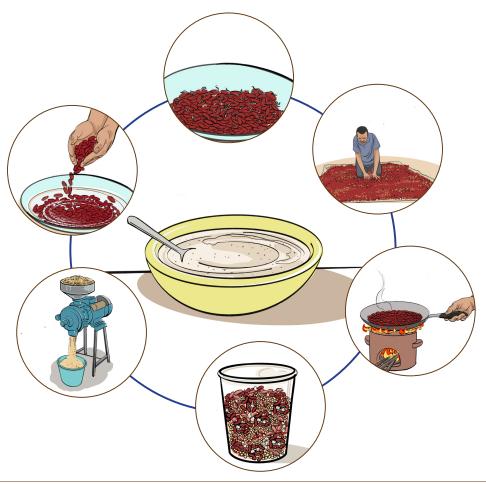
# GERMINATED PULSE-CEREAL PORRIDGE PREPARATION GUIDE







Implemented by





## **DEVELOPING TEAM**

**Prof. Limbikani Matumba**Lilongwe University of Agriculture and Natural Resources (LUANAR)

**Theresa Nakoma Ngoma**Lilongwe University of Agriculture and Natural Resources (LUANAR)

Madalitso Chilembo Lilongwe University of Agriculture and Natural Resources (LUANAR)

**Isaac Chima**Lilongwe University of Agriculture and Natural Resources (LUANAR)

**Nyadani Jali Meleke**Lilongwe University of Agriculture and Natural Resources (LUANAR)

**Dr. Aggrey Pemba Gama**Lilongwe University of Agriculture and Natural Resources (LUANAR)

**Dr. Gabriella Chiutsi-Phiri**Lilongwe University of Agriculture and Natural Resources (LUANAR)

Vitowe Batch GIZ - Food and Nutrition Security Project (FNSP), Malawi

**Dr. Martina Kress**GIZ - Food and Nutrition Security Project (FNSP), Malawi

Witness Dupu GIZ - Food and Nutrition Security Project (FNSP), Malawi

Chawezi Phiri GIZ - Food and Nutrition Security Project (FNSP), Malawi

Artwork and Design by McLean Mafubza, Raphael Mawera

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## **PREFACE**

Malnutrition remains a critical issue in Malawi, with stunting affecting 37% of children. This calls for practical and sustainable solutions to improve nutrition, particularly during early childhood. Many traditional foods lack essential nutrients, while some contain anti-nutritional factors that limit their benefits.

To address this, a nutrient-rich blend of cereals, groundnuts, and pulses has been carefully developed and tested. In this blend, the pulses are germinated to reduce anti-nutritional factors, making the nutrients more accessible and beneficial. This blend is made from pre-roasted grains, ensuring it is convenient to prepare and serve. While the blend is designed to meet basic nutritional needs, it also allows for the addition of other nutritious ingredients to further enhance its value, offering flexibility for families to adapt it to their needs.

These counseling cards provide a step-by-step guide for community trainers to demonstrate how to prepare and use this blend effectively. Each step is supported by questions that help learners understand the rationale behind the actions, making it easier to adopt these practices.

Together, we can promote better health, fight malnutrition, and nurture stronger, healthier communities.

## **COUNSELLING CARDS OBJECTIVES AND USES**

#### **Objective**

To equip Facilitators with the knowledge and skills necessary to effectively guide learners in preparing a nutritious and Convenient Roasted Germinated Pulse-Groundnut-Cereal Porridge.

#### **How to use these Counseling Cards**

These Counseling Cards serve as a tool to foster discussion between facilitators and learners. Facilitators should encourage interactive and collaborative dialogues rather than simply instructing. This approach will enhance understanding and foster a supportive learning environment.

#### **Instructions for Facilitators**

- Use only images relevant to the current topic of discussion.
- Position the flip chart so that all participants can clearly view the images.
- Prompt the audience by asking what they observe in the images. Encourage them to connect these images with their own experiences.
- Ensure full participation throughout the discussion.

#### **Guiding Tips**

- Behind each image, key points are provided for reference. Avoid reading these aloud; instead, integrate them naturally into the conversation.
- Conclude discussions by asking learners to summarize what they have learnt and discuss how they can apply it.

# **SCOPE OF THE COUNSELLING CARDS**

These cards cover best practices for making Roasted Germinated Pulse-Groundnut-Cereal Porridge, focusing on its health benefits, preparation, and cooking methods.

#### **Structure of Counselling Cards**

These Counselling Cards on Roasted Germinated Pulse-Groundnut-Cereal Porridge are divided into four lessons. Each lesson introduces key concepts for facilitators to share with learners:

- **Lesson 1:** Discussion and engagement skills
- **Lesson 2:** Introduction and benefits of Roasted Germinated Pulse-Groundnut-Cereal Porridge
- **Lesson 3:** Preparation of Roasted Germinated Pulse-Groundnut-Cereal Flour
- **Lesson 4:** Cooking methods for Roasted Germinated Pulse-Groundnut-Cereal Porridge

#### The Objectives of the Counselling Cards

- Develop participatory and discussion skills in facilitators to foster effective communication with learners.
- Explain the health benefits of Roasted Germinated Pulse-Groundnut-Cereal Porridge.
- Identify the risks of improper preparation.
- Describe the process of making Roasted Germinated Pulse-Groundnut-Cereal Flour.
- Demonstrate the cooking process for the porridge.

