



رَّبِّ زِدْنِی عِلْمًا My Lord! Increase Me in knowledge.

# FOOD SAFETY AND QUALITY MANAGEMENT

#### **DHND**

**YEAR-V** 

Session: 2015-2020

Dr. Shahid Mahmood Rana Associate Professor



INSTITUTE OF FOOD SCIENCE AND NUTRITION (IFSN)
UNIVERSITY OF SARGODHA, SARGODHA-PAKISTAN



\_\_

## FSQM L # 46.

## THE PUNJAB PURE FOOD RULES-2011

#### Road map

- Food Laws
- Structure of Food Laws
- The pure Food Ordinance 1960
- Current Status
- Punjab Pure Food Rules, 2007
  - > Food additives
  - > Preservatives
  - > Falovring compounds
  - Coloring matter in food
  - The Punjab Pure Food Rules, 2011
- Punjab Food Authority
  - ➤ Main functions
  - > On spot testing through rapid test kits

#### **Food Laws**

- Collection of laws and regulations that govern food production, distribution and consumption.
- Aims
  - > Food imports and exports
  - Safety
  - > Traceability
  - ➤ Labelling and product withdrawals and recalls

#### **Structure of Food Laws**

- Food law may be divided
  - > Basic food act
  - > Regulation

#### The Pure Food Ordinance 1960

- The pure food ordinance 1960 consolidates and amendes the law in relation to the preparation and sale of the food
- All provinces and some northern areas have adopted this law with certain amendments
- Its aim to ensure purity of food being supplied to people in the market and therefore, provides for preventing adultration

#### **Current Status**

- Pakistan's food imports are regulated by the federal government
- Food safety standards are regulated by the provincial governments
- Pakistan's 18th constitutional amendment devolved most of the functions including agriculture to the provinces

#### Current Status..

- As a result of this devolution, the provincial governments are developing their own different sanitary and phytosanitary regulations
  - which are beginning to introduce inconsistency in regulations across Pakistan
- Due to week enforcement, these changes are not impacting trade of goods between provincial borders yet
- The Federal Government is aware of the potential problems and is reviewing their options under the 18th Amendment

#### Punjab Pure Food Rules, 2007

- ► Short title and commencement \_\_\_ (1) These rules may be called the Punjab Pure Food Rules, 2007
- Definitions----In these, rules, unless the context otherwise requires, the following expressions shall have the meanings hereby respectively assigned to them
  - > Advertisement
  - **Approved**
  - > Appliance
  - >Claim

#### Punjab Pure Food Rules, 2007...

- > Food premises
- Form
- Fresh
- > Human consumption
- **Label**
- **Labeling**
- **Presentation**
- **Processed**

#### Food Additives

- Any safe substance that is intentionally introduced into on a food in small quantities in order to affect the food's keeping quality, texture, consistency, appearance, odour, taste, alkalinity, or acidity, or to serve any other technological function
- Include
  - ➤ Coloring substances
  - > Preservatives
  - Flavor and flavor enhancer
  - >Anti-oxidants and pre-conditioner

#### Food Additives.

- Not include
  - **≻** Vitamins
  - > Herbs and spices
  - > Yeast and yeast extract
  - ➤ Malt and malt extract

#### **Labelling of Food Additives**

- Common name and appropriate designation of chemical name
- The European community number(E.C. No)
- Total number of additives

#### **Preservatives**

- Any substance which is capable of inhibiting, retarding or arresting the process fermentation, acidification and other decomposition process
  - ► Benzoic acid
  - >Sulphurous acid
  - > Nitrates and nitrites of sodium and potassium, etc
  - ➤ Use of more than one preservatives prohibited
  - Container of food which contain preservatives not to be marked pure

## **Labelling Of Preservatives**

- Label carries the common name
- Chemical name
- Net weight
- Adequate instruction for use in accordance with limits prescribed for such for such preservatives
- The name and address of manufacturer
- The material safety data sheet

#### **Flavoring Compounds**

- Any substance that when added to the food capable of imparting flavor to that food
- No food shall contain any flavoring agent which are by themselves toxic or contain contaminant materials which are toxic
- Flavoring compounds may be of following types
- Natural flavor or natural flavoring substance

#### Flavoring Compounds ...

- Natural identical flavoring substances
- Food which contain natural flavoring agent should be label as "NATURAL FLAVOR" or "CONTAINS NATURAL FLAVORING"
- ► Food which contain artificial flavor should label as "ARTIFICIAL FLAVOR" or "IMITATION FLAOVR"

## Coloring Matter in Food

The addition to any article of food of any coloring matter in contravention of the following instructions shall be deemed to be contravention within the meaning of section 4

- a) Synthetic colors
- b) Natural Coloring Matters permitted
- c) Inorganic Colors and pigments prohibited
- d) Artificial and Synthetic coloring matter prohibited in raw food

