Nutrition Education in Primary Schools

Vol. 2: The Activities

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CONTENTS

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NOTES FOR FACILITATORS AND WORKSHOP ORGANIZERS

Purpose – What is the aim?

The Planning Guide is an exercise, a procedure for designing or improving a nutrition education curriculum. It is usually run as a workshop involving a number of people who are concerned with the health and education of schoolchildren. These participants agree on principles, identify needs and take decisions about the nutrition education curriculum, based on these principles and needs.

As explained in the Introduction (B4 *User and uses*), the curriculum planning exercise can be done at different levels – national level, district and regional level, at the level of individual schools or groups of schools, or as an initial teacher training exercise.

Depending on the level, the workshop may aim at producing a policy document, a national curriculum, or action plans for school classrooms and school environments.

Facilitators will need to adapt their approaches according to the perceived purpose. Some of the activities are geared specifically to the local level, but there is guidance for national level curriculum developers at the beginning of each unit of the Reader.

Participants – Who will take part?

Facilitators and workshop organizers need to ensure that the workshop participants represent the main stakeholders, and that there is appropriate representation from other relevant sectors and from important sources of information or aid. There are three sorts of participant:

Participants from the education service – Depending on the level of the project, these may be:

- several teachers and other staff from one school;
- a selection of staff from several schools and resource centres;
- head teachers, inspectors and teacher trainers at district level;
- trainee teachers in an institute of education;
- inspectors, curriculum developers, writers, teacher educators at national level;
- policy-makers at national level.

Other main stakeholders belonging to the school "environment" and who must be involved are:

- parents and families (local or national PTA);
- non-teaching school staff or their representatives;
- health services and school health services, including nutritionists;
- school feeding programmes.

Since it is difficult to involve children in the workshop directly, participants should understand that they have the extra duty of representing children's interests and points of view.

Representatives of other sectors and organizations - Other interested groups are:

- community services, community organizations
- agricultural extension services
- NGOs and aid agencies
- teachers' unions
- the media (local or national)
- exam boards and publishers.

Depending on their interest or their importance to the project these may be invited to participate in the whole workshop, or invited to attend one or two sessions as guest consultants or speakers.

The intersectoral approach applies at every level (local, district or national). For example, at local level parents and health services could be represented by the school PTA and the local clinic; at national level, by the national PTA and the education officer of the Ministry of Health.

Every member of the workshop makes an essential contribution to this planning exercise in experience and expertise. All full participants should therefore nominate a deputy in case they have to be away, and all workshop materials should be available to the deputies.

Action

Answer these preliminary questions:

- **What level is the workshop aimed at?**
- **What does it aim to produce?**
- **Who are the main participants?**
- **Who can/should be invited to make a special contribution?**

CONTENT AND SCHEDULING – WHAT ARE THE MAIN PHASES? WHO NEEDS THEM?

The five phases of the workshop are outlined in the Introduction (B3 *Outline*, and Table 2 and in Figure 1 at the end of this chapter).

Before the main workshop

Preparatory units: These provide basic nutritional information required by the workshop and establish common ground on ideas of good and bad diet. The units should be studied by all participants before the main workshop, either individually or in special preparatory sessions. Expert nutritionists should also look through them to ensure that they share the the standpoint of the Guide and that it is appropriate to the local context.

Data-gathering (the initial assessment phase): Data have to be gathered on the nutrition situation, the schools and the curriculum (see *Information Input* below). This is essential to the situation analysis in Phase B and must therefore be done before the main workshop, or during Phase A, or both.

The main workshop

Phase A Concepts and Principles: (Four units) This establishes the main nutrition education principles and the approaches promoted in the Planning Guide – the concept of health, the holistic idea of nutrition education, appropriate learning approaches. Both the Reader and the Activities are essential at all levels as a foundation for a shared approach.

Phase B Situation Analysis: (Six units) This analyses the health and education situation in detail, based on the data gathered and the expert opinions of the participants, and establishes priority needs. The Phase B activities are geared to local schools but the same questions must be asked and answered at national level (see *Notes for National Curriculum Developers* at the beginning of each Reader unit).

Phase C Action Plans: (Three units) This applies the principles and approaches to dealing with the needs, and produces principled action plans for improving nutrition education in the school environment and the classroom. The activities in this phase are mainly aimed at local schools working in collaboration with PTAs and the health sector. However, the activities are also essential for national planners and curriculum developers if they are concerned with helping schools to integrate new curriculum content, adapt to new approaches, respond to local needs and practices, and extend nutrition education into the family, community and the school environment.

Each unit takes about four hours to complete. The main workshop (13 units) will therefore require about ten days of full-time activity (11 if the Preparatory Units are included as group sessions rather than as individual preparation), or four months at one unit a week, or the equivalent.

