QUESTIONNAIRE
Development and Testing of Nutrition Education Aids for Hidden Hunger in Adolescents in Secondary Schools in Nsukka Local Government Area, Enugu State, Nigeria

PART A

Tick (✓) the boxes with most appropriate answer to the questions below

PERSONAL DATA:
1. Name of your School: _____________________________________________________________________
2. Identification Number: _____________________________________________________
3. Sex: (a) Male (b) Female
4. Age: (a) 13 – 15 years (b) 16 – 17 years
5. Class: (a) SS1 (b) SS2
6. Mother’s Education
   (a) First School Leaving Certificate (b) Senior Secondary School Certificate (c) National Certificate on Education/Ordinary National Diploma (d) Graduate (e) Postgraduate
7. Father’s Education
   (a) First School Leaving Certificate (b) Senior Secondary School Certificate (c) National Certificate on Education/Ordinary National Diploma (d) Graduate (e) Postgraduate
8. Mother’s Occupation: (a) Farming (b) Trading (c) Civil Servants (d) Others please specify:____________
9. Father’s Occupation: (a) Farming (b) Trading (c) Civil Servants (d) Others please specify:____________
10. Income of parents
    (a) Below ₦18,000 (b) ₦18,000 – ₦30,000 (c) ₦31,000 – ₦50,000 (d) ₦51,000– ₦100,000 (e) Above ₦100,000
11. Source of Food: (a) Boarding School (b) Home with parents (c) Eateries (d) Live alone (e) Others please specify:____________
12. If you live at home, what is the source of family food: (a) Only from market (b) Only from farm (c) Partly from market and partly from farm
13. Religion: (a) Christianity (b) Muslim (c) Traditional Worshipper (d) Others please specify:____________
14. Do you smoke: (a) Yes (b) No
15. Do you take alcohol: (a) Yes (b) No
16. Do you skip meal: (a) Yes (b) No
17. If yes to question 16 how often: (a) Everyday (b) 2 – 3 times a week (c) More than 3 times
18. Which meal of the day do you normally skip: (a) Breakfast (b) Lunch (c) Dinner
19. Reasons for skipping meal: (a) No food (b) To reduce weight (c) Too early to eat (d) Late for classes (e) Do not like food (f) Do not have appetite (g) Other please specify: ______________________

20. How much are you given as pocket money in a month: (a) Below ₦1000 (b) ₦1000 - ₦5000 (c) ₦5100 - ₦10000 (d) Above ₦10000

21. What do you mostly spend your pocket money on: (a) food (b) snacks (c) beverages (d) books (e) clothes (f) Others please specify: -------------------------------

**Part B (1) General Knowledge on Nutrition**

1. What are food nutrients: (a) Energy giving food (b) Body protective foods (c) Chemical substances found in foods (d) Foods that build the body

2. Which of the following is not a food nutrient: (a) Water (b) Energy (c) Carbohydrates (d) Fat (e) Vitamins (f) Minerals (g) Fats and oil

3. What are minerals: (a) Nutrients that our body require in large quantities (b) Foods that give energy (c) Nutrients that our body require in small quantities (d) Nutrients that are not important

