

# THE AWARE CONSUMER

(SUBSCRIBER COPY NOT FOR RESALE)

[www.theawareconsumer.in](http://www.theawareconsumer.in)

7 June 2021 | **WORLD FOOD SAFETY DAY**

THEME: **SAFE FOOD**

**NOW FOR A HEALTHY TOMORROW**

## RESEARCH FEATURE

Packaged Food –  
How Healthy Is It?

## OUT OF THE BOX

Is Your Favorite Eating  
Joint Hygiene Rated?

## INTERVIEW

Mrs. Rita Teotia, IAS (Retd),  
Chairperson of FSSAI



**PLUS**

**ROUND UP • MY MARKET • THE PRESCRIPTION**



**fssai**

  
FOOD SAFETY AND STANDARDS  
AUTHORITY OF INDIA

*Inspiring Trust, Assuring Safe & Nutritious Food*  
Ministry of Health and Family Welfare, Government of India



**Food Standards**  
To help you get the best, we ensure that it upholds the global benchmark



**Business**  
We ensure that the food you purchase has the correct information & safe to ensure trust.



**Eat Right India**  
सही भोजन, बेहतर जीवन.  
We make sure that every citizen of India gets safe & wholesome food.



**Food testing**  
We ensure that the food is adulteration free & of good quality



**Inspections**  
We check your food to ensure safety



**Citizens**  
You can reach out to us with your queries



**States**  
We work through our State departments to reach out to each and everyone of you

**fssai**

**FARM TO FORK WE ARE WITH YOU**

POST HARVEST



PROCESSING



PACKAGING



TRANSPORT



RETAIL/RESTAURANT



FOOD PREPARATION



CONSUMER



Connect with us:



[fssai.gov.in](http://fssai.gov.in)



[facebook.com/fssai](https://facebook.com/fssai)



[twitter.com/fssaiindia](https://twitter.com/fssaiindia)



9868686868



MESSAGE FROM PUBLISHER & EDITOR

# FOOD SAFETY

## – From Farm To Fork



**THE FOOD WE** eat travels from the farm to the factory to our homes and plates. It is liable to fall prey to various health hazards during this journey through the supply chain – be it during production, processing, distribution, storage, sale, preparation or consumption.

The food contamination can be physical, chemical or biological, ranging from foreign objects and harmful toxins to bacteria, viruses or parasites. Consuming unsafe food is risky on various levels as researchers have identified more than 250 food-borne diseases that increase both morbidity and mortality in the society. The most common illnesses are food poisoning and diarrhoea. Contaminated food can also lead to chronic diseases like cancer, kidney or liver failure and the link is hardly established, if at all.

Driven by rising concerns over the global burden of food-related illnesses and its hindrance to socio-economic development, the World Health Organization launched an 'Initiative to Estimate the Global Burden of Foodborne Diseases' in 2006. The 2015 report reveals that a whopping 600 million that narrows down to almost 1 in 10 people in the world, fall ill after consuming contaminated food every year. Of these, 4,20,000 people die; one-third (1,25,000) of which are children under the age of 5 years.

We cannot afford to ignore food safety in the face of these staggering statistics. However, the looming

problem is that it is not easy to identify contaminated food as it rarely looks, tastes or smells different from the normal.

Ensuring complete food safety calls for a systemic approach wherein every stakeholder during the production, sourcing, preparation, storage, sale and cooking of food, is responsible and accountable for preventing, detecting and managing food-borne diseases.

The WHO is also regularly calling on the governments, the food industry and individuals to do their bit to make food safe for consumption. Food producers, suppliers, handlers and the consumers need to be educated and trained on the appropriate food safety-related behaviors and practices.

Let us join hands and ensure that the food we eat is always safe!

Prof. Bejon Kumar Misra  
Publisher & Editor  
bejonmisra@theawareconsumer.in

# TRUST THE EXPERT SOLUTION FOR YOUR MULTIPLE SKIN PROBLEMS

Sweat is a natural and healthy bodily function. However, sweat trapped in your skin folds, friction and lack of ventilation cause multiple skin problems such as redness, rashes, prickly heat and even fungal infections.

Your regular prickly heat or cooling powder only provides temporary relief. Candid Dusting Powder contains Clotrimazole which is globally proven for its long lasting\* effectiveness against multiple skin problems\*\* making it the Expert Skin Solution.

**NO. 1** **DOCTOR'S PRESCRIBED** <sup>+</sup>  
**BRAND**



Why Candid Dusting Powder is the Expert Skin Solution	Candid Dusting Powder	Normal Prickly heat/ Cooling powder
Formulated with globally proven antifungal agent	✓	✗
Ensures prickly heat rash/boils do not lead to fungal infection	✓	✗
Proven long lasting solution* and not temporary relief	✓	✗
Effective against itching, irritation, redness and rashes caused due to fungal infections	✓	✗

**1 EXPERT SOLUTION FOR 4 SKIN PROBLEMS**



**PRICKLY HEAT ~**



**REDNESS**



**RASHES**



**FUNGAL INFECTION**

PRAFUL D. SHETH

Editorial Board Member

# FOOD REGULATIONS IN INDIA



**THE HARSH FACT** is that consumption of unsafe food not only debilitates lives through illness, disability and premature death, but also hampers the economic development of the country. Many low and middle income economies end up losing as much as US\$ 95 billion in productivity every year.

The WHO provides guidelines to the countries for establishing and implementing food safety strategies and policies to create food safety in the global marketplace. Additionally, there are various international regulatory bodies that evaluate food safety by way of certification and auditing services for global food manufacturers.

However, neither the WHO nor the other agencies can enforce food safety laws in any country. It is up to the country to establish its own food safety laws along with regulatory bodies to actively implement the legislation.

In India, the Manmohan Singh government passed the Food Safety and Standards Act (FSSA) in 2006 as a holistic approach to streamline the way food is monitored across the country. It consolidated nine existing food safety laws spread ACROSS numerous ministries and departments under a single umbrella

and initiated the rule of 'One Nation – One Food Law'.

The Food Safety and Standards Authority of India (FSSAI) was established in 2011, under the Ministry of Health & Family Welfare, Government of India, as an independent statutory body with a clear mandate to ensure safe, wholesome and hygienic food for the consumers. As the country's apex food regulator, the FSSAI is entrusted with laying down science-based standards for food articles and regulating their manufacture, storage, distribution, sale and import. It also provides scientific advice and technical support to the Centre as well as state governments for framing policies and rules related to food safety and nutrition. Furthermore, the agency strives to promote general awareness about food safety and food standards among the public. All food business operators are required to obtain a mandatory FSSAI license before commencing operations.

