

F.No 5(25)/2010/ND-Tech Pt.
Government of India
Ministry of Women & Child Development

New Delhi, dated the 24th December 2013

To

1. All the Secretaries of all States/UTs, Women & Child Development Department/ Social Welfare Department (dealing with ICDS Scheme)
2. The Directors (ICDS) of all States/UTs

Subject :- Operational Guidelines for Food Safety and Hygiene In ICDS

Sir/Madam,

As you are aware that food safety standards are to be followed while providing Supplementary Nutrition under ICDS to provide safe food and prevent contamination. The 'Revised Nutrition and Feeding Norms issued vide this Ministry's letter No. 5-9/2005/ND-Tech dated 24th Feb 2009 states the need for adherence to food safety measures by State/UTs. This was further emphasized vide Secretary Ministry of WCD's D.O. dated 26.07.13 addressed to Chief Secretary of the States/UTs for taking utmost precaution & quality check of Supplementary Nutrition under ICDS.

Though a number of positive steps have been taken by some of the States, further steps are required to be taken to improve and emphasize on basic cleanliness, hygiene and food handling standards in ICDS. A detailed Operational guideline for Food Safety and Hygiene in ICDS has been developed and enclosed herewith (also available on the Ministry's website www.wcd.nic.in).

These guidelines provide the broad contours and may be customized to individual State level specificities of operationalization of ICDS and Supplementary Nutrition. These operational guidelines include separate sections on general principles for maintenance of cleanliness and hygiene at Anganwadi centres and manufacturing units. Precautionary measures and easy to follow

simple protocols for food handling at different stages for both Take Home Ration (THR), Hot cooked meal and morning snacks have been outlined.

In view of recent mishaps under Govt. feeding programme, it is also requested to devise Standard Operating Procedures (S.O.P) for effective handling of emergencies and information about these displayed and made known to all stakeholders including families and communities.

I hope these guidelines will help States/UTs to follow standards and procedures in delivering safe environment and quality food to children pregnant and lactating mothers.

Yours faithfully,

Encl: as above.



(Dr. Shreeranjana)

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3. JTA, Food and Nutrition Board, Jeevan Deep Building, New Delhi
4. All DTAs, FNB

Copy also to:

Additional Secretary, Ministry of HRD (MDM)

Operational Guidelines for Food Safety and Hygiene for Supplementary Nutrition under ICDS



**MINISTRY OF WOMEN AND CHILD DEVELOPMENT
GOVERNMENT OF INDIA**

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Women and Child Development Department, Haryana

Women and Child Development Department, Himachal

Women and Child Development Department, Sikkim

Food Safety and Standards Authority of India, Ministry of Health and Family Welfare

National Institute Public Cooperation and Child Development

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The document mainly relies on the information from Manual of Food Safety Management System, FSSA 2006, FSSA Act 2006 , Regulations 2011 and Codex documents .

ABBREVIATIONS

AGMARK	Agriculture Grading and Marketing
ANM	Axillary Nurse Midwife
ASHA	Accredited Social Health Activist
AWC	Anganwadi Center
AWH	Anganwadi Helper
AWW	Anganwadi Worker
CDPO	Child Development Project Officer
CFNEU	Community Food and Nutrition Extension Unit
CMU	Central Monitoring Unit
DFS	Double Fortified Salt
FCI	Food Corporation of India
FIFO	First In First Out
FSSAI	Food Standards and Safety Authority of India
ICDS	Integrated Child Development Services
ISI	Indian Standards Institute
LPG	Liquefied Petroleum Gas
MDM	Mid-Day Meal Programme
MOC	Maintenance of Certification
RCC	Reinforced Cement Concrete
SHG	Self Help Groups
SOP	Standard Operating Procedure
THR	Take Home Ration
UT	Union Territory
WHO	World Health Organization

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INTRODUCTION

Care in handling of food and water is a pre-requisite to ensure better health and prevention from health hazards. The food borne illness can arise due to various reasons like improper practices in agriculture, transportation and storage of food, lack of hygiene, sanitation and proper control mechanisms at every stage of food preparation production and consumption.

Food safety includes food handling, food preparation, and storage of food in proper manner so that the food should be acceptable and safe for human consumption. This is inclusive of various standardized procedures that need to be followed in order to avoid various food borne diseases.

Contamination of food may take place due to poor personal hygiene, unsafe source of food, or due to poor environmental hygiene. Biological, physical and chemical agents cause food borne illness if not controlled.

Biological contaminant: includes bacteria, viruses or parasites that are present in air, food, water, soil, animals and humans

Physical contaminant: Foreign bodies in food are usually due to accidental contamination and / or poor handling practices these are visible particles like pebbles, stones, metal, glass, wood, insects, soil, dirt, jewellery, hair, fingernails etc.

Chemical contaminant: Includes Chemicals used for cleaning and sanitizing food contact surfaces; Pest control chemicals, paints and water treatment chemicals; Pesticides, fertilizers, fungicides, there are some naturally occurring harmful chemicals also Mycotoxins like aflatoxin

The WHO five key principles of food hygiene are

1. Prevent contaminating food with pathogens spreading from people, pets, and pests.
2. Separate raw and cooked foods to prevent contaminating the cooked foods.
3. Cook foods for the appropriate length of time and at the appropriate temperature to kill pathogens.
4. Store food at the proper temperature.
5. Do use safe water and cooked materials.

Contamination of food leads to conditions of diarrhoea, nausea, vomiting, fever and infection and even death in severe cases, therefore protection from chemical, microbiological, biologic toxins, pesticides, drug residues and allergens is mandatory.

In ICDS there is provision of supplementary nutrition for children 6 months to 6 years of age and for pregnant and lactating women. The guidelines issued by Government of India regarding safety and quality of supplementary nutrition (dated 24.2.2009) recommends that the supplementary nutrition should conform to Prevention of Food Adulteration Act 1954 now repealed as Food Safety Standards Act 2006, Food Safety and Standards Authority of India regulations 2011.

Take Home Ration (THR) is provided for children 6 months to 3 years and pregnant and lactating women, while freshly cooked hot food and a morning snack is provided to children 3-6 years who attend the Anganwadi centre daily, for 300 days annually.

Pregnant mothers, infant and young children are especially vulnerable to infection hence utmost care should be taken at all stages of managing supplementary nutrition. The food supplied from ICDS involves both local preparation and processing, it is imperative that precautionary measures are undertaken at different levels.

Quality assurance of supplementary nutrition and food safety should be an integral part of supply chain management and food handling procedures at AWCs. The food provided through these centres should be nutrient dense free from food adulterants, pathogens, food colours, additives and adhere to food safety and quality norms.

There are several constraints in ICDS like no uniformity in design of Anganwadi center, lack of space, high rent for AWC's in urban areas, lack of water and sanitation facilities etc., however basic food safety principles need to be followed. Some States/ UTs have already taken the initiative to develop food safety guidelines for ICDS.

Operational variations exist in the delivery of supplementary nutrition, across the country; this guideline aims in providing the broad contours of Food Safety measures in ICDS. In addition to this an initiative by the GOI is being undertaken for random quality checks of supplementary nutrition through National Accredited Board for Laboratories. It is desirable that each State/UTs draw individual State specific operational guidelines along with monitoring and supervision at different levels and carry out sample checking of SNP to ensure provision of safe and hygienic supplementary nutrition through ICDS.

(A copy of D.O. letter addressed to Chief Secretaries and Chief Administrators of All States/UTs is enclosed at Annexure I).

CHAPTER 1

GENERAL GUIDELINES ON HYGIENE FOR ANGANWADI CENTRE

The Anganwadi centre is visited by children, pregnant and lactating women, who have greater chances of contracting infection during this vulnerable period, hence it is imperative that the environment of the centre and its nearby areas are kept in hygienic condition. The Anganwadi Helper who is mandated for cleaning the Centre should be adequately trained for the purpose.

