



What Is This Module About?

Food and health go together. Most, if not all, cultures would agree with this statement. Some cultures even consider certain kind of foods sacred. Yet, some of our food choices and food practices do not support good health. We need to understand and appreciate the significance of the relation of food to our health. We need to understand what is proper nutrition.

This module is divided into three lessons:

Lesson 1 — *A Basic Need*

Lesson 2 — *Basic Three*

Lesson 3 — *Healthy Meals*



What Will You Learn From This Module?

After studying this module, you should be able to:

- ◆ define and explain proper nutrition;
- ◆ explain the meaning of malnutrition;
- ◆ identify the three basic food groups;
- ◆ plan a simple yet balanced meal; and
- ◆ discuss the different nutrient needs of special members of the family.



Let's See What You Already Know

Before you start studying this module, let us see how much you already know about the topic, nutrition. Match Column A with Column B. Write the letter of each correct answer in the blank before each number.

- | A | B |
|--|-----------------------------|
| ____ 1. <i>Adobo</i> with egg, tomato salad, rice, water | a) fats |
| ____ 2. Skipping breakfast | b) malnutrition |
| ____ 3. The most important elements in food | c) carbohydrate-rich foods |
| ____ 4. Softdrinks, lollipops, chewing gums, chips | d) balanced meal |
| ____ 5. Rice, corn, <i>camote</i> , bread | e) protein |
| ____ 6. Fish, meats, eggs | f) protein-rich foods |
| ____ 7. Fruits, milk, vegetables | g) irregular eating pattern |
| ____ 8. Low food intake, unbalanced diet or poor absorption of nutrients by the body | h) regulating foods |
| ____ 9. Reserved energy in the body | i) lunch |
| ____ 10. Needed for body building | j) nutrients |
| | k) junk food |

Compare your answers with those found in the *Answer Key* on page 44.

If you made only 1 or 2 mistakes, that's very good. You have enough knowledge on nutrition. You may still study this module for additional knowledge.

If you made 3 to 4 mistakes, it means you have to update what you know about nutrition.

If you made 5 or more mistakes, don't worry. You just have to study the whole module to learn the importance of nutrition in your life.

Are you ready? You may now go to the next page to start Lesson 1.

A Basic Need

Food is almost everyone's favorite topic. But it's so common that we often neglect its true purpose: **to give proper nutrition**. In this lesson, we will learn the importance of eating on time, and the consequences of having an irregular eating schedule. We will also learn that starvation is a fast journey to poor health while improper nutrition is a slower one, but with equally painful results.



Let's Read

Let us read a simple story about a simple-minded man named Mang Simon.

One cool, clear morning, Mang Simon was happily plowing his field. He felt energetic after eating a hearty breakfast. Several hours passed, he heard his stomach grumble (*grrk, grrl*). "What was that?" he asked. A few minutes later, he felt it grumble again. "Don't bother me now!" he told his stomach, "I'm almost halfway through the field."

Noon came and Mang Simon stopped for lunch. "If only people didn't have to eat," he thought "then more work would be done and time won't be wasted." He then rested a while after lunch before he continued with his plowing.

Evening came and Mang Simon's work was nearly done. It became too dark and he couldn't see where he was plowing. "Darn," he complained, "if I hadn't stopped to eat, I should have finished plowing the whole field by now."



Let's Study and Analyze

Carefully read the statements of Mang Simon again. Then place an X-mark (8) before the number of the sentences that are false. Explain why you disagree with them. Remember, you can consult with your Instructional Manager or Facilitator if you have any difficulties.

_____ 1. If Mang Simon hadn't felt his stomach grumble, then he wouldn't have needed to eat lunch.

_____ 2. If people didn't have to eat, time won't be wasted and more work could be done.

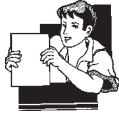
_____ 3. "If I hadn't stopped to eat, I would have finished plowing the whole field by now." – Mang Simon

Have you finished answering the questions? Compare your answers with the ones below.

 8 1. Even if Mang Simon hadn't felt his stomach grumble (or hadn't felt hungry), he still would need to eat lunch. He needed to eat to replace the energy and nutrients he spent when he plowed the field.

 8 2. If people didn't have to eat, where would the body get nutrients? Air and water alone cannot provide all the nutrients the body needs for its many activities.

 8 3. If Mang Simon hadn't stopped for lunch, his stomach would have continued grumbling until it hurt. It would have bothered him enough to make him stop working. This would, therefore, have caused him more delay in plowing his field.



Let's Learn

Food is one of the basic needs of man. It doesn't only taste good, but more importantly, it serves as a "fuel" for our body. It also acts as the "building blocks" of our body. In many cases, it too is the "medicine" that heals our body.

Assuming that a person is of normal health, he or she can only survive three weeks without food. But vital body processes malfunction when one is starving. A starving person is weak and is more prone to diseases. Starvation may even cause insanity and death.

Hunger signs are the body's "reminders" that it's time to eat. We should heed this signal especially if several hours have passed since our last meal. The more work we do, the more we should follow regular meal times. Habitually ignoring our hunger would cause stomach pains. This may lead to stomach diseases like peptic ulcer.

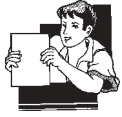


Let's Try This

List down the times you eat your meals for three days. Include full meals, light meals and snacks. Use the chart below for your answers.

Meal	Time (1 st day)	Time (2 nd day)
Breakfast		
Snack		
Lunch		
Snack		
Supper		
Snack		

You may ask the help of your Instructional Manager or Facilitator in filling up your chart.



Let's Learn

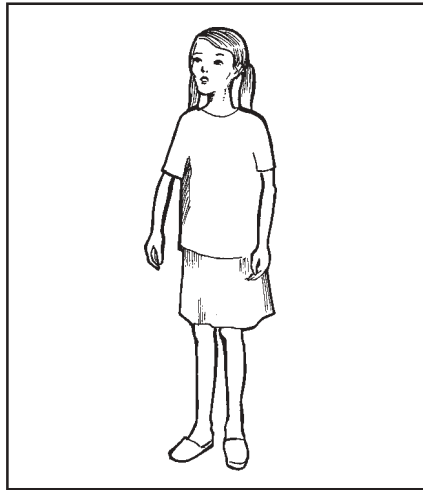
Everyone, regardless of age, should eat three meals a day for proper nutrition. Snacks once or twice a day will also do us good if we use up much energy during the day.

Your stomach gets used to a certain eating pattern or schedule. It expands or relaxes depending on how much and how often we eat. Overeating happens if the stomach is used to being fed too soon and the person eats more than his body needs. The opposite happens when you skip meals and miss out on some nutrients. The chart above will reveal whether you follow a regular eating pattern or not. Regular eating pattern aids in healthy digestion. It also helps us be sure of taking in the right amount of food in our body.

