

Training Module
for Nigeria

Trainers' Guide

Healthy nutrition of rural smallholder families

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Foreword

This training material was developed in the framework of the Competitive African Cotton Initiative (COMPACI) and the Sustainable Smallholder Agri-Business (SSAB) project initially for the context of Ghana. Based on the experiences of these different projects and has been adapted to the context and needs of farmers supported by CARI for Nigeria.

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Training Module

Healthy nutrition of rural smallholder families

Introduction

This training module is based on the result of the dietary analysis conducted for cocoa farmers in Brong Ahafo, Western and Central regions, cotton farmers in the Upper East and Upper West regions of Ghana. The report indicated deficiencies in their dietary behaviours which may lead to malnutrition in the households. It provided the basis to develop a training module for and cost-effective delivery of the training in large scale (at least 20,000 smallholders). It has been reviewed and adapted to some specific conditions of Nigeria farm households. Following the spirit of “Integrated Delivery” the training shall complement business skills and technical training or serve as an introductory training for more intensive nutritional training programs.

Objective:

The training aims at improving the knowledge of rural households and helping to develop strategies to improve their diet and health.

Training Approach

The approach is based on questions and pictorial materials to enhance participation, building of knowledge and sharing of experience among participants and with trainer. Answers leading to key message are appreciated by the trainer and the group to create momentum and adhesion to the entire module.

The training approach is detailed in the following didactic sheet. Training materials have been tested and fine-tuned in Ghana, adapted and been used in Burkina Faso and Nigeria. It will serve as basis to develop the qualification program for trainers.

Guidelines for Trainers:

1. How to prepare the training

- Visit the community well before the training to identify possible training spot, and to locate where the posters could be mounted. It is best to identify a place that will allow for more posters to be displayed at the same time and to make reference to previous posters much easier.
- Avoid possible noisy areas, for example, near schools, roadside, markets, etc.
- Let the participants know that the training is a full morning session with a short break in between the session. It is therefore important that people understand that no food and water for refreshment is provided by trainers but may be by participants. The session may take between 3 to 4 hours.
- It is important that the trainer carries along markers. It can be red, blue or green. Try to avoid using black marker, so you can make sure that the color would stand out when you use it to mark something on the poster.
- Sitting arrangements is important to enhance learning. It is essential that all participants in the training program have excellent view of the posters.

2. Participants' profile

- The number of participants per training session should **not** exceed 40 people.
- Gender is important here as such efforts should be made to have both men and women in equal numbers for the training. This is important since the training is about food production, preparation and nutrition.
- Who is to attend the training? Mostly the decision makers of the households should be the preferred choice – Men, women, older boys and older girls.

3. Delivering mode

- The sessions should be interactive. Invite all participants to join in the discussions. Make sure to invite all involved and not only persons who seem to dominate. Allow others also to take part and contribute.
- Encourage participants to ask questions. For example ask “are there any questions?” or ask “what do you think it should be?” etc.

It is very important that you concentrate, note and reinforce positive behaviors, advices and suggestions coming from the participants.

A. Trainer	Specialized FBS-Trainer, extension agents providing technical training on food production or nutrition trainers operating in rice production zones
B. Time	04:00 hours
C. Target group	Male and female rice smallholders
D. Objectives	<p>Acquired Knowledge: Participants</p> <ul style="list-style-type: none"> - Know each other and the trainer - Know food types and their functions - Have a common understanding of healthy nutrition and nutritional requirements of household members of different age and gender - Know strategic options to improve the nutritional status of their family members <p>Acquired Skills:</p> <p>Participants know how to</p> <ul style="list-style-type: none"> - Assess current nutrition - Develop strategies to improve nutrition <p>Acquired Attitudes:</p> <ul style="list-style-type: none"> - Open dialogue between men and women on healthy nutrition - Courage and motivation to improve nutrition with well-informed decisions related to production, farm and financial management, intra-household distribution of food (quantity and quality), storage, conservation and preparation of food.
E. Relevance	<p>Relevance for household income</p> <ul style="list-style-type: none"> - Healthy nutrition reduces expenditure for medical care - Expenditure for food during hunger season or season of high food prices can be reduced
	<p>Relevance for livelihoods</p> <ul style="list-style-type: none"> - Well-nourished adult farm family members are healthy and can do a good job in agriculture - Children of smallholder families are less ill and perform well in school