#### **Learning Outcomes**

By the end of these lessons, learners will be able to:

- Demonstrate effective participatory and discussion skills essential for facilitators, promoting open and impactful communication with learners.
- Explain the health benefits of consuming porridge made from Roasted Germinated Pulse-Groundnut-Cereal Flour, detailing its nutritional value and benefits for caregivers and their families.
- Identify risks associated with improper preparation of the cereal-pulse-groundnut porridge to ensure safe consumption and optimal health outcomes.
- Describe the preparation process of making Roasted Germinated Pulse-Groundnut-Cereal Flour, including key steps and precautions for high-quality results.
- Perform and demonstrate the cooking process for the porridge, showing mastery in following the recipe and adjusting it to meet nutritional guidelines and taste preferences.

# LESSON

# **DISCUSSION SKILLS**







**Listen attentively** 



Identify the problem



Discuss the problem



Provide relevant points or solutions



**Build consensus** 



Plan a follow-up meeting to assess if the problem has been resolved

### **LESSON 1: DISCUSSION SKILLS**

This section provides a framework for leading effective discussions.

#### **Lesson Objective**

Equip learners with essential discussion skills to effectively guide caregivers in best practices for preparing Roasted Germinated Pulse-Groundnut-Cereal Porridge.

#### **Lesson Outcome**

By the end of the lesson, learners will be able to confidently lead open, supportive discussions with caregivers, employing active listening, collaborative problem-solving, and empowerment techniques to guide effective porridge preparation practices.

#### **Discussion Process Steps**

- Begin by welcoming learners and making introductions.
- Identify any challenges or questions learners may have, encouraging open communication.
- Allow learners to share their thoughts uninterrupted, practicing active listening.
- Help learners articulate the core issues they face.
- Facilitate a collaborative discussion on possible solutions.
- Share available strategies, allowing learners to choose which they feel are applicable.
- Reinforce learners' chosen strategies by having them verbalize their choices.
- Schedule follow-up visits to assess progress on any agreed actions.

#### **Note to Facilitation**

Encourage facilitators to practice discussion skills by using various case studies, allowing them to gain confidence in guiding learners.

#### **Discussion Questions**

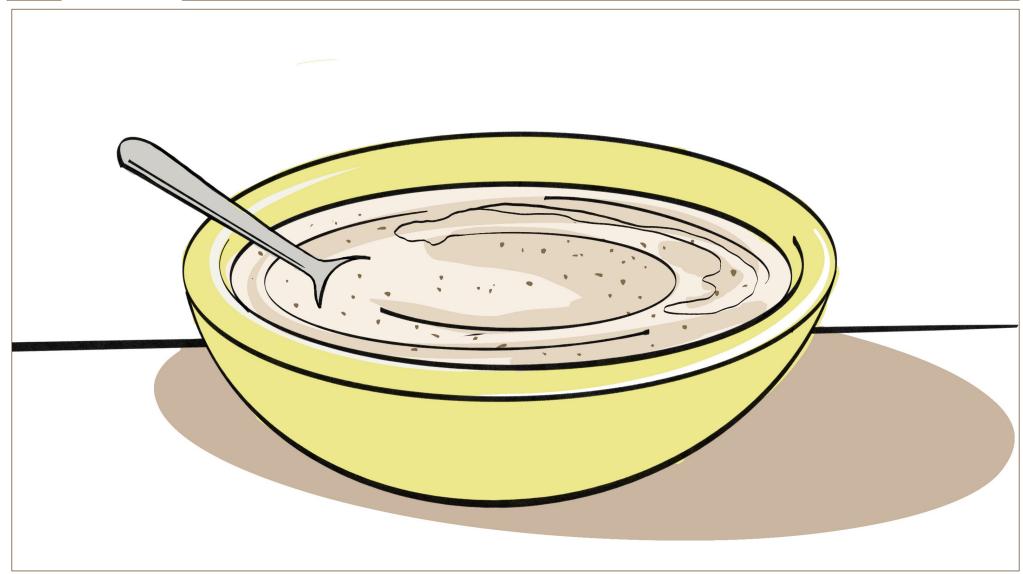
- 1. Why is active listening important in discussions on porridge preparation?
- 2. How does collaborative problem-solving empower participants?

#### **Answers to guiding Discussion Questions**

- 1. Active listening ensures participants feel heard, fostering open communication and trust, which leads to productive problem-solving.
- 2. Collaborative problem-solving involves participants in identifying issues and choosing solutions, fostering ownership and confidence in applying practices.

