

## Module 9

### Nutrition Labelling

# Module coverage



| Topic                  | Sub-topics covered                                                                                                                                                                                                                         | Learning objectives                                                                                                                                                                                                                                                                                                                         |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9) Nutrition Labelling | <ul style="list-style-type: none"><li>• Understanding food labels</li><li>• Key components of a food label</li><li>• Front-of-package labelling (FOPL) claims and labelling regulations</li><li>• Misleading labelling practices</li></ul> | <ul style="list-style-type: none"><li>✓ Learn to identify and understand the key components of a nutrition label. Develop the ability to interpret nutrition labels to make informed food choices. Recognize misleading labelling practices and make informed decisions. Understand the role of FOPL in guiding consumer choices.</li></ul> |

# Nutrition labelling



**Nutrition labelling** is a description intended to inform the consumer of nutritional properties of a food.

Nutrition labelling consists of two components:

- (a) Nutrient declaration.
- (b) Supplementary nutrition information



**Nutrient declaration** means a standardized statement or listing of the nutrient content of a food.

**Nutrition claim** means any representation which states, suggests or implies that a food has particular nutritional properties including but not limited to the energy value and to the content of protein, fat and carbohydrates, as well as the content of vitamins and minerals.

# Understanding the label

Understanding and correctly interpreting the labels on food items is vitally important to make good food choices and helps us to prepare healthy food.<sup>[104]</sup>



# Key elements of Food labelling



A food label should cover essential information for consumers, including the product name, ingredient list, allergen information, nutrition facts panel, and manufacturer's or distributor's contact information.<sup>[105]</sup>

## List of Key Elements:

1. Name of the food
2. List of ingredients
3. Nutritional information
4. Vegetarian/Non-vegetarian declaration
5. Declaration of food additives
6. Name and address of the manufacturer
7. Net quantity
8. Code No./Lot No./Batch No.
9. Date of manufacture and Best Before/Use By date
10. Country of origin (for imported food)
11. Instructions for use



# Understanding the logos



- **FSSAI logo with License number:** The FSSAI logo on a food product signifies that the manufacturer or seller has obtained a license from the FSSAI, demonstrating that they meet the necessary safety and quality standards.
- The License number is a unique identifier assigned to the food business operator. It allows consumers to verify the authenticity of the license and track the source of the product.
- **ISI** mark stands for the Indian Standards Institute mark. It is a certification mark issued by the Bureau of Indian Standards (BIS). It indicates that the product conforms to the quality and safety standards set by BIS.
- **AGMARK** for all agricultural products such as vegetable oil, pulses, cereals, spices, honey, fruits and vegetables.

# De-notified from compulsory BIS certification

| ISI Code          | De-notified from compulsory BIS certification                       |
|-------------------|---------------------------------------------------------------------|
| IS 15757          | Follow-up formula –complimentary foods                              |
| IS 11536          | Processed cereal based complementary foods                          |
| IS 1165           | Milk-powder                                                         |
| IS 1166           | Condensed milk, partly skimmed and skimmed condensed milk           |
| IS 12176          | Sweetened ultra high temperature treated condensed milk             |
| IS 13334 (Part 1) | Skimmed milk-powder, standard grade                                 |
| IS 13334 (Part 2) | Skimmed milk-powder, extra grade                                    |
| IS 13428          | Packaged Natural Mineral Water                                      |
| IS 14433          | Infant milk substitutes                                             |
| IS 17945: 2022    | Food for Special Medical Purpose intended for Infants               |
| IS 14542          | Partly skimmed milk powder                                          |
| IS 14543          | Packaged Drinking Water (Other than Packaged Natural Mineral Water) |
| IS 1656           | Milk- cereal Based Complementary foods                              |



# Understanding the color indications



## **GREEN dot for vegetarian food**

- The green dot inside a square is a mandatory symbol in India to identify vegetarian food products.
- It helps consumers, especially vegetarians, easily distinguish vegetarian food from non-vegetarian food.

## **BROWN triangle for non-vegetarian food, including eggs**

- The brown triangle inside a square is a mandatory symbol in India to identify non-vegetarian food products.
- It includes all types of non-vegetarian food, including eggs. This symbol helps consumers easily identify Non-vegetarian food.



# Food fortification



## Food Fortification

Fortification is the addition of key vitamins and minerals such as Iron, Iodine, Zinc, Vitamins A & D to staple foods such as rice, wheat, oil, milk and salt to improve their nutritional content. These nutrients may or may not have been originally present in the food before processing or may have been lost during processing.<sup>(ADO)</sup>

## Need for fortification of food.

Deficiency of micronutrients or micronutrient malnutrition, also known as “hidden hunger”. Access to safe and nutritious food is a must, and sometimes due to a lack of consumption of a balanced diet, a lack of variety in the diet or unavailability of food, people do not get adequate micronutrients. Often, there is considerable loss of nutrients during the processing of food as well. One of the strategies to address this problem is the fortification of food. This method complements other ways to improve nutrition, such as diversification of diet and supplementation of food.<sup>[1]</sup>

## Fortification Regulations

- Food Fortification Standards: Rice, wheat flour, milk, edible oil, and salt
- Enriched with vitamins A & D, iron, and folic acid
- Iodization in sea salt
- Purpose: Combat malnutrition



# Things to be followed while handling a packed food label



**Check the following points before purchasing or consuming the product:**

- Date of Manufacture, date of expiry or best before date to ensure freshness and whether it's safer to consume.