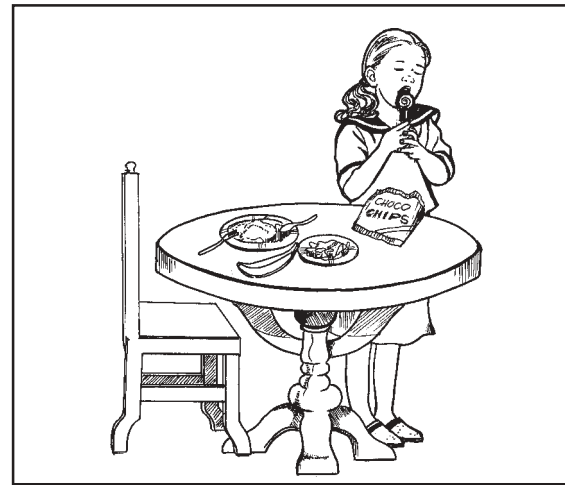


Let's Think About This

Look carefully at the two pictures below, then answer the questions that follow.



A



B

1. Which picture on the previous page represents poor nutrition?

2. If you think that either or both of the girls have poor nutrition, describe in your own words why you think so.

a. Describe the appearance of each girl.

Girl A : _____

Girl B : _____

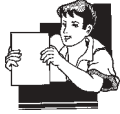
b. What are they eating or not eating?

Girl A : _____

Girl B : _____

Ask the help of your Instructional Manager or Facilitator for more explanation of questions 1 and 2.

After you have finished answering both questions, compare your answers with those in the *Answer Key* on page 44.



Let's Learn

We often think of a poorly-nourished person as someone who looks thin, weak and sickly. But even fat or “healthy-looking” people can be poorly-nourished. Poor or improper nutrition is also called **malnutrition**. It is caused by:

- a. low food intake;
- b. unbalanced diet; and
- c. poor absorption of nutrients by the body.

The effects of malnutrition are:

- a. weight loss;
- b. irritability; and
- c. low resistance to infection and other diseases.

Do you experience some or all of the signs of malnutrition? If you do, you should see a doctor. If you don't, I still advise you to follow these simple tips for better nutrition:

1. Avoid eating junk food like candies, chips, soft drinks, etc. These foods are either too sweet or salty. They contain much artificial ingredients and substances that are not needed by your body.
2. Eat different kinds of fruits and vegetables. They are rich in vitamins and minerals needed by the body to resist sicknesses.
3. Try to follow a regular meal schedule. This will help you avoid eating too much snacks and junk food.

4. Eat a healthy breakfast. **It's not about eating plenty but eating healthy.** Your mind and body can hardly work on an empty stomach.
5. Eat a balanced diet every day. Try to get enough amounts of nutrients from the three food groups. We will discuss more of these in Lesson 2.



Let's Remember

- ◆ Do not ignore hunger signs especially if you do strenuous physical work.
- ◆ Regular meal times are important to maintain a healthy stomach and body.
- ◆ Malnutrition is caused by low food intake, an unhealthy diet or poor absorption of nutrients by the body.



Let's See What You Have Learned

Fill in the blanks with the answer that completes each statement. Choose your answer from the words inside the box below.

food malnutrition overeating junk food reminders

1. Poor or improper nutrition is also called _____.
2. Examples of _____ are candies, chips, soft drinks, etc.
3. When we eat more than our body needs, _____ happens.

4. _____ serves as a fuel for our body.
5. Hunger signs are the body's _____ that it's time to eat.

Finished? Compare your answers with those in the *Answer Key* on page 45.

Well, how was it? Did you get all the correct answers? If so, very good! If not, go back to the parts of this lesson that are not very clear to you.

Basic Three

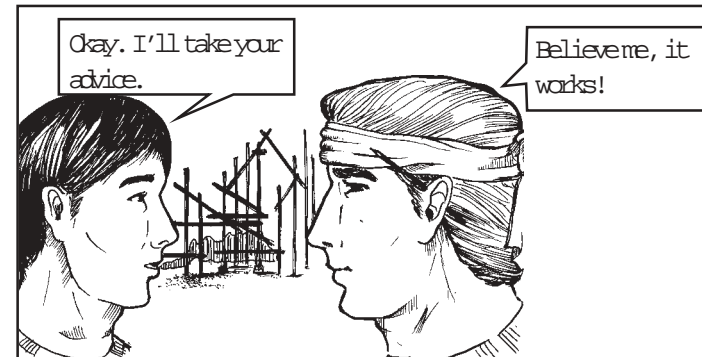
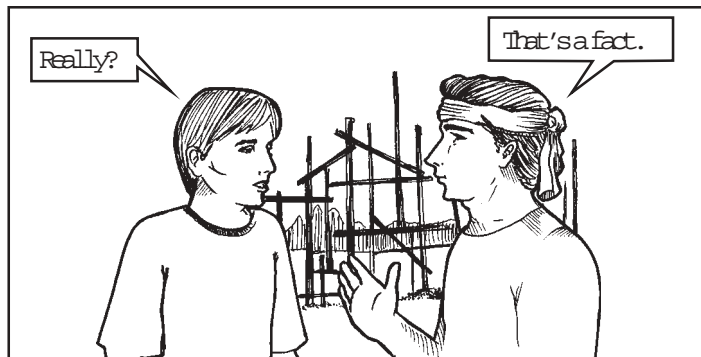
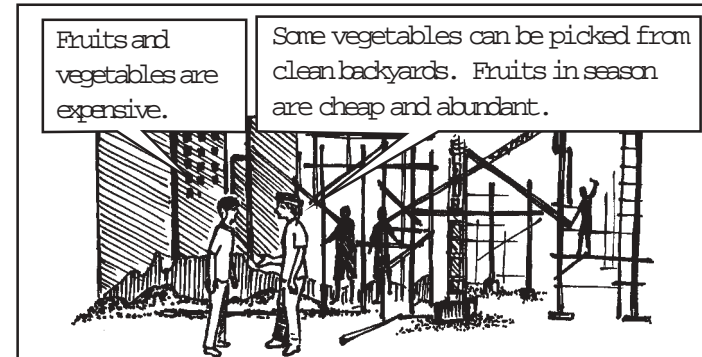
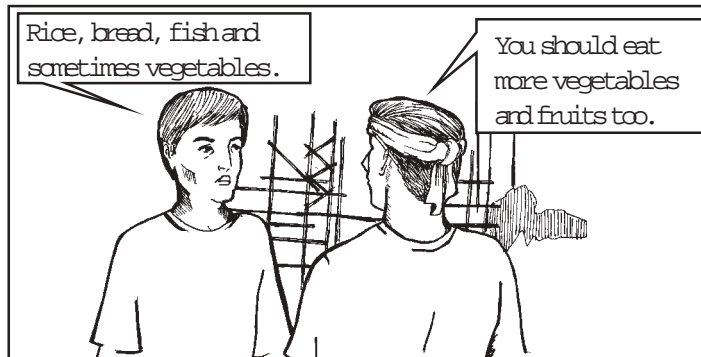
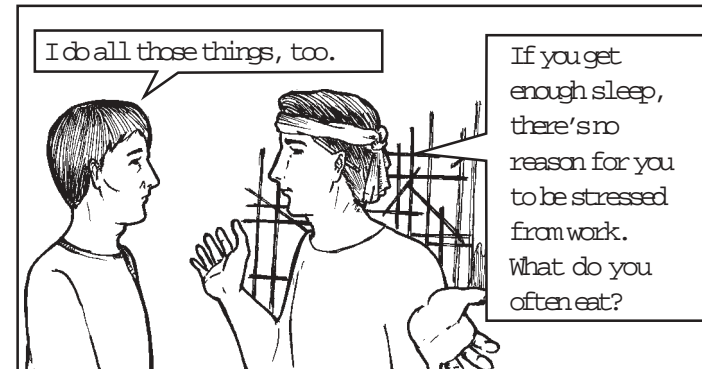
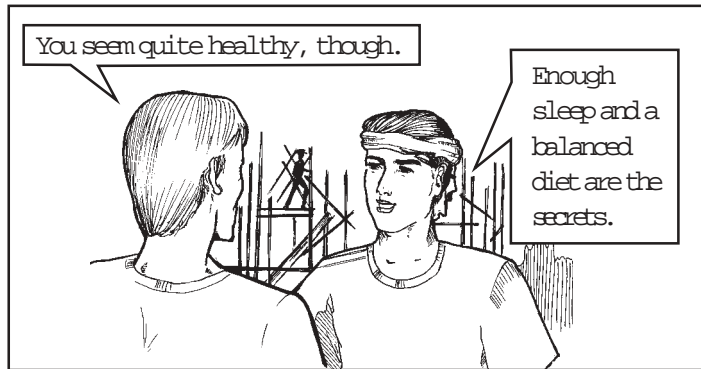
Choosing the right kinds of food is very important. We can eat lots of food but still lack the right nutrients. The key to healthy eating is learning about the three food groups. Let us start discovering this healthy “secret.”



