



# MSF Nutrition Training Package

<b>Module 10 Session 35</b> IPC for therapeutic milk preparation, distribution and storage		<b>Duration:</b> 45m	<b>Reccomended Prerequisite Sessions:</b> M10 - S35 <b>Other Recommended Preparation:</b> IPC Guidelines (check if is available).	
<b>General Objective:</b> To be aware of the IPC measures to implement in: milk kitchen/station, during meals and for food storage.				
<b>Target Profiles:</b>				
Must attend	-Supervisors, ITFC nurses, ATFC nurses (only for correct food storage conditions), nutritional assistants, Psychologists, HPs and cooks.			
Should attend				
Could attend				
<b>Specific Objectives</b> At the end of this session participants will be able to: 1. Recognize the IPC measures needed for therapeutic milk preparation, distribution and storage.				
<b>Contents</b> 1. IPC measures in milk station/kitchen: Frequency of cleaning and disinfection, How to clean kitchen utensils, location and characteristics of the area, Hygiene rules during food/milk preparation, 2. IPC measures during meals including: HP messages for caregivers and patients, e.g. hand hygiene and cleaning of the feeding equipment (cups and spoons), 3. IPC measures for food storage conditions including: Organization/storage and temperature requirements.				
<b>Methodology Overview:</b> This is a 45-minutes session where the participants will have the opportunity to learn about the IPC practices in the kitchen/milk station: <ol style="list-style-type: none"> <li>1. Facilitator introduces the objectives of the session and launches a lead in activity.</li> <li>2. Practice: To identify the IPC measures to consider in: Milk station/kitchen, during meals and regarding the food storage conditions.</li> <li>3. Concept Checking Questions (CCQs) to check that the content of the session has been properly understood.</li> </ol>				
Time	Activities	Description of Learning Activities	Method	Materials
5'	Activity 1: Introduction	-Explanation of the learning objectives and introduction to the session with a lead-in activity: Using photos to detect bad IPC practices.	Whole Group/ In pairs	-Computer and projector - NP_M10_S35_IPC_MilkPreparation
35'	Activity 2: Group Work	-Three flipcharts will be posted on the wall with the following information on it: 1 <sup>st</sup> paper: IPC measures for the milk station/kitchen, 2 <sup>nd</sup> paper: IPC measures during meals and 3 <sup>rd</sup> paper: IPC measures for food storage conditions. -Each group will start on a different flipchart, and will think about the IPC measures needed for this specific activity/location	3 teams and whole group	-3 flipcharts (or 3 flipchart papers) with the titles written on it. -Markers (3 different colours)
5'	Activity 3: Wrap up	-Facilitator will wrap up the session and the takeaways will be delivered.	Whole group	NP_M10_S35_Takeaway_KeyContents



## Materials

- Computer and projector
- **(Ppt)** NP\_M10\_S35\_IPC\_MilkPreparation
- 3 flipcharts (or 3 flipchart papers) with the titles written on it
- Markers (3 different colours)
- Takeaway:
  - NP\_M10\_S35\_Takeaway\_KeyContents



## Activities Description



### Activity 1: Introduction

(In group/pairs/group, 5 minutes)

- (1-minute, whole group)
  - The facilitator states the objectives of the session using the Ppt:
    - NP\_M10\_S35\_IPC\_MilkPreparation
- (3 minutes, in pairs)
  - 2 Photos are shown demonstrating food storage conditions with the following questions. Students work in pairs to answer the questions for each photo.
    - **Question 1: Can you identify the bad IPC practice in this picture?**
    - **Question 2: Are these milk boxes correctly stored? Why/why not?**
- (2 minutes, whole group)
  - The facilitator asks the participants to volunteer their answers , but doesn't give the answer yet. The feedback will be done at the end of activity 2.

