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'One third of India's Food Industry Unaware of Safety Standards'

Stakeholders in the food industry are expected to know the safety standards and related rules. But it is alarming to note that roughly one third of the key implementers are ignorant of the Act and the rules there under. A survey conducted by the Federation of Indian Chambers of Commerce and Industry (FICCI) concluded.

Food Safety and Standards Authority of India has been established under Food Safety and Standards Act 2006 which is a statutory body for laying down science based standards for articles of food and regulating manufacturing, processing, distribution, sale and import of food so as to ensure safe and wholesome food for human consumption and for aligning with international food trade.

Food Safety and Standards Act consolidated eights acts and orders to systematically develop the food processing industries in India.

Results of the survey indicate that 30% of the respondents, mainly the food industry that needs to mandatorily implement the act, are not even aware of the Food Safety and Standards Act.

Key findings of the survey included:

- About one-third of the industry is unaware about the FSSA and therefore ignorant about the rules there under. These will need to be mandatorily implemented in the near future.
- 86% of the industry is appreciative of the consolidation and unification that has happened with FSSA Act.
- 10% of the respondents look forward to further unification of duplicate requirements like BIS, Agmark etc. with FSSA.
- 92% of the industry hopes for harmonization of the new rules under FSSA with internationally accepted standards like Codex, amongst which the most important issues are food categorization system, food additives and labeling.
- Industry feels that they are not adequately represented in the authority and looks forward to increased representation.
- 25% of all the respondents felt that it is critical that FSSA should issue guidance notes and FAQs alongwith legislations for consistent interpretation and ease of implementation.

FSSAI makes the journey simpler

The food sector in India has been governed by many laws, under different ministries. This multiplicity of laws has given rise to many problems pertaining to maintenance of food standards. A single regulatory body and an integrated food law have been recognized as the best solution to resolve this issue. Food safety and Standards Authority of India presents an optimistic approach.

In a country like India that has a vast scope in area of food safety, a common food law will definitely help both, consumers and the industry.

Duties to fulfill

Some of the duties and functions of the food authority include :

- To regulate and monitor the manufacture, processing, distribution, sale and import of food, so as to ensure safe and wholesome food.
- To prepare the standards and guidelines in relation to food.
- To set the limits for use of food additives, crop contaminants, pesticides and veterinary drug residues, heavy metals, processing aids, myco-toxins, antibiotics & pharmacologically active substances and irradiation of food
- To regulate the mechanisms & guidelines for accreditation bodies engaged in certification of food safety management system for food business
- To set the procedure and enforcement of quality control.
- To define the procedure and guidelines for accreditation of laboratories.
- To prescribe method of sampling, analysis and exchange of information among enforcement authority.
- To conduct survey of enforcement and administration of this ACT in the country.
- To prescribe food-labelling standards including claims on health, nutrition and special dietary uses.
- To undertake risk assessment, communication & management.
- To provide scientific advice and technical support to the Central and State Governments in matters regarding framing of policies and rules.

Omega fatty acids: A boon to Healthy Living

The food industry has begun to recognize the importance of omega essential fatty acids and they are interested in manufacturing omega enriched products with improved ratio of omega-6 and omega03 fatty acids. Omega fatty acids have already made the way into staples such as bread, milk, yogurt as well as infant formula.

Over the past few years there has been a dramatic increase in the public interest for their health. Small changes to diet and lifestyle may help to improve the health and prevent the onset of diseases. Unfortunately, fats have been given a bad reputation, because in the form of fat we store excess calories. But all the fats are not bad; some fats have been shown to e health promoting and essential for our health. Fats are mixtures of saturated and unsaturated fatty acids; our body can synthesize some type of fatty acids but not all. Omega fatty acids are one of those types of polyunsaturated fatty acids (PUFAs) which are not synthesized by our body and must be obtained through diet of supplementation. That's why they are also called as essential fatty acids. Omega fatty acids are classified as omega-3 and omega-6 on the basis of position of double bond in their structure. In humans both omega fatty acids are metabolized to long chain fatty acids by desaturation & addition of extra double bond to the carboxyl group of the molecule. The parent omega-3 fatty acid is alpha linolenic acid (ALA), which is most abundant and occurs naturally in algae and plants.