2

# INTRODUCTION AND BENEFITS OF ROASTED GERMINATED PULSE - GROUNDNUT - CEREAL PORRIDGE



# LESSON 2: INTRODUCTION AND BENEFITS OF ROASTED GERMINATED PULSE - GROUNDNUT - CEREAL PORRIDGE

#### **Lesson Objective**

Introduce learners to Roasted Germinated Pulse-Groundnut-Cereal Porridge, covering its composition, nutritional benefits, and role in supporting caregivers and families with a convenient, balanced meal option.

#### **Lesson Outcome**

By the end of the lesson, learners will be able to describe the benefits and convenience of Roasted Germinated Pulse-Groundnut-Cereal Porridge as a nutritious meal that supports growth and development, particularly for young children.

# What is a Roasted Germinated Soybean-Cereal Porridge?

Roasted Germinated Pulse-Groundnut-Cereal Porridge is:

- A porridge made from a nutrientrich blend of roasted, germinated pulses, groundnuts and cereals like maize, sorghum, or millet.
- A porridge that provides balanced protein, energy, and essential nutrients, with roasting and germination enhancing flavor, digestibility, and nutrient absorption, making it an ideal meal for all ages.

#### Roasted Germinated Pulse-Groundnut-Cereal Porridge is beneficial because it is:

- Convenient and quick to prepare, ideal for regular feeding schedules and busy caregivers.
- Nutritionally complete, providing essential amino acids, fiber for digestion, and rich in minerals, vitamins, and antioxidants.
- Supports healthy growth, aids in disease prevention, and promotes cognitive development in children.

#### **Guiding Discussion Questions:**

- What local cereals could be used to make cereal-pulse flour?
- How might this porridge reduce cooking time and support young children's nutrition?
- What are some other ways that this porridge could benefit caregivers and families?
- How could community members support one another in adopting this porridge in their homes
- Why are roasting and germination important in preparing Pulse-Groundnut-Cereal Porridge?

# **Answers to guiding Discussion Questions**

- 1. Sorghum, millet etc
- 2. Roasting and germination enhances flavor, digestibility, and nutrient absorption, making it an ideal meal for all ages. Additionally, these processes make the porridge convenient (cook for a short period).
- 3. It is convenient and quick to prepare, ideal for regular feeding schedules and busy caregivers.
- 4. By sharing information on the benefits and convenience of this porridge.
- 5. Roasting enhances flavor and reduces anti-nutrients, while germination improves nutrient digestibility and absorption by breaking down complex compounds. Together, they boost the porridge's nutritional value and taste.

#### **Wrap-up Discussion**

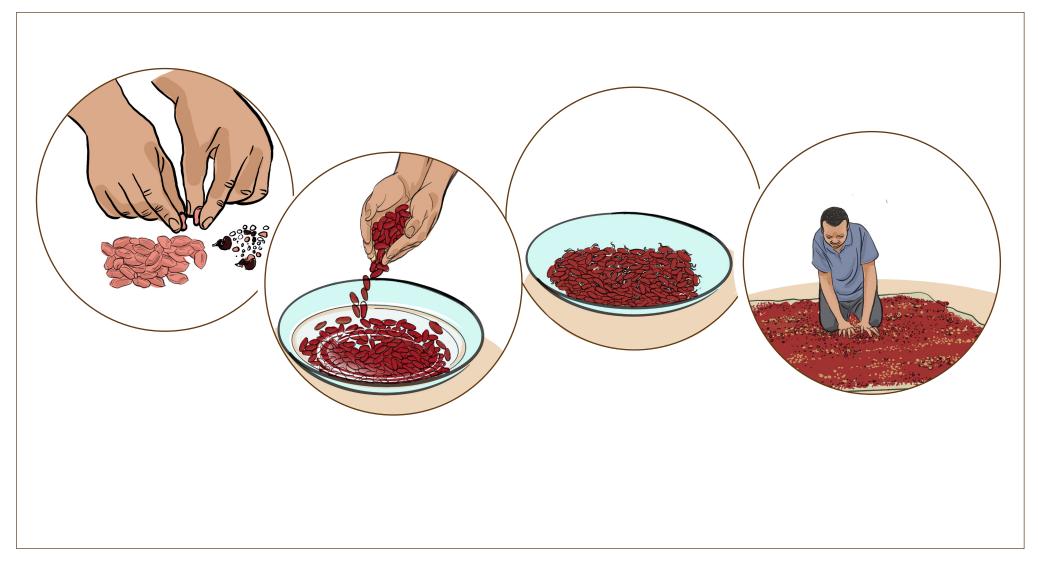
Consider the potential health impacts on children without access to nutritious porridge options like the cereal-pulsegroundnut blend.

#### **Key Message**

Roasted Germinated Pulse-Groundnut-Cereal Porridge is a nutritious, accessible, an valuable option that supports children's growth, cognitive development, and health, making it an ideal addition to daily meals.



