IGNITE MODULE 4 // NUTRITION 101

How does a nutritious diet support health?

FACILITATOR GUIDANCE



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Learning objectives

- Review the role that food plays in making and keeping people healthy
- Food groups
- Know what macro- and micro-nutrients are, and which types of foods are sources for these nutrients, and how these contribute to a healthy diet.
- Understand how women and small children have specific nutritional needs.
- See the connection between agriculture and nutrition. The food we eat is grown on farms.

Time

This is designed as a 45-minute pre-recorded session appropriate for self-paced learning.

Facilitated learning in real-time

The session script and PowerPoint slide deck, or the pre-recorded session, can also be used as standardized content for use real-time (synchronous) facilitation.

When delivering this content in a facilitated, real-time mode—either remotely or in-person—plan to double the time (90 minutes) and design the learning session with experiential learning activities to make the session more interactive. You can find ideas for activities in the compendium guidance.

Using the session talking points

REMINDER: The session notes / talking points are meant as a guide and should not be read verbatim. You can—and should—customize the talking points to suit your facilitation style.

You will see notation throughout these notes, including directions to you, the facilitator, that are not meant to be shared with the learners. These are in square brackets [like this]. Key concepts are in **bold text.** Learning activities are in sections with grey background, and are in blue text.

Notes / talking points

Slide	Notes / talking points
The second secon	In this session we learn about nutrition basics the relationship between food and health.
	Food and agriculture are strongly connected. We can make a difference in the health of our communities through agriculture projects.
	Understanding what foods people need to be healthy will help as we design, develop, implement and assess agricultural activities.
	This session provides an overview of nutrition, diet and health.
Vertrade	This material may be new to you, or you may already know quite a bit about nutrition, food, health and agriculture.
	Wherever you are starting, we encourage you to deepen your understanding by listening for opportunities to link these fundamentals to your work.
	What new ideas do you have for sharing this information? Who else needs to know these fundamentals? How does knowing these nutrition basics help you think about or design programs?
What do we mean by healthy?	What are we really talking about when we say "health"? If we want or are encouraged to "be healthy," what does that mean, and why is it important?
 Healthy means Able is do the physical theirs you work and need. Aveid baving liness or pain Able is black clearly and remember thisps. Have manageable lives is of feat, worky or stress. Ultimately, health is about having a good quality life with your body and mind. 	When we say "healthy" we think about the growth and development of our bodies and minds. Healthy means you:Are able to do the physical things you want and need to do (lift
	things, get from places a to b, etc.)Avoid having illness or pain
	 Are able to think clearly and remember things Have manageable levels of fear, worry, stress.
	Ultimately, health is when your body and your mind support having a good
	<i>quality</i> life.
Treek What does healthy mean to you? To the people and communities where you work?	What does healthy mean to you? What do you hear for yourself in this description of health?
	What do you think it means for the people and communities you work with in rural areas?
	How might this be different? What do you think is the same?



Health is not a faucet that gets turned on or off. It does not depend solely on one certain action. There are many different factors that make up our health, and having good health requires daily attention.

Some of the factors that affect our health are:

- Physical movement, which builds our strength, increases our energy, and helps our brain and heart to function.
- Sleep, which is important for our brains, our physical growth and our immune systems. (Sleep is especially important for children and adolescents.)
- Our physical and emotional safety. This might mean having a safe shelter that is protected from crime, bad weather, and free of toxic chemicals. It also means being safe from physical or mental abuse by others.
- Our mental and emotional health contribute to our physical health: feeling comfortable and having friends or family that we have good relationships with makes life more enjoyable and is a key part of being healthy.
- Mental health also includes the physical health of our brain. Our brains learn and change throughout our entire lives. It is important to keep "exercising' our brains as adults by developing new skills and hobbies, having interesting conversations with others, and using creativity and problem-solving skills.

And, of course, nutrition.

The food we eat provides the nutrients needed to give us energy, support growth, and protect us from illnesses. The type, amount, and quality of food we eat on a regular basis is called our diet, and it plays a critical role in supporting the health of our entire body. This is what we will be focusing on today.