4. Which of these is not a micronutrient: (a) Vitamin (b) Protein (c) Mineral

5. Which of these is not an example of a vitamin: (a) Retinol (b) Folate (c) Ascorbic acid (d) Zinc

6. Which of these is not an example of a mineral: (a) Zinc (b) Iron (c) Thiamin (d) Calcium

7. Which of these micronutrients is important for adolescent girls: (a) Zinc (b) Iron (c) Calcium (d) Folate

8. Which of these is not a fat soluble vitamin: (a) vitamin A (b) vitamin D (c) vitamin C (d) vitamin E

9. Which of these is not a water soluble vitamin: (a) Thiamin (b) vitamin C (c) vitamin K (d) Folate

10. Which of these micronutrients is not a mineral: (a) Niacin (b) Calcium (c) Iron (d) Potassium

11. Hidden hunger is lack of: (a) Carbohydrate (b) Micronutrient (c) Macronutrient (d) Protein

**Part B (2) General Knowledge on Nutrition**

Tick (√) the main food nutrient in each of the listed food contains

| S/N | Names of food             | Carbohydrate | Protein | Vitamin | Mineral | Fat/oil |
|-----|---------------------------|--------------|---------|---------|---------|---------|
| 1   | Bambara nut pudding (okpa)|              |         |         |         |         |
| 2   | Rice                      |              |         |         |         |         |
| 3   | Beans (cowpea)            |              |         |         |         |         |
| 4   | Yam                       |              |         |         |         |         |
| 5   | Cassava                   |              |         |         |         |         |
| 6   | Semolina                  |              |         |         |         |         |
| 7   | Orange                    |              |         |         |         |         |
| 8   | Tomatoes                  |              |         |         |         |         |
| 9   | Cucumber                  |              |         |         |         |         |
| 10  | Milk                      |              |         |         |         |         |
| 11  | Soft drinks               |              |         |         |         |         |
| 12  | Pasta and noodles         |              |         |         |         |         |
| 13  | Fish                      |              |         |         |         |         |
| 14  | Egg                       |              |         |         |         |         |
| S/N | Functions                                                                 | Iron | Calcium | Zinc | Vit. A | Vit. C | Folate |
|-----|---------------------------------------------------------------------------|------|---------|------|--------|--------|--------|
| 1   | Needed for proper development of the brain cells                          |      |         |      |        |        |        |
| 2   | Prevents lack of blood (Anaemia)                                          |      |         |      |        |        |        |
| 3   | Lack can cause Tiredness (fatigue)                                        |      |         |      |        |        |        |
| 4   | Lack causes inability to concentrate                                      |      |         |      |        |        |        |
| 5   | Lack can result to impaired physical and cognitive development            |      |         |      |        |        |        |
| 6   | For development of healthy bone and teeth                                 |      |         |      |        |        |        |
| 7   | Plays a role in constriction and relaxation of blood vessels              |      |         |      |        |        |        |
| 8   | Helps nerve impulse transmission                                          |      |         |      |        |        |        |
| 9   | Helps muscle contraction                                                  |      |         |      |        |        |        |
| 10  | Helps in secretion of hormones like insulin                               |      |         |      |        |        |        |
| 11  | Helps to maintain the acid base balance                                   |      |         |      |        |        |        |
| 12  | Stops bleeding from wound or injury                                       |      |         |      |        |        |        |
| 13  | Essential for growth and development                                      |      |         |      |        |        |        |
| 14  | Involves in enzymatic reactions in the body                               |      |         |      |        |        |        |
| 15  | Helps in the movement of vitamin A in the liver to maintain blood concentrations |      |         |      |        |        |        |
| 16  | Involve in the development of foetus during pregnancy                     |      |         |      |        |        |        |
| S/N | Functions                                                                 | Iron | Calcium | Zinc | Vit. A | Vit. C | Folate |
|-----|---------------------------------------------------------------------------|------|---------|------|--------|--------|--------|
| 17  | Important for sexual maturation                                          |      |         |      |        |        |        |
| 18  | Prevents anaemia in which red blood cells are abnormally large            |      |         |      |        |        |        |
| 19  | Linked to academic achievements                                          |      |         |      |        |        |        |
| 20  | Reduce the risk of heart diseases and stroke                             |      |         |      |        |        |        |
| 21  | Prevents deformity of new born baby                                      |      |         |      |        |        |        |
| 22  | Maintains old cells and creates new ones                                 |      |         |      |        |        |        |
| 23  | Helps in the formation of collagen                                       |      |         |      |        |        |        |
| 24  | Protects the gums and mouth from infection                               |      |         |      |        |        |        |
| 25  | Helps wounds to heal more quickly                                       |      |         |      |        |        |        |
| 26  | An important antioxidant                                                |      |         |      |        |        |        |
| 27  | Needed in iron absorption                                                |      |         |      |        |        |        |
| 28  | Encourages growth                                                        |      |         |      |        |        |        |
| 29  | Needed to maintain normal vision                                         |      |         |      |        |        |        |
| 30  | Reduces cells that causes cancer significantly                           |      |         |      |        |        |        |
| 31  | Required for normal functioning of the immune system                     |      |         |      |        |        |        |
| 32  | Required for maintaining the epithelial of mucous membranes              |      |         |      |        |        |        |
| 33  | Enhances the absorption of vitamin A                                     |      |         |      |        |        |        |

**PART C**

**Consumption Profile**

Tick (✓) on how often do you consume the following foods

| Food                                    | Everyday | 2 – 3 times (week) | Once a week | Rarely |
|-----------------------------------------|----------|--------------------|-------------|--------|
| (a) Energy Giving Foods                 |          |                    |             |        |
| Potatoes                                |          |                    |             |        |
| Cereals (maize, rice, etc)              |          |                    |             |        |
| Bread                                   |          |                    |             |        |
| Soft drinks                             |          |                    |             |        |
| Cassava                                 |          |                    |             |        |
| Yam                                     |          |                    |             |        |
| Pasta and noodles                       |          |                    |             |        |
| (b) Body Building Foods                 |          |                    |             |        |
| Fish                                    |          |                    |             |        |
| Meat                                    |          |                    |             |        |
| Poultry                                 |          |                    |             |        |
| Egg                                     |          |                    |             |        |
| Liver                                   |          |                    |             |        |
| Milk                                    |          |                    |             |        |
| Beans (cowpea, fiofio, akidi)           |          |                    |             |        |
| Yogurt                                  |          |                    |             |        |
| Nuts (groundnut, cashew nut)            |          |                    |             |        |
| (c) Body Protective Foods               |          |                    |             |        |
| Mango                                   |          |                    |             |        |
| Orange                                  |          |                    |             |        |
| Water melon                             |          |                    |             |        |
| Apple                                   |          |                    |             |        |
| Guava                                   |          |                    |             |        |
| Food                        | Everyday | 2 – 3 times (week) | Once a week | Rarely |
|-----------------------------|----------|--------------------|-------------|--------|
| Pineapple                   |          |                    |             |        |
| Paw paw                     |          |                    |             |        |
| Green leafy vegetables      |          |                    |             |        |
| Carrots                     |          |                    |             |        |
| Cabbage                     |          |                    |             |        |
| Pumpkin                     |          |                    |             |        |
| Fruits juice                |          |                    |             |        |
| Star apple (udala)          |          |                    |             |        |
| Soursop                     |          |                    |             |        |
| Pear (avocado, local pear) |          |                    |             |        |
| Cashew                      |          |                    |             |        |
| Tiger nut                   |          |                    |             |        |
| Okro                        |          |                    |             |        |