With actively involved members and an independent work culture, the FSSAI has instituted certain novel and successful programs over the years to strengthen the food safety infrastructure and ensure that all foods are safe for human consumption. ▶



15

RESEARCH FEATURE

PACKAGED FOOD -  
HOW HEALTHY IS IT?



Packaged food goes hand-in-hand  
with convenience, but does it  
spell nutritious too?



23

HORIZON

NEW REALITIES THAT WILL SHAPE  
THE FUTURE OF FOOD



Global trends and technology are  
literally revolutionizing the food  
industry. It is hoped that the  
ongoing transformations will drive us  
towards a fairer, healthier  
and more sustainable food future!



32

INTERVIEW



**Mrs. Rita Teotia, IAS (Retd),  
Chairperson of FSSAI**

39

MY MARKET

FRONT-OF-PACK LABELING -  
A PUBLIC HEALTH STRATEGY



Front-of-Pack (FoP) labeling is a  
crucial intervention proposed by the  
WHO and Codex Alimentarius to reduce  
consumption of processed foods and  
beverages that are associated with  
unhealthy diets.



42

OUT OF THE BOX

IS YOUR FAVORITE EATING JOINT  
HYGIENE RATED?



Did you know that the FSSAI is  
sprucing up the quality of outside food  
with the 'Hygiene Rating Scheme'  
initiative?



47

IN FOCUS

FOOD - WASTE NOT, WANT NOT!



Food is wasted at  
every level from  
the initial production  
down to the final  
consume.

ARUN SINGHAL  
CEO, FSSAI

“The ‘Eat Right India’ movement initiated by FSSAI has gone a long way in creating awareness amongst people about eating safe, healthy and sustainably. Today, we see clusters of street vendors across the country, campuses certified as Eat Right Campuses and food service establishments, rated under the Hygiene Rating scheme.”



# ROUNDUP



Safe and nutritious food is the key to a healthy future!



Empowering India  
Towards A Healthy Future

## - Atmanirbhar Bharat

Instilling confidence among the consumers that the food is safe to eat is a crucial part of the food safety ecosystem. The FSSAI's Eat Right India initiative is a huge step in this direction.

DATA BRIEFING

20

Clean Street Food Hubs have been certified in different parts of the country



**THE COVID-19 PANDEMIC** has brought the world to a halt, forcing governments all over the world to strengthen their public health systems. However, the far deadlier 'silent epidemic' of malnutrition remains overlooked.

According to the 'Chronic Hungry: FAO State of Food Security and Nutrition in the World, 2018' report, 196 million Indians are undernourished. And yet, another 135 million are overweight/obese (Prevalence of Obesity in India: A Systematic Review Diabetes & Metabolic Syndrome, Clinical Research & Reviews, Ahirwar & Mondal, 2019). This puts the latter category at risk for non-communicable diseases such as high blood pressure, heart disease and diabetes.

Furthermore, the number of cases of food-borne illnesses is expected to rise from 100 million in 2011 to 150–177 million by 2030 (The Economics Of Food Safety In India – A Rapid Assessment by Wageningen Economic Research and ILRI, 2017). This will directly impact the human body's ability to absorb nutrients and fight infection, rendering millions vulnerable to a host of diseases.

The role of the FSSAI is critical in the light of this nutrition reality in India. Established under the Food Safety and Standards Act (FSS), 2006, the FSSAI is the apex food regulatory body in the country with the mandate to ensure safe and wholesome food for all citizens. As a part of its core regulatory functions, the FSSAI sets science-based, globally benchmarked standards for food safety, ensures credible food testing for quality and compliance to these standards and processes through effective surveillance mechanisms.

### The Eat Right India Program

The FSSAI has embarked on a series of initiatives to ensure safe, healthy and environmentally sustainable food for everyone through the 'Eat Right India' movement. This movement is a large-scale effort to transform the country's food landscape and incorporates all the key players in the food ecosystem. With the tagline, '**Sahi Bhojan. Behtar Jeevan**', Eat Right India is aligned with the government's focus on preventive and promotive public healthcare as well as other flagship programmes like Ayushman Bharat Yojana, POSHAN Abhiyaan, Anemia Mukh Bharat and Swachh Bharat Mission.

In the wake of the current pandemic, the provision of safe and healthy food has gained greater prominence. Under Eat Right India, the regulator has launched different programs targeting both food businesses and consumers to create an environment of right food practices and habits.

Let us take a look at some of the novel and varied initiatives, FSSAI has taken recently.

- As per the FSS Act, 2006, food businesses are mandated to be licenced/registered with FSSAI. For this, the revised FSS (Licensing & Registration) Regulations simplify the process of both application and renewal, thus entailing reduced time and effort. The FSSAI is also in the process of releasing new

regulations to facilitate and speed up import clearances. These recent developments by the FSSAI support ease of doing business.

