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FOOD SAFETY AND FSSAI REGULATIONS ON BYADAGI CHILLI PRODUCTS



AATMANIRBHAR BHARAT

**PM Formalisation of Micro Food Processing
Enterprises Scheme (PM FME Scheme)**

- ❑ Food Safety and Standards Authority of India (FSSAI) lay down science based standards for articles of food and regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption.
 - FSSAI has its main office in Delhi, and regional offices in Delhi, Guwahati, Mumbai, Kolkata, Cochin and Chennai. Each Indian state has its own State FSSA.
 - Every FSSAI registration and State FSSAI license are issued by the state FSSA. The central FSSAI license is issued by the main FSSA authority.
- ❑ Every Food Business Operator in the country is required to be licensed/registered under the FSSAI.
 - **Registration** is meant for petty food manufacturers (petty retailer, hawker, itinerant vendor or a temporary stall holder or small or cottage scale industry) having annual turnover up to Rs. 12 lacs.
 - All food businesses having income more than this limit are required to take a **license**.



- As per Section 31(1) & 31(2) of FSS Act, 2006 every Food Business Operator in the country is required to be licensed/registered under the Food Safety & Standards Authority of India.
- The licensing and registration procedure and requirements are regulated by Food Safety & Standards (Licensing and Registration of food Business) Regulations, 2011.
- As per FSS (Licensing & Registration) Regulations, 2011, Licenses and Registrations are granted to FBOs in a **3 tier system**
 - **Registration**
 - **State license**
 - **Central License**
- FSSAI registration is done online through Food Safety Compliance System (**FoSCoS**) on the FSSAI website.
- Food Licensing and Registration System (FLRS) has been replaced by FoSCoS.



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FSSAI REGISTRATION



- Registration is meant for petty food Food Business Operators (FBOs).
- FBOs are manufacturers that includes petty retailer, hawker, itinerant vendor or a temporary stall holder or small or cottage scale industry having **annual turnover up to 12 lacs** and/or **production capacity** of food (other than milk and milk products, meat and meat products) **up to 100 kg/litre per day**.
- These FBOs are required to obtain FSSAI Registration Certificate by applying on Food Licensing and Registration System or FoSCoS.
- This Registration Certificate is embedded with QR code and has the image of FBO with 14-digit Registration number starting with 2 (2xxxxxxxxxxxxx).



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- All food businesses having income more than ₹12 lacs and/or production capacity > 100 kg/litre per day are required to take a license.

FSSAI license types:

1. State FSSAI license: Medium size food manufacturers/processors/transporters having income between ₹ 12 lakhs and ₹ 20 crores
 2. Centre FSSAI license: Large size food manufacturers/processors/transporters or importers having income between > ₹ 20 crores
- **License period**: 1 – 5 years
 - More license fee if license is required for more than 5 years
 - FBO can't renew the License or Registration if it is not applied before the expiry of license/registration.
 - Once the license/registration is expired, the FBO has to apply afresh for a new license/ registration.
 - A late fee of Rs. 100 per day is calculated and added to renewal fee of License