Action

Decide the scheduling for the workshop, allowing time for preparatory collection of data. If the Preparatory Units are to be circulated beforehand for individual work, allow appropriate time for them to be completed; if not, organize workshop sessions to cover them.

Information input – What information is needed and where will it come from?

Some of the data necessary for the Phase B situation analysis will be available at the workshop in the persons of participants and guests. Some will be in published documents. Some will be gathered by means of questionnaires or focus groups (see *Questionnaires and data sheets* below). The data required are listed on the title page of each activities unit and are summarized in the table below.

Kind of information needed	Sources
Information on agriculture, climate, development in the area, region or country (Unit B1)	Participants and guests Agro-ecological descriptions of the region
Information about the school and its environment and the community resources for nutrition education (Units B3, B4, B5, B6)	Questionnaires and data sheets Participants and guests Descriptions of grant schemes and funding possibilities Literature on school feeding programmes
Information about health and nutrition in the area (Units B1 and B2)	Questionnaires and data sheets Research reports on health and nutrition problems Food composition tables (local, if they exist) Expert participants and guests National dietary guidelines (if they exist)
Information about the present school curriculum for nutrition education (Unit B5)	Questionnaires and data sheets National curriculum documents and national syllabuses for appropriate subjects (e.g. environmental science, home economics) School course descriptions Teaching materials in relevant subjects Participants and guests
Information about the players, such as teachers, school staff, parents, and children. (Units B2, B3, B4, B5, B6)	Questionnaires and data sheets Participants and guests

Informants and sources will differ according to the level of the planning exercise. The questionnaires and data sheets are designed for local level, but at national level the same kind of information will need to be gathered. This can be of aggregate, national or regional nature, where available. Otherwise, specific small-scale exploratory surveys in selected regions may need to be conducted. These will provide an adequate basis for decisions about the focus and content of nation-wide school-based nutrition education programmes.

Most of the sessions, and especially those in Phase B, can and should have inputs from appropriate expert participants or guests, who may make short presentations or simply be available to answer questions. Such inputs provide information, illuminate points

of view, provoke discussion, harness the group's expertise, and help to vary the workshop activities. In this way, a discourse community is created. If the workshop is to be repeated, it is a good idea to record the inputs in some form: they can also provide raw material for future teacher education packages.

Collecting data and documentation, and making contacts, should be spread among participants rather than done single-handedly by workshop organizers. The work needs to be coordinated and organized well in advance.

Action

Decide how the information is to be collected – for example, by distributing questionnaires, collecting documentation, arranging focus groups or inviting experts. If the workshop is to be held over a long period there will be more time to organize. Call a preliminary meeting of participants to explain what's needed, and allocate responsibilities.

Materials – What do we have to work with? How do we use it?

The Planning Guide consists of the Reader, the Activities, the Classroom Curriculum Chart and the Questionnaires/Data Sheets.

The Reader is a summary text which outlines the nutrition education principles and the curriculum planning process. It contains cross-references showing what activities should be done and when (e.g. ▪ ACTIVITY 1). It acts as a reference text: facilitators will need it for preparing workshop sessions; participants can use it for preparatory or follow-up reading. It can also be used on its own, as a summary of the Guide, for advocacy or information.

The Activities, the core of the planning exercise, develop and firm up the ideas and processes outlined in the Reader, and are used to arrive at decisions and conclusions. The workshop sessions consist mainly of these activities, reinforced by inputs from experts and experienced practitioners. Each activity has a suggested length (e.g. 30 minutes). Some have Keys, which are printed at the end of the unit. These are not "right answers", but give the comments and opinions of the Guide for comparison with participants' own conclusions. A few activities (marked *Optional*) are only for reinforcement.

The results of each unit's work are summarized in documents of record (called **Display Documents**) on which decisions are later built.

The **Classroom Curriculum Chart** is an extensive plan for a classroom curriculum and is used for selecting and planning the classroom programme. Several copies are needed.

The **Questionnaires and Data sheets** are to be completed by or on behalf of health professionals, parents, children, teachers and other school staff. They gather much of

the information necessary for the situation analysis in Phase B (see *Information Input* above). The findings from each group are summarized on a Data Sheet for easy reference. If the workshop has a limited participation (e.g. mainly teachers), the questionnaires are particularly important to make sure that other voices are heard.

All participants should have individual copies of all the materials so that they can prepare for sessions, catch up on missed sessions or follow up unclear points. This also allows all participants to act as facilitators, and to repeat the workshop (or parts of it) with other groups.

The figure on the next page illustrates how the individual materials of the Planning Guide are meant to be used for arriving at a nutrition education work programme.