Fish oil and plant oils are the primary dietary source of omega-3 fatty acids. In fish,

Omega-3 is available in the form of eicosapentaenoic acid (EPA) and decosahexaenoic acid (DHA). The omega-3 fatty acids content of fish differs in species and by their origin. Among fishes mackerel, herring & salmon are rich source of these fatty acids. Omega fatty acids also present in seeds & oils, green leafy vegetables, nuts and beans. Approximately 55% alpha-linolenic acid is present in flax (linseed) oil, and is a common source of omega-3 for vegetarians.

Omega fatty acids in disease Prevention

Omega fatty acids are important for human development and various biological functions. The human body needs these essential fatty acids to manufacture and repair cell membranes. A primary function of these fatty acids is the production of prostaglandins, which regulate body functions such as heart rate, blood pressure, bold clotting, and fertility and play a role in immune function by regulating inflammation and encouraging the body to fight infections.

Omega supplements in processed food

Omega fatty acids have already made the way into staples such as bread, milk, yogurt as well as infant formula. The consumption of these has increased over the past decade due to the change in dietary habits and health trends. Recently, the food industry has begun to recognize the importance of omega essential fatty acids and they are interested in manufacturing omega enriched products with improved ration of omega-6 and omega-3 fatty acids.

Natural Colours for Foods

Colours and Flavours make our life vibrant as we want it to be. Food is not an exception ! Certain flavours are linked to certain colours by people. Colour can influence the perceived flavor in almost every product. Everyone is responsive to the colour of foods. Appetite is stimulated or stifled in direct relation to the colour perceived. This is the primary reason for using colours in foods by food manufacturers. Colour in one form or another has been added to our foods for centuries. Commercial applications of colurs in food are for the following reasons :

- Masking colour loss due to environmental factors like light, air, extremes of temperature, moisture and storage conditions.
- Covering up natural variations in colour
- Enhancing naturally occurring colour
- Providing identity to foods
- Protection flavors and vitamins from damage by light
- Decorative or artistic purposes such as cake icing

In recent years, people have become more conscious about the ingredients used in foods they consumer and want their food as natural as possible. This combined with technological developments has influenced the increased use of natural food colours. Today, industry can opt various naturally derived colours depending on their process and application requirements.

Natural colours

Anthocyanins, betalains and carotenoids give grapes, beetroot and bell peppers their strong red to yellow hues, while chlorophylls are responsible for the green of many leafy vegetables.

The palette of colours ranges from red to blue-violet and depends on the pH value of the end product. Well=balanced anthocyanins mixtures obtained from colour non-alcoholic drinks, sweets and cereals. These colours are extremely stable and have a wide array of intense nuances. Beetroot contains betanin, which is especially suitable especially suitable for colouring foods with a slightly sour to neutral pH value. Colours can vary from pale pink to vivid magenta, depending on the dose. This colour is ideal for colouring dairy products and is often used for strawberry flavoured ice cream.

Fruit products and cream fillings are also coloured using these extract. Carotenoids are natural yellow colours found in many plants (e.g. carrots, bell peppers, tomatoes, cucumbers). They include carotenes (E160a, beta-carotene), annatto or bixin (E160b), paprika extract or capsanthin (E160c) and lycopene (e160d). Beta-carotene, which is converted to vitamin A in the body, is also known as provitamin A. Of all the carotene variants, beta carotene (E160a) is the one most commonly used as a food additive. It is synthesized by micro organisms.

Compiled & Prepared by

Kiran Paralkar
Renu Sanghvi

Contact Address

FTI Food Tech Pvt. Ltd.
305, Anmol Sagar Darshan
9/1, New Palasia
Indore – 452003 INDIA
Tele # +91 731 4045681
Fax # +91 731 4065681
Email –contact@foodtechinc.com