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FSSAI LICENSING FEE

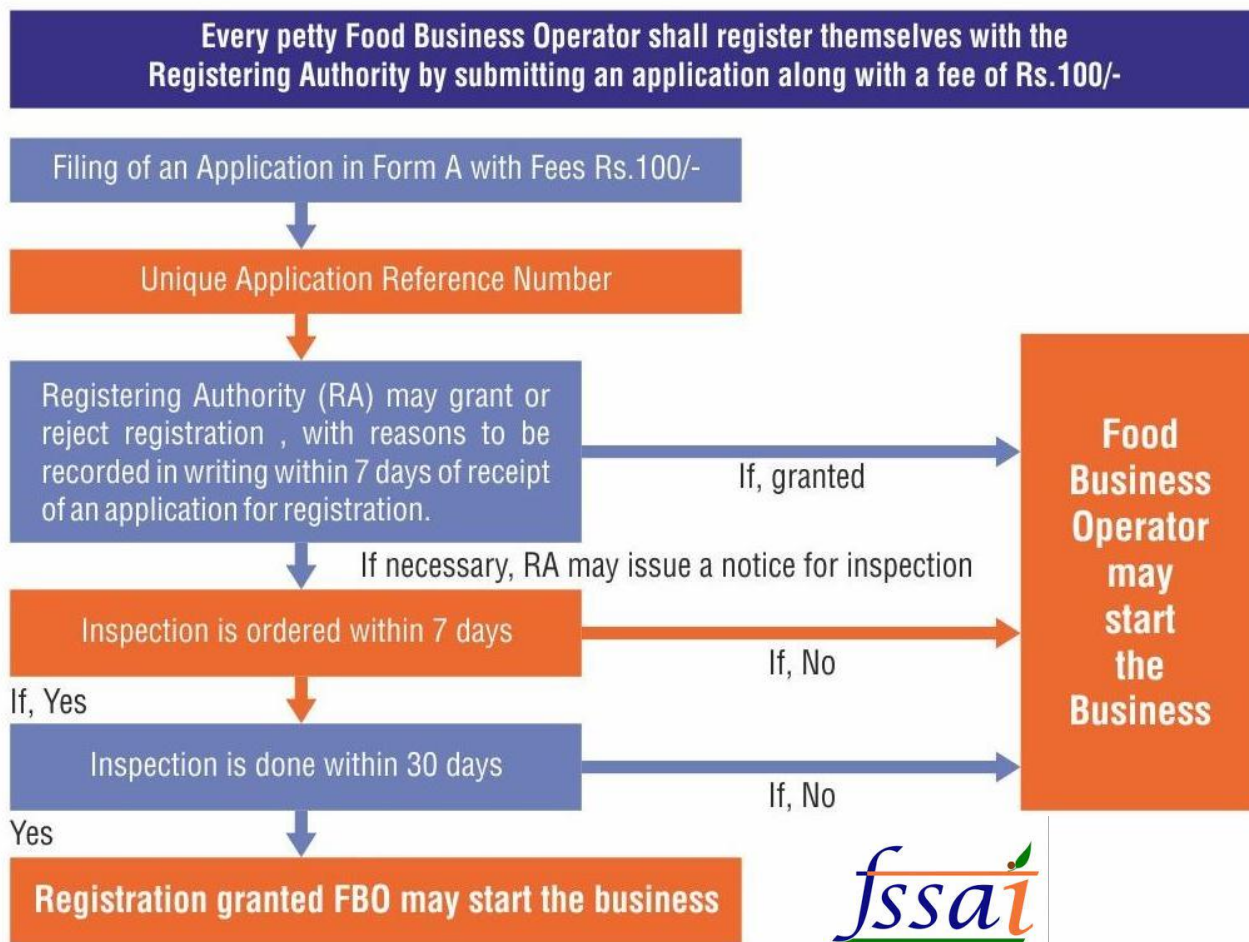


Fee Structure for 1 year

Types/Category	Registration	Central license	State license
New Application	Rs. 100	Rs. 7500	Rs. 2000
Renewal Application	Rs. 100	Rs. 7500	Rs. 2000
License/Certificate Modification	Rs. 100	Rs. 7500	Rs. 2000
Duplicate Certificate/License	10% of the applicable certificate fee	10% of the applicable license fee	10% of the applicable certificate fee

- ❑ FSSAI has launched Food Safety Compliance System (FoSCoS) in the States/UTs of Tamil Nadu, Puducherry, Gujarat, Goa, Odisha, Manipur, Delhi, Chandigarh and Ladakh with effect from 1st June 2020.

Registration Process



FoSCoS
Food Safety Compliance System

FSSAI registration gives a 14-digit license number



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FOOD CATEGORY SYSTEM

- The food category system is a tool for assigning food additive uses in this Standard. The food category system applies to all foodstuffs. The food category descriptors are not to be legal product designations nor are they intended for labelling purposes.

PRINCIPLES OF FOOD CATEGORY SYSTEM

- The food category system is based on the following principles:
 - a) The food category system is hierarchical, meaning that when an additive is recognized for use in a general category, it is recognized for use in all its sub-categories, unless otherwise stated. Similarly, when an additive is recognized for use in a sub-category, its use is recognized in any further subcategories or individual foodstuffs mentioned in a sub-category.
 - b) b) The food category system is based on product descriptors of foodstuffs as marketed, unless otherwise stated.
 - c) The food category system takes into consideration the carry-over principle. By doing so, the food category system does not need to specifically mention compound foodstuffs
 - d) The food category system is used to simplify the reporting of food additive uses for assembling and constructing this Standard.