Action

Distribute all materials to all participants and their deputies, preferably at a preliminary meeting.

Facilitating and organizing – Who are the facilitators and organizers? What do they do?

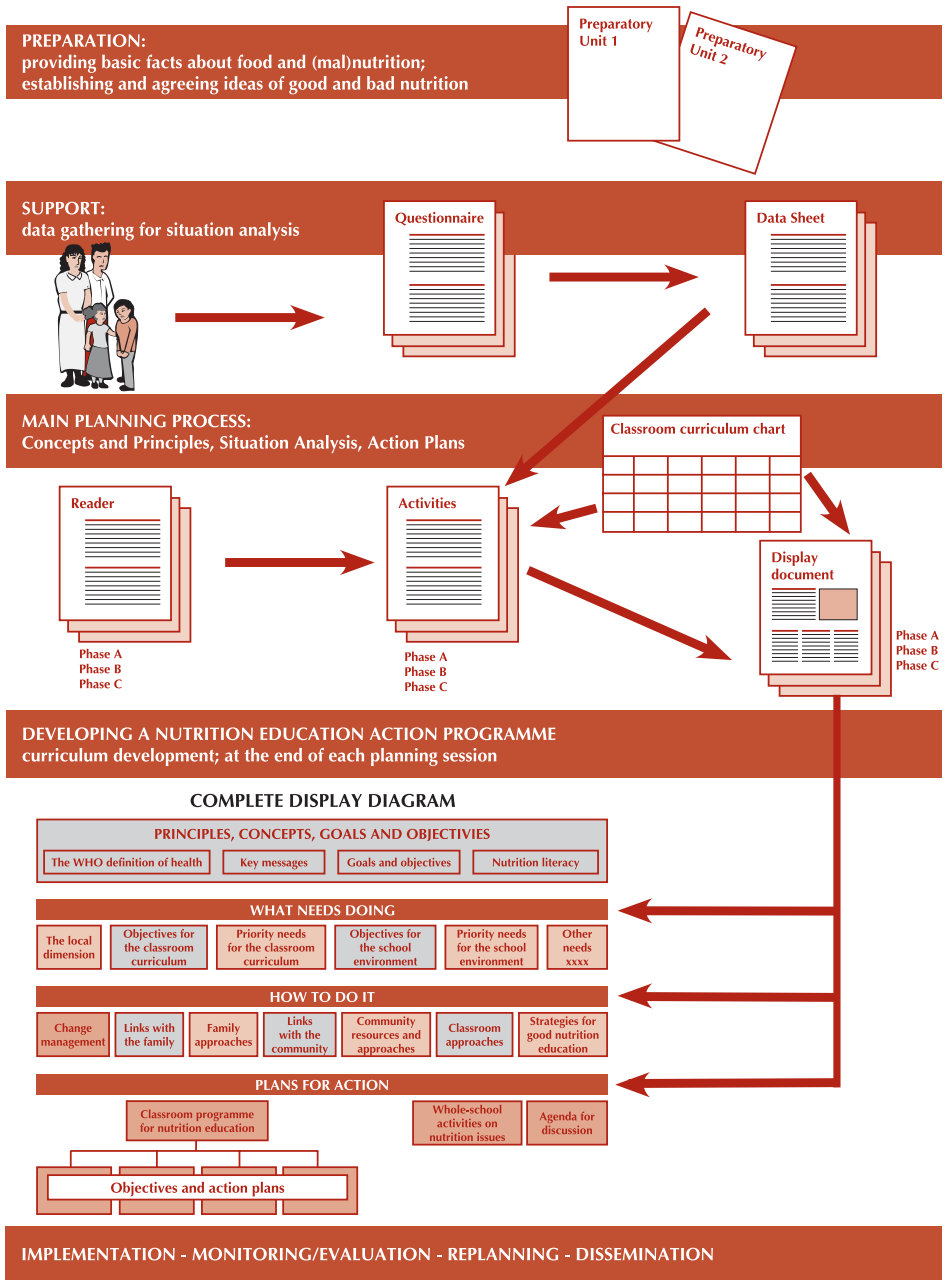
The Planning Guide is a collaborative exercise to which all participants contribute. All the information is available to all participants, and the participants are in charge of the process.

This affects the way the workshop is organized and run. There should be one or two permanent organizers, but any participant can act as facilitator, or the role of facilitator can be rotated among all or several of the participants. This has several advantages:

- it makes good use of human resources;
- it reflects the distributed ownership of the exercise;
- the group doesn't get bored with one facilitating style;
- facilitators tend to do their best if they have only one or two sessions to run;
- good facilitators can be used several times;
- poor facilitators can be used minimally.