Let's Read

Read the comic strip below.







Let's Review

1. What were Jun's two "secrets"? _____

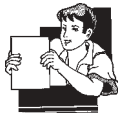
2. Lino practices only one of the "secrets." What did he miss? _____

3. What was Lino's reason for not practicing the second "secret?" _____

4. What did Jun advise Lino? _____

Consult your Instructional Manager or Facilitator if you need help in answering the questions.

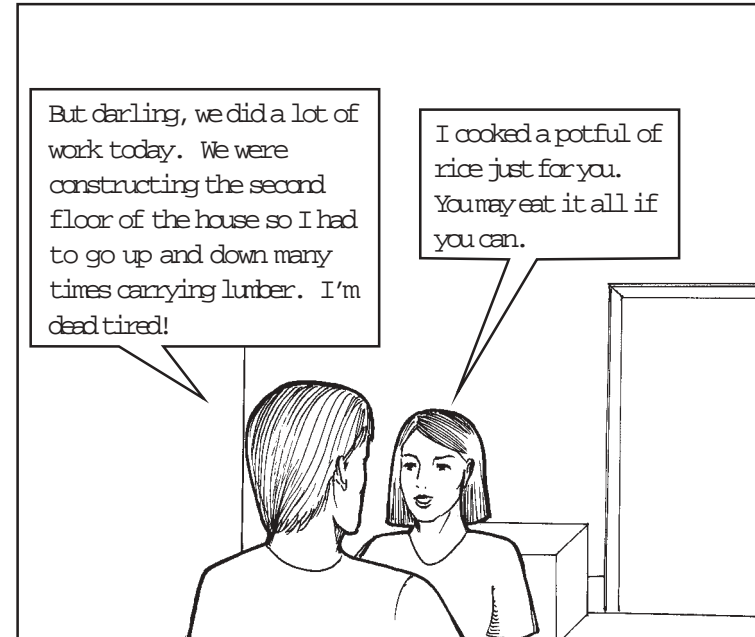
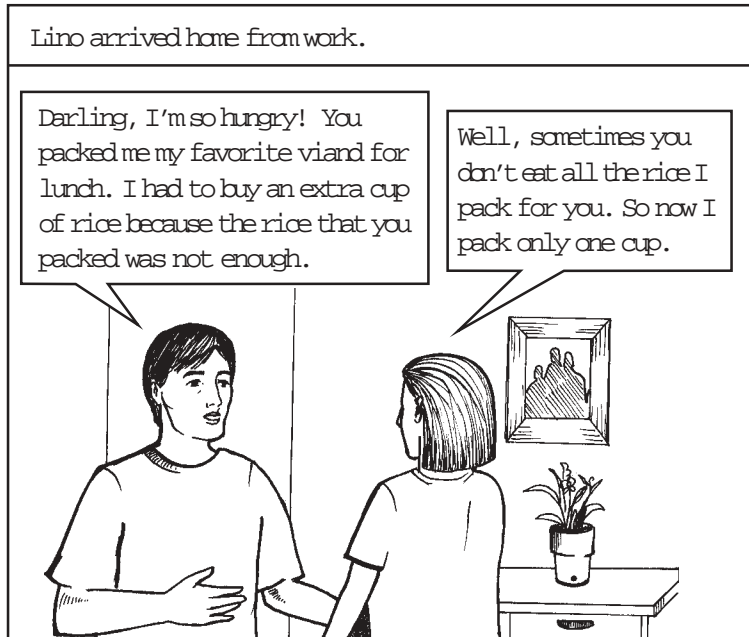
Compare your answers with those in the *Answer Key* on page 45.



Let's Learn

What were Jun's "secrets" all about? They are about how to stay healthy. How do we stay healthy? One way is through proper nutrition. Proper nutrition is not merely getting three meals a day. It has something to do with choosing foods from the "basic three" food groups. These are the *energy-giving foods*, *body-building foods* and *regulating foods*. Proper amounts of nutrients from these food groups will make us stronger, smarter and more resistant to diseases. Let us get to know more about these three groups of foods.

Continue reading Lino's story below.



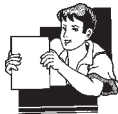


Let's Review

1. What was Lino complaining about? _____
2. Why did Lino's wife pack him just a small amount of rice for lunch that day? _____
_____.
3. Why was Lino "dead tired" that day? _____
_____.
4. Do you think Lino could eat all the potful of rice his wife cooked at home? Explain your answer.

Consult your Instructional Manager or Facilitator should you need help in answering the questions.

Compare your answers with those in the *Answer Key* on pages 45–46.



Let's Learn

In our comic strip, Lino was so hungry because he used up so much energy at work. We get most of our energy from foods containing **carbohydrates** and **fats**. Carbohydrates are the body's main source of energy. It is one of the nutrients that are easily digested and absorbed by the body. Fats are the body's last source of energy, but it has the highest energy value. It is usually stored in different parts of our body, therefore, it takes a longer time for the body to use it.

We get carbohydrates from foods like grains (rice, wheat), cereal (corn, oats) and root crops (potato, *camote*, cassava). Fat-rich foods, on the other hand, are butter, margarine, animal fats and edible oils from plants. These foods are called **energy-giving foods** because they provide the body with the energy needed to perform tasks.



Let's Think About This

Our body is like a car. A car needs fuel to run. Our body, on the other hand, needs carbohydrates to work. Without them we feel weak and get easily tired just like a car that sputters when it is almost out of gasoline. When this happens, the car gets extra fuel from different parts of the car—say, from extra fuel from the car's trunk. This is your body's stored fat. If you have enough stored fuel (fat) in your car's trunk (body), that's good. If not, you need to eat more carbohydrates and fats. And you should be careful of what you put inside your body. Be sure it's not junk food.