# PREPARING GRAINS FOR ROASTED GERMINATED PULSE - GROUNDNUT - CEREAL PORRIDGE



# LESSON 3: PREPARING GRAINS FOR ROASTED GERMINATED PULSE - GROUNDNUT - CEREAL PORRIDGE

#### **Lesson Objective**

Guide learners through the preparatory steps for creating safe, nutritious Roasted Germinated Pulse-Groundnut-Cereal Porridge by introducing best practices for sorting, soaking, drying, roasting, mixing, milling, and storing the grains.

#### **Lesson Outcome**

By the end of the lesson, learners will be able to:

- Perform grain sorting to remove impurities and reduce contamination, emphasizing its importance for food safety.
- Demonstrate the process of soaking and germinating pulses, recognizing the nutritional and digestibility benefits this step provides.
- Identify the methods for proper drying of germinated pulses to prevent microbial growth, ensuring safe storage and extended shelf life.
- Describe the roasting process for groundnuts and pulses, understanding its impact on flavor, nutrient absorption, and convenience.
- Apply correct mixing ratios and milling techniques to achieve a balanced nutrient profile and consistent texture in the flour.
- Implement appropriate storage practices for the flour, using food-grade, airtight containers to maintain quality and prevent spoilage.



## **SORTING AND CLEANING OF GRAINS**



#### A

#### **SORTING AND CLEANING OF GRAINS**

Grain sorting involves removing foreign materials (e.g., dirt, stones) and moldy or damaged grains.

#### **Objective:**

Ensure food safety and quality by removing impurities, defective grains, and foreign materials

#### **Materials:**

Clean flat surface, winnowing basket, sieve, clean

#### Steps:

#### 1. Prepare Workspace:

Clean and organize the sorting area and tools to avoid recontamination.

#### 2. Inspect and Sort:

Systematically separate good grains from foreign materials, defective grains (e.g., moldy, cracked), stones, and serving insects. Systematic grain sorting involves a deliberate process using both hands.

The healthy grains are carefully pushed to one side, while the defective ones are isolated on the other. This method ensures that each grain is meticulously examined, leading to a precise and comprehensive sorting outcome.

#### 3. Winnowing (Optional):

Use a winnowing basket to remove lightweight debris like chaff and dirt.

#### 4. Sieving:

Pass grains through a sieve to remove small impurities, including fine dirt or pests.

#### 5. Washing (Conditional):

- Wash grains if necessary to remove storage chemicals, chaff and any other debris. This should be done on a clear, sunny day to ensure adequate drying unless the grains will be soaked immediately after washing.
- After washing, spread grains thinly on a clean surface and ensure they are thoroughly dried to prevent mold or spoilage.

#### 6. Final Check:

After drying, reinspect grains for any remaining impurities, defective grains, or pests.

#### 7. Store Safely:

Transfer sorted and dried grains into airtight, foodgrade containers to maintain quality and prevent recontamination.



#### **Discussion Questions**

- 1. Why is it critical to sort and remove defective grains before processing?
- 2. How can inadequate drying after washing lead to spoilage and microbial growth?
- 3. What barriers might prevent communities from following proper grain sorting and drying practices?
- 4. How can these barriers be addressed to ensure safe and effective grain preparation?

#### **Answers to Discussion Questions**

- 1. Sorting removes impurities, defective grains, and contaminants, ensuring food safety, improved flavor, and extended storage life.
- 2. Inadequate drying retains moisture, creating an environment for mold and bacteria to grow, leading to spoilage, reduced quality, and potential health risks from toxins.
- 3. Barriers include lack of access to proper tools, limited awareness of the importance of sorting and drying, time constraints, and unfavorable weather conditions for drying.
- 4. Barriers can be addressed by educating communities on health benefits, promoting affordable tools, encouraging cooperative efforts, and advocating for alternative drying methods like low-heat indoor drying during poor weather.

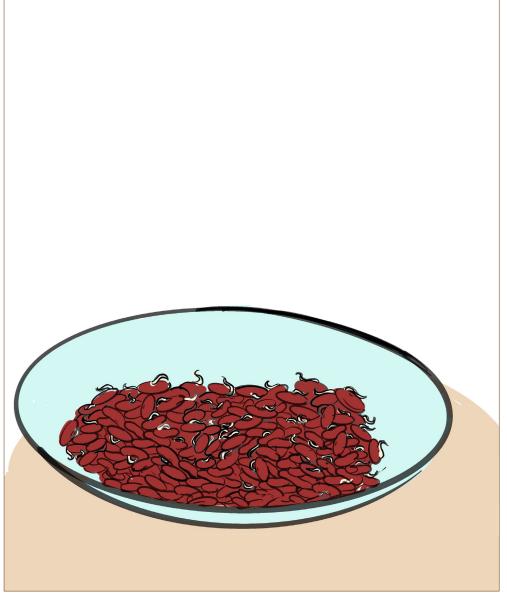
#### **Key Message**

Sort grains before processing into Roasted Germinated Pulse-Groundnut-Cereal Porridge Flour to minimize contamination risks and enhance food safety. When washing is involved ensure that the grains are thoroughly dried before storage.