F. Content, Overview of the modules	Time allocated
<i>Welcome and mutual presentation</i>	00:05
Introductory topic: Why do we eat?	00:05
Topic 1 What are the food types?	00:20
Topic 2 What do you eat during the different seasons of the year?	00:20
Topic 3 How rich is the food we eat?	00:20
Topic 4 What is a healthy meal?	00:15
Topic 5 What and how much food does each person need to be healthy?	00:30
<i>Intermediate evaluation</i>	00:05
<i>Break</i>	00:15
Topic 6 Improving Nutrition -How to produce more and better food?	00:25
Topic 7 How to conserve and store to have healthy food for longer period of the year?	00:25
Topic 8 Hygiene for healthy nutrition	00:25
Topic 9 Preparation of healthy food and hygiene for healthy nutrition (and drinking)	00:15
<i>Final evaluation</i>	00:15
	04:00

F. Content, teaching method, allocated time		
<i>Topics and Method</i>	<i>Poster</i>	<i>Min.</i>
<p>Welcome and mutual presentation</p> <p>Self-introduction: first name basis or participant can use his/her nickname, to help create a relaxing atmosphere for learning</p>		00:05
<p>Introductory topic: Why do we eat?</p> <ul style="list-style-type: none"> - Discussion should bring up the issues such as (to grow, to work, to have pleasure, to look nice, to be healthy, etc.) <p>Key messages:</p> <p>Eating is important for health!</p> <p>Eating is important for healthy growth!</p> <p>Healthy eating is essential for the well-being of our future generation.</p>		00:05
<p>Topic 1 What are food types?</p> <p>Use Poster No. 1 on food types introducing each food type by the Question “What do you see here? Based on answers explain the function of each food type</p> <ul style="list-style-type: none"> - Body building food: Food that help us to build our body and make/keep us strong (body building foods) = protein - Energy providing food staple food (starchy food / energy giving foods) - Protective food. that keeps us healthy and provides vitamins and minerals <p>What happens if one of the food types is lacking in your daily meals? Give participants a trial to name consequences</p> <p>Key messages:</p> <p>Body Building, Energy Foods and Protective Foods are different food types. They are all required for healthy nutrition;</p> <p>All the different type of foods must be present in the meal in the right proportion</p> <p>Behavioral message:</p> <p>Eat three diversified meals per day using every time food from each of these groups</p>		00:20
<p>Topic 2 What do you eat during the different seasons of the year?</p>		00:20

F. Content, teaching method, allocated time		
Topics and Method	Poster	Min.
<p>→ Show completed nutrition calendar for the zone including food types (The trainer fills poster 2 (P2) before training according to the local context of the zone. This will facilitate the explanations)</p> <p>→ Show/ recommend how to eat during lean season (combine sorghum with beans that replaces animal food)</p> <p>→ Explain why households should buy food during the lean season (to assure variety of food items)</p> <p>Q: What food types do you produce and consume in your family during the different seasons?</p> <p>Q: Which food types are available in sufficient quantity?</p> <p>Q: Which foods do you buy?</p> <p>Q: Which foods that you do not have, but could be produced on your farm?</p> <p>Key messages:</p> <p>Nutrition varies according to the availability and quality of the foods available.</p> <p>Where you do not have it you can supplement by buying to ensure that the different food types are present in the right proportion.</p> <p>Make sure you store food and keep it available during the year.</p> <p>Make sure you save money to cover your needs in the months you do not have certain foods at home.</p> <p>Make sure to use produced crops to generate money for buying missing food products.</p> <p>Behavioral message:</p> <p>Match the different products that are available during the different seasons of the year and throughout the three food groups (Energy, building, protective)</p>	calendar	
<p>Topic 3 How rich is the food we eat? (in energy, protein and fat)</p> <p>→ Use Poster 3 on energy, protein and fat content of foods, let the participants determine the richest types of food.</p> <p>Key messages</p> <p>For a healthy diet, different types of food are necessary</p> <p>There is food that is very rich in nutrients and there is other food that is less rich in nutrients.</p> <p>For a balanced nutrition these should be combined.</p>	<p>P3 Food products and their content in energy and protein</p>	00:20