Specific expert participants – such as nutritionists, teacher educators, head teachers, council members – can be asked to run particular sessions, e.g. on diet, teaching style, classroom conditions, school environment. Having two facilitators for each session is also desirable: it spreads the load and improves the quality.

THE ROAD TO EFFECTIVE NUTRITION EDUCATION – USING THE MATERIALS OF THE PLANNING GUIDE



Ways to organize the workshop

Options are:

a) The facilitators prepare the session, and take the participants through the Activities (participants read the Reader as a follow-up or if they miss the session).

OR

b) Participants read the Reader before the session and go through the Activities together in the session.

OR

c) Participants prepare some parts of the Reader and some of the Activities before coming to the session.

Option (a) is preferred by many as the participants come fresh to the subject, existing ideas and positions get a good airing, common positions are worked out on the spot and it is not necessary for everyone to have done their homework. Options (b) or (c) can be used to speed up the process if time is limited.

The organizer's job

Organizers are responsible for:

- getting the necessary permission and funding;
- contacting and keeping in touch with workshop members;
- contacting and inviting extra participants and speakers;
- tracking down important documentation;
- scheduling and timetabling;
- organizing a preliminary meeting for distributing materials, organizing data gathering, appointing facilitators;
- organizing travel, accommodation, refreshments;
- finding premises, distributing materials and ensuring materials are provided (pens, paper, etc.);
- organizing facilitators;
- introducing the sessions;
- setting up a final evaluation;
- organizing follow-up.

The facilitators' job

Some time before the session, facilitators should check what human and information resources are needed (speakers, documents) and make sure they will be available.

Before the session, facilitators should prepare well in advance by:

a) reading the Reader and looking through the Activities and the Key;
b) deciding what needs special emphasis;
c) adapting the content to the local situation (if necessary);
d) deciding what can be skipped or reduced;
e) deciding if participants need to prepare part of the material before the session;
f) deciding how the activities are to be organized (plenary, pairs, groups, reporting back, etc.);
g) deciding approximately how long activities/inputs should take;
h) briefing any other workshop participants or guest experts they want to involve;
i) making photocopies;
j) assembling paper, pens and so forth;
k) liaising with the organizer(s) as necessary.

At the beginning of each session facilitators should:

a) make sure the main document display is in place;
b) make sure all necessary documents are available (there is a list in each Activities unit).

Facilitators should start the session by:

a) recalling what the workshop has done so far and where it is going;
b) outlining the content, purpose, and objectives of the unit, and the expected outcomes;
c) indicating what activities are to be done in the session, including any inputs from speakers, with an approximate time allocation.

During the session facilitators should:

a) welcome and introduce any visitors, chair any sessions with visiting speakers, and thank them;
b) organize the activities, e.g. decide how to feed back;
c) provide connecting links between the activities;
d) actively monitor group work;
e) make breaks and organize "loosening up" physical activities as necessary;
f) keep an eye on the time, or organize a timekeeper to do this;
g) arrange to display key concepts, conclusions, ideas, and manage the main display.

At the end of the session facilitators should:

a) allow five minutes for summing up;
b) decide what needs to be done for the next session and who will do it;
c) end on an upbeat note.

Above all, the facilitators should set a tone of independent enquiry, exploration and decision. The Planning Guide is a guide, no more – the conclusions must be the conclusions of the workshop.

Other participants

If the workshop is hosting expert informants, facilitators should ask them to act as advisers and resource persons rather than as instructors. They should listen, answer questions, correct misconceptions, fill in important gaps and make *short* prepared inputs, but not take the initiative away from the participants.

Action

Decide who will be the facilitators (preferably two for each session) and allocate the tasks at a preliminary meeting. Draw facilitators' attention to these briefing notes.

Activities – How should the activities be organized?

Pairwork, groupwork or plenary discussion?

The instructions sometimes specify whether an activity should be done in plenary session, in small groups, by individuals, or in pairs. But mostly it is for facilitators to decide. The choice will depend on:

- the size of the whole group – is it too big for useful discussion?
- the scope of the activity – does it need to be distributed among several groups?
- how many different areas are represented in the workshop – for example, are there three different schools/regions with different plans and policies?

Group work is not a good in itself, but is valuable for allowing everyone to be heard, exchanging information, generating ideas, establishing points of view, and coming to planning decisions. It is also essential where a group represents a particular school or district. If there are several technical experts in the workshop, spread them around the groups.

Although group activities do serve to take the pressure off facilitators, they should not be seen as facilitators' free time. Groups need to be monitored to make sure they do not go off on a tangent. Participation in the groups keeps facilitators informed and helps them organize feedback better.