## **SOAKING AND GERMINATING OF PULSES**





#### **SOAKING AND GERMINATING OF PULSES**

#### **How Soaking of Pulses is Done**

**Note:** Pulses, unlike maize and groundnuts, require germination.

#### **Objective:**

B

Enhance nutritional value and digestibility of pulses while maintaining safety and quality.

#### **Materials:**

- Clean basin or container
- Clean water
- Drying mat or tray

#### Steps:

- 1. Ensure all tools and the soaking area are clean.
- 2. Soak pulses in clean water (1 part pulses: 3 parts water ratio) for 12 hours (from 6 pm to 6 am).
- 3. Fully drain water after soaking to avoid microbial growth.
- 4. Place soaked pulses in a clean, dark area for 24 hours to germinate.
- 5. Sun-dry pulses thoroughly to prevent spoilage during storage.

#### **Benefits of Germinating pulses**

- 1. Enhances nutrient bioavailability.
- 2. Reduces anti-nutritional factors like phytic acid.
- 3. Improves digestibility and ease of cooking.

#### **Discussion Questions**

- 1. Why is it important to limit germination to 24 hours?
- 2. How does soaking enhance nutrient absorption?
- 3. What precautions ensure safe and effective germination?
- 4. Why is thorough drying after germination critical?

#### **Answers to Discussion Questions**

- 1. Germinating for 24 hours ensures optimal nutrition and taste, while reducing risks of bitterness and microbial contamination.
- 2. Soaking activates enzymes that increase nutrient bioavailability and reduce anti-nutritional factors.
- 3. Use clean tools, drain water thoroughly, and maintain a cool, dark environment during germination.
- 4. Thorough drying prevents spoilage and microbial growth during storage.

#### **Key Message**

Proper soaking and germination enhance the nutritional value and digestibility of pulses. Careful timing and drying are essential for safety and quality.



## **DRYING PULSES**



#### **DRYING PULSES**

#### **Objective:**

Ensure safe storage, maintain quality, and extend shelf life by thoroughly drying germinated pulses.

#### **Importance of Drying Pulses:**

- Removes excess moisture to inhibit mold and bacterial growth.
- Reduces the risk of spoilage, preserving pulses for longer periods.

# **Steps to Ensure Proper Drying and Maintain Quality:**

- 1. Use a clean, food-grade mat, tarpaulin, or raised drying rack to prevent contamination from soil and debris.
- 2. Spread and regularly turn germinated pulses in a single layer to ensure even drying on all sides.
- 3. Monitor Weather Conditions: On sunny days, use direct sunlight to dry pulses thoroughly. On cloudy or humid days, opt for low-heat indoor drying methods, such as solar dryers or ventilated racks, to ensure consistent results.
- 4. Ensure pulses are hard, brittle, and free of moisture before storage to avoid microbial growth during storage.

#### **Discussion Questions**

- 1. What are the health risks of consuming porridge made from flour containing mold or bacterial contamination?
- 2. How does excess moisture affect the quality and safety of pulses?
- 3. What methods ensure effective drying of germinated pulses in both sunny and humid conditions?
- 4. Why is it essential to use clean mats or tarpaulins for drying pulses?

#### **Answers to Discussion Questions**

- 1. Mold or bacterial contamination in flour can cause foodborne illnesses, such as aflatoxin poisoning or gastrointestinal infections.
- 2. Excess moisture promotes microbial growth, leading to spoilage, reduced shelf life, and potential toxin production.
- 3. Effective methods include sun drying with regular turning for even exposure and using solar dryers or ventilated indoor racks during cloudy weather.
- 4. Clean mats or tarpaulins prevent contamination from soil, debris, or pests, ensuring food safety during drying.

#### **Key Message**

Thoroughly dry germinated pulses on clean, food-safe surfaces. Regular turning and proper drying techniques prevent mold growth, spoilage, and microbial contamination, ensuring safe storage and high-quality food products.



## ROASTING



#### **D** ROASTING

#### **Objective:**

Enhance the flavor, texture, and nutritional quality of grains while reducing cooking time and extending shelf life through proper roasting.

#### **Benefits of Roasting Cereal, Pulse and Groundnuts**

- Speeds up porridge preparation by pre-cooking grains.
- Adds a nutty aroma and appealing golden-brown hue.
- Breaks down complex compounds for easier digestion.
- Decreases phytic acid and tannins, improving nutrient absorption.
- Lowers moisture content, reducing the risk of spoilage.