A basic Anganwadi centre consists of a room for activity based learning, health classes and other activities of ICDS. A Kitchen is usually a side room where preparation of supplementary nutrition takes place, often has a store attached with it. A toilet is there usually at one end of the premises. The premises may have a small space in front for children to play.

Usually a tube well is installed in the premises or nearby. The infrastructure varies and size differs depending primarily on the availability of space. It is mandatory that a cleaning and disinfection schedule be drawn up for each Anganwadi centre to ensure that all areas are appropriately cleaned under proper supervision and record must be maintained.

1. General Tips for Maintaining Hygiene and Sanitation at the Anganwadi Centre

- To prevent contamination of Supplementary Nutrition all equipment and utensils must be cleaned as frequently as necessary and disinfected whenever circumstances demand.
- Adequate precautions must be taken to prevent the food item from being contaminated during cleaning or disinfecting of rooms, equipment or utensils, by use of water, detergents or disinfectants. Whilst clean-as-you-go should be the general policy,
- Floors and drains must not be cleaned whilst the food is being prepared.
- Detergents and disinfectants must be suitable for the purpose. Any residues of these agents on a surface, which may come in contact with food item, must be removed by thorough rinsing with potable water before the area or equipment is used again.
- Immediately at the end of the day's work, or at such other times as may be appropriate, floors (including drains), structures and walls of food handling areas must be thoroughly cleaned.
- Toilets must be kept clean and tidy at all times.
- Provision of safe disposal of stool and wastes must be made
- Nearby outside area/surroundings in the immediate vicinity of the premises, must also be kept clean and tidy.

2. Establishment Design and Facilities

2.1 Anganwadi Centre

The main activity room of the centre should be spacious enough, well ventilated and with windows having wire mesh. The room should be cleaned every day before the centre starts functioning in the morning. Children/ mothers are often seated on Durries or mats. It is important that the durries/ rugs often used are cleaned every day and is free from dust, ants and other contaminants. It requires regular professional washing and sun drying. Toys and other learning materials at the centre which is handled by children should be cleaned regularly.

2.2 Kitchen-Cum-Store

Adequate space should be provided for kitchen, it should be separate from activity/ class rooms, preferable located at a safe, but accessible distance. They should be well ventilated and designed so that there is a separate storage facility with locks to check pilferage. On no account should kitchen-cum-store have roofs of inflammable material, like straw, bamboo and synthetic material. Adequate natural or artificial lighting should be provided throughout the kitchen area. Lights and fixtures should be cleaned regularly to keep it free from dust, dirt and carbon.

Smokeless chulhas should be used to the extent possible. Fuel (kerosene/fuel wood/charcoal/LPG) should be stored safely, so that there is no fire hazard. To the extent possible firewood should not be used in the interest of environmental protection. If kerosene/gas is used for cooking, the cook /AWH should be specifically trained in safe handling of stoves, gas cylinders etc.

2.3 Toilet

Baby friendly toilets are most preferred; it should be washed and cleaned every day, there should be water supply for the toilet. Provision of soap should be there outside the toilet for children to wash hands after each visit.

2.4 Water Supplies

- An adequate supply of potable water with appropriate facilities for its storage, distribution should be available, which should be used in processing and cooking.
- Water used for washing should be of such quality that it does not introduce any hazard or contamination to render the finished food item unsafe.

- Water storage tanks/ buckets should be cleaned periodically. Safe drinking water should be available and kept covered or in containers with a tap, hands should not be dipped while taking out water.
- If water filters/ purifiers are used, prescribed instructions for cleaning need to be adhered as mentioned by the company.
- Non potable water can be used provided it is intended only for cooling of equipment, fire fighting etc.

2.5. Drainage and Waste Disposal

Adequate drainage and waste disposal systems and facilities should be provided.

- Food waste and other waste material should be removed periodically from the place where food is being handled or cooked to avoid building up. A refuse bin of adequate size with a proper cover preferably one which need not be touched to open should be provided in the premises for collection of waste material. This should be emptied and washed daily with a disinfectant and dried before next use.
- Adequate drainage, waste disposal systems and facilities should be provided and they should be designed and constructed in such manner so that the risk of contaminating food or the portable water supply is eliminated.
- Waste storage should be located in such manner that it does not contaminate the food process, storage areas, the environment inside and outside the food establishment and waste should be kept in covered containers and removed at regular intervals.
- Periodic disposal of the refuse/ waste should be made compulsory. No waste should be kept open inside the premise and disposed of in an appropriate manner as per local rules and regulations including those for plastic and other non-environment friendly materials.

3. Cleaning Processes

3.1 Cleaning of Floors and Walls

Special attention must be paid to the cleaning of obstructed sites including cooking areas and at the junction of floors and walls. The floors of kitchen and the slabs should be cleaned every day before and after the food is served. Unwanted material should not be left on the floor and should be picked up immediately. Drainage channels must be cleaned properly and

regularly. **Floors should never be cleaned whilst cooking / serving / distribution of food is in process.** The upper part of the walls should be cleaned preferably at intervals. The wall and ceiling should be cleaned once a week so that no dirt, dust cob webs or any unwanted material is found in the AWC or kitchen.

3.2 Cleaning of Food Preparation and Storage Surfaces

These areas must be kept cleaned at all times. It is important that surfaces in direct contact with food must be both clean and dry before use. Cracks, rough surfaces, open joints etc. must be repaired as soon as possible. Sinks and hand wash facility must be maintained and cleaned regularly.

3.3 Cleaning of Equipment and Materials

All utensils equipment used for preparing and serving food should be washed in potable water using suitable detergent.

Cleaning equipment such as cloths, mops and brushes carry a very high risk of cross contamination. They must therefore be thoroughly cleaned and dried after use. Brushes and mop heads are best washed in hot water, soaked overnight in detergent sanitizer, rinsed in water and dried quickly before going into store. Mop buckets should be dried and store inverted. Cleaning equipment's used in the cooking area/packing area should not be used in other parts of the Centre. Sun drying of the cleaning equipment in a clean and tidy place should be done.

4. Pest Control at the Anganwadi Centre

Cleanliness is essential for effective control of all pests (mainly rodents, birds, and insects). The emphasis must be on not attracting pests and preventing entrance. The building must be kept in good condition and repair to prevent access and to eliminate potential breeding sites. Holes, drains and other places where pests are likely to gain access must be kept sealed. Wire mesh screens, for examples on open windows, doors and ventilators, will reduce the problem of pest entry.

The kitchen & AWCs surrounding areas must be regularly examined for evidence of infestation. **Before pesticides are applied, care must be taken to protect people, food, equipment and utensils from contamination. Pesticides should always be kept in its original containers. Clearly marked and be stored in a locked storage separate from production. Records must be kept of all pesticides used, including name of pesticides, concentration used, method of application and location of application.**

Substances which could contaminate food must not be used or stored in food handling areas, and in the AWCs except when absolutely necessary for hygienic or processing purposes with proper caution and supervision.

Chemical substances like phenyl, mosquito repellent etc. and pesticides, which may represent a hazard to health, must not be stored in food handling areas of the AWCs and if kept must be labelled with a warning about toxicity and information on proper use and away from normal reach of children and under lock and key in segregated area. Hazardous chemicals must be stored in containers which will prevent further contamination in case of leakage and kept in locked rooms or cupboard used only for that purpose. All hazardous substances must be handled only by authorized personnel such as AWWs or AWH who will be trained appropriately on hygienic handling of food.

5. Personal Hygiene and Health Requirements

The personal hygiene standard of food handlers at kitchen, AWW/AWH includes: a high standard of personal cleanliness, freedom from infectious diseases and a sufficient standard of hygiene. State may ensure that AWWs / AWHs are in good health. All staff enrolled for supply of food items must be adequately trained in good hygiene practices.

AWW/AWH must be instructed to report immediately to their supervisors, if they are suffering from any disease likely to be transmitted via food, e.g. diarrhoea or vomiting, infected wounds like, skin infections, jaundice or sores. In case of such illness they will re-join only after clearance by a Medical Officer.