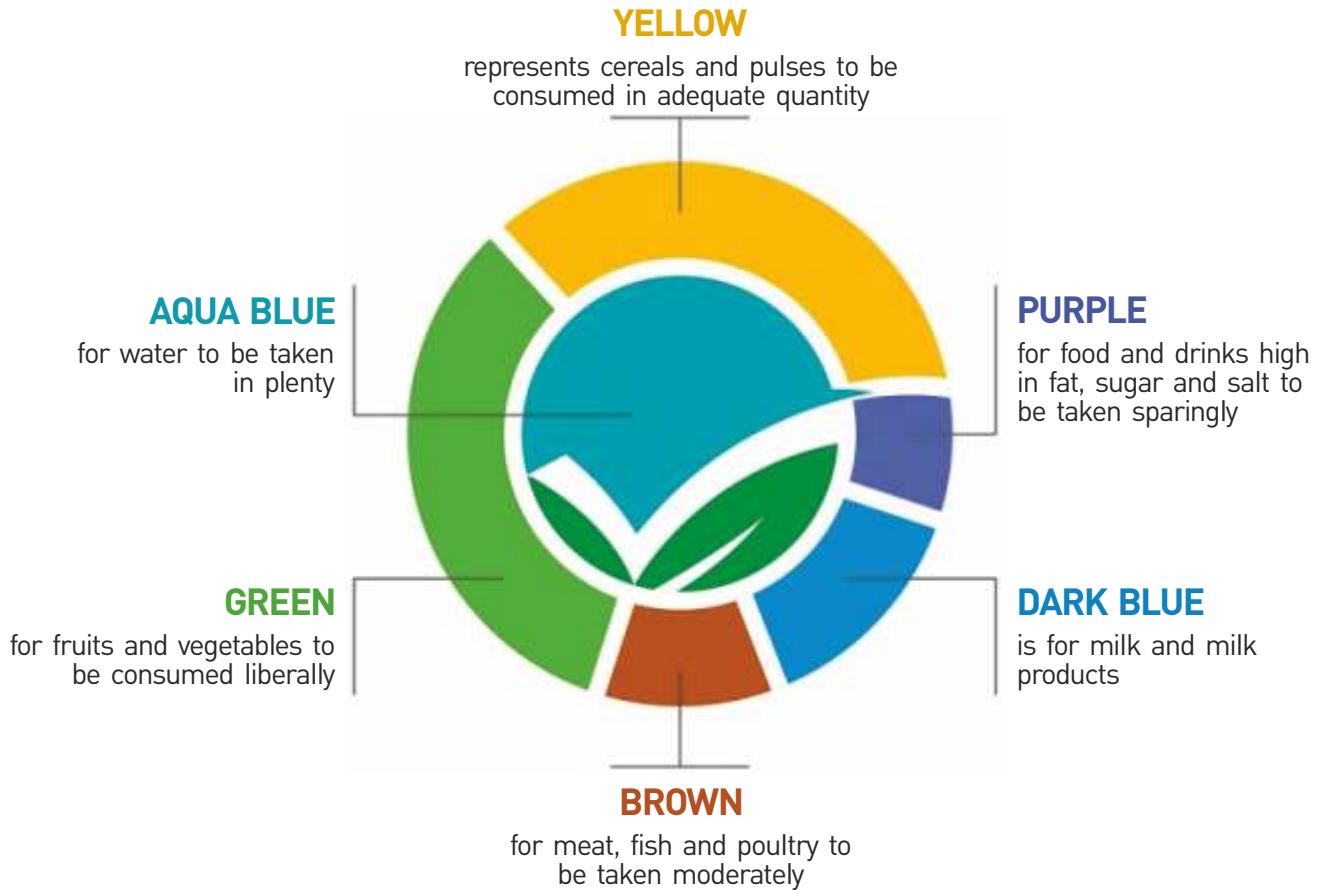
- To strengthen food testing, FSSAI has approved 53 rapid food testing kits/devices to ensure faster, better and cheaper real-time testing of food even at the field level, thus assuring safe and good quality of food while raising the bar for food safety in the country.
- The regulator is also concentrating on periodic risk-based inspections, third-party audits and focused checks to ensure that safe and quality food products are available in the market and earn the trust of the consumers.
- To build capacity of food businesses on food safety, the FSSAI has launched 'Food Safety Training and Certification' (FoSTaC) – a unique program to ensure that there is a trained and certified Food Safety Supervisor (FSS) on each food business premises. Almost 4.5 lakh FSS have been trained so far. What's more, the FSSAI tried to meet the novel demands of the unprecedented pandemic by quickly introducing an online training programme on hygiene practices required during COVID-19, which has already trained over 2 lakhs FSS.
- Given the large unorganized food sector in India - comprising a range of small food businesses like street food vendors, dhabas, eateries etc. - several benchmarking and certification schemes to improve their food safety and hygiene standards are in place. These involve training of food handlers and third-party audits of food businesses. Schemes such as 'Clean Street Food Hub', 'Clean and Fresh Fruit and Vegetable Markets', 'Eat Right Station' and 'Blissful Hygienic Offering to God' (BHOG) for places of worship are targeted to clusters of vendors. So far, 20 such clusters – of Street Food Hubs have been certified, thereby raising the confidence of consumers in consuming food from local street food hubs.
- For individual outlets such as restaurants, catering establishments, sweet and meat shops the 'Hygiene Rating Scheme' has been introduced. Over a thousand food outlets have been rated so far to empower consumers to make informed food choices.
- The FSSAI has launched mass awareness campaigns to reduce salt, fat and sugar in the diet, - like 'Aaj Se Thoda Kam' and 'Trans-Fat Free India by 2022' - to reduce the risk of non-communicable diseases.
- Going forward, the consumers will be further empowered to make healthy choices under the new voluntary regulations on 'Menu Labelling' that require bigger food service establishments to declare the nutrition information of each food item per serving.

### Scaling Up Food Fortification

- Large-scale food fortification is also being promoted to address deficiencies of vitamins and minerals like iron, Vitamin B 12 and folic acid that lead to conditions like



# The 'Eat Right India' logo – What does it actually depict?



iron-deficiency anemia. So far, fortified foods such as edible oil, milk, wheat flour, rice and salt - with the +F logo to identify them - are being supplied in the open market and in some Government Safety Net Programmes like ICDS, MDM and PDS in 19 states and 5 union territories.

- Another important regulation to boost fortification of food will now cover standards for fortification of species-identified milk like cow, buffalo, camel, goat, sheep etc; for all kinds of multigrain atta and categories of processed foods covering cereal products, bakery wares and juices – with various specified micronutrients, except in products that are high in fat, salt and sugar.

## Targeting Schools – Catching Them Young

- To target consumers in different environments - schools, education institutes, workplaces, hospitals etc., the 'Eat Right School' and 'Eat Right Campus' schemes have been launched. Under these initiatives, certification is awarded based on compliance to predefined benchmarks on provision of safe, healthy and sustainable diets in these environments.
- The food authority has recently finalised the FSS (Safe Food and Healthy Diets for School Children) Regulations, 2019 that will ensure wholesome food to school children by not allowing food items high in fat, salt and sugar to be sold and advertised within school premises or even within a 50 metre radius of the school gates.



**Eat Right, Stay Fit,  
Tabhi India Superfit...**

## Some of the Commendable Achievements

- Over **40** Campuses have been awarded 'Eat Right Campus' certificates across the country including IIT Gandhinagar, IIT Roorkee, LBSNAA, Mussoorie and other large private corporates.
- **20** Clean Street Food Hubs have been recognized and certified in different parts of the country.
- **4** railways stations have been awarded the 'Eat Right Station' tag including Mumbai Central and Chhatrapati Shivaji Terminus at Mumbai and Anand Vihar Railway Station at New Delhi.
- **157** different fortified products are available in the open market.
- **47%** of the top ten players in edible oil and **36.6%** of the organized milk industry are fortifying their food products as per the FSSAI standards.
- **82** food distribution agencies have donated over 50 million meals to those in need in over 100 districts.

In addition to the Eat Right India movement, many more concrete measures to ensure that the food in the country is safe and nutritious are ongoing with many improvements on the anvil.