Let's Read

Find out Lino's problem in the comic strip below.

At the construction site . . .


Pareng Jun, I became thin after I got sick. I'm trying to recover by eating a balanced diet, like you said.

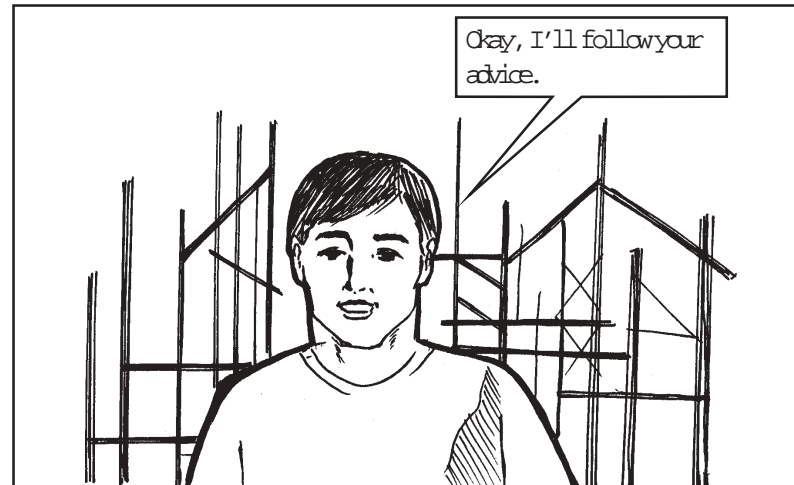
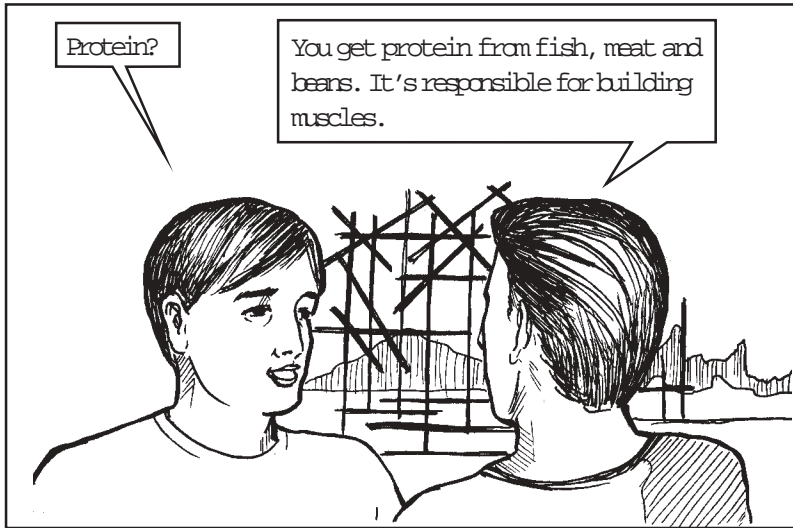


Good for you. Would you like to join some of the guys in lifting weights? It will help strengthen your muscles.

No thanks, Pare. I've been lifting enough heavy lumber here at the construction site. I'm still trying to recover my old form.

A littleweight lifting in the right place will make you stronger. Just be sure to eat foods with enough protein.





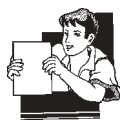


Let's Review

Try answering these questions by yourself. You may consult your Instructional Manager or Facilitator if you encounter any problems.

1. What was Lino complaining about to Jun? _____
_____.
2. What was Jun's answer to Lino's complaint? _____
_____.
3. What does Lino have to add to his diet if he plans to lift weights? _____
_____.
4. Why is protein important to our body? _____
_____.

Compare your answers with those in the *Answer Key* on page 46.



Let's Learn

Body-building foods are those that are **protein-rich**. Protein found in certain foods is what our muscles are made up of. Almost all hard and soft tissues and fluids in our body have protein in them—from the top of our hair to the drop of our saliva. No other nutrient can replace the important role of protein.

The main role of protein is to build and repair cells in our body. Protein is also an energy source like carbohydrates and fats, but it should be saved for its more important job, that is, as “building blocks” of our body. Therefore, it is important to get enough protein in our diet to keep all our cells healthy.

We can get protein from seafood (fish, shellfish), meats (poultry, pork), beans or legumes (mungo, peas), seeds and nuts (squash seeds, peanuts), and milk products (milk, cheese). Let's not forget eggs, one of the richest sources of protein.



Let's Try This

Do you eat any of the protein-rich foods mentioned above? If you do, then refer to the list below. It contains foods rich in protein. Put a check mark (✓) opposite the food type that you eat. Then identify other kinds of foods, preferably your favorite ones, that are associated with this food type. Put an X-mark (X) on the line corresponding to the food type that you don't eat.

Examples: Fish 4 — *bangus, hito, tilapia*

Shellfish 8 — _____

- | | | | |
|--------------------|-------|---|-------|
| 1. Fish | _____ | — | _____ |
| 2. Shellfish | _____ | — | _____ |
| 3. Poultry | _____ | — | _____ |
| 4. Eggs | _____ | — | _____ |
| 5. Pork | _____ | — | _____ |
| 6. Beef | _____ | — | _____ |
| 7. Milk | _____ | — | _____ |
| 8. Cheese | _____ | — | _____ |
| 9. Legumes | _____ | — | _____ |
| 10. Seeds and Nuts | _____ | — | _____ |

You may consult your Instructional Manager or Facilitator in answering this exercise.



Let's Study and Analyze

How did you feel while answering our activity? Did you check all the food items in the list?

If you checked all the food types listed in the previous page, it means that you have a healthy protein diet. You would have no problem getting enough protein in your body.

If you checked only some items in the list, that's all right. There are so many protein-rich foods, and you probably prefer to eat only some of them.

If you checked only 1 or 2 items in the list, you should have listed several favorite foods associated with the food types that you checked. Hopefully, you can still widen your protein choices.



Let's Try This

Have you heard of some common sayings about certain foods? Below are some of them:

Do you remember food "advices" given to you by family and friends to improve your health? Here are some of them:

- ◆ *A banana (or apple) a day keeps the doctor away.*
- ◆ *Fish and peanuts are 'brain' food.*
- ◆ *When you have colds, drink calamansi juice.*
- ◆ *Balut (duck embryo) strengthens your knee bones.*
- ◆ *Ampalaya (bitter melon) will make your blood healthier.*
- ◆ *Carrots make your eyes clearer.*

1. These are just some of the popular food “sayings” that give good advice about our health. Can you name some more sayings or advice? If yes, list them down in the blanks below. If you don’t know of any, interview family members, neighbors or friends. Ask them to help you.

2. Do you believe in these food “sayings”? Explain your answer.

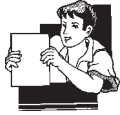


Let’s Study and Analyze

Look at the sayings again on page 20. Each of the foods mentioned contains nutrients needed by our body to fight sicknesses and to maintain normal body functions.