5.1 Washing of Hands

Contamination of food via hands of the personnel may be by direct contact of the food with hands that are contaminated, to prevent hand washing and soap / hand disinfections are highly recommended. The purpose of hand washing is to remove superficial dead skin scales and sweat.

Hands disinfection refers to the application of soap to the hands. Wash facilities should be provided preferably at the entry of the food handling area. Some general instructions are:

- Every person working in a kitchen/food handling area must wash her hands frequently and thoroughly using a suitable with soap / hand cleansing preparation and running, potable water.
- **Hands must always be washed before entering the foods handling area immediately after using the toilet, after handling contaminated material and whenever necessary.**
- Toilets should be provided with soap to wash hands.
- Notices requiring hand washing must be displayed in the local language.

When to Wash Hands

The primary reason for washing hands is to prevent cross contamination, in food handling which could lead to food poisoning incidents.

- Hands, therefore, need to be washed to remove acquired pathogens, so that the hands do not transfer organisms to food product or food contact equipment.
- Hands need to be washed after any operation, which may lead to hands becoming contaminated, and also before embarking upon food handling procedures.
- Hands need to be washed
 - **After.....**
 - Visiting the toilet
 - Handling raw food
 - Handling waste
 - Touching body parts
 - Carrying out cleaning duties
 - Touching non-food contact surfaces, e.g. machine adjustment, power switches etc.
 - **Before**
 - Entering food handling areas (Kitchen/ /Serving/distribution)
 - Handling cooked food or ready to eat food/ fruits etc.
 - Eating

The hand should be washed systematically by rubbing all parts of the hands wrists, following the 6 steps. Each step consists of five strokes forward and five backwards, there should be a designated as a *“hand washing area”*, Hand washing facilities should not be used for other purposes, e.g. washing utensils.

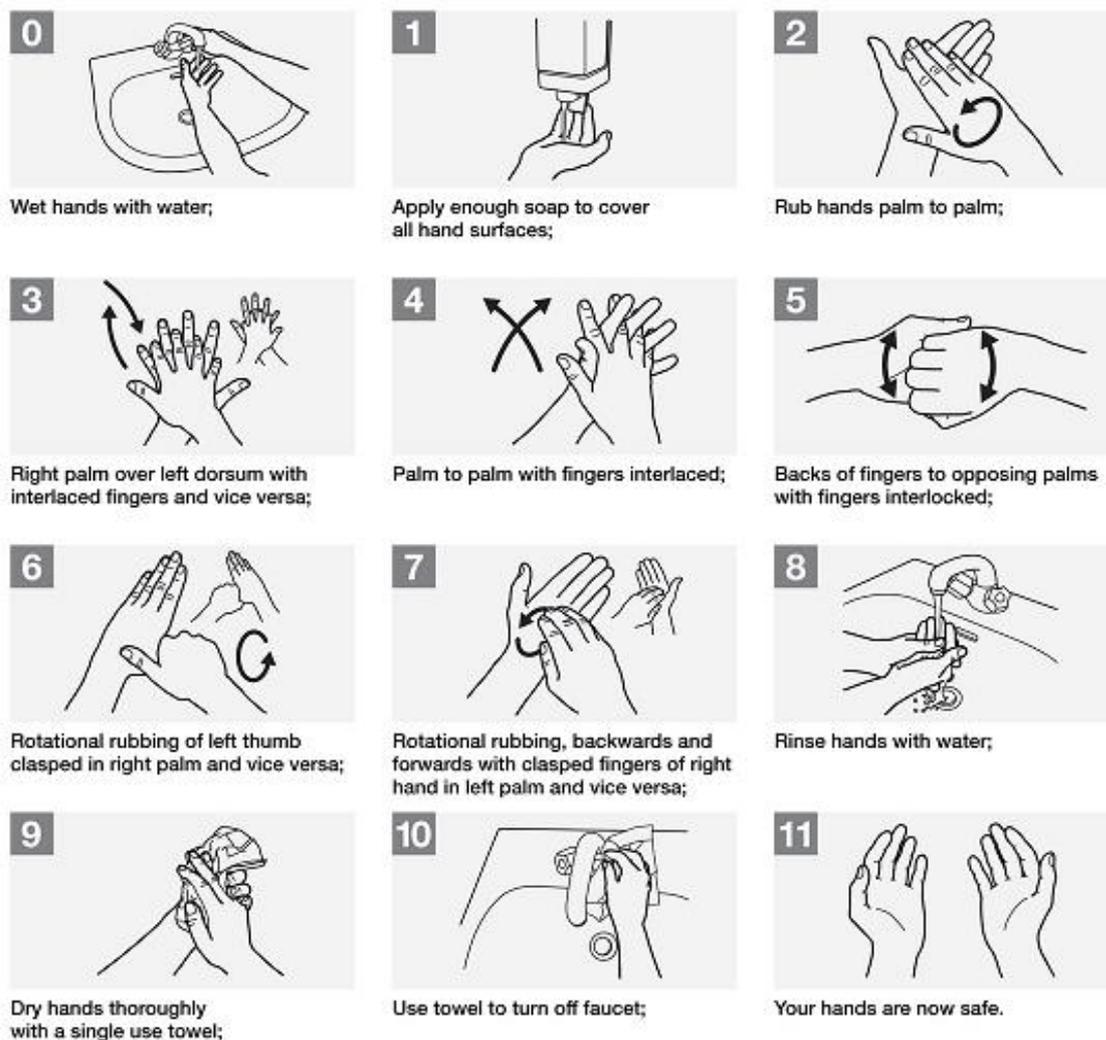


Figure I Hand Washing Procedure

Reference WHO (Clean Care is Safer Care)

5.2 Personal Cleanliness and Behaviors

- Food handlers mainly AWWs/ AWH/ SHG members should maintain a high degree of personal cleanliness. They must refrain from behaviour, which could result in contamination of food such as eating and drinking, use of tobacco, chewing paan, supari etc., or unhygienic practices such as spitting, smoking while handling food.
- Fingernails of the anganwadi Worker/helper must be trimmed and special attention should be given to clean them when washing hands.
- Nail polish or artificial nails should not be worn because they can become foreign bodies and may compromise on hygiene.
- No watches, rings, jewellery and bangles should be worn during cooking, serving and distribution where there is a danger of contamination of product.
- Glass in any form should not be allowed in the cooking areas.

- Before entry into food preparation area footwear should be removed.
- Hair should be tied up neatly and covered.
- Hands should be washed thoroughly using soap and running potable water.
- The clothing must be cleanable. Clothing must be changed at least daily.
- Any person who has cut or injury or wound should not be allowed to work till fully recovered and cleared by the Health Officer.

Key Points to Remember:

- ✓ **Anganwadi premises should be cleaned every day.**
- ✓ **Cleaning of premises should not take place during food preparation.**
- ✓ **Pesticides, fuels, disinfectants should be kept separately and not come in contact with food.**
- ✓ **There should be proper washing facility, toilet and provision of portable water.**
- ✓ **Soap should be provided for hand washing.**

CHAPTER 2

FOOD HANDLING AND SAFETY MEASURES FOR HOT COOKED MEAL AND MORNING SNACK

Hot cooked meal and morning snack provided under Supplementary Nutrition are often cooked at the Anganwadi centre. In some States/UTs the cooked food is supplied by SHGs / local groups or cooked at community kitchens. Irrespective of where the food is cooked, it is imperative that a high degree of care should be taken and adherence to food safety and hygiene protocols in handling food.

This section outlines simple food safety measures in preparation of hot cooked meal and morning snacks prepared at AWC/community kitchen or any other cooking arrangement.

1. Lifting and Transportation of Cereals (Rice & Wheat)

As mandated under ICDS cereals are provided centrally and all other ingredients are procured locally. It should be noted:

- Fair and Average quality of rice and wheat should be lifted from Food Corporation of India (FCI) godown. The officer lifting should ensure that the grains are of good quality and if there is doubt the higher authorities should be informed immediately.
- Cereals are delivered to the AWCs for hot cooked meal, the transit time should be short and proper route charts need to be drawn for delivery to avoid spoilage during transportation. Quantity of food items delivered should be weighed and given to each AWC/ processing units.
- If cereals need to be stored before delivery due to any circumstances, the godown where food is stored should be safe, free from dust, rodents and pests.
- The vehicle carrying cereals should be in proper condition and clean.