F. Content, teaching method, allocated time		
Topics and Method	Poster	Min.
<p>Topic 4 What is a healthy meal?</p> <p>→ Show poster 4 on healthy meal and refer to the food types</p> <p>→ Ask the participants if they know what kind of food is advisable to eat at what time of the day.</p> <p>Q: What food types do you see?</p> <p>Q: What are examples of the different food types in your area</p> <p>Q: Which food types are lacking in your meals?</p> <p>Q. What challenges do you face in making sure that all the food types are present in the household meal?</p> <p>Let's see how you prepare a healthy meal</p> <p>→ Invite participants to come to the poster and to show what are ingredients of a healthy meal</p> <p>→ Start with a woman!! Continue with a man</p> <p>→ Exercise with participants on what kind of food is advisable to eat at what time of the day.</p> <p>Key message:</p> <p>A healthy meal should always comprise Body Building, Energy providing and Protective Foods in the right quantity.</p> <p>Different foods from the food types are used according to the season for healthy meals</p> <p>Fruits are protective food. Always remember: A piece of fruit each day keeps the doctor away!</p> <p>Eat energy food for breakfast and have a light dinner in the evening.</p> <p>Behavioral message:</p> <p>Eat at least 3-4 times per day a meal that contains products from all of the three food groups. Items from the same food group can replace each other, e.g. animal products can be easily replaced by beans, groundnuts, nuts and soybeans!</p>	<p>P4</p> <p>What is a healthy meal?</p>	00:15

F. Content, teaching method, allocated time		
Topics and Method	Poster	Min.
<p>Topic 5: Who needs what and how much food to be healthy?</p> <p>Intro: Let's see the differences on this poster → Show Poster 5</p> <p>→ Point to the pregnant women and ask:</p> <p>Q: What do you see?</p> <p>A: A pregnant woman</p> <p>Q: What else do you see</p> <p>A: flame for EF (Energy Food), house for BB (Body Building food).</p> <p>Excellent. Here we see needs for Energy providing and body building food.</p> <p>Q: What is the need of a pregnant woman? (start to ask an adult man to facilitate entry and to build the gateway to distribution of food in the household when coming to needs of men)</p> <p>A: Quantity of EF</p> <p>A: Quantity for BB</p> <p>Excellent. There are other persons on this poster.</p> <p>→Point to the breast feeding woman.</p> <p>Q: How much does the breast-feeding woman need?</p> <p>A: Quantity of Energy providing food,</p> <p>A: Quantity for Body building food</p> <p>→ Complete the round for all groups of persons</p> <p>Q: What have you learnt?</p> <p>Key messages:</p> <p>People of different age groups require all the food types in their meal to stay healthy.</p> <p>The quantity of each food type will vary according to the needs of the specific age group.</p> <p>Pregnant and breastfeeding women need almost as much of the different food types as men.</p> <p>From the 7th month onward children need good quality meals (without spices!) and breast feeding for good health and growth.</p> <p>Children of a certain age need almost as much food as adult persons.</p> <p>Behavioral message:</p> <p>Make sure that pregnant/ breastfeeding women and children consume enough and a diversified diet (3 food groups) with a special emphasis on protective foods like fruits and vegetables (micronutrients), especially during pregnancy and lactation!</p>	<p>P5</p> <p>Energy and protein needs per day of the family members</p>	00:30

F. Content, teaching method, allocated time		
Topics and Method	Poster	Min.
<p>Explain the following consecutive positive cycle of good nutrition. Start with “well-nourished pregnant women” and explain the positive impacts of good nutrition.</p> <p>The virtuous cycle of nutrition</p>		
<p>Intermediate evaluation</p> <p>Q: What have you learnt so far?(get the view of both men and women)</p> <p>Intro: After the break we will discuss what can be done to improve nutrition for health</p>		00:05
<p>Break</p>		00:15
<p>Topic 6: Improving nutrition - <u>Overview</u></p> <p>Overview of strategic options Poster 6:</p> <ul style="list-style-type: none"> - Go through the poster 6 - Ask for each strategic option: <p>Q: What do you see here?</p> <p>Discuss with participants until key contents are understood.</p>	<p>P6</p> <p>How to have more and better food?</p>	00:05