Organizing plenary feedback

Group work generally takes time, as it often requires a plenary feedback session. Facilitators should consider if this is necessary. For example, it may be valuable for groups to share their policy decisions about the school environment, but detailed implementation plans may not be so interesting to the group as a whole. Ways to organize plenary feedback are:

- All groups report to plenary. This is time-consuming – groups should be asked to reduce their conclusions to three short points, display them and answer questions about them.
- Each group sends a reporter to each of the other groups to explain their conclusions.
- Groups display their conclusions on a poster and leave a group member to stand by it and answer questions, while they circulate to look at others' posters and ask questions.

Display documents

Each unit results in a display document. These are pinned up one by one to form the "big picture" of principles and key concepts, priority needs and favoured approaches, on which action plans will be based. Suggestions for the layout of the main display are given at the end of each Activities unit. See also the back cover of this booklet. Facilitators should make sure there is enough wall-space (visible to all) for this display, and that it remains in position throughout the workshop.

At the end of the workshop the main display exhibits all the thinking and planning of the group. It can be used for future reference by curriculum planners or for presentations to interested outsiders. It can be turned into a booklet, transformed into PowerPoint slides, and so on.

Apart from the main display, facilitators should decide what else needs to be exhibited and in what form. Several copies of the Classroom Curriculum Chart should be pinned up; information about nutrition and malnutrition from the Preparatory Units will also be useful. Other useful reference documents may be local dietary guidelines, curriculum documents and (local) food composition tables. Group conclusions can be written on flipchart sheets; ideas can be written on cards and posted up for discussion, classification and so on.

INTRODUCTION

CONTENT

1. Nutrition, health and education
2. The Planning Guide

WHAT YOU NEED

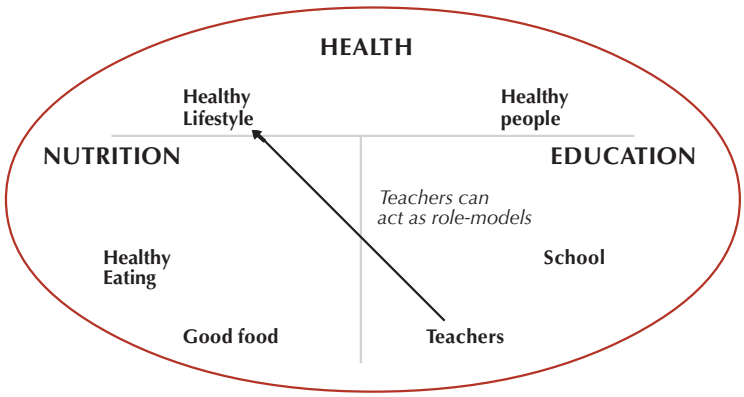
People	All participants contribute to these activities: health experts, nutritionists, teachers, educationists, administrators
Information	Your own experience and expertise is all the information required Planning Guide, Vol 1: The Reader, Introduction; figure 2 in Introduction
Equipment	Flipchart, coloured marker pens, poster paper (or use a flipchart sheet)

ACTIVITY 1

NUTRITION, HEALTH AND EDUCATION

20 minutes

What are the connections between nutrition, health and education? For example, *teachers can act as role models* for children, demonstrating a healthy lifestyle. This connection is represented by the arrow in the figure below.



a) In plenary session, brainstorm all the connections you can think of – long-term as well as short-term. This is just to air the question – there are no right answers!

b) Draw lines between the elements and write in the connections.

c) Copy up the diagram on the board or on a flipchart.

d) What do you think are the cause-and-effect connections between the three sections – health, nutrition and education? Discuss this all together.

e) Refer to Figure 2 in the Reader Introduction. Get a volunteer to copy out Figure 2 on a poster, and display it for future reference.

ACTIVITY 2

THE PLANNING GUIDE

15 minutes

Here are some statements about the Planning Guide, the basis of this workshop.

a) Read each one aloud and think of any questions that come to mind. Record the questions in a list and divide them up between you.

b) To get answers to your questions, you can:

- ask the Facilitator OR
- read the INTRODUCTION to the Planning Guide, Part B.

c) Find out the answers then report back to the whole group.

STATEMENT 1
The Planning Guide is an exercise in developing a nutrition education curriculum based on the needs of the area and involving all the relevant players.

STATEMENT 2
The purpose of the Planning Guide is to help curriculum developers plan and produce curricula and materials for nutrition education in primary schools. Planning curriculum development may involve:

- changes in the classroom curriculum;
- new teaching materials and materials for teacher training;
- ideas for incorporating nutrition topics into other subjects;
- special lessons, projects and materials on urgent topics;
- research by schools and pupils into food and diet in the area;
- ways of involving parents and the community;
- a school policy document on health and nutrition;
- action plans for the school environment;
- a staff training plan;
- new working groups – for example, a school Health and Nutrition Committee, special task forces;
- new contacts for the school – for example, with local clinics, local industry, NGOs.