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FSSAI QUALITY STANDARDS OF MIZO CHILLI

- ❑ Chillies and Capsicum (Lal Mirchi) whole - means the dried ripe fruits or pods of the *Capsicum annum* L & *Capsicum frutescens* L.
- ❑ The pods shall be free from mould, living and dead insects, insect fragments, rodent contamination.
- ❑ The product shall be free from extraneous colouring matter, coating of mineral oil and other harmful substances.





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FSSAI QUALITY STANDARDS OF MIZO CHILLI

- ❑ Dried Mizochilli shall conform to the following standards:
 - (i) Extraneous matter : Not more than 1.0 percent by weight
 - (ii) Unripe and marked fruits : Not more than 2.0 percent by weight
 - (iii) Broken fruits, seed & fragments : Not more than 5.0 percent by weight
 - (iv) Moisture : Not more than 11.0 percent by weight
 - (v) Total ash on dry basis : Not more than 8.0 percent by weight
 - (vi) Ash insoluble in dilute HCl on dry basis : Not more than 1.3 percent by weight
 - (vii) Insect damaged matter : Not more than 1.0 percent by weight

Microbiological parameter for dry chilli fruits : Salmonella should be absent in
25 g sample.

FSSAI QUALITY STANDARDS OF MIZO CHILLI POWDER

- ❑ Chillies and Capsicum (Lal Mirchi) powder means the powder obtained by grinding clean ripe fruits or pods of *Capsicum annum* L and *Capsicum frutescens* L.
- ❑ It shall be free from mould, living and dead insects, insect fragments, rodent contamination.
- ❑ The powder shall be dry, free from dirt, extraneous colouring matter, flavouring matter, mineral oil and other harmful substances.
- ❑ The chilli powder may contain any edible vegetable oil to a maximum limit of 2.0 percent by weight under a label declaration for the amount and nature of oil used.



FSSAI QUALITY STANDARDS OF MIZO CHILLI POWDER

- ❑ Mizo chilli powder shall conform to the following standards:
 - (i) Moisture : Not more than 11.0 percent by weight
 - (ii) Total ash on dry basis : Not more than 8.0 percent by weight
 - (iii) Ash insoluble in dilute HCl on dry basis : Not more than 1.3 percent by weight
 - (iv) Crude fibre : Not more than 30.0 percent by weight
 - (v) Non-volatile ether extract on dry basis : Not less than 12.0 percent by weight





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FSSAI DEFINITION AND STANDARDS FOR RED CHERRY PEPPER PICKLE

- As per the general definition for pickles in FSSAI, pickles means the preparation made from fruits or vegetables or other edible plant material including mushrooms free from insect damage or fungal infection, singly or in combination preserved in salt, acid, sugar or any combination of the three.
- The pickle may contain onion, garlic, ginger, sugar jaggery, edible vegetable oil, green or red chillies, spices, spice extracts/oil, limejuice, vinegar/ acetic acid, citric acid, dry fruits and nuts.
- It shall be free from copper, mineral acid, alum, synthetic colours and shall show no sign of fermentation.



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FSSAI STANDARDS FOR RED CHERRY PEPPER PICKLE

Type of pickle	Parameters	Limits
Oil pickle	Drained Weight	Not less than 60.0 percent
	Fruit and Vegetable pieces shall be practically remaining submerged in oil	
Vinegar pickle	Drained Weight	Not less than 60.0 percent
	Acidity of vinegar as acetic acid	Not less than 2.0 percent