F. Content, teaching method, allocated time		
Topics and Method	Poster	Min.
<p>Produce ♦ Buy ♦ Conserve/Store well ♦ Prepare well ♦ Hygiene</p> <p>Behavioral message:</p> <p>Make sure that you plant a broad variety of local seeds; apply compost; apply mineral fertilizers; reduce losses in storage (e.g. drying fruits); manage money to buy foods and seeds for the next year; raise animals; use clean water and observe hygiene!</p>		00:20
<p>Topic 7: How to produce more and better food?</p> <p>Q: What would you do to produce more and better food?</p> <p>Q: What are the GOOD AGRICULTURAL PRACTICES that you will require to produce more and better quality food?</p> <p>Q: How can you get good and higher yields?</p> <p>Q: How do you keep/raise your animals?</p> <p>Key messages:</p> <p>Here emphasis should be on stationery (fenced livestock rearing) compared to free roaming of animals without regular water and food supply. If a chicken or goat are running around take them as entry point for discussion.</p>		
<p>Topic 8: How to conserve and store to have healthy food for longer period of the year?</p> <p>Use Poster 6 concentrating on the picture on storage</p> <p>Q. What are the benefits of storing and preserving food items?</p> <p>Q: How do you store food? (cereals & grains, vegetables)</p> <p>Q: Where do you store them? What chemicals do you use?</p> <p>Q: How to store food properly?</p> <p>Q: How to conserve food properly? E.g. drying Picture on sun drying of leaves and/or vegetables</p>	<p>P6</p> <p>How to have more and better food?</p>	00:25

F. Content, teaching method, allocated time		
Topics and Method	Poster	Min.
<p>Key messages:</p> <p>Good preservation and storage is important to have healthy food for a longer time in the lean season.</p> <p>Vegetables should be dried for a short time period to maintain nutrients,</p> <p>Produce must be stored in a clean place to prevent contamination and insect attacks ,</p> <p>Use only chemicals approved for food preservation and storage. Please ask your extension officer when in doubt.</p> <p>Do not use smoke for drying grains because smoke is dangerous for your health</p>		
<p>Topic 9: Food safety and hygiene for healthy nutrition</p> <p>Use Poster 7 on food safety and Poster 8 on Personal hygiene</p> <p>Q: Where do you get water for drinking and washing?</p> <p>Q: Where does clean water come from? (point to the water source on the poster)</p> <p>Q: What kind of containers do you use for storage of foods and water?</p> <p>A: Clean bags and containers. Never use pesticides and fertilizers containers</p> <p>Q: What are the women doing here?</p> <p>A: Washing water containers.</p> <p>Q: Why is this important?</p> <p>Q: What is the woman doing here?</p> <p>A: Preparing food. She has cleaned her table.</p> <p>Q: Why is this important</p> <p>Q: Why is the food on this table covered?</p> <p>A: to keep flies and dust away</p> <p>Q: Why is hand washing important before touching food?</p> <p>Q: What is the woman doing here?</p> <p>A: feeding the baby.</p> <p>Q: She is using a spoon. What should she do before?</p> <p>A: Washing the spoon with clean water.</p>	<p>P7</p> <p>Food safety</p> <p>&</p> <p>P8</p> <p>Personal Hygiene</p>	00:25

F. Content, teaching method, allocated time		
Topics and Method	Poster	Min.
<p>Q: Why is this important?</p> <p>Q: What is the woman doing here?</p> <p>A: Washing dishes after meal</p> <p>Q: Why is this important</p> <p>Key messages:</p> <p>To keep healthy food clean, always wash hands with soap before preparation and eating.</p> <p>Cover cooked food</p> <p>To keep healthy food clean, it must be served in a clean plate</p> <p>Drink only boiled water or portable water</p> <p>Wash all fruits and vegetables in clean salt water solution before eating. (use vinegar if available)</p> <p>Behavioral message “Food safety”:</p> <p>Collect water from a safe water source; boil water before using it; wash your hands with soap if possible before you start cooking; wash every item that you need for cooking before using (e.g. vegetables, fruits, pot, stirring spoon, etc.); observe hygiene and make sure that your cooking environment is clean, e.g. animals should not be next to your cooking pot; before eating everybody should wash his or her hands with soap!</p> <p>Behavioral message “Personal hygiene”:</p> <p>Wash your hands and your baby’s hands with soap and water before eating; wash your hands with soap and water after using the toilet or cleaning your baby’s bottom; teach your child to wash his or her hands with soap and water.</p>		
<p>Topic 10: Preparation of healthy food and hygiene for healthy nutrition (and drinking)</p> <p><i>Use the clock symbols on the poster to illustrate different cooking times</i></p> <p>Use Poster 9</p> <p>Q: Why is hand washing important before preparing food?</p> <p>Q; How long do you cook your foods?</p> <p>Q: How do you prepare the vegetables (also green leafy vegetables)?</p> <p>Q; How do you cook beans?</p>	<p>P9</p> <p>Prepare well and conserve vitamins and nutrients during cooking</p>	00:15