2. Local Procurement

Certain safety measures need to be ensured for all local procurement these are enlisted below:

- Preparation of hot cooked meal and morning snack, require local purchase of perishable and dry ingredients. **FIFO (First in First Out)** standards to be strictly followed for all local procurement. Food stuff with shorter shelf life should be used within their prescribed time limit. Once ingredients are exhausted, the containers should be washed dried in the sun before refilling.
- Dry ingredients – pulses, oil, iodized salt, condiments etc. should be purchased locally, in amounts which last not more than 15 days. Good quality ingredients should only be

purchased, with Agmark, ISI mark; purchase of loose ingredients specially oil, salt should be avoided at all costs.

- Non-iodized and loose salt should not be procured and used in the hot cooked meal. Double fortified salt should be carefully stored in air tight containers.
- All condiments like turmeric, chilly powder should be without additives and colour.
- Pulses should be good quality free from infestation; Khesari dal should not be used
- Fresh vegetable and fruits should be purchased on day of cooking only, discolored vegetables, and fruits should be avoided. Purchase of vegetables infested with insects should be avoided.
- Eggs should be purchased on the day of use, it should be ensured that eggs are not broken or the shell cracked as this leads to contamination.
- Proper records of purchases should be maintained.

3. Storage of Food at the Anganwadi Centre

The supply of cereals like wheat and rice should not be stored for more than a month; they may be stored in airtight bins or stacked neatly in gunny bags and stored in area free of rodents and insects. Food should not be stored directly on the ground; a wooden plank should be used for stacking of food materials. (*Refer Chapter 3*)

Dry ingredients like iodized salt, condiments, oils soyabean, pulses etc. should be stored in airtight containers, which may be purchased from the allocated fund for utensils at AWC level. All containers should be of materials that do not impart toxicity to food. These containers should be cleaned at regular intervals and thoroughly dried before use. It should be ensured that ingredients used for cooking, food grains, pulses, vegetables, cooking oil and condiments, should be free from adulteration and pest infestation.

All stored raw materials and ingredients must be kept under dry and cool conditions that will prevent spoilage, protect against contamination by pathogenic microorganisms, insects, rodents, foreign bodies, chemicals and damage. This implies that food and non-food materials should not be stored in same area and not all food materials can be stored together because of risk of cross – contamination.

Raw material or Processed food should not be stored for more than month at the Anganwadi centre as there is shortage of space.

4. Food Safety Measures before Cooking

Food and food ingredients should be sorted to segregate material which is evidently unfit for human consumption; any rejected material should be disposed in a hygienic manner.

All area of the cooking space and utensils should be clean and personal hygiene should be maintained before cooking (*Refer Chapter 1*).

5. Safety Measures during Cooking

All raw materials should be cleaned and washed in clean water, cooking should be done in clean utensils with lid, so as to prevent contamination and loss of nutrients.

Water used should be clean and safe; cooking should be done thoroughly so as kill all pathogens and cooked food should be kept covered so that dust dirt or pest does not enter.

At the AWC vegetables/ fruits are procured locally or contributed by the community , care should be taken to avoid use of vegetables and fruits which are likely to have been sprayed with pesticides/chemicals. Purchase of any vegetables and fruits having any odour of pesticides should be avoided. Such chemical residues must be removed by washing and cooking.

Removal of the Pesticide Residues from the Food Products by Different Methods:

Most of the pesticide residues can be removed by adopting four methods. These methods should be easily adopted at the AWC/ house hold level to remove the pesticide residues. These methods are washing, blanching, peeling and cooking.

- a) **Washing:** The first step in the removal of pesticide residues from the food products is washing. About 75-80% of pesticide residues are removed by cold water washing. Washing with 2% of salt water will remove most of the contact pesticide residues that normally appear on the surface of the vegetables and fruits. The pesticide residues that are on the surface of the grapes, apples, guava, plums, mangoes, peaches, pears etc, vegetables like tomatoes, brinjal, okra require 2-3 washings. The green leafy vegetables must be washed with 2% salt water. The pesticide residues from green leafy vegetables are removed satisfactorily by normal processing such as washing, blanching and cooking.
- b) **Blanching:** It is a short treatment in hot water or steam applied to most of the vegetables. Certain pesticide residues can effectively be removed by blanching. But before blanching it is very important to thoroughly pre-wash the vegetables and fruits.
- c) **Peeling:** Contact pesticide that appears on the surface of the fruits and vegetables can be removed by peeling. Steps such as concentration, dehydration and extraction from the raw product can further reduce pesticide residues in the end produce. The net influence of processing almost always results in minimal residues in processed food.
- d) **Cooking:** Animal products are also the major source of contamination for pesticide residues in human diets since the animals feed or fodder, which are sprayed with pesticides. Pressure cooking, frying and baking will minimize the harmful effect pesticide residues. Boiling of milk at high temperatures will destroy the persistent pesticide residues. Refined oils will have fewer amounts of pesticide residues. Household heating of oils will minimize pesticide residues.

6. Safety Measures While Serving

Precaution should be taken some measures are enlisted below:

- Food should be tasted by AWW/ AWH before serving.
- Food should be served to children in a clean area.
- Hands should be washed before serving.
- Dishes, plates, bowls and spoons used by children should be washed with portable water and dried before serving.
- Food should be served using spoons with long handle.
- Small amounts of food should be given first, second helping should be offered, this will prevent wastage.
- Fruits given for morning snack should be washed with portable water and given to children.
- As far as possible food should not be touched by hand.

7. Safety Measures while Feeding

Children should be taught basic manners of eating food. Some tips are given below:

- The space for eating should be neat and clean, it is best to avoid durries in the feeding area.
- Children should wash hands with soap before eating (provision of soap should be made at the centre).
- Nails of children should be trimmed.
- It is preferred that children eat with spoons.
- Safe drinking water should be available.

8. Disposal of Left Overs

Some safety measures include:

- Food should be cooked strictly as per requirement to prevent wastage.
- Care should be taken to prevent, so far as reasonably practicable, deterioration and spoilage through appropriate measures which may include controlling temperature, humidity, and/or other control.

- Food remaining should be disposed or discarded appropriately and as fast as possible.
- Food should not be thrown away near the Anganwadi centre where it attracts animals pests or lead to growth of micro-organisms.
- Stale food should not be mixed with the fresh food on any account.
- Left overs should not be kept in the Anganwadi centre and allowed to spoil.
- If there is any doubt of spoilage of raw or cooked food, it should be “thrown away” or discarded.
- Records of food used and disposal should be kept at the AWCs.

9. Food Borne Illnesses and Managing Food Poisoning/ Emergencies

Food borne illnesses may be caused due to

- I. micro-organisms
- II. chemicals
- III. Food Allergies

I. Caused by Micro-Organisms

Food poisoning is caused by a microbial organism (bacteria, virus, and parasites) present in the food or water. Food and drink can easily become contaminated by micro-organisms. Several factors contribute to the contamination which is preventable

- Raw foods contaminated at the source (e.g., meat, fish, rice, lentils, grains, oil)
- Contaminants spread by workers’ hands, utensils, cleaning cloths
- Utensils not properly cleaned
- Food contaminated by sewage
- Food cooked at inadequate temperature or for too short a time
- Previously cooked foods stored for a while, and then reheated for too short a time or at insufficient temperature

Food contaminated by microorganisms can lead to acute food poisoning, when two or more children are affected within one to six hours of consumption of food, and there is no history of anyone else having a similar condition in the prior few days.