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MICROBIAL STANDARDS FOR RED CHERRY PEPPER PICKLE

Requirement	Standard
Salmonella	Absent in 25 g



Characteristics	Method of test
Extraneous matter	4 of IS: 1797-1985
Total ash	6 of IS: 1797-1985
Acid insoluble ash	8 of IS: 1797-1985
Moisture content	9 of IS: 1797-1985
Crude fibre	13 of IS: 1797-1985
Non-volatile ether extract	14 of IS: 1797-1985
Volatile oil	15 of IS: 1797-1985
Salmonella	IS 5887 (Part 3)
Total soluble solids	Clause 1.6 of FSSAI manual of methods
Acidity	Clause 2.4 of FSSAI manual of methods
pH	Clause 2.3 of FSSAI manual of methods
Fruits and vegetable content	Clause 2.11 of FSSAI manual of methods
Unripe and marked chilli fruits	Physical separation and weighing
Broken fruits, seed & fragments	Physical separation and weighing
Insect damaged matter	Physical separation and weighing



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CODEX STANDARDS FOR MIZO CHILLI

ADDITIVES	MAXIMUM LEVEL
Polysorbates	2000 mg/kg
Sucralose	400mg/kg
Sucroglycerides	2000 mg/kg
Sucrose esters of fatty acids	2000 mg/kg
Sucrose oligoesters, type i And type ii	2000 mg/kg
Sulfites	150mg/kg

SANITARY AND HYGIENIC REQUIREMENTS

The place where food is manufactured, processed or handled shall comply with the following requirements:

- The premises shall be located in a sanitary place and free from filthy surroundings and shall maintain overall hygienic environment. All new units shall set up away from environmentally polluted areas.
- The premises to conduct food business for manufacturing should have adequate space for manufacturing and storage to maintain overall hygienic environment.
- The premises shall be clean, adequately lighted and ventilated and sufficient free space for movement.
- Floors, Ceilings and walls must be maintained in a sound condition. They should be smooth and easy to clean with no flaking paint or plaster.
- The floor and skirted walls shall be washed as per requirement with an effective disinfectant the premises shall be kept free from all insects.



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SANITARY AND HYGIENIC REQUIREMENTS

- Continuous supply of potable water shall be ensured in the premises.
- Equipment and machinery when employed shall be of such design which will permit easy cleaning.
- No vessel, container or other equipment, the use of which is likely to cause metallic contamination injurious to health shall be employed in the preparation, packing or storage of food.
- All equipments shall be kept clean, washed, dried and stacked at the close of business to ensure freedom from growth of mould/ fungi and infestation.
- All equipments shall be placed well away from the walls to allow proper inspection.
- There should be efficient drainage system and there shall be adequate provisions for disposal of refuse.
- The workers working in processing and preparation shall use clean aprons, hand gloves, and head wears.



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SANITARY AND HYGIENIC REQUIREMENTS