F. Content, teaching method, allocated time		
Topics and Method	Poster	Min.
<p>Q: Which salt type do you use?</p> <p>Q; How do you store water (containers)?</p> <p>Q: How do you fetch the stored water?</p> <p>Key messages:</p> <p>Vegetables are Protective Food. Only when cooked shortly they really protect you.</p> <p>Beans, cow peas, groundnuts are Body-building food. Soaking them overnight and cooking them without salt reduces their cooking time. By doing so you save also fire wood</p> <p>Healthy food is prepared in a clean cooking place</p> <p>To prepare healthy foods hands, dishes and cooking tools are washed with clean water</p> <p>Closing the pot with a lid reduces cooking time and saves fire wood</p> <p>Behavioral message:</p> <p>Eat food right after preparation because protective value can be lost when food is cooked too long or is not cooked appropriately (not stored in a fridge, not dried correctly etc.)!</p>		
<p>Final Evaluation</p> <p>Use poster 10</p> <p>Q: What have you learnt?</p> <p>Q: What will you change?</p> <p>(get the view of both men and women)</p>	<p>P10</p> <p>Food products for a healthy meal</p>	00:15

G. Materials	Posters	
	P1 What are food types?	Topic 1
	P2 Nutrition calendar	Topic 2
	P3 Food products and their content in energy and protein	Topic 3
	P4 What is a healthy meal?	Topic 4
	P5 Energy and protein needs per day of the family members	Topic 5
	P6 How to have more and better food?	Topic 6, 7 and 8
	P7 Food safety	Topic 9
	P8 Personal hygiene	
	P9 Prepare well and conserve vitamins and nutrients during cooking	Summary
P10 Food products for a healthy meal	Final evaluation	
H. References	<ul style="list-style-type: none"> - FAO. 2004. Family Nutrition Guide, HEAB India - Ghana dietary Study and field testing - ProAGRI-Benin Maternal and child health Image blocks - Hygiene EVORAP GIZ 	

Annex: Posters

P1 What are food types?

P1 Food categories

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Energy providing

Building our body and mental force

Protective food and clean water

P2 Nutrition calendar (rice version)

P2 Nutrition Calendar

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Available Sufficiently

Buy Sell Eat

	J	F	M	A	M	J	J	A	S	O	N	D
Rice												
Cassava												
Sweet potato												
Yam												
Sorghum												
Maize												
Beans												
Groundnut												
Meat												
Fish												
Fruits												
Vegetables and leaves												

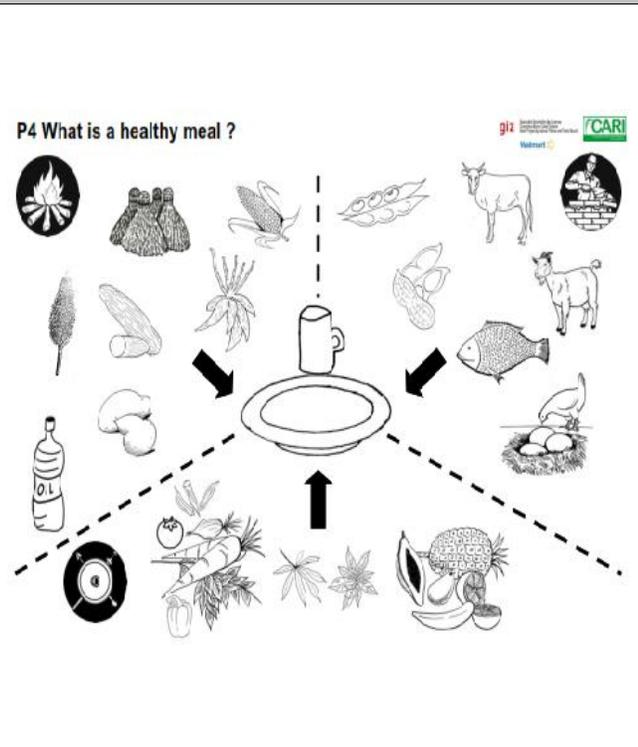
P3 Food products and their content in energy & protein