STATEMENT 3
The Guide has three main phases. Phase A establishes the principles, Phase B deals with situation analysis, and Phase C develops an action programme.

PREPARATORY UNIT 1

A GOOD DIET

CONTENTS

WHAT YOU NEED

People	If the facilitator is not a nutritionist, ask a nutritionist or health worker knowledgeable in nutrition to run this session, or to sit in as an adviser.
Information	This expert may also be able to adapt the Tables and Figures in the Reader to the local situation.
Documents	Copies of national dietary guidelines, if they exist, for Activity 9. Local food composition tables if available.
Equipment	A large flipchart sheet to make a poster, and coloured marker pens.

N.B. As far as possible, adapt the content of this unit to the local situation, substituting local foods and food practices.

ACTIVITY 1

A GOOD DIET

30 minutes

1. A good diet is a healthy diet. Discuss what you think are the elements of a "good diet" and write your ideas below. You may get some ideas from the words and pictures below (but these are certainly not complete). Pool your ideas.
2. Check your ideas with the definition of a good diet in the POSTER MATERIAL at the end of this unit (and in the Introduction to the Reader unit). How many of these concepts did you touch on?
3. Add any missing elements to your table.

In the following activities we are going to follow through several of these aspects of good diet.

Elements of a good diet

A good diet is/has/provides:
e.g: *a variety of foods*

protein
variety
meals
cereals
traditional
meat
energy
sufficiency
breakfast
individual needs
snacks
safety
fruit and vegetables
minerals
taste
frequency

ACTIVITY 2

WHY DO WE NEED FOOD?

20 minutes

What exactly do we need food for? Brainstorm the possibilities:

e.g: *for energy*

Check in the Key.

ACTIVITY 3

WHAT NUTRIENTS DO

20 minutes

You probably remember the main nutrients:

- carbohydrates
- proteins
- vitamins
- fats
- minerals

These nutrients carry out all the functions you discussed in the previous activity.

Do you remember the functions of each one? What do they do in the body?

1. Here are six quiz questions – discuss them and see if you agree on the answers. (Note that we are talking about *nutrients*, not about specific foods.)

a) What nutrients supply energy? .....

b) What is the relationship between fats and vitamin A?

.....

c) Why is protein important for children?

.....

d) What nutrients are needed for repairing and maintaining the body?

.....

e) What is particularly important for healthy bones and teeth?

.....

f) What is particularly important for the eyes?

.....

2. Check with Fact sheet 1, *The main nutrients, their functions and food sources*, at the end of Preparatory Unit 1 in the Reader, or with the summary version in the Poster Material at the end of the unit.

3. Make up three more quiz questions about the functions of nutrients and ask these questions of each other.

ACTIVITY 4

FOODS AND NUTRIENTS

30 minutes

How good is your nutritional knowledge of particular foods, and in particular of local foods?

1. To refresh your memory, discuss what foods are rich in particular nutrients and fill in the table below. For example, peas and beans are good sources of vegetable protein, but also supply plenty of carbohydrate, as well as some minerals and vitamins.

2. Check your ideas in Fact sheet 1, *The main nutrients, their functions and food sources*, in Preparatory Unit 1, or in the summary in the Poster Material at the end of this unit. For local foods, you will need to call on your local expert or local food composition tables.

Nutrients	**Good sources**
Proteins	Meat
Carbohydrates	Beans,
Fats	
Vitamin A (animal vegetable)	
B Vitamins	
Vitamin C	
Vitamin D	
Iron	
Calcium/Phosphorus	
Iodine	

3. See if you have a good idea of the nutrient content of some common local foods.

   Divide into pairs. One person looks at the table, *Selected foods and their main nutrient content*, in the Reader (Preparatory Unit 1, Table 1) and selects a food that is common to the area. The other person has to guess what nutrients the food is particularly rich in (if any).

   After a few minutes change roles.

4. Report back to the whole group on any findings which surprised you.

ACTIVITY 5

YOUR OWN DIET

20 minutes

(Optional)

1. Make a list of the foods you eat in a typical day.

2. Run through your list with one or two partners.
   Ask their opinion.

   Does your diet appear to have enough…..

Protein?	Yes ☐	No ☐
Vitamin A?	Yes ☐	No ☐
Iron?	Yes ☐	No ☐

3. If not, what foods could be added to improve your diet?

ACTIVITY 6

INDIVIDUAL NEEDS

15 minutes

Running child

Bedridden old woman

Manager working at desk

Labourer

Baby

Pregnant woman

Child in school

What? ..... **How much?** .....
How often? ..... **When?** .....