- Examples:
- Bananas — rich in potassium, vitamins C and A
 - Fish — rich in vitamin B₁₂, vitamins A and D
 - Calamansi — vitamins A and C
 - Eggs — vitamins A, D, B₁, B₂
 - Ampalaya — iron
 - Carrots — vitamin A

These nutrients have specific functions in our body. If we lack some of them, sickness will strike us easily.



Let's Learn

Food performs different roles in our body. We have already mentioned two roles — food provides energy and builds body tissues. In order for these functions to be properly carried out, **regulating nutrients** are needed. **Vitamins** and **minerals** regulate or maintain normal body functions. We only need small amounts of vitamins and minerals from the food we eat. Though small, they play a very big part in maintaining the overall health of our body.

Some of the more important vitamins are A, B₁, B₂, B₃, B₆, B, C, D, E and K. Some important minerals are iron, calcium, potassium, phosphorus and magnesium.

Severe lack of any of these nutrients in our body would result to diseases. Study the table below. It shows the diseases caused by the lack of certain nutrients.

Lacking nutrient	
Vitamin A	Night blindness
Vitamin B	Beri-beri
Vitamin C	Scurvy (bleeding gums)
Vitamin D	Rickets (deformed bones)
Iron	Anemia (blood deficiency)
Calcium	Brittle bones
Potassium	Hypokalemic paralysis (muscle weakness and confusion)



Let's Try This

Here is a family menu for one Saturday.

Breakfast	Lunch
milk fried rice fried <i>galunggong</i> tomato papaya	rice <i>sinigang na baka</i> (with <i>kangkong</i> and <i>gabi</i>) banana

1. Which meal/s has/have all three food groups? _____
2. Label each food item above with the following:
 - E — if it is an energy-giving food
 - B — if it is a body-building food
 - R — if it is a regulating food

Consult your Instructional Manager or Facilitator if you have questions about the assignment. Compare your answers with those in the *Answer Key* on page 46.



Let's Remember

- ◆ Proper nutrition is having a balanced diet composed of foods from the three basic food groups.
- ◆ The three basic food groups are:
 - Energy-giving foods (carbohydrates and fats)
 - Body-building foods (proteins)
 - Regulating foods (vitamins and minerals)
- ◆ Energy-giving foods contain carbohydrates and fats, which serve as main sources of energy.
- ◆ Carbohydrates are the body's main sources of energy while fats are the body's reserved energy.
- ◆ The main role of protein is to build and repair all body tissues.
- ◆ Regulating foods contain vitamins and minerals that maintain the normal functions of different parts of the body.
- ◆ Though taken in very small amounts, severe lack of just one vitamin or mineral in your diet may result in certain diseases.



Let's See What You Have Learned

Encircle the letter of the correct answer.

1. The secret to proper nutrition is/are _____.
 - a. nutrients
 - b. three meals a day
 - c. the three basic food groups
 - d. all of the above

2. If you spent so much energy at work or play, you should take more _____.
 - a. rice, corn, potato
 - b. juice, soup, water
 - c. candies, cakes, ice cream
 - d. all of the above

3. The following foods have the **highest** energy value:
 - a. *camote*, cassava, bread
 - b. butter, corn oil, animal fat
 - c. fish, chicken, beans
 - d. all of the above

4. If your friend is thin and weak, he/she needs to build his/her body with these foods:
 - a. *chico*, pineapple, *ampalaya*
 - b. *malunggay*, *pechay*, *mustasa*
 - c. eggs, beef, milk
 - d. all of the above

5. Nutrients which are present in small amounts in food but play very important roles are:
 - a. carbohydrates
 - b. protein
 - c. fats
 - d. vitamins and minerals

Compare your answers with those in the *Answer Key* on page 47.

Healthy Meals

In the previous lesson, we discussed the importance of the three food groups. It is the first key to healthy eating. Now we are going to give you the second key. We will teach you how to plan healthy meals for your family. In this lesson, you will also learn that each person has unique nutritional needs.



Let's Try This

Study the lunch menus of three different restaurants.

(a) Le Bistro	(b) Jubilee Fastfood	
clear soup	french fries	
mashed potato	hamburger	
sizzling steak	spaghetti	
cake	ice cream	

1. Which menu would you choose? _____
2. Why would you choose it? _____

3. Which menu, in your opinion, is the most delicious? _____

4. Which menu, in your opinion, is the most nutritious? Explain your answer. _____

Compare your answers with those in the *Answer Key* on page 47.



Let's Study and Analyze

When dining out, we usually choose meals that look, taste and smell good. But in such cases, we may neglect a very important factor in eating right—nutrition. We already discussed that the three food groups should be present in any meal. Choosing and planning the food you and your family will eat is important. It assures you of the right amounts and combinations of nutrients that your body needs in any meal.

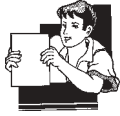
The nutrients in our body work as a team. No single food can provide all the nutrients needed by the body. Thus, you must eat a variety of nutritious foods. Each of the three food groups must be present in your meals. And these foods must be in the right quantity and quality.



Let's Try This

In your notebook, record the food you eat in a day. Include your drinks (water, coffee, etc.). There is no need to write the time you ate them. Place your food under these headings: *breakfast, lunch, supper* or *snack*. Any kind of food or drink you take in a day should be written down. Do this for three days. We will use this record for our next topic.

Are you ready for the next topic? Read on.



Let's Learn

We will now discuss a tool that will help you review the quality and quantity of food you eat every day. This is your “Nutrition Guide.” This will not only suggest the quality (kind) of food but also the quantity (amount) needed by normal adults. It will greatly help you in planning healthy family meals.

“Nutrition Guide”

Instructions:

- ◆ Check (4) lightly in pencil the foods you serve or eat each day. You can easily erase your answers so that you can use the guide the next day.
- ◆ Remember that foods within a group have the same nutrients. You can substitute one for the other.
- ◆ Take note of the suggested amount of food from each group every day.

A. Energy-Giving Foods

1. Carbohydrate-rich foods

Did you eat any of these today?

_____ rice

_____ corn

_____ bread

_____ *bihon*, other noodles

- _____ *suman, palitaw*, etc.
- _____ *gabi, camote*, other root crops
- _____ *panutsa*
- _____ candied fruits

Suggested Amounts

- Rice 5 – 7 cups, cooked
- Corn 5 $\frac{1}{3}$ – 8 $\frac{1}{3}$ cups, cooked
- Rice-corn mix 4 $\frac{1}{3}$ – 7 $\frac{1}{8}$ cups, cooked
- Root crops 1 small
- Sugar 5 – 9 teaspoons

You may substitute:

- 1 cup of cooked rice = 4 slices of loaf bread, ordinary size
- or 5 pcs. *pandesal*, small
- or 1 $\frac{1}{8}$ cup of cooked corn meal
- or 1 cup of cooked *camote* or 1 small cooked *camote*

The foods mentioned are your main sources of energy. You need them to do your daily activities and to keep your body warm.

2. *Fat-rich foods*

- _____ butter
- _____ margarine
- _____ coconut oil
- _____ cooking oil
- _____ coconut milk (triple serving)
- _____ other fats and oils

Suggested Amount

6 – 7 teaspoons

This food group supplies a concentrated form of energy.