The FSSAI amended the Food Safety and Standards (Prohibition and Restriction on Sales) Regulations in 2018 to further cap the amount of trans fatty acids (TFA) in oils and fats from the current permissible limit of 5%. Manufacturers are required to bring down the trans fat content to 3% by 2021 and 2% by 2022 in line with the WHO's call for global elimination of trans fats by 2023. The regulation applies to edible refined oils, vanaspati (partially hydrogenated oils), margarine, bakery shortenings and other mediums of cooking such as vegetable fat spreads and mixed fat spreads.

It also issued an order in February, 2020 requiring all traditional sweet makers to display the 'Best Before' and the Manufacturing Date of non-packaged sweets.

Work is ongoing on bringing animal feed under the purview of the FSS Act, 2006 and framing feed regulations accordingly. In the interim, the FSSAI issued a direction in 2019 that animal feed for food producing animals cannot be manufactured, imported, distributed and sold without the Bureau of Indian Standards (BIS) mark.

In sum, a lot is being done – but we still have a long way to go – to increase consumer confidence in the food while keeping it safe and sustainable.

- The 'Eat Right Toolkit' has been developed to reach citizens at the grass roots level through frontline health workers to promote right eating habits. This is being mainstreamed through Health and Wellness Centres under Ayushman Bharat Yojana.
- The FSSAI also releases 'Myth Busters' and 'Guidance Notes' for consumers from time to time to address any growing concerns related to food and clarify misconceptions at large.

With time, this 360° approach is expected to usher in a culture of eating right across the country.

In addition to the above, the Eat Right India movement is also spearheading different initiatives to encourage and support sustainable food practices to protect the environment. Such as:

- 'Jaivik Bharat' for easy identification of authentic organic food
- 'Save Food, Share Food' to reduce food waste and promote food donation
- 'Safe and Sustainable Packaging in Food and Beverage Sector' to reduce the use of plastics
- 'Repurpose Used Cooking Oil' (RUCO) for safe and healthy use of cooking oil and repurposing used cooking oil to make biodiesel/soap etc.

It's not just about promoting safe, healthy and sustainable food practices only. These Eat Right India initiatives are also generating economic opportunities in the food ecosystem through increased demand for trained food testing and regulatory personnel, training, auditing, implementation and development partners, petty food vendors and small businesses and creating a thriving circular economy in line with Prime Minister Modi's vision of 'Atmanirbhar Bharat'.

Eat Right India is ultimately a people's movement. Therefore, it puts the onus on everyone to transform the way India eats and usher in a culture of right eating. ▶



# DISPO VAN

THE TRUSTED BRAND  
PROMOTING PATIENT SAFETY

**MADE IN INDIA,  
CURING PEOPLE  
AROUND  
THE GLOBE**



Precision Engineered, Affordable & Easy to use.

**Consumers, Beware**

# Repurposing Used Cooking Oil – The FSSAI Way!

Are you aware of the many dangers of reusing used cooking oil? 'Recycle and Re-use' is the mantra of FSSAI's RUCO initiative – it safeguards consumer health while converting used cooking oil to bio-fuel.

Repeated frying in the same edible oil renders it toxic to human health.



IMAGE: PIXABAY

**COOKING OIL IS** a staple in Indian kitchens. We cannot imagine cooking our regular vegetables and curries without a good dollop of oil to start with. The *tadka* of herbs and spices adds a wholesome flavor and delectable aroma to the food. And our favorite pakodas, wadas and other finger foods would never be possible without deep frying in oil.

But what happens to the oil that has been used for frying? Alas, it's a fact that vegetable oil forms a major chunk of our kitchen budget. We tend to re-use the same oil for frying at least a couple of times.

Not many people may be aware that reusing cooking oil leads to a drastic change in the physical and nutritional properties of the oil. Toxic Total Polar Compounds (TPC) are formed on repeated frying that can lead to various diseases like hypertension, atherosclerosis, Alzheimer's and liver diseases. What's more, the level of TPC increases every time the oil is re-heated, more so when it is used for frying.

Food business operators also opt for reusing the same oil for frying again and again even to the extent of topping off it off with fresh oil every time the oil level in the *kadhāi* drops down. The bigger food outlets and hotels often dispose their used cooking oil for industrial use like manufacturing soaps, cosmetics or pet food. However, it is also

purchased by roadside food vendors who try to cut corners by getting the used cooking oil at cheaper prices.

Even when the households or food vendors finally dispose the 'overused' oil, it is brazenly poured down the drain and ends up clogging the drainage system. Therefore, used cooking oil proves to be hazardous both for health and the environment.

According to the estimates released by Biodiesel Association of India (BDAI) in 2019, of the 2,467 crore litres of edible oil consumed annually in the country, nearly two-thirds is used by households and food business operators (FBOs) and the remaining by the manufacturing industry. The total amount of used cooking oil generated by FBOs is estimated at 11.45 lakh tonnes. The FSSAI estimates that as much as 220 crore litres of used cooking oil can be recovered for the production of biodiesel by 2022.

## The FSSAI Intervention

Realizing the importance of monitoring the quality of vegetable oils during frying for safeguarding consumer health, the FSSAI has fixed the maximum permissible limit for TPCs at 25% beyond which the vegetable oil is unsafe and should not be used. All FBOs are required to comply with this regulation since 1st July, 2018.

A month later, the FSSAI also flagged off the Repurpose Used Cooking Oil (RUCO) initiative in

association with the BDAI for collecting and converting used cooking oil into bio-fuel.

The FSSAI is implementing a 'Triple E strategy' - Education, Empowerment and Eco-system - aimed at diverting UCO from the food value chain, thus curbing illegal practices like adulteration of new cooking oil with used oils and also reducing repeated usage of the same cooking oil by various food joints. This will go a long way in ensuring food safety and good health for the people of the country.

Along with this, the conversion to bio-fuel will reduce our import bill of crude oil, thus aiding in achieving energy security, climate change mitigation and environmentally sustainable development.

## How Does The EEE Strategy Work?

The FSSAI has issued useful Standards of Procedure (SOPs) for safe handling and disposal of UCO by

consumers and both small and big FBOs. The State Food Safety Commissioners have been charged with creating education programs and also carrying out surveillance and enforcement activities. The rule that FBOs whose consumption of edible oils for frying is more than 50 litres per day should not reuse the same oil more than three times, is being

strictly implemented. An online web portal has also been launched for tracing, tracking and collecting used cooking oil.