P3 Food products and their content in energy, fat and protein

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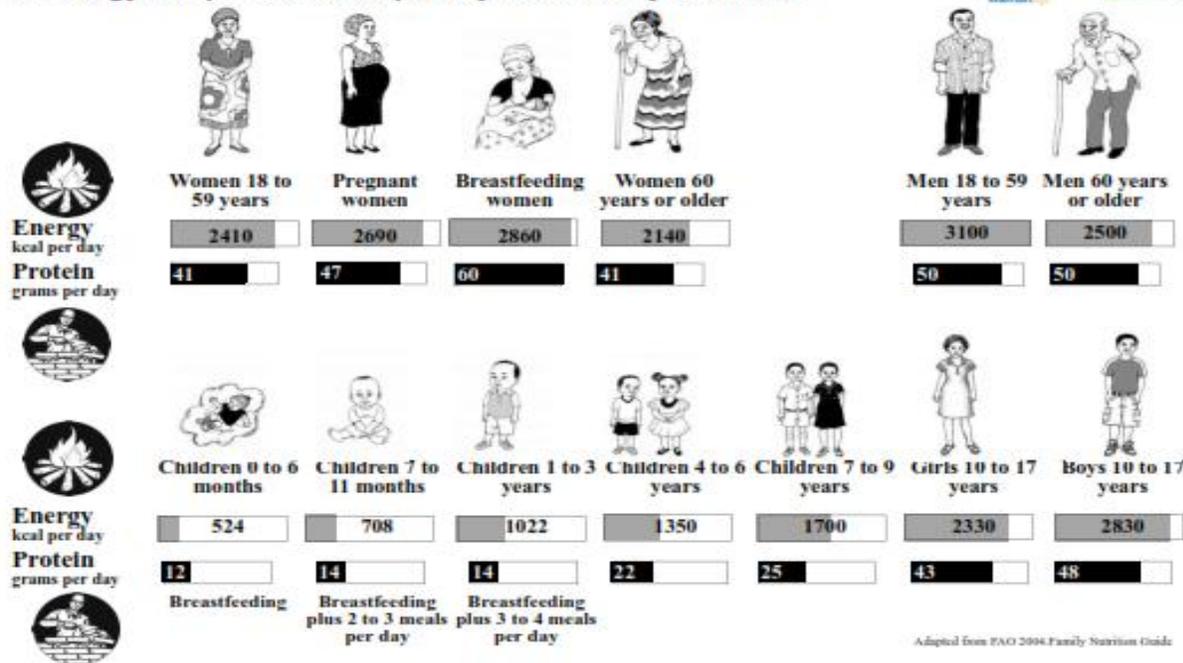
Food	Energy	Fat	Protein
Cassava			
Yam			
Potato			
Rice			
Maize			
Sorghum			
Eggs			
Meat			
Beans			
Groundnut			
Soybeans			
Fish (skinned)			
Fruits (Dried)			
Vegetables (Cooked)			
Leaves (Cooked)			

P4 What is a healthy meal?



P5 Energy and protein needs per day of the family members

P5 Energy and protein needs per day of the family members



P6 How to have more and better food?

P6 How to have more and better food?

<p>Improved varieties</p>	<p>Apply compost or organic manure</p>	<p>Apply mineral fertilizer</p>	<p>Associate Crops</p>	<p>Diversify cropping</p>
<p>Reduce losses in storage</p>	<p>Manage money to buy food</p>	<p>Raise animals</p>	<p>Prepare well</p>	<p>Use clean water Observe hygiene</p>

P7 Food safety

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P8 Personal hygiene

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P9 Prepare well and conserve vitamins and nutrients during cooking

P10 Food products for a healthy meal

P9 Prepare well and conserve vitamins and nutrients during cooking

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P10 Food products for a healthy meal

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