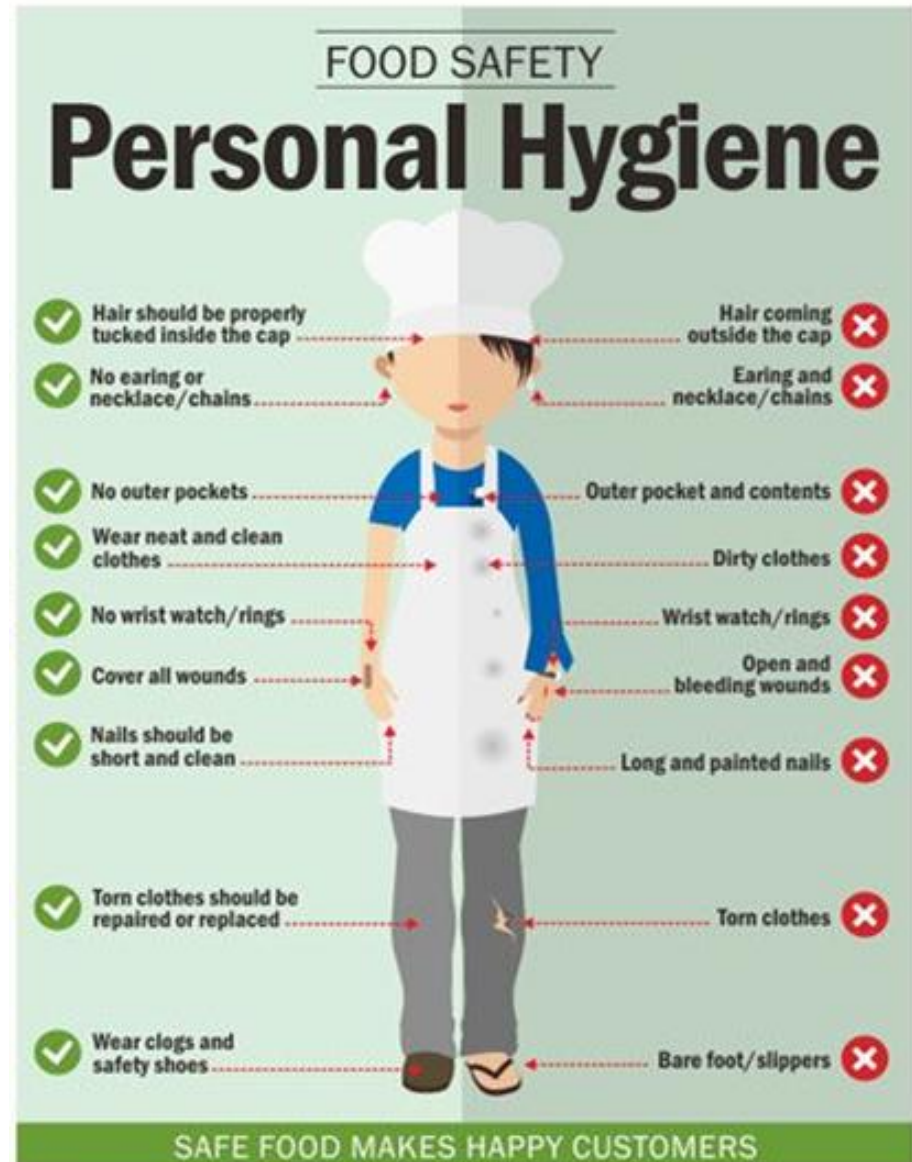
- All food handlers shall keep their finger nails trimmed, clean and wash their hands with soap, or detergent and water before commencing work and every time after using toilet.
- Eating, chewing, smoking, spitting and nose blowing shall be prohibited within the premises especially while handling food.
- All articles that are stored or are intended for sale shall be fit for consumption and have proper cover to avoid contamination.
- The vehicles used to transport foods must be maintained in good repair and kept clean.
- Foods while in transport in packaged form or in containers shall maintain the required temperature.
- Insecticides / disinfectants shall be kept and stored separately and `away from food manufacturing / storing/ handling areas.

Mask - To avoid microbial contamination through mouth.

Cap - To avoid hair fall in to the food material

Coat - To avoid dust particle and other unwanted material entering in to the food material