What does health have to do with your work in agriculture?

Agriculture is a huge and multifaceted industry. It can be easy to lose sight of how agriculture influences health, but at the end of the day, **agriculture is a primary source of food**, which we all need to live, and live healthfully.

In this way, agriculture and health are deeply connected. Farmers are responsible for stewarding land and resources, choosing what and when to grow, deciding what they will keep, sell or trade, and as a result, determining how much food, which foods, and when food is available in our communities.

Here, we look at the building blocks of what it means to have a healthy, or nutritious, diet so that we can bring awareness into our work, highlighting the inherent connection between growing food and people's health.

People need a healthy diet to	The food we eat affects our health and development.
Grow and develop from referely recurpt solutions. Have energy to when, increased a could be Kaop Burk train health yaid, and analyse methods. Prevent theses and recover from itness or hjory Prevent theses	 People need a healthy diet to: Properly grow and develop from infancy through adulthood Have energy to work, recreate, and socialize Keep a healthy brain and emotional state Prevent illness and recover from illness or injury Prevent diseases, both temporary illness like a cold, as well as long-term diseases like diabetes.
What makes up inutritious diet?	To do all of these things we need a healthy diet. What do we mean by a healthy diet?
	Our diet is the regular pattern of food that we consume.
	A nutritious diet is any combination of food that provides the right amount and balance of necessary nutrients to meet the current needs of an individual's body given their lifestyle, age, and physical condition.
Food groups	We typically eat food over the course of the day in the forms of meals and snacks.
	Eating a mix of different foods at each meal and across the day not only provides a good variety of tastes, but also can contribute to health.
	Let's dive into what food is made of to understand why this is the case.
What's in food?	Food is composed of digestible and indigestible materials, along with water.
	Different combinations of these components give food different colors, flavors, and textures.
	The digestible components of food are known as nutrients. There are two groups of nutrients: macronutrients and micronutrients.
Macronutrients provide energy and help us grow.	Macronutrients include fat, carbohydrates, and protein.
FATS CANSCHUCKATES FROTEN Image: State of the observation Image: State of the observation Image: State of the observation Image: State of the observation Image: State of the observation	Carbohydrates and fat mainly provide energy while proteins, also known as body-building foods, help in muscle growth and repair along with providing energy.
	The amount of energy in food is measured in calories.



Fats contain more calories per gram than any other nutrients.

Fat-rich foods are stored by the body for use as energy and are critical to cell maintenance.

Fat is also necessary for organ health and promotes the absorption of many micronutrients. That means we need fats in our diet to be able to digest and use many other nutrients!

Some fats, and having too many fats, may have negative health effects, particularly fats that are solid at room temperature and those found in heavily processed foods.

Fat found in seafood, seeds, nuts, legumes, and vegetables, are considered healthier options.

Carbohydrate-rich foods provide fuel for immediate use by muscles and organs to function.

Sugary and sweet foods, or those made with refined flour are processed very quickly by the body and don't contain many additional nutrients.

Whole grains, raw fruits, and starchy vegetables provide lasting energy while also providing micronutrients; these whole foods are often also very rich in vitamins and minerals

Protein-rich foods are known as 'body-building' foods since they help muscles grow and repair, and they assist in recovery from illness.

Animal-sources, such as meat and dairy, contain more essential proteins per gram.

For adults, all necessary proteins *can* be obtained by eating a mixture of plant-sourced proteins like seeds, nuts and legumes.



There are many other nutrients that don't provide energy but are absorbed by the body, primarily through the food we eat, and used for many essential functions.

These are found in foods in smaller amounts, and are needed by the body in smaller amounts, so they are called 'micronutrients'.

Micronutrients include vitamins and minerals.

Essential vitamins and minerals are those that our body cannot create on its own but are essential for life. We must get these from our food.



When we talk about a diet having **sufficient quantity**, it means **that the energy the food provides is enough to give us the energy we need to do** our work and hobbies, maintain a healthy weight, and repair any injuries or recover from illness.