A nationwide eco-system to collect used cooking oil is being instituted and there are 19 aggregators in 14 states and union territories as of now. Both household consumers and FBOs can give their used cooking oil to the authorised aggregators or BDAI-registered collection agencies, state biodiesel boards and other agencies nominated by the state governments and actually be paid for it, at pretty reasonable prices at that. McDonalds' is one of the large food firms to flag off RUCO in Pune and Mumbai.

The aggregators will in turn give it to the biodiesel manufactures for production of biodiesel which will be used for blending with diesel. 29 biodiesel manufacturers have enrolled under RUCO till date. This biodiesel can be used in any vehicles or equipment that runs on diesel.

## Conclusion

Consumers on their part should play an active role by watching out for the RUCO label on the food outlets they patronize. This indicates that it conforms to the RUCO ecosystem and does not reuse the cooking oil. ▀

Source: Secondary research & media reports



## PACKAGED FOOD – HOW HEALTHY IS IT?



Packaged food goes hand-in-hand with convenience, but does it spell nutritious too? A recent global survey compares the packaged foods and drinks of different countries - from the healthiest to the most unhealthy – based on various parameters.



*How healthy is our packaged food – let's find out...*

**HEALTHY FOOD AND** good health are two sides of the same coin. Indeed, we cannot expect to stay in the pink of health unless we consume safe, nutritious and wholesome foods, that too on a regular basis.

And then there is packaged food – all our biscuits, chips, breads, cereals, *bhujias* and other savoury snacks as well as aerated and sweetened drinks. The list doesn't end there either. Packaged food also includes other items like instant noodles, pastas, cakes, processed cheese, instant mixes, soups, sauces, dressings, canned beans and tomato purees and more. Then there are frozen foods that are flooding the market, like French fries, parathas, cutlets, momos, kababs, chicken tikkas and more.

These bagged, canned or boxed foods spell convenience in capital letters. Most of them are ready-to-eat and can be consumed anytime, anywhere - when on-the-go or just lazing around. Some require, defrosting, heating or other minor work before they can be consumed. But the quick and convenient factor abounds as hardly any cooking or preparation is required per se while they taste oh-so-good!

### What's in the packet?

Packaged and processed foods are affordable and accessible – there is always the temptation to reach out to the supermarket shelf, add them to your virtual shopping cart or ask your local *kiranawala* to deliver them home.

But fact is that all packaged food has been processed – cooked, canned or frozen in different manners while adding preserving components that changes the nutritional composition of the actual food. This means that they contain saturated fat, sodium, sugars and refined carbohydrates along with other artificial ingredients such as food colors, chemicals, texturing agents, flavors and preservatives. Especially, the ultra-



**Indian packaged foods and drinks were found to be the most energy-dense with a kilojoule content of 1515 kJ per 100g.**

processed food products of the lot contain high fats, sugars and salt and are also stripped of the essential dietary fiber and other nutrients.

Needless to say, most of the packaged foods are crammed with the dreaded Calories. They also prove to be the precursor for obesity, type 2 diabetes, high blood pressure, cardiovascular diseases and other non-communicable diseases (NCDs). The NutriNet-Santé study, 'Ultra-Processed Food Intake And Risk Of Cardiovascular Disease' estimates that ultra-processed food intake now accounts for 25% to 60% of a person's daily energy intake throughout much of the world. The study involving more than 100,000 adults and published in March, 2019 reveals that eating just 10% more ultra-processed foods can lead to a direct 10% increase in the risks of cardiovascular disease, coronary heart disease and cerebrovascular disorders.

Another 2019 study on 'Association Between Consumption Of Ultra-Processed Foods And All-Cause Mortality' (involving almost 20,000 adults) states in no uncertain terms - Eating more than 4 servings of processed food daily is linked with an increased risk of all-cause mortality. What's more, for each additional serving, all-cause mortality risk increases by 18%.

Processed food manufacturers try to allay the consumers' fears by adding fortifying compounds like vitamins, minerals and fiber that is presented with attractive labeling to lull us into a false sense of wellbeing. While chips, noodles, biscuits and other such ready-to-eat food items have a bad name, not all packaged food qualifies as junk either. Some have even become a staple of our kitchens and refrigerators. Butter, cheese and tomato ketchup are common on the table and we consume them without a second thought. Bread, breakfast cereals and savoury snacks are also becoming an integral part of urban diets.

## “Food safety is everyone’s business”

### Calls to Action

#### 1. Ensure it's safe

Governments must ensure safe and nutritious food for all

#### 2. Grow it safe

Agriculture and food producers need to adopt good practices

#### 3. Keep it safe

Business operators must make sure food is safe

#### 4. Know what's safe

Consumers need to learn about safe and healthy food

#### 5. Team up for food safety

Let's work together for safe food and good health!





**Unsafe food kills an estimated 420,000 people every year. Globally, one in ten people – 600 million – fall sick because of exposure to food contaminated with bacteria, viruses, parasites or chemicals. These deaths are entirely preventable.**

**– World Health Organization.**

### What Do International Studies Say?

The George Institute for Global Health at the University of Oxford analyzed more than 400,000 food and drink products from 12 countries and territories around the world. The survey draws attention to the high levels of sugar, saturated fat, salt and calories/kJ in many of our favourite food items.

Packaged food and beverage data collected from 2013 to 2018 for the analysis was collated using The George Institute's FoodSwitch program. The countries and territories included in this survey are Australia, Canada, Chile, China, India, Hong Kong, Mexico, New Zealand, Slovenia, South Africa, the UK, and USA which also participate in The International Network for Food and Obesity/Non-Communicable Diseases Research, Monitoring and Action Support (INFORMAS). This is a global network of public interest organizations and researchers that aims to monitor, benchmark and support public and private sector actions to create healthy food environments and reduce obesity, non-communicable diseases and their related inequalities.

The countries were ranked using the established Health Star Rating (HSR) nutrient profiling system – a Trans-Tasman labelling system that is used in both Australia and New Zealand. It measures the levels of the nutrients such as energy, salt, sugar, saturated fat as

well as protein, calcium and fibre and assigns a star rating from ½ (least healthy) to 5 (most healthy).

A total of 592,635 products were available in data sets from the 12 countries, of which 394,815 (67%) were included in this analysis while the remaining were removed for varied reasons. The total number of products per country ranged from 7,191 for Chile to 162,297 for the USA. Each product was assigned to a food or beverage category and mean HSR was calculated overall by category and by country. Median energy density (kJ/100 g), saturated fat (g/100 g), total sugars (g/100 g) and sodium (mg/100 g) contents were calculated. Countries were ranked by mean HSR and median nutrient levels.