An old Caribbean joke:

There was one chicken for dinner. How many chicken legs did the man get?
- One? No!
- Two? No!
He got THREE chicken legs.The woman got the bones. The children got the gravy.

Does everyone in the house get the food they need?

- What are the special dietary needs of these people?
- How should their diets be composed – amount of food, types of food, frequency?

1. Discuss and record your ideas.

2. Check with the Key.

A) .....
B) .....
C) .....
D) .....
E) .....
F) .....

ACTIVITY 7

GOOD AND BAD DIETS FOR SCHOOLCHILDREN

20 minutes

Shown here is one day's eating and drinking for five different school-age children. Of course, one day's food is not a diet, but let's assume that this day is typical. We are not considering individual needs – for example, a child who walks five kilometres to school will need more energy than one who lives near their school.

You should ask these questions –

- Are there enough foods from each food group? The groups are: cereals, roots and tubers, fats and oils, legumes (peas/beans/groundnuts), vegetables, fruit, animal foods.
- Is there enough variety in general?
- Is there enough of each nutrient – proteins, carbohydrates, fats, vitamins and minerals?
- Does the diet sound appetizing?
- Is the food well distributed through the day?

What would be your comment on these diets? Take one each, discuss and report back. Before you start, find names for the children.

Children	First meal	Mid-morning	Midday	Mid-afternoon	Evening
A 	Coffee and bread roll	Coffee and bread roll	Spaghetti with tuna	Tea	Meat, vegetables
B 	Cereal and orange juice	Banana	Egg with mushrooms and bread	Fruit	Vegetable soup with barley
C 	Rice		Rice and vegetables		Rice and fish
D 	Nothing	Coke and chocolate bar	Cheese sandwich	Cup of tea, potato crisps	Sausage and chips, ice cream
E 	Maize meal porridge	Roast cassava			Maize meal, fish, pumpkin leaves

You'll find some comments in the Key at the end of the unit.

ACTIVITY 8

DIETARY GUIDELINES

15 minutes

National dietary guidelines aim to guide countries in improving their diets.

Refer to the *Examples of dietary guidelines for the general public* in the Reader, Preparatory Unit 1, Fact sheet 2, and also to the *Guatemala Food Guide* in The Reader, Preparatory Unit 1, Figure 2.

Study the guidelines drawn up for other countries – take one set for each group.

- Find the most frequent messages.
- Find any guidelines that you think apply to your own country.
- Compare them if possible with dietary guidelines prepared for your own country.
- Report back to the whole group.

ACTIVITY 9

THE LOCAL DIET

15 minutes

1. What is normally eaten in your area? Look at the *Family mixed meal guide* below. Discuss the local diet in the same way. For example:

   "*In our region the staple food is nshima, made from cassava flour. We eat this at lunch and at supper. We have the nshima on one plate, and on another plate we have one or two "relishes" – usually a dish of vegetables, and some kind of meat or fish in a savoury sauce, which we eat with the nshima. There is vegetable oil in the sauce and all sorts of flavouring. Sometimes we cook pounded groundnuts with the vegetables, which is very tasty. We don't usually have eggs or dairy products with the main meal, and we don't usually eat fruit after the meal either.*"

2. Does the diagram fit? Is it a useful way to describe your local diet? Is it easy to see how the diet could be improved?

ACTIVITY 10

SUMMING UP

15 minutes

You have looked at:

- the general idea of a good diet;
- what food does for the body;
- nutrients and their functions;
- the nutritional content of various foods;
- good and bad diets;
- individual needs;
- a way of describing a diet and seeing how it can be improved;
- national dietary guidelines.

On the next page is a summary of some important ideas and facts about diet from this unit, in the form of poster material.

1. **Display**
   Arrange to enlarge the next page or copy it, and display it as a poster for future reference. Leave it on display throughout the curriculum planning exercise so you can refer to it when needed.

If you have a copy of your national dietary guidelines, add them to the display.

2. **Test yourself**
   Use the poster material to test yourself or your partner. Ask:

- Can you say what a good diet consists of?
- What are carbohydrates for? What are fats for? And proteins? And vitamins and minerals?
- Name some foods which are rich in Vitamin A, or protein, or fat … etc.
- Give an example of a local food that is rich in iron, protein, etc.

3. **Presentation**
   If you are in a group, make groups of three. Take one of the Key Messages each and explain them to each other, giving details and examples.

N.B. The details and examples are essential!