### Activity 2: Group Work

(Groups of 3, 35 minutes)

- (5 minutes) Set up and explanation
  - The facilitator will divide the group in 3 teams.
  - 3 flipcharts (or flipchart papers) will be posted on the wall with the following information on it:

Titles of the 3 flipcharts	Categories
1st poster: IPC practices for the milk station/kitchen	<ul style="list-style-type: none"> <li>- General principles</li> <li>- Frequency of cleaning</li> </ul>

	<ul style="list-style-type: none"> <li>- How to clean kitchen utensils and wash kitchen utensils</li> <li>- Location and characteristics of the milk station/kitchen</li> </ul>
2nd poster: IPC practices during meals	<ul style="list-style-type: none"> <li>- Hygiene rules for the staff during food/milk preparation and distribution</li> <li>- HP messages for caregivers on IPC</li> <li>- How to wash dishes and cups and who is responsible</li> </ul>
3rd poster: IPC practices for food storage conditions.	<ul style="list-style-type: none"> <li>- Organization</li> <li>- Temperature</li> <li>- Prevention of contamination</li> </ul>

- (10 minutes, in groups)
  - Each group will start on a different flipchart and will write up the IPC practices for this specific moment/location.
  
- (5 minutes, in groups)
  - The group will move to the next flipchart and will have 5 minutes to add anything they think is missing in a different colour or put a cross next to anything they feel is not correct.
  - The facilitator will move around helping the participants and ensuring that all the aspects are tackled (i.e. location, temperature, organization etc.)
  
- (5 minutes, in groups)
  - Each group moves to the flip chart they haven't seen and does the same again so that each team has interacted with each flipchart.
  
- (10 minutes, whole group)
  - The facilitator will ask to each group to explain the IPC practices of the 1st flipchart that they worked on, and they will discuss all together.

Theoretical content to complete by the facilitator in case not mentioned:

### IPC measures for the milk station and the kitchen

- **General measures:**
  - **Only authorised people** have access to the milk station/kitchen
  - **Water** should be available for handwashing and cleaning of the material
  - The area must always be clean, with cement or plastic sheeting on the floor
  - The **appropriate detergent** should be used: Floors and surfaces should be cleaned with Surfanios.
  - The **appropriate cleaning equipment** should be used: soap, cloth, sponge, wet mopping.
  - The structure must be **protected from sun, dust and vectors.**

▪ **Frequency of cleaning and disinfecting of the milk station and kitchen:**

Utensil/location	Frequency
The table, knives, chopping board, frying pan, oven	After each use
Hand wash station and floors	At the end of the service (3 times a day)
Kitchen trolleys	Once a day
Freezer, knife drawer	Once a week
Kitchen walls, doors, shelves and cupboards	Once every three weeks

▪ **How to clean kitchen utensils for meal preparation:**

- Respect the forward flow principle; **The area where dirty equipment is placed should be separated in space from where clean equipment is stored**
- A double stainless-steel sink (for washing and rinsing).
- Each sink should have a draining rack for placing dishware, dirty or washed
- Washing:
  - Washing is done with **detergent (dishwashing liquid) and with a scraper/brush/dish cloth, etc.**
  - Remove residual food waste and discard in the trash bin
  - Remove detachable parts from utensils, if necessary
  - Sort the utensils by category (do not store sharp objects in the dishwashing sink)
  - Wash **from cleanest to dirtiest**, using a brush if necessary
  - Change the water used for washing and rinse sinks frequently
  - After rinsing, prepare a tub with **0.1% chlorine solution** and immerse utensils for 5 minutes
  - Rinse well in running water
  - Drain vertically and let dry
  - Never stack wet dishes on top of each other – use the drying rack
  - Arrange by category, upside down, on clean shelves in the furniture provided for that purpose (e.g. a cupboard, shelves etc)

▪ **To clean the washing utensils** (sinks, brushes, draining racks, etc.), after each use:

- Wash and brush with a detergent
- Rinse
- Disinfect by soaking or contact **with a 0.1% chlorine solution** for 5 minutes

- Rinse with running water (if stainless steel: use cold water and rinse well)
- Wash, rinse and disinfect the gloves and apron, then rinse again and leave to dry.