We say 'sufficient' quantity, because more is not always better. Eating more calories than the body uses will lead to weight gain, which can eventually lead to becoming overweight and at risk for diseases such as diabetes and high blood pressure. And, filling up on calories without also getting a sufficient quantity of micronutrients is also not good for our health.

Nearly all foods contain some amount of micronutrients, but fruits, vegetables, and some animal-source foods (milk, eggs, fish, and lean meat such as chicken) contain many more while also being low in calories.

This is why it is recommended to eat a diet that contains more of these food groups, since they will provide sufficient micronutrients while avoiding excess calorie consumption.

Eating a variety of different food groups on a regular basis helps to ensure that all the necessary nutrients are eaten.

This is known as **"diet diversity**." Not every food needs to be eaten every day.

Choosing foods based on what you and those who will eat with you like, and what is good quality and affordable given the time of year, is important.

This might also mean switching out different fruits, vegetables, and animal source foods as the seasons change.

Dried, canned, or otherwise preserved foods may be good options when none of these micronutrient-rich foods are in season. Good quality food is safe to eat and does not make you sick. It is not infested with bugs and has not become rotten or moldy.

Many households that produce food also store it to eat throughout the year. Inadequate storage facilities can lead to food becoming infested, moldy, or going rancid.

When this happens, we can no longer consider it food. Strategies that help households store food safely for longer contribute to a healthy diet.

Good quality food looks appealing and tastes good.



There are many ways to group foods depending on culture and tradition, and the purpose of categorization.

Here, we will group food based on the major role it plays in providing nutrients:

- **Starchy staples**: include rice, potatoes, cassava, wheat, and maize among others. The primary macronutrient is carbohydrates. When eaten whole (without the bran and germ removed) they contain more micronutrients than when they are refined/processed.
- **Legumes and pulses** include all dried beans, peas, lentils, and groundnuts. They provide carbohydrates and proteins, and minerals.
- **Fruits and vegetables** are rich sources of micronutrients. Vitamins add color to foods, so eating fruits and vegetables with a variety of different colors helps ensure you are consuming a variety of different vitamins.
- Animal-source foods: Include foods such as meat, fish, eggs, and milk. Animal-source foods are excellent sources of key micronutrients as well as fat and protein. However, excess consumption of animal fats is linked with heart disease, so lean (having less fat) animal-source foods are preferable.
- Nuts and Seeds provide protein, fats, and micronutrients.
- **Oils and fats** are a very common ingredient in meals, used in cooking and as a condiment. Oils are nearly all fat and may contain micronutrients depending on the source of the oil and if it is fortified. Oils from nuts, seeds, and vegetables are the healthiest, while oils from animals (butter, ghee, lard) should be eaten only occasionally.
- Sweets and sugary beverages: These are treats that are eaten on special occasions or as a snack. While sugar provides a rapid source of energy and any safe food can fit into a healthy diet in moderation, these foods tend to contain many calories and very few micronutrients.



Eating habits and influences shape our food choices and therefore our diet. Our habits around food can support a healthy diet.

It's important to note that our **eating habits often are not conscious choices that we make, but an effect of our culture and environment**.

Eating is a behavior that is social and cultural, affected by the environment/context, our awareness, and our personal tastes.

Which foods are available, affordable, and even desirable are all qualities that are as much, if not more, affected by our environment, as by our individual choices.

- Diet is the pattern of the food and meals you eat each day over the course of time.
- We talk about diets being more or less healthy. This is really about how your diet *supports* your health through the foods you eat on a regular basis.
- A healthy diet has the right quantity and diversity of safe and nutritious foods to achieve optimal growth and development, and support physical, mental and social wellbeing at all life stages.

Healthy diets will vary based on culture, personal preference, and economic resources, but they all contain safe, diverse, balanced, and nutritious foods

Still, there are many ways that **agriculture programs can** *influence* **eating habits**, thereby leading to more nutritious food and healthier diets. We talk more about designing for and working toward this type behavior change in another module.