### The Results Speak For Themselves

The study - published in Obesity Reviews Journal in July, 2019 - reveals that packaged food in the United Kingdom is the healthiest in the world with a Health Star Rating of 2.83. The USA bagged the second place with an enviable rating of 2.82, Australia came in a close third at 2.81 and Canada ranked fourth with 2.74 HSR. Unfortunately, India had the lowest rating of 2.27 among the 12 countries, followed by China at 2.43 and Chile at 2.44 was third from the bottom.

It is commendable that while China's packaged foods scored low at a Health Star Rating of 2.39, China-

manufactured drinks were ranked as some of the healthiest in the survey with an average rating of 2.9. On the other hand, South Africa's packaged foods actually scored a laudable rating of 2.87, but the drinks were found extremely poor with an average 1.92 Health Star Rating.

The global survey also attempted to bring the high levels of sugar, saturated fat, salt and calories under the spotlight. While there was considerable variation in the levels of nutrients of concern between countries, it was found that the countries with higher overall HSR generally ranked better with respect to nutrient levels.

- United Kingdom was again crowned at the top for lowest sugar at just 3.8 grams per 100g while Canada averaged second best at 4.6 grams per 100g. China was ranked the worst with whopping sugar levels that averaged at 8.3 grams per 100g which is actually twice the UK's average. India managed to be second-last on the list with a sugar rating of 7.3 grams per 100g. Going by category of food - sugars, honey and related products report the highest median total sugar content followed by confectionery and bread and bakery products. Edible oils, seafood and seafood products and eggs rank the lowest in sugar levels.
- Canada topped the list for unhealthy salt levels in foods and drinks with the highest median sodium content of 291mg per 100g. The United States came in second with 279mg per 100g while Slovenia and Chile ranked the lowest with 80mg per 100g and 140mg per 100g of salt respectively. Overall meat and meat alternatives had the most sodium content followed by snack foods and sauces, dressings, spreads and condiments while edible oils had the lowest followed by beverages.
- China's packaged foods and beverages had the most harmful levels of saturated fat at 3.4 grams per 100g while Canada had the lowest median saturated fat content of 1.0 grams per 100g followed by Mexico 1.1 grams per 100g. When it comes to food groups, edible oils reported the highest saturated fat followed by confectionery. Beverages and sugars, honey and related products have the least saturated fat content followed closely by fruit, vegetables, nuts and legumes.
- Indian packaged foods and drinks were found to be the most energy-dense with a kilojoule content of 1515 kJ per 100g followed by China at 1461 kJ per 100g. On the other hand, South Africa's products showed up with the lowest median energy content at just 1044kJ per 100g. Edible oils reported the highest median energy content followed by snack foods and confectionery while beverages are least energy dense followed by eggs.

### What Expert Opinion Says

The lead author of the study, Dr Elizabeth Dunford was worried with the results as it is a direct indicator that the packaged foods and drinks drive a double burden of



diet-related diseases in many of the low and middle income countries.

She sounded a warning bell with, "Globally we're all eating more and more processed foods and that's a concern because our supermarkets' shelves are full of products that are high in bad fats, sugar and salt and are potentially making us sick." She also pointed out that, "Our results show that some countries are doing a much better job than others. Unfortunately it's the poorer nations that are least able to address the adverse health consequences that have the unhealthiest foods."

Co-author and Acting Executive Director of The George Institute, Australia, Professor Bruce Neal opined that the results of the study are really concerning as packaged foods are progressively dominating the world's food supply. He further warned that, "Billions of people are now exposed to very unhealthy foods on a daily basis. The obesity crisis is just the first ripple of a tsunami of dietary ill health that is coming for us. We have to find a way that the food industry can profit from selling rational quantities of quality food, rather than deluging us with unhealthy junk. There are few greater priorities for human health."

### The High Point

A note of joy arises from the fact that many of the world's major food and drink manufacturers have signed up with the International Food and Beverage Alliance and pledged to reduce the levels of salt, sugar and harmful fat. The report further anticipates that the disquieting results will work as a driving force for the processed food companies to improve the healthiness of their product range.

### The Time to Act is Now!

It is evident that many of India's favorite packaged food items are far from healthy. Both policymakers and industry players should now start undertaking nutrient profiling as this will serve as a key tool for reformulating the products and thus, also reducing the risk of obesity and NCDs among the population.

Consumers on their part also have to start being more cautious and cut down their consumption of processed food. Modern lifestyles and work schedules are driving up our reliance on the convenience of packaged foods.

But anything is fine only till it is kept in moderation. Be wary of the high amounts of sugar and sodium in the foods you usually pick up from the supermarket. Make it a point to read the nutrient information and other labeling on the packages. Also keep in mind that the appealing flavor, appearance and even the aroma of processed foods comes from artificial ingredients. All the 'flavors' and 'additives' are not always listed on the labels either.

Therefore, it is always advisable to try and replace the unhealthy and risky ultra-processed foods with whole foods like grains, fruits, vegetables, legumes, lean meats and nuts as far as possible. ▶