**List of ingredients and food additives:**

- Common allergy-causing ingredients include casein in milk, tree nuts including peanuts, eggs, fish, shellfish, soybean, and protein in wheat.
- Avoid food products that include these ingredients if the consumer is sensitive to them. Consuming these even in small quantities can cause severe allergic reactions in some individuals.
- Check the food additives for artificial/permitted flavouring and colors. Class I preservatives are preferred over class II.
- **Instructions for use:** Read instructions for use if mentioned. Make sure you follow these instructions for the best results.
- Storage conditions: Read instructions for storage, such as where to keep the food product and for how long.
- Declarations: Read any claims and declarations such as free from Argemone oil. For details about clarifications on claims.

Continuation in the next slide. . .

# Use of nutrition facts to choose processed foods wisely



- Serving size and net weight: Check the serving size. It is given in different formats, such as the number of servings per container/packet or the weight/volume in g/ml.
- Check the net weight of the packet. This is the total amount of product contained in the packet.
- The nutrition facts Label information is generally based on one serving/per 100g /100ml, but many packages may contain more than one serving or more than 100g or 100ml.

## Understanding calorie intake through the consumption of several serving sizes

- The number of servings/g/ml consumed determines the calories consumed.
- If there are two servings/200g/200ml in one packet and if a person eats the whole packet, the person has consumed double the calories and nutrients mentioned in the nutrition facts.

| NUTRITIONAL INFORMATION                 |                                  |        |
|-----------------------------------------|----------------------------------|--------|
| NUTRIENTS                               | APPROXIMATE COMPOSITION PER 100g |        |
| Energy                                  | kcal                             | 413    |
| Carbohydrates                           | g                                | 70.5   |
| - Total Sugars**                        | g                                | 22.0   |
| - Added Sugars                          | g                                | 7.0    |
| Total Fat                               | g                                | 9.5    |
| - Saturated fat (not more than)         | g                                | 4.6    |
| - Trans fat (not more than)*            | g                                | 0.05   |
| - Cholesterol                           | mg                               | 9      |
| Sodium                                  | mg                               | 85.00  |
| Biotin                                  | µg                               | 8.00   |
| Niacin                                  | mg                               | 7.00   |
| Folic acid                              | µg                               | 30.00  |
| Vitamin E                               | mgTE                             | 3.00   |
| Magnesium                               | mg                               | 45.00  |
| Potassium                               | mg                               | 375.00 |
| Copper                                  | mg                               | 0.30   |
| Supports normal cognitive development   |                                  |        |
| Iron                                    | mg                               | 7.80   |
| Supports normal immune system function  |                                  |        |
| Vitamin A                               | µgRE                             | 350.00 |
| Vitamin C                               | mg                               | 39.00  |
| Zinc                                    | mg                               | 2.80   |
| Supports normal muscle** & bone* growth |                                  |        |
| Protein**                               | g                                | 12.5   |
| Vitamin D                               | µg                               | 5.50   |
| Calcium                                 | mg                               | 475.00 |
| Phosphorus                              | mg                               | 200.00 |
| Contributes to normal energy metabolism |                                  |        |
| Vitamin B1                              | mg                               | 0.50   |
| Vitamin B2                              | mg                               | 0.40   |
| Vitamin B6                              | mg                               | 0.40   |
| Pantothenic acid                        | mg                               | 2.00   |

\*Other than naturally occurring trans fat  
\*\*Product contains ingredients like milk, wheat & fruit which have sugars naturally  
1 serve = 50g  
This pack contains 6 serves  
Per serve contribution to RDA - 10% energy, 7% added sugar, 7% total fat, 10% saturated fat, 1% trans fat and 2% sodium



# Each section of Food labelling



## **Name of the food:**

- Unambiguous name.
- Should accurately reflect the nature of the food.

## **List of ingredients**

- All ingredients must be listed in descending order of predominance by weight.
- Helps consumers make informed choices based on dietary needs and preferences.
- Prevents fraudulent practices

## **Nutritional information**

- Includes calories, fat, saturated fat, trans fat, cholesterol, sodium, carbohydrates, dietary fiber, sugars, protein, vitamins, and minerals.
- Helps consumers understand the nutritional value of the product.
- Enables consumers to make healthier choices.

## **Vegetarian/Non-vegetarian declaration**

- Mandatory for all food products.
- Green triangle for vegetarian, red triangle for non-vegetarian.
- Helps cater to diverse dietary needs and religious preferences.

# Each section of Food labelling



## **Declaration of food additives**

- Lists all food additives used in the product.
- Helps consumers make informed choices about the ingredients they are consuming.