B. Body-Building Foods

Protein-rich foods

- _____ beef
- _____ lean pork
- _____ lean chicken
- _____ liver, gizzard (internal organs of chicken)
- _____ sausages, hotdogs, *tocinos*, hams, etc.

- _____ other kinds of meat
- _____ milk, cheese, yogurt, other milk products
- _____ *dilis*, other kinds of fish
- _____ shrimps, *kuhol*, clams, other shellfish
- _____ dried beans
 - ◆ *mongo*
 - ◆ *paayap*
 - ◆ *balatong*
 - ◆ *bichuelas*, peas and others

Suggested Amounts

- fish, meat or poultry products 1 ³/₄ – 2 cooked servings (3 cm cube)
- dried beans or nuts. ¹/₂ cup cooked
- eggs 2 pieces

You may substitute:

- Fish/meat/poultry = dried beans, cooked 1 ¹/₂ cup per serving
- or medium egg, 2 pieces
- or medium fish, 2 pieces

You need these body-building foods to build and repair body tissues. Pregnant women need them for childbearing and childbirth. Nursing mothers need them for breast milk. Children need them for growth. These foods keep our blood red, our nerves healthy, and the bones, teeth and nails strong. They are also good sources of vitamin B and iron.

C. Regulating Foods

Green, Leafy and Yellow Vegetables

- | | |
|---------------------------------------|---|
| _____ <i>malunggay</i> | _____ <i>sayote</i> tops |
| _____ <i>carrots</i> | _____ <i>gabi</i> leaves |
| _____ <i>sili</i> leaves | _____ <i>saluyot</i> |
| _____ <i>upo</i> tops | _____ <i>tamling</i> |
| _____ <i>talinum</i> | _____ <i>spinach</i> |
| _____ <i>ampalaya</i> leaves | _____ <i>camote</i> tops |
| _____ <i>alugbati</i> | _____ <i>kangkong</i> |
| _____ <i>mustasa</i> | _____ <i>petsay</i> |
| _____ <i>squash</i> leaves and fruits | _____ <i>other leafy green vegetables</i> |

Suggested Amount

$\frac{3}{4}$ cup, cooked

The foods in the previous page are listed according to the increasing vitamin A content. They help us grow and maintain good eyesight and healthy skin. The greener or the more deeply yellow the food is, the more vitamin A it has.

2. *Vitamin C-rich foods*

_____ cashew	_____ guava
_____ <i>datiles</i>	_____ <i>camatsile</i> fruit
_____ strawberry	_____ <i>anonas</i>
_____ papaya	_____ green mango
_____ <i>siniguelas</i>	_____ <i>pomelo</i>
_____ ripe mango	_____ <i>durian</i>
_____ <i>atis</i>	_____ <i>tiesa</i>
_____ tomatoes	_____ melon
_____ <i>guyabano</i> (soursop)	_____ <i>dalanghita</i>

Suggested Amount

1 serving (1 medium fruit or 1 slice big fruit)

for tomatoes = 6 medium pieces, raw

The foods above are listed according to increasing vitamin C content. We need them for healthy gums and teeth. They also increase our resistance against infection and common sicknesses.

3. *Other Fruits and Vegetables*

_____ <i>mabolo</i>	_____ pineapple
_____ <i>chico</i>	_____ <i>langka</i> (jackfruit)
_____ <i>santol</i>	_____ <i>caimito</i> (star apple)
_____ <i>granada</i>	_____ <i>duhat</i>
_____ watermelon	_____ avocado
_____ banana	_____ <i>macopa</i>
_____ <i>bitsuelas</i> (snap beans)	_____ <i>ampalaya</i> (bitter gourd)
_____ banana bud	_____ <i>bataw</i>
_____ <i>kadyos</i>	_____ <i>paayap</i>
_____ <i>okra</i>	_____ red or green pepper
_____ <i>sigarilyas</i>	_____ <i>talong</i> (eggplant)
_____ string beans	

These foods help in digestion and in the removal of waste. They have less vitamin and mineral content compared to leafy and yellow vegetables and vitamin C-rich foods.



Let's Think About This

Do you remember the kinds of foods that you have eaten for three days? That will be your reference for checking items in your own “Nutrition Guide.” Evaluate if you are eating balanced meals or not. If you are, congratulations! If not, there is still enough time to improve your diet. Just concentrate on the food groups whose essential nutrients you are missing out on. Then, make your own nutrition guide based on the sample given on pages 28 to 34. Show your output to your Instructional Manager.

After you have done that, let's try planning a meal.



Let's Try This

How do you plan a meal? Try this activity.

Plan a menu for breakfast. Choose from the foods listed below.

sinigang na baka

fried egg

paksiw na isda

fried rice

boiled *camote*

ripe banana

coffee with sugar

calamansi juice

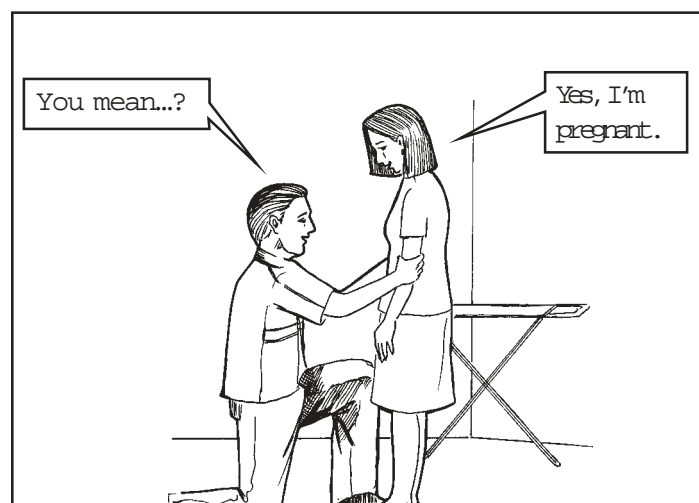
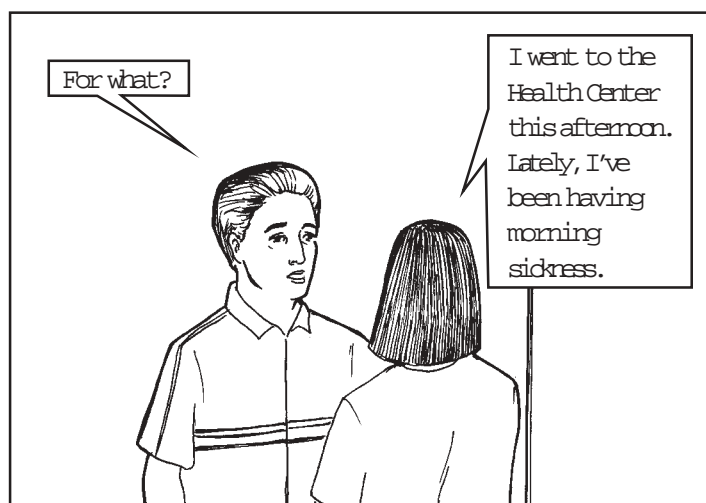
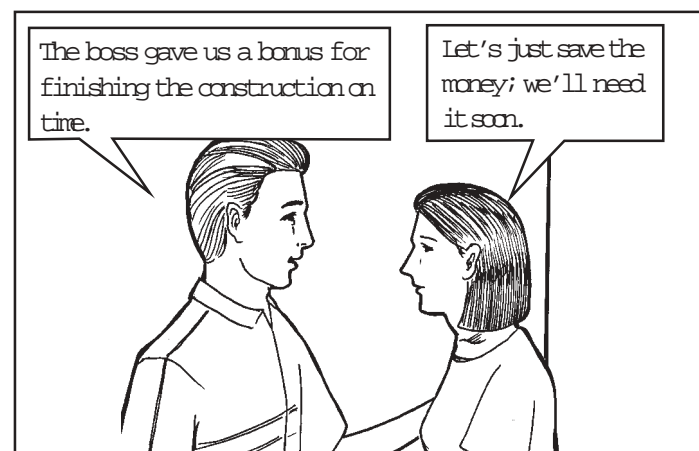
boiled corn