Shoes - To avoid contamination from the legs

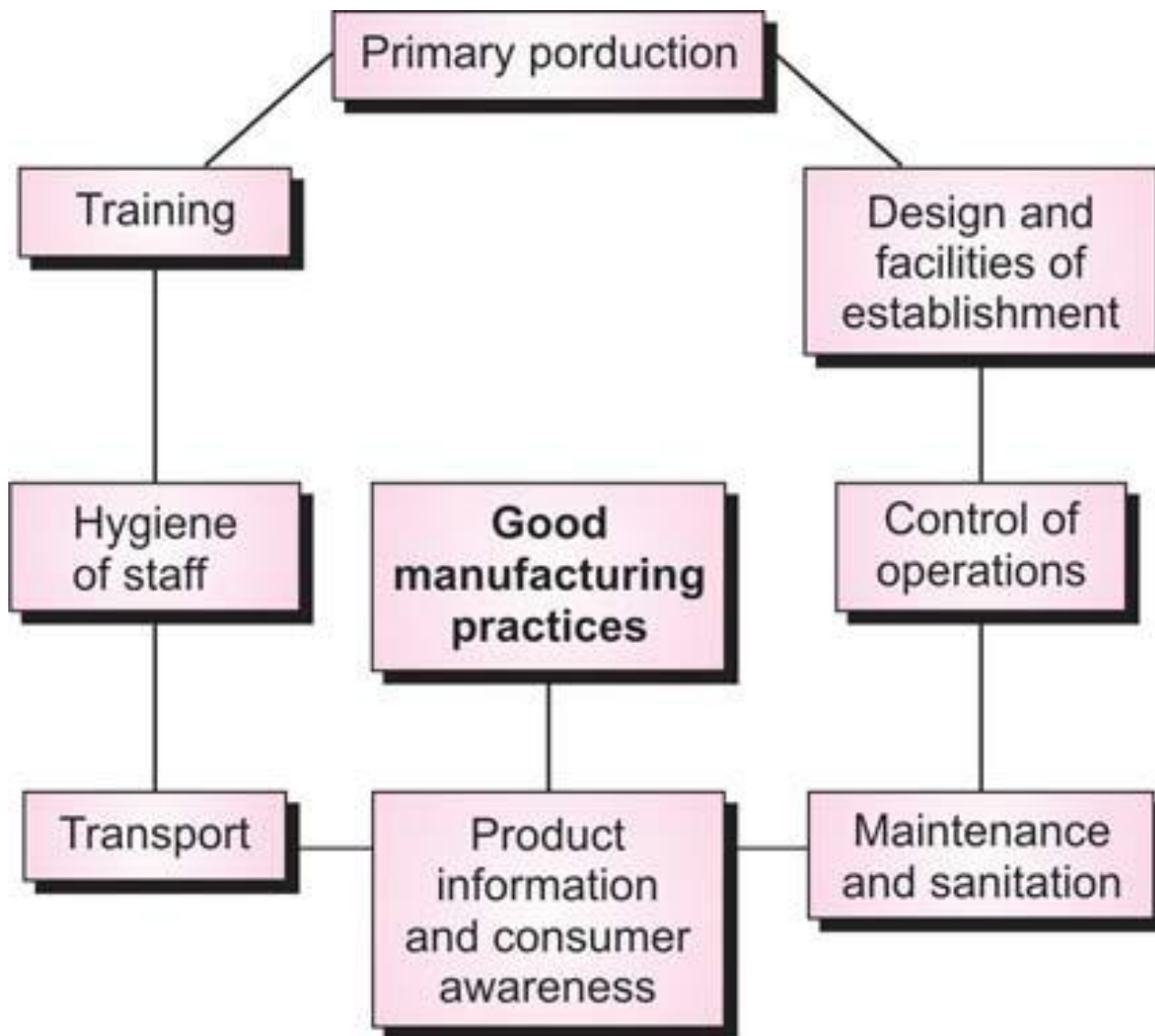


- ❑ Good Manufacturing Practices (GMPs) are referred to as practices and procedures performed by a food processor which can affect the safety food product.
- ❑ GMPs refer to the people, equipment, process and the environment in the production process.
- ❑ GMP is recognized for the control and management of manufacturing, testing and overall quality control of food products.
- ❑ The focus of GMP is primarily at diminishing the risks inherent in any food production.
- ❑ The design, documentation and implementation of GMP system of an industry is influenced by the specific needs of the products provided and the processes employed.



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COMPONENTS OF GMP



- ❑ HACCP is the acronym for Hazard Analysis Critical Control Point. It is an analytical tool that enables management to introduce and maintain a cost-effective, ongoing food safety program.
- ❑ HACCP involves the systematic assessment of the steps involved in a food manufacturing operation and the identification of those steps that are critical to the safety of the product.
 - The analysis allows management to concentrate resources into those manufacturing steps that critically affect product safety.
- ❑ A Hazard analysis will produce a list of Critical Control Points (CCPs), together with control parameters (with critical limits), monitoring procedures and corrective actions for each CCP.
 - For continuing safety and effectiveness of the plan, records must be kept of each analysis and the efficacy of the study must be verified on a regular basis, and when aspects of the operation change.

- ❑ HACCP is applicable to the identification of microbiological, chemical, and physical hazards affecting product safety. It may be applied equally to new or existing products.
- ❑ Effectiveness of HACCP is achieved through the use of multidisciplinary team of experts.
 - The team should have members from microbiology, chemistry, production, quality assurance, food technology, and food engineering.
- ❑ HACCP consists of 5 initial steps and 7 major principles:

Steps

1. Assemble HACCP team
2. Describe the product
3. Document intended use of product
4. Construct process flow diagram
5. Onsite confirmation of flow diagram

Principles

1. Identify hazards
2. Identify critical control points (CCPs)
3. Establish critical limits for each CCP
4. Establish monitoring action
5. Establish corrective action
6. Establish verification process
7. Establish record keeping procedure



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