## **Manufacturer information**

- Name and address of the manufacturer.
- Ensures accountability and traceability.

## **Net quantity**

- Indicates the weight or volume of the product.
- Helps consumers compare prices and make informed choices.

## **Code no./Lot no./Batch no.**

- Unique identifier for each batch of the product.
- Helps in product recall and traceability in case of any issues.

## **Date of manufacture & best before/Use by date**

- Indicates the date of production and the date by which the product is expected to retain its quality.
- Ensures product freshness and safety.

# Each section of Food labelling



## Country of Origin (for Imported Food)

- Helps consumers identify the origin of imported products.
- Enables consumers to make informed choices based on their preferences.

## Instructions for Use

- Provides information on how to store, prepare, and use the product.
- Ensures proper handling and consumption of the product.



# Purpose of nutrition labelling



To ensure that nutrition labelling is effective:

- In providing the consumer with information about a food so that a wise choice of food can be made.
- In providing a means for conveying information on the nutrient content of a food on the label.
- In encouraging the use of sound nutrition principles in the formulation of foods that would benefit public health.
- In providing the opportunity to include supplementary nutrition information on the label.
- To ensure that nutrition labelling does not describe a product or present information about it which is in any way false, misleading, deceptive or insignificant in any manner.
- To ensure that no nutrition claim is made without nutrition labelling.



# Special features of presenting nutrition labelling



## Format

Nutrient content should be declared in a numerical, tabular format. Where there is insufficient space for a tabular format, nutrient declaration may be presented in a linear format.

Nutrients should be declared in a specific order developed by competent authorities and should be consistent across food products.

## Font

The font type, style and a minimum font size, as well as the use of upper- and lower-case letters, should be considered by competent authorities to ensure legibility of nutrition labelling.

## Contrast

A significant contrast should be maintained between the text and background so that the nutrition information is clearly legible.

# Guidelines for nutrient declaration



- **Nutrient Declaration (3.2.1)**
- **Required for all products:**
  - Energy value.
  - Protein, available carbohydrate (excluding dietary fiber), and fat.
  - Saturated fat, sodium, and total sugars.
- **When applicable:** Nutrients with nutrition or health claims
  - **Nutrients relevant for good nutrition per national guidelines.**
- **Voluntary Nutrient Declaration (3.2.2)**
  - National regulations may mandate additional nutrients if considered essential for good nutrition.
- **Health or Nutrition Claims (3.2.3)**
  - Nutrients related to the claim must be declared per national guidelines.
- **Carbohydrate Claims (3.2.4)**
  - **Must include total sugars.**
  - **Optional: Starch or other carbohydrate constituents.**
  - **Dietary fiber (if claimed).**

# Guidelines for nutrient declaration



## **Fatty Acids or Cholesterol Claims (3.2.5)**

- Must establish saturated, monounsaturated, and polyunsaturated fatty acids.
- Cholesterol.
- Trans fatty acids (if required by national laws).

## **Vitamins and Minerals (3.2.6)**

- Declare only if: Recommended intake is established, or they are nutritionally significant.
- Present in amounts  $\geq 5\%$  of Nutrient Reference Value per 100 g/ml or per serving.

## **Codex Standards (3.2.7)**

- Follow specific Codex standards for nutrient declaration if applicable, ensuring no conflict with these guidelines.

# Front-of-Pack Labelling (FOPL)



The Food Safety and Standards Authority of India (FSSAI) is working to implement Front-of-Pack Labelling (FOPL) to help consumers make healthier food choices.

## Purpose:

- FOPL aims to provide simplified nutritional information on the front of packaged food products.
- This helps consumers quickly understand the nutritional content and make informed decisions.
- It also encourages food manufacturers to produce healthier products.

## Key Features:

- The FSSAI is proposing the Indian Nutrition Rating (INR) system. This system uses a star rating, from half a star (least healthy) to five stars (most healthy), to indicate the overall nutritional profile of a product.
- The rating considers factors like energy content, total sugars, saturated fat, and sodium.

## Goals:

- To combat the rise of lifestyle-related diseases like obesity and diabetes.
- To empower consumers with easy-to-understand nutritional information.
- To promote healthier food consumption.

# Misleading labelling practice



## **Misleading health claims:**

- Claims that a food product is "natural" or "healthy" without sufficient evidence.

## **Inaccurate nutritional information:**

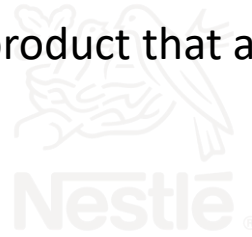
- Claims about the amount of nutrients in a food product that are not accurate.

## **Hidden ingredients:**

- Ingredients that are not clearly listed or that are present in high quantities but are not prominently displayed.

## **Misleading packaging:**

- Packaging that is designed to deceive consumers about the size or quantity of the product.



## Key Points:

- Provides crucial information to consumers.
- Enables informed purchasing decisions.
- Helps prevent food-borne illnesses.
- Promotes fair trade practices.
- Ensures compliance with food safety regulations.