- **Location and characteristics of the milk station/kitchen:**

- **Two different spaces should be available** (ideally two different rooms well separated): **one for milk preparation (milk station) and one for caregivers' food (kitchen).**
- Assure in each space an **adequate ventilation** to allow proper diffusion of smoke (open space between roof and walls) and put up nets to avoid insects, especially at night.
- Ensure the **proper circuit of the following areas** is respected:
  - water point,
  - chlorine or boiling water area,
  - storage area
  - preparation & cooking area
  - distribution area
  - cooking utensils cleaning space
  - Waste area: Separate organic waste (leftover food) from other waste (packaging, etc.) in clearly marked dustbins so that it can be disposed of in an organic pit or incinerator.
- **Allow one stove per 25-50 children** depending on the size of the stove; it is important that enough stoves are available.
- **Location of the kitchen and milk station:**
  - The kitchen and the milk station should not be too far from the ward.
  - The kitchen and the milk station should be at least 50 m from the latrines (if possible).

### Hygiene during meals

- **General rules-caretakers health promotion messages:**

- In ATFC and in ITFC: Explain to the caretakers that they must use soap to **wash their hands** and their child's hands and face before eating or preparing any food
- Make sure the **cups have a lid to cover them**
- Once the milk is distributed to the patients, remove **the cup of milk after 1 hour** to avoid the risk of bacterial growth.
- Prevent patients, caretakers and visitors from storing fresh food in the ITFC
- **The therapeutic milk must be given in a cup or through a gastric tube. Spoons or feeding cups (nifty cup)** should only be used for **small infants** who cannot manage to drink from a cup.

- **How to wash patient dishes:** This will depend on the project. Some projects will ask caretakers to wash their own dishes, cups and spoons in the dishwashing area. Other projects will instruct the staff to do this. Whoever does the task, the steps are the same:
  - The equipment used is: **Scraper, brush, dish cloth, etc.**
  - First, they **remove the residual food or milk** waste and discard it in the trash bin
  - Then, the utensils are washed with **water and soap from the cleanest to the dirtiest (first milk jars and then cups used by patients)**
  - Rinse using the hottest water possible: **If hot water is not available, a disinfection step is required :**
    - After rinsing, **prepare a bucket with Chlorine 0.1%** (logistic team will provide you with this)
    - **Immerse the utensils for 5 minutes**
    - **Rinse well in running water**
  - Drain vertically and let dry. If wiping is absolutely necessary, use clean and dry dish towels
  - Never stack wet dishes on top of each other – use the drying rack
  
- **Strict hygiene rules for the staff during food/milk preparation and distribution** are essential to avoid food/milk contamination
  - Use **chlorinated and boiled water** that has been brought to room temperature to dilute the milk.
  - The staff should use **specific cloth** (e.g. cleaning gloves, apron etc.)
  - To prepare the milk **do not use gloves, just clean hands!**
  - **Wash your hands with soap and water** on entering the milk station and in the kitchen, before and after handling food. If hands are not visibly soiled, the nutrition assistant must use as a first option Hydro alcoholic solution to wash their hands
  - Wash your hands with soap and water **after visiting the toilets.**
  - **Keep your fingernails short and clean** (have nailbrushes available). They should be free from nail polish.
  - **Do not wear jewellery** e.g. bracelets, watches, rings.
  - Inform your line manager when you are ill.
  - Do not handle food if you have infected wounds, especially on your fingers – inform your manager.
  - **Do not cough, sneeze, spit, eat or smoke** in the milk station.
  - **Protect the food from flies, insects and dust** (cooking pots with lids).
  - Consume cooked food as quickly as possible after preparation and do not keep it for longer than the duration of the meal.
  - **Consume therapeutic milk within 2 hours of its preparation.** Always **keep the milk covered.**
  - **Clean kitchen utensils and the milk station/kitchen between**

### each preparation.

**Note: For milk preparation and distribution:** The nutrition assistants are usually the staff responsible to prepare and distribute the milk and the cook is responsible to boil the water whenever it is needed

### Food storage conditions

**Hygiene warehouse cleaning procedures must be in place** to maintain storage conditions needed for preserving product quality