#### **Key Considerations When Roasting Grains**

- 1. Select equipment that matches the quantity of grains to ensure even heat distribution and consistent roasting.
- 2. Roast grains to a uniform light brown color. Avoid over-roasting, as it can cause bitterness, nutrient loss, or scorching.
- 3. Different grains require varying roasting times and temperatures to achieve optimal results without undercooking or burning.
- 4. Allow roasted grains to cool on clean surfaces before milling or mixing to prevent contamination.

#### **Discussion Questions**

- 1. Why is it necessary to roast each type of grain separately?
- 2. What are the potential drawbacks of using unroasted grains in cereal-pulse-groundnut porridge?
- 3. How does over-roasting affect the quality of grains?
- 4. What precautions should be taken during the cooling and storage of roasted grains?

#### **Answers to Discussion Questions**

- 1. Grains are roasted separately because they require different roasting times and temperatures, ensuring even roasting and optimal quality.
- 2. Using unroasted grains increases cooking time, retains anti-nutritional factors, and reduces flavor and digestibility in porridge.
- 3. Over-roasting can lead to bitterness, nutrient loss, and an undesirable burnt flavor, reducing the overall quality of the grains.
- 4. Roasted grains should be cooled on clean, food-safe surfaces and stored in airtight containers to prevent contamination and moisture absorption.

#### **Key Message**

Proper roasting enhances flavor, digestibility, and cooking efficiency while preserving nutrients and extending shelf life. Roasting grains separately and monitoring roasting levels ensures each grain achieves optimal quality, maximizing the flavor, texture, and nutrition of the final product.



## MIXING AND MILLING GRAINS



#### **MIXING AND MILLING GRAINS**

#### **Objective:**

E

Create a nutritionally balanced, safe, and shelf-stable cereal-pulse-groundnut-flour by properly mixing, milling, and drying the grains.

#### **Recommended Ratios for Mixing Grains**

- Roasted Cereal Grains: 70% (7 parts)
- Germinated-Roasted Pulse Grains: 15% (1.5 parts)
- Roasted Groundnut Grains: 15% (1.5 parts)

#### Mixing, Milling, and Sun-Drying Process:

- 1. Combine roasted cereal grains, pulses and groundnuts in the recommended ratio (70:15:15).
- 2. Ensure a uniform blend to achieve a consistent nutrient profile and taste.
- 3. Use a hammer mill or similar equipment to grind the mixture into fine flour for easy preparation and cooking.
- 4. Spread the milled flour thinly on a clean, foodsafe mat or tray. Sun-dry thoroughly to reduce the moisture content to below 12%. This prevents spoilage and extends shelf life.
- 5. Once dried, store the flour in airtight, food-grade containers to maintain freshness and safety.

#### **Discussion Questions**

- 1. What grains are commonly used in porridge flour in your community?
- 2. Why is the 70:15:15 ratio recommended for mixing cereals, pulses and groundnuts?
- 3. How can the nutritional value of cereal porridge flour be further enhanced?
- 4. Why is it essential to sun-dry the cereal-pulse-groundnut-flour after milling?

#### **Answers to Discussion Questions**

- 1. Common grains vary by region but may include maize, millet, sorghum, soybeans, groundnuts, and pulses.
- 2. The 70:15:15 ratio provides a balanced blend of carbohydrates, proteins, and fats while maintaining a pleasant taste and texture for porridge.
- 3. Nutritional value can be enhanced by incorporating additional nutrient-rich ingredients such as soybeans, groundnuts, pulses, sesame seeds, or fortifying the mix with vitamins and minerals.
- 4. Sun-drying reduces the moisture content to below 12%, preventing microbial growth, spoilage, and ensuring a longer shelf life.

#### **Key Message:**

Using the correct ratio of cereals, pulses and groundnuts creates a nutrient-rich porridge flour that meets the dietary needs of consumers, especially children. Proper sun-drying to achieve low moisture content before storage ensures food safety, prevents spoilage, and extends shelf life.



# STORING THE ROASTED GERMINATED PULSE - GROUNDNUT - CEREAL FLOUR



#### F. STORING THE ROASTED GERMINATED PULSE-GROUNDNUT-CEREAL FLOUR

#### **Objective:**

Maintain the safety, freshness, and nutritional quality of flour through proper storage practices.

#### **Recommended Storage Guidelines:**

- 1. Store flour in food-grade, airtight containers (plastic, metal, or lined paper bags) to protect against moisture, air, and pests.
- 2. Label containers with the date of storage and use the oldest stock first to ensure freshness.
- 3. Keep containers in a cool, dry place, away from direct sunlight and humidity, to prevent spoilage and extend shelf life.
- 4. Ensure the storage area is clean and dry to avoid dust, humidity, and pest infestations.
- 5. Check stored flour periodically for signs of rodents, insects, or mold growth, and address any issues immediately.

#### **Discussion Questions**

- 1. How do you store flour in your household or community?
- 2. Why is it important to keep the flour away from sunlight and moisture?
- 3. What are the ideal storage conditions for this type of flour?
- 4. How can regular inspection help maintain flour quality?