Source: Secondary research & media reports

## TOP FOOD SAFETY SURVEILLANCE SYSTEMS ACROSS THE GLOBE

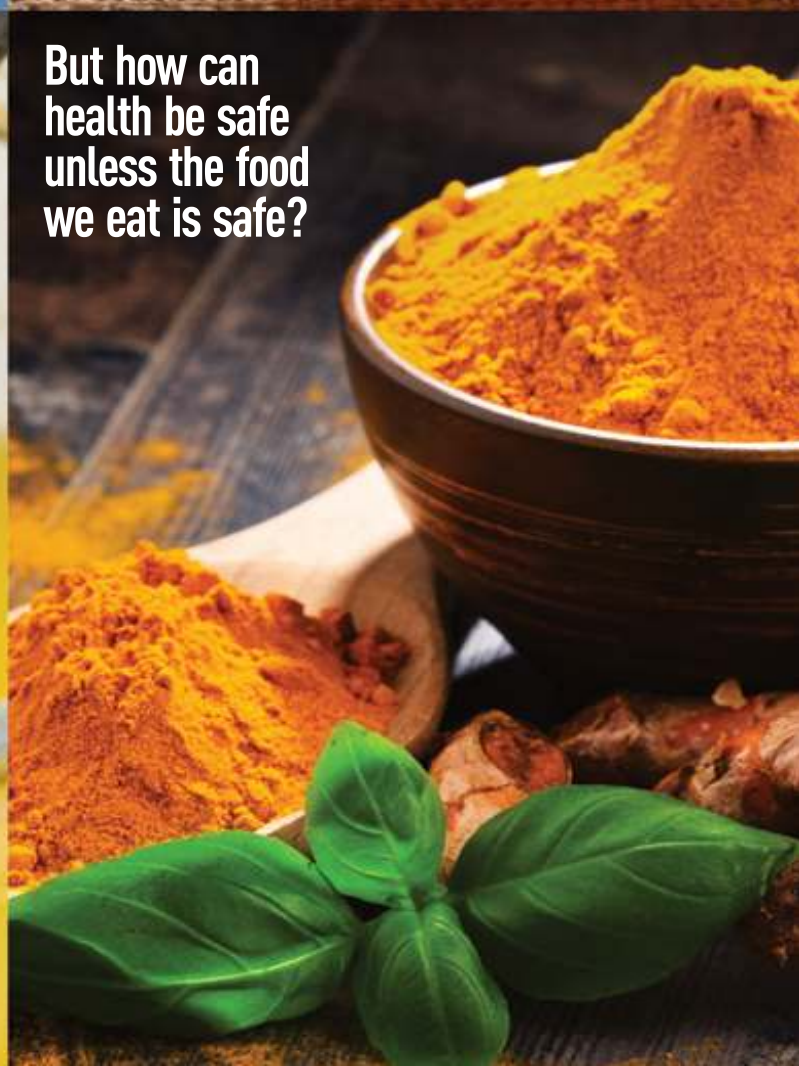
The actual efficiency of food safety surveillance in the world is under question as very few countries have actually instituted comprehensive mechanisms that can successfully meet the objectives of a surveillance system.



*National surveillance systems play a crucial role in ensuring food safety in the world.*



# HEALTH IS WEALTH!



But how can health be safe unless the food we eat is safe?

**INDEED, THE QUALITY** of food is intrinsically linked to our health and the risks of unsafe food are wide-ranging, covering the gamut from malnutrition to various foodborne diseases. Food can become unsafe due to improper agricultural practices, poor hygiene in the food chain, lack of preventive controls in food processing operations, misuse of chemicals, contaminated inputs or inappropriate storage and handling. These hazards can cause chemical and microbiological contaminants, biological toxins or pesticide residues which render the food injurious to health.

The potency of food control becomes all the more imperative in the face of the growing international connectivity of food markets, extended supply chains and rising number of intermediaries involved in bringing the food from the farmer to the consumer.

The onus is on the governments to protect the citizens from unsafe food. Many countries across the world have instituted their own food safety surveillance systems so as to ensure sound public health. However, both the coverage and effectiveness of these systems – in terms of meeting the objectives of food safety - displays wide discrepancy from country to country.

## Objectives of Food Safety Surveillance

The need for food safety surveillance is two-pronged:

- Detect, control and prevent foodborne disease outbreaks with emergency response plans for food safety and the use of risk analysis (risk assessment, risk management and risk communication) in emergency situations.
- Notify long-term issues like - identifying priorities and developing policies for the control and prevention of foodborne diseases; estimating the burden of foodborne diseases and monitoring trends; evaluating foodborne disease prevention and control strategies.

This calls for integrated solutions that will check the food at every level and juncture across the entire food system. The WHO releases technical guides to assist the countries in developing meticulous, inclusive and effective food and nutrition surveillance systems. Even the Codex Alimentarius Commission (popularly known as Food Code) has developed food safety standards, guidelines and codes that can serve as a strategic framework for the governments to shape their own laws and regulations regarding food safety and trade.

management decisions and their implementation. In case any risks surface, the federal agency works with the company to ensure that the public is informed and that the recall effectively removes the unsafe food products from the market.

The CFIA is regarded as the best food safety surveillance system in the world and Canada has even topped the charts for food safety and risk assessment performance among 17 countries based on 10 food safety performance indicators. Canadian consumers themselves consistently report high confidence levels in the safety of their food and in the effectiveness of the food safety system.

**UNITED KINGDOM** - The Food Standards Agency (FSA) is responsible for food safety and food hygiene in England, Wales and Northern Ireland. It works with local authorities to enforce food safety regulations in a fair and strict manner. It covers food safety standards, food safety controls, composition and labeling requirements, nutrition and even encompasses response to emerging risks and uncertainties. The agency constantly strives to identify potential gaps in the food regulation system and strengthens it accordingly.

Food businesses are heavily regulated and any breach of the food safety laws incurs the wrath of the agency in the form of detailed and expensive investigations, prosecution in criminal court, monetary fines and even possibility of conviction. Therefore, consumers can repose their trust in the food they buy and eat.

**USA** - Anyone who sells food in USA is responsible for making sure it is safe to eat. The US Food and Drug Administration (USFDA) is charged with enforcing the federal food safety regulations for both domestic and imported food. This is a science-based agency that focuses on public health and safe, nutritious and properly labeled foods based on assessments of real risks to the population.



**In India, the Food Safety and Standards Act was passed in 2006.**

Let us take a look at the best and most effective food safety mechanisms in the world:

**CANADA** – The Canadian Food Inspection Agency (CFIA) has instituted robust food safety standards with excellent food safety response for consumers by consolidating the delivery of all federal food safety, animal health and plant health regulatory programs in Canada.

The standards are set based on current health risk assessment. Constant surveillance and monitoring helps in identifying and investigating emerging issues as well as measuring the effectiveness of risk



**The potency of food control becomes all the more imperative in the face of the growing international connectivity of food markets, extended supply chains and rising number of intermediaries involved in bringing the food from the farmer to the consumer.**

A flexible and evolving system is in place that promotes consistency and encourages improvements by way of innovation. The acceptable approach - rather than optimum approach - varies from country to country, commodity to commodity and business to business.

There is regular, consistent and effective communication of policies, procedures and practices to all stakeholders and inputs from consumers are incorporated in the decision making process. The USFDA's crisis management system and crisis management team is particularly commendable as it ensures that prompt action is initiated in case of any outbreaks.

**AUSTRALIA AND NEW ZEALAND** - Food Safety Authority of Australia and New Zealand (FSANZ) and other government agencies in both the countries monitor the food supply to ensure that it is safe. The agency is responsible for ensuring that foods comply with standards for

microbiological contaminants, pesticide residue limits and chemical contamination. It also monitors nutrients in the food supply and collects food surveillance data to stay prepared to tackle both ongoing food safety issues and emerging food safety risks.