We have discussed what a healthy diet is broadly, but specific needs vary depending on a person's level of physical ability/activity, biology, sex, disease, deficiencies, and life cycle.

Two of the most important life stages that have unique nutrition needs are young children, and women who are pregnant or lactating.

Babies' first and only food for the first six months should be breastmilk. Babies given only breastmilk are rarely malnourished if their mother is also eating a sufficient and high quality diet.

At six months through to two years of age, babies should be given calorieand micronutrient-dense foods such as porridges made from cereals and legumes, soft vegetables, and mashed fruits alongside continued breastmilk. This is called complementary feeding.

Children need to eat sufficient calories, including proteins, fats and micronutrients, because they are active and growing their bodies and minds!



During pregnancy, a mother's need for nutrients expands to meet both her own and that of the developing baby.

Increasing the amount of micronutrient-rich fruits, vegetables, and animal source foods can help meet this need.

Occasionally pregnant mothers will require micronutrient supplements such as iron and folic acid.

When lactating, a mother's body needs nutrients both for her own health as well as to produce nutritious breast milk for her baby.

A mother's body will prioritize adding nutrients to milk first, so it is important especially for mothers to increase consumption of fruits, vegetables, and animal source foods, to maintain their own health.

Let's put it together

• Diet is the pattern of the food and meals you eat each day over the course of time.

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A healthy diet has the right quantity and diversity of safe and nutritious foods to achieve optimal growth and development, and support physical, mental and social wellbeing at all life stages. Healthy diets will vary based on culture, personal preference, and economic resources, but they all contain safe, diverse, balanced, and nutritious foods In these stages of life, women experience some of the greatest needs for diet diversity and quantity, yet often face the biggest barriers to consuming a healthy diet. Can you think of examples, or reasons why this might be? What can food producers do to support mothers during this time of life? What can agricultural organizations do to support health for mothers in this critical window? Some of the reasons are... Women serve food to others first and nutritious foods are finished before they eat. What are the barriers to healthy diet Women might not be able to purchase healthy foods without control • over money, which often lies with men in a household. Women have more care responsibilities and less time to eat healthy • foods and rest adequately. Barriers to healthy diets For these reasons, many nutrition programs and interventions focus on Accessibility women's nutrition in particular. Affordability Utilization Food preferences Women and children face many barrier to healthy diets Getting women, especially pregnant and nursing women, proper nutrition is important, and has different and unique challenges than ensuring a healthy diet for others.

In the next module, we will talk more about the challenges to getting good nutrition, and the effects of those challenges on both individuals and communities.

LET'S REVIEW

Nutrition basi

Healthy diet
 Food groups

and barriers

This has been a lot of information. Let's review some key concepts:

Health and Nutrition

• Health is the uninhibited growth, development, and maintenance of our bodies and minds. Health is linked to nutrition and agriculture because agriculture is responsible for stewarding the land and resources that produce food and determining how much, which, and when food is available in our communities.

Nutrition

- Nutrition refers to the intake of calories (or energy) and nutrients that the body needs to grow, develop, heal, and maintain a healthy weight and good health.
- Food is made up of these nutrients, including macronutrients that provide energy and help us grow, and micronutrients like essential vitamins and minerals.

Healthy diet

• A healthy diet is any combination of food that provides the right amount and balance of necessary nutrients to meet the current needs of an individual's body given their lifestyle, age, and physical condition. This includes sufficient quantity, diversity, and good quality food.

Different dietary needs and barriers to healthy diets

- Healthy diets will vary based on culture, personal preference, and economic resources, but they all contain safe, diverse, balanced, and nutritious foods.
- Two of the most important life stages that have unique nutrition needs are young children, and women who are pregnant or lactating.

Why is it important for me personally to be healthy?

How does my community benefit from people having good nutrition?

How might I support good nutrition in my community? What is my role as a designer and implementer of agricultural development projects?

Thank you.

[Add contact info here if desired. Wrap up and set up for what's next]



Thank you!