Food borne illnesses may also occur due to infections when children display symptoms such as fever, diarrhoea/abdominal cramps (as in Typhoid), jaundice (Hepatitis A), abdominal cramps, watery (like rice water) stools, bloody diarrhoea/abdominal pain (Amoebiasis), diarrhoea/abdominal cramps (Giardiasis).

The distinction between acute food poisoning and those caused by infections is that at least one person (almost always somebody who either cooks or serves the food) should have had the infection in the prior few days.

The most common and earliest symptoms are **nausea, vomiting, abdominal cramps, and diarrhoea. Food contamination is confirmed if the symptoms are reported by more than one individual.**

The time of onset of symptom and specific signs provide clues for an early identification of the possible source of contamination. The Table below lists the correlation between time of onset, nature of symptoms and likely contaminant.

Table

Time of Onset of Symptoms	Signs and Symptoms of Food Poisoning	Possible Sources of Contamination
Between 1-6 hours	Sudden onset of nausea, vomiting, abdominal pain and diarrhoea	Contaminated/ unpasteurized milk, unhygienically handled food that carries germs from cuts and droplets of handlers, vegetable, rice and meat dishes which after cooking have not been adequately heated before consumption.
Between 8-16 hours	Moderate to severe abdominal pain and diarrhoea	Inadequately cooked meat, egg or beans
More than 16 hours	Fever, diarrhoea, vomiting and abdominal pain	Unwashed vegetables eaten raw, raw meat, contaminated water

II. Caused by Chemicals

- This can happen when food or water is contaminated by a poisonous substance or chemical: for example pesticide, kerosene, or sometimes poisonous mushrooms, yellow oleander, datura seeds, etc.
- Symptoms with this type poisoning depend upon the amount of chemical present in the foodstuff. A large amount of the chemical leads to acute reactions that set in within a few minutes of consumption of the meal.

The most common symptoms are: **vomiting, diarrhoea, muscle cramps, difficulty in breathing, excessive salivation, sweating, watery eyes, blurred vision**, Garlic like smell emanating from mouth, etc.

III. Food Allergy

- Sometime a normally harmless foodstuff can produce an adverse reaction in the body or cause allergies but this is generally limited to one child at a time, unlike food poisoning which affects more than one child.

Food allergies happen relatively quickly after intake, and can happen even with a tiny amount of that food. **Symptoms related to such allergies are: rashes, vomiting, diarrhoea, Food stuffs such as peanuts can lead to allergy.**

Handling Emergencies

As indicated above contamination can cause food poisoning, within hours of consuming food, symptoms of nausea, vomiting, diarrhoea, abdominal pain may be reported by beneficiaries. Management varies with the type of food borne illness. Proper linkage with all health facilities around the village, block and district should be maintained by AWWs supervisors and CDPOs in order to facilitate prompt referral of the affected children. **A list of emergency numbers should be available with AWWs to contact District Magistrate, District Programme officer (DPO), health officials (CMOH, BMOH, MO etc.), Supervisor, CDPO, ANM, ASHA, transport, Police, etc. and the same must be displayed at AWC.** The medicine kit should have sufficient ORS and other medicines for any basic first line treatment.

Under any such experiences AWWs should immediately seek help of ASHA/ ANM for first line treatment and then refer or accompany children to health facility. AWWs / AWHs should not hide any information but provide them so that proper and timely diagnosis and management can be done. Information of such incidence should immediately reach supervisors, CDPOs and health officers who should take quick and necessary action.

Handling Chemical Poisoning

Chemical poisoning and contamination of food with pesticides requires immediate action as it may be life threatening. In the case of chemical poisoning it may be necessary to call for an ambulance with Advanced Life Support, because a basic life support ambulance may not have the necessary equipment to handle such emergencies.

- Such individuals require immediate referral to Block CHC for specific treatment and further management. Cases of chemical food poisoning require getting the chemical out of the blood stream quickly. When large quantities have been consumed, the children will need medical support to pump out the poison and artificial ventilation with special equipment. Dealing with other types of chemical poisoning including Kerosene may require different emergency response and should be undertaken under the guidance of a qualified medical practitioner.

- Sometimes the vomited material in cases of pesticide poisoning can cause skin rashes. It is therefore important to clean the vomit from the external surface.
- In cases where the nausea is mild, and only one or two episodes of vomiting/diarrhoea occur, and where it is confirmed that the illness is not due to chemical poisoning, the children should be placed under observation. They should be given plenty of fluids/ORS. If they are unable to retain anything given orally, and if the vomiting/diarrhoea continue, they should be referred to the nearest Primary Health Centre. In severe cases children would need referral and the AWWs / supervisors should accompany the children up to the point of treatment until the child is handed over to parent.

How to Prevent Food Borne Illness

All the precautions mentioned earlier on general hygiene conditions at the AWCs and food handling should be followed for preventing cases of food poisoning and illnesses

Basic tips for preventing food borne illness

- Individuals engaged in handling, preparation, cooking and serving food should follow high standards of personal hygiene.
- Hand washing after using toilets and touching raw food, and before preparing, serving and consuming food.
- People suffering from infected wounds, boils, diarrhoea, dysentery, throat infection should be excluded from food handling.
- Any of the food handlers who have had a case of typhoid, jaundice due to Hepatitis A or other diarrheal illness such as Amoebiasis or Giardiasis should not be allowed to handle the food until a certificate has been provided by the medical officer of the area.
- Ensuring storage of raw material in clean covered containers to prevent insects, rats, lizards, etc. from falling in.
- Taking particular care to ensure that containers that were used to store paint, pesticides, or other chemical substances are not used to store food or water.
- Checking the quality of raw material prior to usage and food handlers should carefully look for contaminants if any. Handlers should be vigilant about the date of usage and use only well sealed packs of raw material such as rice, dal, lentils and oils.
- Washing raw material with safe water, before using for cooking

- Covering the prepared food or raw materials properly so that rats or lizards may or other insects may fall into the food. While per se, this is not a primary cause of food poisoning. However since there is a cultural taboo the food should be discarded, if only to prevent misconceptions spreading from the episode.
- Always listen to the children’s opinion when they taste the food, and take them seriously when they say it smells or tastes bad. Do not force them to eat the food.

10. Monitoring and Supervision

CDPOs, ICDS supervisors, have the primary responsibility of monitoring of Supplementary Nutrition. ICDS supervisors should ensure that all Anganwadi centres under their jurisdiction follow proper norms of food handling, right from receipt of stocks to delivery of Supplementary Nutrition to children. They should also inspect the general hygiene of the AWCs and personal hygiene of workers and other food handlers. Simple checklists should be used for monitoring food safety measures at every stage by Supervisors/ CDPOs. *(Annexure II)*

Anganwadi Level Monitoring and Support Committee and Gram Panchayat Pradhans should be involved for monitoring of activities under Supplementary Nutrition. District level monitoring committees should review Supplementary Nutrition under ICDS regularly and redressal mechanism may be set up for at the district level.

11. Quality Assurance

- It should be ensured that food should be free of any contamination and adulterants.
- FIFO ‘First in First Out’ system should be applied to release the raw materials (for processing, packaging and delivery) in order to protect the food from being stored too long and becoming contaminated or spoiled.
- At regular intervals food should be sent for laboratory testing.
- The States/UTs may consider engaging CSIR institutes/National Accredited Board for Laboratories recognized labs for carrying out sample checking of SNP, to ensure quality meal through ICDS. A list of test may be referred given Annexure III (depend upon the type of food)
- Periodic inspection (preferably every week) of all items stored should be carried out.
- Most AWCs have hand pumps in the vicinity or use water from bore wells. Water used for cooking/ drinking should be regularly tested for conforming to drinking water quality standards as prescribed by the Ministry of Drinking Water and Sanitation (MDWS).