## Coloring Matter in Food.

- a) Labelling of Colors
- b) Use of permitted synthetic colors restricted
- c) Maximum limit of Color
- d) Color mixture
- e) Color preparation

## a)Synthetic Colors

- No synthetic colour or mixture thereof except the following shall be used in the preparation of any food
- Where an extraneous colouring matter has been added to any article of food that shall be written on the label attached to any package of food so coloured statement in capital letters as (contains permitted food colours\*\_\_\_\_\_\_\_\_) Blank is to be filled with colour index name of colour used

#### b) Natural Coloring Matters Permitted

- Natural color used in food shall be
  - >Pure
  - > Free from extraneous matter
  - > Free from adulterants
- The following natural coloring matters may be used in or upon any article of food
  - > Annatto
  - Chlorophyll
  - Curcumin or turmeric
  - > Caramel

## c)Inorganic Colors and Pigments

Inorganic colouring matters or pigments shall not be added to any article of food

# d)Artificial and Synthetic colouring matter prohibited in raw food

■ The use of artificial or synthetic colouring matters in raw food stuffs which are consumed after cooking in the usual way is prohibited

## e)Labeling of colors

No person shall sell a synthetic colour or a mixture of synthetic colour unless the label on the package carries;

The common and the colour index name(s) of the synthetic colour

- \* The lot number of synthetic colour.
- \*The words "Food Colour".
- \* E.E.C.NO.

## f)Use of Permitted Synthetic Colors Restricted

- Use of permitted synthetic dyes in or upon any food other than those shown below is prohibited:
  - > Ice Cream
  - Dairy products except milk, dahi, butter, ghee, cheese, yogurt, condensed milk, cream, skimmed milk, toned milk recombined/reconstituted milk
  - Smoked fish
  - ➤ Biscuit, pastry, confectionery, savouries, wafer and similar products and sweets

## f)Use of Permitted Synthetic Colors Restricted..

- Peas, strawberries and cherries in hermetically sealed containers, preserved or processed papaya, canned tomato juice, fruit syrup, fruit squash, fruit cordial, jellies, jam, marmalade, candied crystallized or glazed fruits, fruit drink, flavored drinks
- Non-alcoholic beverages (carbonated water) except tea, cocoa, coffee, malted foods
- > Sweetened ice, thread candies and similar products

## g). Maximum Limit of Color

- The maximum limit of any permitted synthetic food colour which may be added to any food article enumerated in rule 5(f) shall not exceed 100 parts per million of final food or beverage for consumption except
- In case of food articles mentioned in clause (v) of rule 5(f) where the maximum limit of permitted synthetic food colour shall not exceed 200 parts per million of the final food or beverage for consumption

#### h). Color Mixture

- A mixture of two or more permitted synthetic food color conforming to the prescribed standard without diluents and filler material and meant to be used for imparting color to food.
- It may contain permitted preservatives and stabilizers.

#### I)Color preparation

- The colour preparation would be either in the form of liquid or powder
- **■Powder preparation** shall be reasonably free from
  - \* lumps
  - visible extraneous / foreign matter.
- **Liquid preparation** shall be free from



## h). Color Mixture.

- No person shall sell a preparation of permitted colors for use in or upon food unless its container carries a label stating the following particulars
- The word "Food colours preparation" in capital words in a prominent position, two times larger in size than other words (sentence) used on the container
- Various ingredients used in the preparation
- Name of the filler shall be in a prominent position equal in size to the words "Food colours preparation"

#### **Punjab Food Authority**

- Punjab Food Authority has been established under the "Punjab Food Authority Act 2011" to ensure availability of safe and wholesome food for human consumption
- The basic purpose is to lay out standards for food articles and to regulate their manufacturing, storage, distribution, sale and import

#### MAIN FUNCTIONS

- Formulate standards, procedures, processes, and guidelines in relation to any aspect of food including food business, food labelling, food additive, and specify appropriate enforcement systems
- Specify procedures and guidelines for setting up and accreditation of food laboratories
- Formulate method of sampling, analysis of samples and reporting of results
- Provide scientific advice and technical support to the Government in matters related to food

- Specify licensing, prohibition orders, recall procedures, improvement notices or prosecution
- Collect and analyse relevant scientific and technical data relating to food
- Establish a system of network of food operators and consumers to facilitate food safety and quality control;

  Organize training programmes in food safety and standards
- Promote general awareness as to food safety and standards
- Registration, licensing and other services
- Certify food for export

## On Spot Testing Through Rapid Testing Kits

- To check the quality of food items through "on the spot kits"
- Kits are used to detect various adulterants in milk, spices, tomato ketchup and also rancidity in cooking oil and ghee
- Instead of archaic practice of drawing samples across the board, the field teams draw samples of only those food products and send them to the laboratory, which fail to pass the rapid testing tests