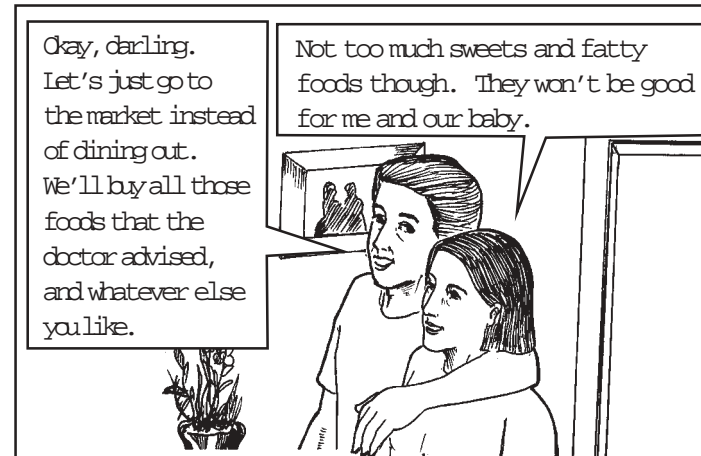
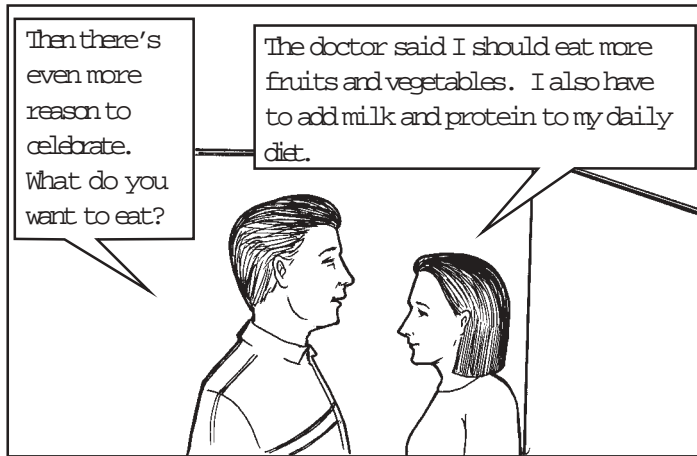
Compare your menu to the one found in the *Answer Key* on page 48. Discuss your output with your Instructional Manager.



Let's Read

In the home of Lino and his wife . . .





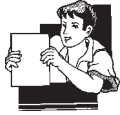
Let's Try This

1. What is the condition of Lino's wife? _____
2. Why did Lino change his mind about dining out? _____

3. What did the doctor advise Lino's wife? _____

4. What foods are not good for his wife's condition ? _____

Compare your answers with those in the *Answer Key* on page 48. Discuss your answers with your Instructional Manager or Facilitator.



Let's Learn

Each member of the family needs different amounts of food. A pregnant woman needs more nutrients for the health of her baby. She should take in more calcium and protein to help her baby grow and to make her own muscles strong. The calcium from milk would make her baby's bones strong. The iron from meat would give enough blood supply for herself and her baby. She should also eat more fruits and vegetables. This would give enough supply of vitamins and minerals to guard against infections or diseases.

Too much energy-giving and fatty foods will not benefit a pregnant woman. After all, her activities now are not as demanding or tiring as before. Thus, she doesn't need that much energy. Energy-giving foods would merely be stored in her body as fat. Too much fat would make it hard for her to deliver a child.

If there are children in the family, they should get plenty of body-building and energy-giving foods. The body-building nutrients would help their muscles, bones and organs develop properly. They also help supply blood to the brain, which is an important need of school-age children. Energy-giving foods, on the other hand, give fuel for the high level of activity among pre-school kids. Remember pre-school and school-age children are in their growing years. Their bones need to be strong and fully developed. They need two to four times more calcium than adults.



Let's Remember

- ◆ Nutrients in our body work as a team. They must be present in the right amounts in our daily diet.
- ◆ The "Nutrition Guide" will help us plan healthy family meals. It suggests the kinds and amounts of food needed by adults.
- ◆ Each member of the family needs different amounts and combinations of food, especially pregnant women and young children.



Let's See What You Have Learned

A. Plan a menu for lunch. Choose from the foods listed below.

chamorado with milk

fried *tilapia*

corn soup

toasted bread

ripe banana

salted egg with tomatoes

cooked rice

B. Look again at the list of foods above. Identify which of them belong to the three food groups. Write your answer in the proper column below.

Energy-giving foods	Body-builder

Compare your answers with those found in the *Answer Key* on page 49.



Let's Sum Up

- ◆ Food is one of our basic needs. It serves as a fuel for our body.
- ◆ The true purpose of food is to give proper nutrition to our body.
- ◆ Proper nutrition involves choosing the right amount of foods from the three basic food groups. These are the following:
 - Energy-giving foods or foods that contain carbohydrates and fats;
 - Body-building foods or protein-rich foods, and
 - Regulating foods which contain vitamins and minerals.
- ◆ To ensure that you and your family have proper nutrition, plan healthy family meals through the use of the nutrition guide.



What Have You Learned?

This short quiz will test how much you have learned from this module. Read each sentence below carefully. Then choose the best answer from the four choices given. Encircle its letter.