- **Organization:**
  - **Make sure the food is properly organised and stored:**
    - **Specialised nutritious products** (another name for therapeutic foods) **and normal food** should always be stored **separate from logistic items**.
    - Specialised nutritious products must always be stored **on pallets** to keep them raised off the floor and to allow air circulation). Each palette should hold only one product, all from the same batch (bearing the same batch number).
    - Specialised food should **never be stored against the wall**: a space of at least 30 cm should be left.
    - Pallets should be arranged to **allow stocktaking, inspections, cleaning, outgoing and incoming stocks**. There should be **corridors between the rows of pallets**
    - **Products should be stored according to item category, expiry dates, outgoing frequencies, and weight/volume**.
    - **Clearly label the pallets** with the batch number and the expiry date (to be done upon receipt of product).
    - **For sacks** (e.g. of fortified blended flour): the first row should be slightly spaced out to ensure stability.
- **Temperature:**
  - **Therapeutic products (F-75, F-100 and RUTF should always be stored below 30°C** as the vitamin content is very important and this starts to deteriorate above 30°C. In order to achieve that, they should be stored in the pharmacy.
  - **Supplementary food** and other specialised nutrition food (RUSF, emergency food rations, fortified blended flour, etc.) should also be stored below 30°C if possible, but they can be exceptionally stored between **30°C and 40°C**.
  - The temperature must be checked at least once a day, at the hottest hours of the day (use a Log Tag)
  - To improve temperature control, the warehouse needs to be ventilated and the walls protected from direct sunlight
- **Contamination prevention:**

- Make sure pests (rodents, insects...) are prevented from entering the storage areas in order to not contaminate food (e.g. use of traps).
- **The use of cats is forbidden** as they pose hygiene problems. Poisons are also forbidden as a poisoned rodent may contaminate the food.

For the facilitator feedback on food storage conditions, the facilitator refers to the answers of the activity 1:

**Question 1:**

The use of cats in the warehouse is forbidden. They are relatively useless and cause hygiene problems



**QUESTION 1:**

Can you identify the bad practice in this picture?

**Question 2:**

They seem correctly stored. However, we do not have all the information  
Aspects correctly seen in the picture:

- Stored **separate from logistic items.**
- Stored **on pallets.** Only one product, all from the same batch (bearing the same batch number)
- There are **corridors between the rows of pallets**
- **Clearly label the pallets** with the batch number and the expiry date (to be done upon receipt of product). In the picture we can read the number 42 in red

Not clearly seen in the picture:

- We cannot see the distance from the products to the Wall (30 cm?)
- **Products should be stored according to item category, expiry dates, outgoing frequencies, and weight/volume.**
- Temperature is not known



**QUESTION 2:**

Can you tell me if these milk boxes are correctly stored? Why?



**Activity 4: Wrap Up**



(Whole group, 5 minutes)

- For the wrap up, the facilitator will ask these questions:

Who can have access to the milk station and the kitchen?	Only authorised people have access to the milk station and to the kitchen.
After preparation, how long can the milk be kept?	Make sure the milk is consumed within 2 hours of its preparation.
To properly clean the dishes (when no hot water is available), what is the product in which the caretakers will immerse utensils for 5 minutes?	chlorine 0,1%
What is the temperature the nutrition products should be stored at?	< 30 degrees
After distribution, how long the milk can be kept?	Once the milk is distributed to the patients, remove <b>it after 1 hour</b> to avoid the risk of formation of bacteria.
Give me at least 5 hygiene rules for the staff during food/milk preparation and distribution.	<p>Main hygiene rules:</p> <ol style="list-style-type: none"> <li>1. Use correctly <b>chlorinated and boiled water</b> that has then been cooled to room temperature to dilute the milk.</li> <li>2. The staff should use <b>specific protective clothes</b> (e.g. cleaning gloves, apron etc.)</li> <li>3. To prepare the milk <b>do not use gloves, just clean hands!</b></li> <li>4. <b>Wash your hands with soap and water</b> on entering the milk station and the kitchen, before and after handling food.</li> <li>5. <b>Keep your fingernails short and clean</b> (have nailbrushes available). They should be free from nail polish.</li> <li>6. <b>Do not wear jewellery</b> on the hands and arms</li> <li>7. Inform your line manager when you are ill.</li> <li>8. Do not handle food if you have infected wounds, especially on your fingers – inform your manager.</li> <li>9. <b>Do not cough, sneeze, spit, eat or smoke</b> in the milk station.</li> </ol>



## Takeaways

- NP\_M10\_S35\_Takeaway\_KeyContents.docx



## On the Job Training

The facilitator of the session can participate from time to time in the IPC committee meetings to observe what the main problems are, and which aspects should be closely supervised.