#### **Answers to Discussion Questions**

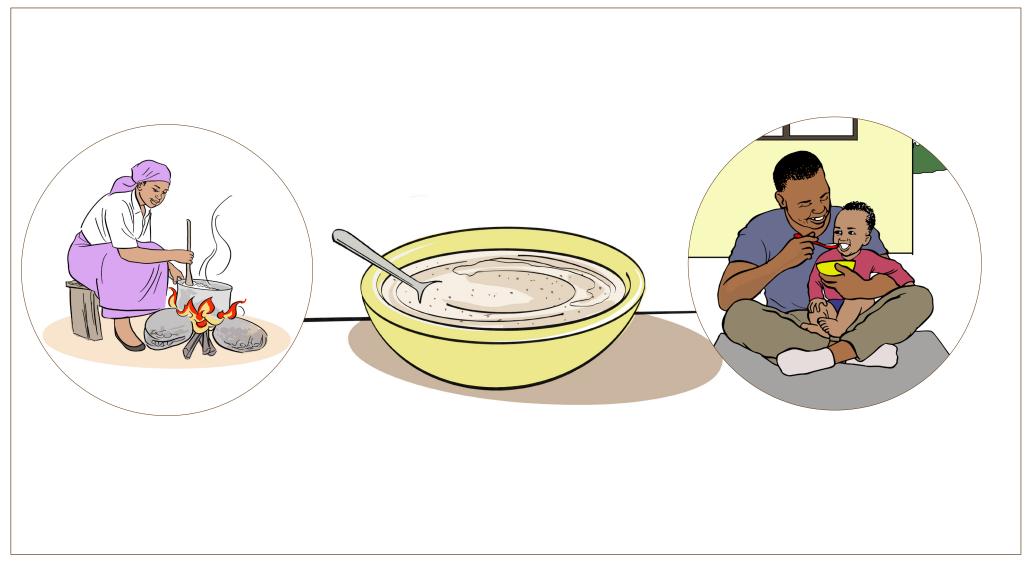
- 1. Storage methods vary, but common practices include using bags or containers in cupboards, which may or may not meet ideal conditions.
- 2. Warm environment and moisture encourage microbial growth and pest infestations, reducing the safety and shelf life of the flour.
- 3. Ideal storage conditions are cool, dry, and free from humidity, ensuring maximum freshness and preventing spoilage.
- 4. Regular inspection helps identify early signs of contamination, pests, or spoilage, enabling timely corrective actions to maintain flour quality.

#### **Key Message**

Store Roasted Germinated Pulse-Groundnut-Cereal Flour in food- grade, airtight containers in cool, dry locations. Regularly inspect and rotate stock to ensure safety, freshness, and minimize spoilage. Proper storage preserves the nutritional and sensory quality of the flour.



# COOKING AND SERVING ROASTED GERMINATED PULSE - GROUNDNUT - CEREAL PORRIDGE



# LESSON 4: COOKING AND SERVING ROASTED GERMINATED PULSE - GROUNDNUT - CEREAL PORRIDGE

#### **Lesson Objective**

Teach learners the correct cooking technique and hygiene practices for preparing and serving Roasted Germinated Pulse-Groundnut-Cereal Porridge to ensure a nutritious and safe meal.

#### **Lesson Outcome**

By the end of the lesson, learners will be able to:

- Demonstrate the cooking process for Roasted Germinated Pulse-Groundnut-Cereal Porridge, maintaining a smooth consistency and cooking for an appropriate duration to ensure safety and palatability.
- Implement hygienic serving practices, including the use of clean utensils and safe handling techniques to prevent contamination.
- Explain the importance of hygiene and safe cooking methods, recognizing how these practices prevent foodborne illnesses and promote safe consumption, especially for young children.

A

# COOKING PROCESS FOR ROASTED GERMINATED PULSE - GROUNDNUT - CEREAL PORRIDGE



A

### COOKING PROCESS FOR ROASTED GERMINATED PULSE-GROUNDNUT-CEREAL

#### **Objective:**

Prepare a smooth, nutritious porridge by following the correct cooking process to preserve its nutritional value and texture.

#### **Ingredients/Materials**

Water, cereal-pulse-groundnut-flour, sugar (optional) salt(optional), pot, mixing bowl, stiring rod

#### **Steps:**

- 1. Bring the required amount of water to a boil in a clean pot.
- 2. In a separate bowl, mix the Roasted Germinated Cereal-Pulse-Groundnut Flour with cold water to form a smooth, lump-free slurry.
- 3. Gradually pour the slurry into the boiling water while stirring continuously to prevent lumps from forming.
- 4. Reduce to medium heat and cook for about 10 minutes, stirring occasionally, until the porridge thickens and reaches the desired consistency.
- 5. Allow the porridge to cool slightly before serving.