Key Points to Remember:

- ✓ **Good quality ingredients should be procured with standardized certifications like AGMARK, ISI.**
- ✓ **The quantity of food (THR or dry ingredients) should be not stored for more than a month in the AWC.**
- ✓ **Hands should always be washed before handling food.**
- ✓ **Provision of soap should be there, children should wash hands before eating.**
- ✓ **All utensils, equipment's should be cleaned before and after use.**
- ✓ **Wastage of food should be avoided.**
- ✓ **Disposal of left-over food should be done properly.**
- ✓ **In case of emergency or food poisoning AWWs should take quick action and take support of health system without delay**
- ✓ **Water and food should be tested at regular interval**

CHAPTER 3

GENERAL GUIDELINES FOR FOOD SAFETY AND HYGIENE IN PRODUCTION OF TAKE HOME RATION

Take Home Ration (THR) is dry packed food produced locally by SHG's, local groups and federations. The production should meet standards and specifications for food safety and handling.

The establishment in which food is being handled; processed, stored, distributed by the SHG/ producer is a holder of registration certificate or a license as per the norms laid down by the Food Standards and Safety Authority Act 2006, regulations 2011. Sanitary and hygienic requirement, food safety measures and other standards should be conformed and it will be responsibility of the producer to ensure adherence to necessary requirements.

This section deals with the certain basic food safety measures during the production of THR.

1. Location, Surrounding and Building Facilities

The production unit should be ideally located away from industries which emit harmful gases, obnoxious odour, chemical etc. The building must permit easy and adequate cleaning including where appropriate disinfections and prevent the entrance and harbouring of pests and the entry of environmental contaminants such as smoke and dust.

It must take into account the need to separate (by partition, location or other means) those materials, operations and particles, which may lead to cross contamination. Lay out of the building and facilities must take into account the need to have supervision and control of hygiene and to have a regulated flow of people and incoming raw materials, to prevent cross contaminations.

The establishment should meet the following basic criteria:

- The nature of ceiling roof should be of permanent nature (Iron sheet/Asbestos sheet/R.C.C).
- The floor of building should be cemented, tiled or laid in stone/ pucca floor.
- The production area walls must be smooth, made with impervious material up to a height of not less than five feet and the junction between the walls and floors must be curved.
- The premises of the production unit should be adequately lighted and ventilated, properly white washed or painted.

- Building should be soundly built and maintained with good repair. It must also provide appropriate temperature control.
- All the windows and doors of the building must be adequately screened to exclude flying insects and they must also be rodent proof
- Other spaces to be avoided between the ceiling and roof of the building or any such space provided in the building which may be a place for the birds roosting etc.
- Cracks, rough surfaces, open joints etc. must be repaired as soon as possible.
- Provision for disposal of refuse and effluents should be available.
- The food production/ food service area provided with adequate drainage facility.
- In case cooking/frying /roasting is done on open fire, proper outlets for smoke/ steam should be provided, chimney, exhaust fan should be installed and fans should be installed at a suitable height.
- Fire extinguishers should be installed in the premises.

2. Drainage and Waste Disposal Facility

- Adequate drainage and waste disposal systems and facilities should be provided.
- Food waste and other waste material should be removed periodically from the place where food is being handled or cooked or manufacture to avoid building up. A refuse bin of adequate size with a proper cover preferably one which, need not be touched for opening should be provided in the premises for collection of waste material. This should be emptied and washed daily with a disinfectant and dried before next use.
- The disposal of sewage and effluents (solid, liquid and gas) should be in conformity with requirements of Factory/Environment Pollution Control Board. Adequate drainage, waste disposal systems and facilities should be provided and they should be designed and constructed in such manner so that the risk of contaminating food or the potable water supply is eliminated.
- Waste storage should be located in such manner that it does not contaminate the food process, storage areas, environment inside and outside the food establishment and waste should be kept in covered containers and should be removed at regular intervals.
- Periodic disposal of the refuse/ waste should be made compulsory. No waste should be kept open inside the premise and should be disposed of in an appropriate manner as per local rules and regulations including those for plastic and other non-environment friendly materials.

3. Washing Facilities

Adequate facilities for washing of raw food should be provided. All basins (or other facilities) for washing food items must have an adequate supply of water. The water should be potable. These facilities must be kept clean and, where necessary, disinfected. Adequate, if possible separate facilities, for cleaning of utensils and equipment should be provided.

4. Personal Facilities and Toilets

- Personnel facilities should include those for proper washing and drying of hands before touching food materials including wash basins and a supply of hot and /or cold water as appropriate; separate lavatories, of appropriate hygienic design, for males and females separately; and changing facilities for personnel and such facilities should be suitably located so that they do not open directly into food processing, handling or storage areas.
- Number of toilets should be adequate depending on the number of employees (male /female) in the establishment and they should be made aware of the cleanliness requirement while handling food.
- Rest and refreshments rooms should be separate from food process and service areas and these areas should not lead directly to food production, service and storage areas.
- A display board mentioning do's & don'ts for the workers should be put up inside at a prominent place in the premise in local language for everyone's understanding.
- Cleaning agents soaps, detergents should be provided.

5. Storage Facilities

Following points should be considered while deciding a place for store house/godown to keep the raw materials, processed foods and packaged foods:

- Building having concrete ceiling, wall and flooring, strong wooden doors and windows are the most preferred place for store house.
- The store house needs to be located in the place that is free from contaminations due to industrial pollution, flooding, drainage etc.
- It should not be a passage or entrance.
- It should be spacious enough to accommodate stock at least for few months.
- It should have proper ventilation to prevent build-up of heat, steam, condensation or dust and to remove contaminated air and be well lit.

5.1 Storage of Food Material

Each establishment should have spacious area for storage of both raw ingredients and processed products, adequately segregated and labelled. It should be secured and pilferage prevented. Some principles for storage are:

- Food storage facilities should be designed and constructed to enable food to be effectively protected from contamination during storage; permit adequate maintenance and cleaning, to avoid pest access and accumulation.
- Segregation should be provided for the storage of raw, processed, rejected, recalled or returned materials or products. Such areas, materials or products should be suitable if marked and secured.
- Raw materials and food should be stored in separate areas from printed packaging materials, stationary, hardware and cleaning materials / chemicals.
- The arrangement must not only facilitate insect pest control but also allow easy intake and despatch of stock and smooth physical stock taking as and when necessary.
- Storage of raw materials, Ingredients, work-in-progress and processed / cooked or packaged food products should be subject to FIFO (First in, First Out) stock rotation system.
- Containers made of non-toxic materials should be provided for storage of raw materials, work-in-progress and finished / ready to serve products.
- All packaging materials should be stored under clean and dry condition to retain its mechanical strength or machinability and level of hygiene required by product.
- Chemicals, pesticides, detergents, fuel (kerosene oil) spirit etc. should be stored in a separate area and marked clearly
- Fire extinguishers should be available in the storage area or in the premises.
- The food materials should not be stored directly on the floor as it can absorb moisture and chances of contamination and spoilage increase. Shifting racks / pallets should be used such that they are reasonably well above the floor level and away from the wall so as to facilitate effective cleaning and prevent harbouring of any pests, insects or rodents.

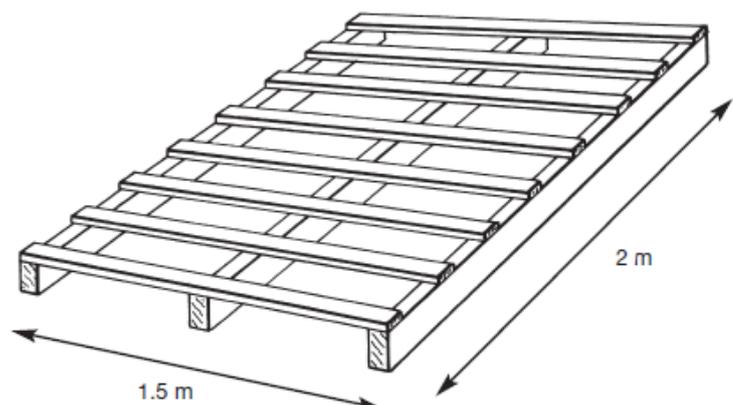


Figure II Shifting Racks / Pallets

5.2 Stacking of Food Material

- Stacking should be done on pallets/ wooden racks. The height of the pallets/shifting shelves should be at least 6 inches above the floor.
- Stack should be built clear from of all walls surface stockade, roof etc. to allow access to the stocks by the users and air circulation to check condensation and growth of mold and fungi.
- Each stack should contain only one type of product.
- Food stuff should be stacked in straight columns up to a considerable height and maintaining minimum space of 2 (two) feet between the stacks and walls or roof.



