrition care through other routine services at the facility, including antenatal care and the young child clinic*
 - Meet with community coordinators monthly to share progress, determine what areas need improvement, and build on existing opportunities*