POSTER MATERIAL

A GOOD DIET

A good diet consists of

- Enough
- Varied
- Nutritious
- Safe
- Enjoyable and acceptable
- Food and drink
- For all the household
- Throughout the day
- Throughout the year.

Nutrient functions	
Carbohydrates and fats are for	energy, growth, maintenance.
Fats also help us to	absorb some vitamins, especially Vitamin A.
Proteins are for	growth and maintenance.
Enzymes (also proteins) are for	basic body functions.
Vitamins and minerals are for	proper functioning, repair, health, development, protection against infection.

Rich in carbohydrates	cereals, starchy root vegetables
Rich in fats	oils, meat fats, dairy fats, margarine, nuts, some fish
Rich in proteins	meat, fish, beans, groundnuts, dairy products
Rich in vitamin A	liver, eggs, dairy products, carotenes in dark-coloured fruits and vegetables
Rich in iron	meat, fish, poultry, liver and other organ meats. Also legumes, dark-green leafy vegetables, dried fruits and groundnuts. Vitamin C helps to absorb iron from vegetable sources
Rich in iodine	seafood, foods grown on iodine-rich soils and iodine-enriched salt
Rich in vitamin C	many fruits and vegetables
Rich in B vitamins	dark-green vegetables, legumes, cereals, meat, groundnuts, fish and eggs
Rich in vitamin D	fish oils, eggs and milk
Rich in calcium and phosphorus	milk and dairy products

WE NEED A VARIETY OF FOODS TO BE HEALTHY AND GROW.
DIFFERENT GROUPS HAVE DIFFERENT DIETARY NEEDS.
A HEALTHY DIET IS NOT SOPHISTICATED OR EXPENSIVE.

KEY TO ACTIVITIES FOR PREPARATORY UNIT 1

■ ACTIVITY 2 *Why do we need food?*

Some answers are:

- to stay alive
- to satisfy hunger
- for energy
- for warmth
- for socializing (hospitality, celebrating, caring and sharing)
- for protection against diseases
- for proper functioning of all parts and systems of the body
- for repair
- for growth
- for enjoyment?

■ ACTIVITY 6 *Individual needs*

All these people need all kinds of food. But in particular:

a) and g) All children, whether they are playing or studying, need a lot of energy and high protein foods for activity and growth. They also need to eat frequently, because their needs are large and their stomachs are small.

b) This person is old and sick. It may be important to give her easily digested food, or food which doesn't need to be chewed. If she has diarrhoea the most important thing is liquid. If she is not eating very much we must especially make sure she gets enough micronutrients.

c) The manager has a sedentary job and if he spends a lot of time at his desk he shouldn't eat too much fat and carbohydrates. Other than that, he needs all kinds of food.

d) This man is using up a lot of energy, which needs to be renewed with energy-giving foods (cereals, potatoes, fats and oils).

e) The baby needs a diet rich in all nutrients. Breastmilk is the best food he can get and he should be fed at least four or five times a day.

f) A pregnant woman has to eat for two, since her unborn child is growing all the time. She needs a diet rich in all nutrients, and more food than usual.

KEY TO ACTIVITIES *contd.*

■ ACTIVITY 7 *Good and bad diets for schoolchildren*

A		Plenty of animal protein, but not enough fruit and vegetables; only one kind of cereal.
B		A good diet, with plenty of fruit and vegetables, fibre, grains, carbohydrate protein.
C		Needs much more variety, and some snacks to keep going.
D		An urban child? This diet badly lacks fruit and vegetables and has too much sweet food.
E		Needs more variety, more fruit and vegetables, and a good midday meal.

PREPARATORY UNIT 2

MALNUTRITION AND ITS CAUSES

CONTENTS

WHAT YOU NEED

People	Ask a nutritionist or health worker knowledgeable in nutrition to run this session or to sit in as an adviser. School Health Service personnel would be particularly welcome as well.
Information	Your own experience of local children's behaviour.
Course documents	The poster from Preparatory Unit 1 should be on display.
Equipment	A large flipchart sheet to make a poster, and coloured marker pens.

N.B. As far as possible, adapt the content of this unit to the local situation, substituting local foods and food practices.

ACTIVITY 1

TERMINOLOGY

20 minutes

Start by getting the vocabulary right. Here are some of the terms used when talking about malnutrition:

- Undernutrition
- Malnutrition
- Overnutrition
- Hunger
- Protein-energy malnutrition
- Micronutrient
- Deficiency

1. Discuss the differences between them.

- Which is the most general term? Which other terms are covered by it?
- Which terms are the result of specific lacks in the diet?
- Which terms have to do with quantity?
- Which is the most subjective term?

2. Check your ideas on the page of POSTER MATERIALS at the end of the unit.