#### **Discussion Questions**

- 1. Why is it important to avoid lumps when cooking porridge?
- 2. How long should the Roasted Germinated Cereal-Pulse-Groundnut Porridge be cooked?
- 3. How does stirring during the cooking process impact the final texture of the porridge?
- 4. Why is it essential to prepare a slurry before adding the flour to boiling water?

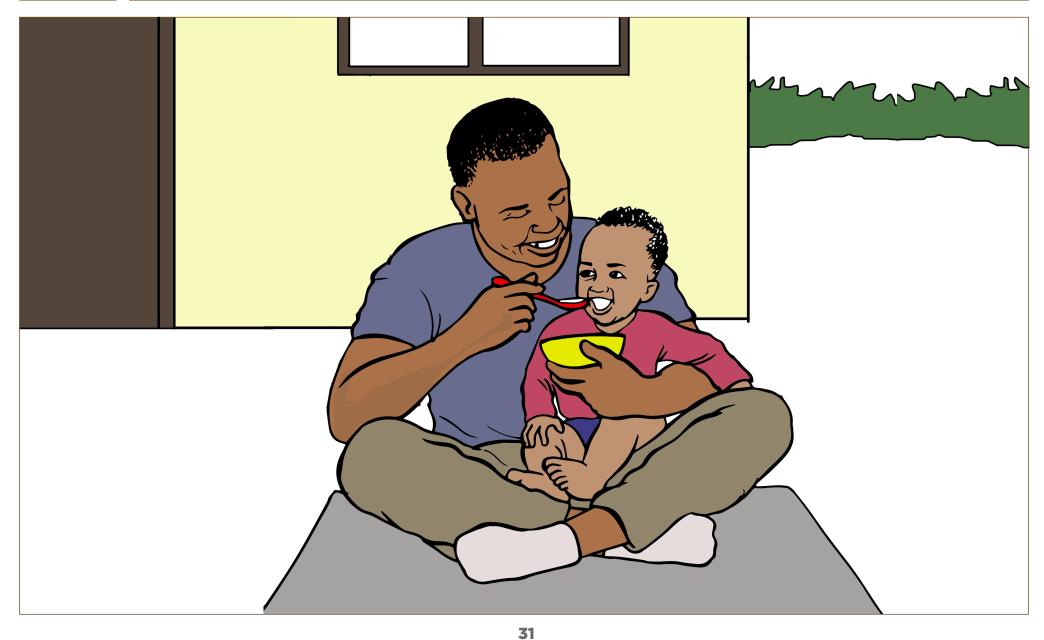
#### **Answers to Discussion Questions**

- 1. Avoiding lumps ensures the porridge has a smooth texture, making it more palatable and easier to digest.
- 2. The porridge should be cooked for about 10 minutes to ensure it is well-cooked, safe to eat, and reaches the desired consistency.
- 3. Stirring prevents clumping and promotes even cooking, resulting in a uniformly smooth texture.
- 4. Preparing a slurry prevents the flour from clumping when added to boiling water, ensuring an even mix and smooth porridge.

#### **Key Message:**

To achieve a smooth and nutritious porridge, stir the flour slurry into boiling water gradually and cook over medium heat for about 10 minutes. Proper stirring and preparation ensure even cooking and enhance the porridge's texture and flavor.

### SERVING THE PORRIDGE HYGIENICALLY



#### F. SERVING THE PORRIDGE HYGIENICALLY

#### **Objective:**

Ensure the safety and hygiene of the Roasted Germinated Pulse-Groundnut-Cereal Porridge during serving to prevent contamination and maintain its nutritional integrity.

#### **Guidelines for Hygienic Serving:**

- 1. Serve porridge in clean, sanitized bowls using utensils that have been thoroughly washed and dried.
- 2. Use spoons or ladles for serving instead of hands to maintain food safety and prevent contamination.
- 3. Wash hands with soap and water before serving or feeding porridge, especially when feeding young children.
- 4. For small children, use clean baby spoons or feeding cups to ensure a hygienic feeding process.

#### **Discussion Questions**

- 1. How do you ensure utensils are properly cleaned before cooking or serving food in your home?
- 2. What are the best practices for feeding porridge to young children?
- 3. Why is it important to use utensils rather than hands when serving food?

#### **Answers to Discussion Questions**

- 1. Utensils should be cleaned using soap and clean water, rinsed thoroughly, and dried in a hygienic environment to avoid contamination.
- 2. Feed children with clean, small-sized utensils like baby spoons or feeding cups to ensure hygiene and ease of consumption.
- 3. Using utensils prevents direct contact with hands, reducing the risk of transferring harmful bacteria or other contaminants to the food.

#### **Key Messages:**

Ensure porridge is served in clean bowls with sanitized utensils to maintain food safety.

Avoid hand contact with food during serving to prevent contamination.

Following proper hygiene practices during serving reduces the risk of foodborne illnesses, especially for vulnerable groups like children.