Figure III. Stacking of Food

5.4 Pest Control Measures

- Good design and maintenance of windows and doors and good housekeeping are essential for effective control of all pests (mainly rodents, birds, and insects). The building must be kept in good repair and condition to prevent access and to eliminate potential breeding sites.
- Holes, drains and other places where pests are likely to gain access must be kept sealed. Wire mesh screens, for examples on open windows, doors and ventilators, will reduce the problem of pest entry.
- Pest control must be carried out by suitable trained personnel.
- Before pesticides are applied, care must be taken to protect people, food, equipment and utensils from contamination. Pesticides should always be kept in its original containers.

- Clearly marked and be stored in a locked storage separate from area for production / processing / storage of food. Records must be kept of all pesticides used, including name of pesticides, concentration used, and method of application and location of application.

Key Points to Remember:

- ✓ **The establishment should meet all the basic specifications.**
- ✓ **Storage facility should be proper to prevent infestation and contamination.**
- ✓ **FIFO: First In First Out should be strictly followed for all processed/ raw ingredients.**
- ✓ **Regular pest control should be done.**

CHAPTER 4

FOOD HANDLING AND SAFETY MEASURES FOR TAKE HOME RATION

Right from procurement and transportation to actual processing, packaging and distribution food comes in contact with various equipment, surfaces and food handlers; hence there exists chances of contamination. It is essential that food safety measures are strictly adhered to all stages of production of Take Home Ration.

The section below elaborates on such measures.

1. Procurement of Raw Material for Production of Take Home Ration (THR)

Fair and Average quality of rice and wheat should be lifted from FCI godown. The officer lifting should ensure that the grains are of good quality and if there is any doubt the higher authorities should be informed immediately.

Other ingredients which may be required such as Bengal Gram, sugar, jaggery groundnuts, etc. should be purchased from local market and should be of good quality, have ISI mark etc. The responsibility of SHG groups/producer selected for the processing and supply of THR be:

- To procure quality ingredients as per the specification by the State Govt. /laid under the regulations. A procurement plan should be prepared to have an undisturbed supply of THR to the AWCs which should be based on the indent from AWCs.
- No raw material or ingredient thereof should be accepted by an establishment if it is known to contain parasites, undesirable micro-organisms, pesticides, veterinary drugs or toxic items, decomposed or extraneous substances, which would not be reduced to an acceptable level by normal sorting and/or processing.
- In addition the raw materials, food additives and ingredients, wherever applicable, should conform to the regulations laid down under the FSSAI Act 2006 and Regulations 2011.
- Records of raw materials and ingredients as well as their source of procurement should be maintained in a register for inspection.

2. Transportation of Raw Ingredients/ Processed Food

Vehicles carrying the raw /finished food (THR) must be checked for the cleanliness and should disinfect if required. The duration in transit should be as short as possible, so that chances of contamination and spoilage are low. Before receiving the product the receiver should check that the packaging is intact and contamination has not occurred.

3. Processing of Food

Processing involves activities like sieving, washing, drying, roasting, mixing, grinding etc. which requires handling of food. Certain precautions need to be taken while processing which include:

- Food handlers require maintaining highest level of personal hygiene use head gear, aprons and protective clothing.
- Only people employed in processing should enter the production area.
- Hands should be washed before handling food, provision of soap, detergents should be made.
- Jewelry such as rings, bangles watches should not be worn by food handlers.
- Eating drinking should be prohibited in the area.
- Every utensil or container containing any food or ingredient of food should be either provided with a properly fitted cover/lid or with clean gauze net or other material of texture sufficiently fine to protect the food completely from dust, dirt and flies and other insects.
- All items, fittings and equipment that touch or come in contact with food must be of non-corrosive material so that it does not add toxicity to the food.
- Equipment should be suitable for cooking, processing and storing stainless steel /aluminum / glass containers, mugs, jugs; trays etc. suitable should be used. Brass utensils should be frequently provided with lining.
- All containers/ equipment should be completely dry before it is used.
- All pieces of food contact equipment should be clean and in good repair.
- All the equipment and their surroundings should be free from evidence of rodent or insect activity.
- Utensils like spoons, beaters, pans, bowls, trays, spatulas etc should be sanitized after every lot processed.

4. Food Packaging and Dispatch

- Packaging unit should be close to processing unit .The packaging unit should be clean and made free from spilled powdered food materials which may attract or harbour pests, rodents or micro-organism Weight machine, sealing machine, scoops and packaging material should be available .

- Packaging should be done wearing proper apron, head gear, gloves and mask to cover mouth and nose. No footwear should be allowed in the area.
- Packaging materials should be such that it provides protection for all food products to prevent contamination, damage. Packaging material should be those which are permitted as laid down under the FSS Act & the Regulations there under.
- Processed food should be packed on the same day to prevent any possible infestation or adulteration.
- Packets should carry proper labeling and information such as:
 - Name of the Product
 - Nutritive value,
 - Ingredients used,
 - Instructions for use / process of consumption
 - Best before
 - Batch no
 - Date of packing
 - Weight of the product
 - Name of the producer
 - Address of the producer
- All packets should carry the Label –**FOOD FOR ICDS SUPPLEMENTARY NUTRITION -FOOD NOT FOR SALE.**
- Immediately after packaging and proper labelling, the products should be placed in the rooms provided for storage under required temperature and humidity conditions to prevent any spoilage.
- Packed food should be stacked separately away from the raw materials.
- In no case should old stock which could not be delivered due to some or other reason to an Anganwadi Centre be issued in the next or a successive phase.
- Packaged food materials are dispatched to respective Anganwadi Centres as per the plan and in time.

- Record of stock dispatched/issued should be maintained on a regular basis at the production unit as well as at the AWCs.
- Record of acknowledgement of receipt by Anganwadi Workers against all the dispatched/issue should also be maintained and furnished for verification as and when needed.
- All critical links in the supply chain need to be identified and provided for to minimize food spoilage during transportation.
- Vehicles and / or containers should not be used for transporting anything other than foodstuffs where this may result in contamination of foodstuffs.
- The conveyance used for transportation of different foods, or high risk foods such as fish, meat, poultry; eggs etc. must not be used for transporting THR this to avoid the risk of cross- contamination.

5. Quality Assurance

- It should be ensured that food should be free of any contamination and adulterants.
- FIFO 'First in First Out' system should be applied to release the raw materials (for processing, packaging and delivery) in order to protect the food from being stored too long and becoming contaminated or spoiled.
- At regular intervals food should be sent for laboratory testing.
- The States/UTs may consider engaging CSIR institutes/National Accredited Board for Laboratories recognized labs for carrying out sample checking of SNP, to ensure quality food through ICDS. A list of test may be referred given Annexure III (depend upon the type of food)
- Periodic inspection (preferably every week) of all items stored should be carried out.

6. Monitoring and Supervision

a) Supervision at Manufacturer level

- A detailed Standard Operating Procedure (SOP) for the processing of food as well as its packaging, dispatch and storage needs to be developed for proper management which in turn would help in identifying any problem and the exact point, so that damage control would be faster.
- Appropriate records of food processing / preparation, production / cooking, storage, distribution, service, food quality, laboratory test results, cleaning and sanitation, pest control and product recall should be kept and retained for a period of the shelf-life of the product

b) Supervision by State/District (ICDS) officials

- The 5 Tier Monitoring and Review Committees setup under ICDS should monitor the different aspects of supplementary nutrition and ensure that food safety measures are adhered too at all levels.
- CDPOs, ICDS supervisors, have the primary responsibility of monitoring of Supplementary Nutrition. ICDS supervisors should ensure that all Anganwadi centres under their jurisdiction follow proper norms of food handling, right from receipt of stocks to delivery of Supplementary Nutrition to the beneficiary. They should also inspect the general hygiene of the AWCs and personal hygiene of workers and other food handlers. Simple checklists should be used for monitoring food safety measures at every stage by Supervisors/ CDPOs.(Appendix I)
- Anganwadi Level Monitoring and Support Committee and Gram Panchayat Pradhans should be involved for monitoring of activities under Supplementary Nutrition. District level monitoring committees should review Supplementary Nutrition under ICDS regularly and redressal mechanism may be set up for at the district level.