1. Irregular eating patterns have negative effects on our health. Which of the following is not an example of these negative effects?
 - a. overeating
 - b. lack of nutrients
 - c. good nutrition
 - d. ulcer
2. In order to have proper nutrition, we should _____.
 - a. eat our favorite foods
 - b. eat foods from the three food groups
 - c. eat foods with artificial ingredients
 - d. eat expensive foods
3. The cause of malnutrition is _____.
 - a. unbalanced diet
 - b. low food intake
 - c. poor absorption of nutrients by the body
 - d. all of the above

4. The body's main source of energy is/are _____.
- a. fats
 - b. vitamins and minerals
 - c. carbohydrates
 - d. protein
5. All the cells in our body have this/these important nutrient/s called _____.
- a. fats
 - b. vitamins and minerals
 - c. carbohydrates
 - d. protein
6. These are nutrients we need in very small amounts. However, severe lack of any of these nutrients causes diseases. They are called _____.
- a. fats
 - b. vitamins and minerals
 - c. carbohydrates
 - d. protein
7. Which of the following is not an example of junk food?
- a. Too sweet foods
 - b. Too salty food
 - c. Too much food
 - d. Too much food with artificial ingredients

8. Which of the following does not describe a balanced meal?
 - a. breakfast, lunch and supper
 - b. foods having the nutrients we need
 - c. foods in the right quantity and quality
 - d. combination of energy, body-building and regulating foods
9. Which of the following is not considered in meal planning?
 - a. foods that are delicious
 - b. foods that are nutritious
 - c. foods that are affordable
 - d. foods that are easy to eat
10. Which members of a family usually do not have special nutritional needs?
 - a. fathers
 - b. pregnant women
 - c. infants
 - d. school children

Finished? Check your answers against the *Answer Key* on page 49. Get your score and see how you rate below:

- 8–10 = Excellent! You have learned much about proper nutrition. You can now proceed to the next module.
- 6–7 = Good! Just go back to those topics you don't understand.
- 0–5 = Satisfactory. You should review the lessons that you didn't understand very well. Your Instructional Manager or Facilitator will be able to help you.



Answer Key

A. Let's See What You Already Know *(page 2)*

- | | |
|------|-------|
| 1. d | 6. f |
| 2. g | 7. h |
| 3. j | 8. b |
| 4. k | 9. a |
| 5. c | 10. e |

B. Lesson 1

Let's Think About This (pages 6–7)

1. A and B; both girls have poor nutrition.
2. a. Girl A = Girl A is not only thin and bony; she also looks sickly. These are obvious signs of poor nutrition.
Girl B = Girl B looks healthy. Her body is well filled-out and she seems to be of normal height. But the food she is eating is not nutritious and healthy.
- b. Girl A = The girl is not eating. She seems to lack nutrients and food.
Girl B = She is overfed with the wrong kinds of food. She eats junk foods like candies and chips, which are bad for her health. She was not able to eat all her rice, viand and banana, which are actually the ones good for her health.

Let's See What You Have Learned (pages 9–10)

1. Poor or improper nutrition is also called malnutrition.
2. Examples of junk food are candies, chips, softdrinks, etc.
3. When we eat more than our body needs, overeating happens.
4. Food serves as a fuel for our body.
5. Hunger signs are the body's reminders that it's time to eat.

C. Lesson 2

Let's Review (page 13)

1. Jun's two "secrets" are getting enough sleep and eating a balanced diet.
2. Lino gets enough sleep but he doesn't eat a balanced diet. He eats mostly rice, bread and fish but not fruits and vegetables.
3. Lino said fruits and vegetables are expensive.
4. Jun advised Lino that some vegetables can be picked from clean backyards. He also advised Lino that fruits in season would be cheap to buy.

Let's Review (page 15)

1. Lino was complaining about the small amount of rice his wife had packed for him for lunch that day. He had to buy extra rice because he was so hungry.

2. Lino's wife said that he sometimes brings back leftover rice from lunch.
3. Lino did so much work that day. He went up and down the second floor of the house they were constructing. He did this several times carrying heavy lumber.
4. No, Lino could probably eat only a small portion of the rice that his wife cooked because the capacity of our stomach is limited. He was just so hungry that he thought he could eat such amount.

Let's Review (page 18)

1. Lino complained about his being thin after getting sick.
2. Jun told Lino to lift weights.
3. Foods that are rich in protein like fish, meat and beans.
4. Protein builds our muscles.

Let's Try This (page 22–23)

1. All three meals are complete. They all have items from the three food groups.

2.

Breakfast	Lunch
milk — B;R	rice — E
fried rice — E	<i>sinigang na baka</i> (with
fried <i>galunggong</i> — B	<i>kangkong</i> and <i>gabi</i>) — B;
tomato — R	banana = E;R
papaya — R	

Let's See What You Have Learned (pages 24–25)

1. d
2. a
3. b
4. c
5. d

D. Lesson 3

Let's Try This (pages 26–27)

- 1–3. (Answers will vary.)
4. most nutritious — Sariling Atin.

Because it has balanced nutrients from the three food groups. *Tinolang manok* has chicken (protein, fats and minerals), *sili* leaves and *sayote* (vitamins), liver and gizzard (minerals).

Le Bistro has clear soup (we're not sure what nutrients are present here), mashed potato (carbohydrates, fats from butter, vitamin A), steak (protein, fats and minerals) and cake (carbohydrates and fats). This menu is too energy-rich.

Jubilee serves french fries (carbohydrates from potato, fats from oil), hamburger (protein from beef, carbohydrates from bread, fats from oil and mayonnaise), spaghetti (carbohydrates from pasta, protein from beef, fats from oil, minerals from tomato sauce), ice cream (carbohydrates from sugar, fats and minerals from cream). This menu is also too energy-rich.

Let's Try This (page 35)

Possible Answers:

- a) Fried egg, fried rice, ripe banana, coffee with sugar or calamansi juice. (Comment: it might be better to just use plain rice to avoid too much fat in this menu).
- b) *Paksiw na isda*, fried rice, ripe banana, coffee with sugar

Wrong Answers:

Sinigang na baka, fried rice, etc. *Sinigang na baka* is a typical main dish for lunch or supper.

Boiled *camote*, boiled corn, etc. These carbohydrate-rich foods are not a good match for the protein dishes in the food list (fried egg, *paksiw na isda*). They are often eaten alone as a snack among Filipinos.

Let's Try This (page 37)

1. Lino's wife is pregnant.
2. Lino changed his mind because he wanted to buy nutritious foods for his wife instead. His wife needed additional nutrients in her condition. So, they just agreed to buy foods from the market instead.
3. The doctor advised her to eat more fruits, vegetables and milk, and to take in more protein.
4. Too much sweets and fatty foods are not good for pregnant women.

Let's See What You Have Learned (page 39)

A. The best choice for a complete lunch is:

Cooked rice, fried *tilapia*, cooked rice, salted egg with tomatoes, corn soup and ripe banana.

Champorado and toasted bread are best eaten during breakfast and merienda.

B.

Energy-giving foods	Body-buildir
champorado	fried tile
cooked rice	salted €
toasted bread	
corn soup	

E. What Have You Learned? *(pages 41–43)*

- | | |
|------|-------|
| 1. c | 6. b |
| 2. b | 7. c |
| 3. d | 8. a |
| 4. c | 9. d |
| 5. d | 10. a |



References

Oliveros, et.al.Claudio, V.S., M.P.E. de Guzman, G. P. Dimaano, and M.S. *Basic Nutrition for Filipinos*, 3rd ed. Manila: Merriam-Webster, 1988.

Leocadio, C.G. *Essentials in Meal Management*. Quezon City: UPCHE, 1986.

Truswell, A.S. "Nutrition." *The New Encyclopedia Britannica*, 15th ed. Chicago: Encyclopedia Britannica, Inc., 1993

Williams, M.H. *Nutrition for Fitness and Sports*, 2nd ed. Iowa: Wm. C. Brown Publishing, 1983.