In addition

- Food and Nutrition Board, Ministry of WCD, with its 43 field units carry out inspection and monitoring of Supplementary Nutrition.
- Central Monitoring Units (CMU) carries out monitoring of ICDS Services.

Key Points to Remember:

- ✓ **Production should take place in a hygienic and clean environment.**
- ✓ **Proper labeling for all packets should be followed.**
- ✓ **The packet should carry the label of FOOD for ICDS– NOT FOR SALE**
- ✓ **FIFO: First In First Out should be followed.**
- ✓ **Quality control measures should be adhered to and food should be tested at regular intervals.**

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भारत सरकार
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 Government of India
 Ministry of Women & Child Development
 Shastri Bhawan, New Delhi-110 001
 Website : <http://www.wcd.nic.in>

D. O. No.5 (25)/2010-ND-Tech.

Dated the 26th July, 2013

Dear Chief Secretary,

As you are aware supplementary nutrition is one of the six services under the ICDS. It is one of the most vital and pivotal interventions in young and early years, being most critical, impacting growth, nutrition and development of the child. Besides, it is a key service included in the Food Security Ordinance, 2013.

It may be noted that the Ministry has issued 'Revised Nutritional and Feeding Norms for Supplementary Nutrition in ICDS' on 24th February 2009 wherein Para 8 stresses on the need to ensure quality of supplementary nutrition being provided with reference to the norms of food safety as well as nutrient composition. Further, vide letter of even number dated 15 March, 2012 (copy enclosed), it was communicated that safety standards are followed while providing SNP and that it is necessary to take adequate precautions and ensure that any food supplied through the ICDS system is safe and nutritious. It was also emphasized that it is necessary to be vigilant and anyone violating food safety and standards are booked and taken to task promptly. The Hon'ble Supreme Court too in its judgments (Civil Appeal No. 7104/2011) has also observed that it is necessary to ensure that there is 'zero infection' in the food.

On 31st March 2011, the Ministry had issued 'Guidelines for Constitution of Monitoring & Review Committees at different levels to review progress in implementation of the ICDS Scheme'. Monitoring the quality of SNP is also one of the roles of the committee at State,

District, Block and Anganwadi levels. It is necessary to ensure that all steps required are undertaken to ensure constitution and regular meetings and enforcement of the said committees.

It is also important for the States to identify and involve proactively Government Food Analysis Laboratories in addition to FNB's Quality Control Laboratories in order to ensure regular quality check of SNP. A letter dated 15.10.2012 was issued to all States in this regard (copy enclosed).

In light of the above, it is hoped that you are looking into the matter with utmost attention. Considering the recent tragedy, due importance and priority needs to be accorded to food safety measures and reinvigorating inspection, lab testing, monitoring of hygiene, proper storage, quality of supply of food grains / items and due precaution for proper container, labeling and segregation of food items with any other article etc.

I request your personal indulgence in the matter and to direct all authorities to exercise extra caution and adopt 'zero tolerance' towards any violation or deviations in this regard.

Requesting acknowledgement and confirmation of action taken in the matter.

With regards,

Yours sincerely,


(Nita Chowdhury)

Shri J.K. Mohapatra,
Chief Secretary
Government of Orissa
Bhubaneswar -751001

Sh. H.S. Sunam
S.No. 18.016

No. 5 (25)/2010-ND/Tech.
Government of India
Ministry of Women & Child Development
Food & Nutrition Board

Shastri Bhawan,
New Delhi-110001
Dated: 15/03/2012

To

All the State Secretaries, *Directors*
Department of Women and Child Development

Sir/Madam,

Subject: **Food Safety Measures for SNP in ICDS.**

Please refer to the guidelines 'Revised Nutritional and Feeding Norms for Supplementary Nutrition in ICDS' issued vide letter No. 5-9/2005/ND/Tech (Vol. II) on 24th Feb.09 which clearly indicate the norms to be adopted with regards to food safety and hygiene.

You would appreciate that it is most necessary that safety standards are followed while providing SNP to the beneficiaries under the ICDS programme. There can be no compromise with the health of the children, pregnant and lactating women and hence safety of the foods provided needs to be ensured.

Recently, some of the samples analysis from a State indicates presence of high coliform, insects in raw materials/ use of prohibited colouring agents and their unfitnes for human consumption making it highly undesirable and the matter of grave concern. I request you to take adequate precautions and ensure that any food supplied through the ICDS system is safe and nutritious and anyone violating food safety and standards are booked and taken to task promptly.

Yours faithfully

Shreeranjana

(Dr. Shreeranjana)

*Issues States Secretary
by special POA*

*21/03
15/03/2012*

d/c

Monitoring Checklist

I. GENERAL INFORMATION ON HYGIENE AND SAFETY

1. Anganwadi centre premises cleaned everyday	Yes/No
2. Kitchen kept clean	Yes/No
3. Toilet kept clean and washed every day	Yes/No
4. Storage area kept clean free from rodents and pests	Yes/No
5. Storage of ingredients as per guidelines of the state	Yes/No
6. Storage of THR as per guideline of the state	Yes/No
7. Disinfectants, pesticides stored separately and labeled	Yes/No
8. Fuel like kerosene, charcoal stored separately	Yes/No
9. Portable water available on the premises	Yes/No

II. INFORMATION ON FOOD SAFETY & HANDLING

(HOT COOKED MEAL & MORNING SNACKS)

1. Cooking area clean	Yes/No
2. Utensils and equipment clean	Yes/No
3. Locally purchased ingredients of standard quality as per guideline	
· Oil	Yes/No
· Iodized salt / Double Fortified salt	Yes/No
· Condiments	Yes/No
· Fresh vegetables	Yes/No
· Pulses	Yes/No
· Sugar / jaggery	Yes/No
· Any others	
4. Personal Hygiene maintained	Yes/No
5. Personal behaviours proper	Yes/No
6. Hand washing practice followed	Yes/No
7. Food served in clean plates and bowls	Yes/No
8. Extra food, wastes disposed properly and safely	Yes/No
9. Centre cleaned after day's work	Yes/No

III. INFORMATION OF FOOD HANDLING AND SAFETY (TAKE HOME RATION)

1. Quality of Food received by AWW as per guideline	Yes/No
2. Packaging Intact at distribution	Yes/No
3. Labeling as per State guideline	Yes/No

IV.RECORDS AND REGISTERS

- | | |
|--|--------|
| 1. Stock records maintained | Yes/No |
| 2. Balance between requirement against cooked meal | Yes/No |
| 3. Detail on quality of ingredients maintained | |
| · Locally purchased | Yes/No |
| · Received from FCI | Yes/No |
| · Received from processing unit | Yes/No |
| 4. Details of purchase of cleaning agents, soap | Yes/No |
| 5. Detail of purchase of disinfectants, pesticides etc | Yes/No |

V. ANY OTHER OBSERVATION / REMARK

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Analytical Parameters for Supplementary Nutrition

SI No	Parameters
1	Protein
2	Energy (Total Calories)
3	Minerals – Iron & Calcium
4	Vitamins – Vitamin A & C , Thiamin, Riboflavin, Niacin, Folic Acid
5	Microbiological parameters – Total Plate Count, Yeast & Mould, Coliform, e- coli, S.aureus, Salmonella, Clostridium botullinum.
6	Total Aflatoxin
7	Shelf Life of the product
8.	Heavy metal
9.	Pesticide Residues