Over the past two decades, the food safety policy approach shifted from a primarily 'Command and Control' regulation to an 'Outcomes-Based' approach. Since then, the FSANZ allows for self or cooperative regulation with scope for creativity and innovation for the food industry which is more effective than deterrence policies and adversarial strategies. It has helped reduce the foodborne illnesses without unnecessarily burdening businesses and also ensures better protection for consumers.

**EUROPEAN UNION** - The European Food Safety Authority (EFSA) is the keystone of the European Union's risk assessment of food safety. It works in close collaboration with all the

national authorities and has open consultations with its stakeholders. The agency invests in food science, conducts risk assessments and provides independent scientific advice and clear communication on existing and emerging risks.

In India, consumer groups were placing increasing pressure on the government to protect the people from poor quality and hazardous foods and finally, the Food Safety and Standards Act was passed in 2006. The FSSAI came into existence in 2011 and was mostly involved in setting science-based standards and aligning them to global norms till 2017. Since then, regular revision and updation is an ongoing process with new and innovative schemes for food safety being launched regularly.

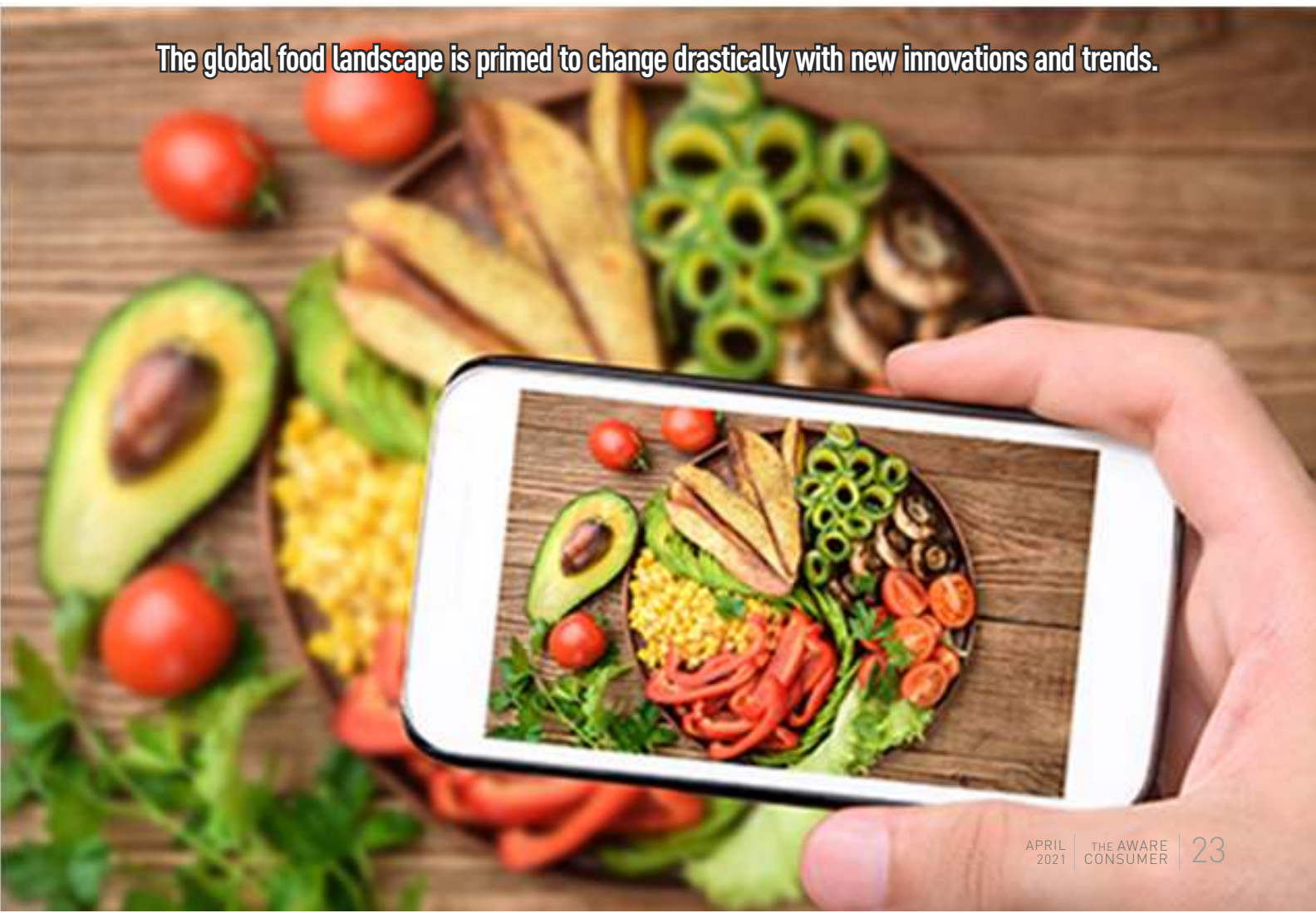
Yet, the risks have not been completely eliminated and unsafe food keeps entering the marketplace... ▶

*Source: Secondary research & media reports*

## New Realities That Will Shape The Future Of Food

Global trends and technology are literally revolutionizing the food industry. It is hoped that the ongoing transformations will drive us towards a fairer, healthier and more sustainable food future!

The global food landscape is primed to change drastically with new innovations and trends.



**THE FOOD INDUSTRY** has always been and always will continue to be evolving. Today, this evolution is accelerated by emerging technology and trends around the globe. The unprecedented Covid-19 pandemic has further turned things on their head with unexpected disruptions in both leanings and expectations of the consumers. The food ecosystem has no choice but to develop and adjust at the same pace to be able to absorb the changes emerging in the foods even before they reach the market.

Lets us take a look at some of the key trends and innovations in the food industry:

### Genetics in Food

Genetically modified crops have been a harsh reality of the food industry. Gene-editing that can control certain traits of food products is a double-edged sword. On the one hand, it has the potential of solving our looming food crisis and reducing our agricultural footprint while promoting specific changes like nutrient-fortified vegetables, reduced-gluten wheat, drought-free crops and even curing heart disease or cancer. On the other hand, playing around with the genes of plants comes with its own set of drawbacks.



A rigorous evaluation of the genetically modified foods involving years of testing is crucial as they have the potential of throwing up novel risks to both human health and the environment. The consumers should be engaged in both the development process and impact assessment of the new technologies. Strong labeling measures are mandatory.

However, it is claimed that gene editing does not introduce new virus/bacteria into the plants or even transfer genes from one plant to another. This is

supposed to be simpler, quicker, cheaper and safer for boosting everyday foods. However, adequate regulation is still essential for it to be successful with farmers and consumers. What's more, personalized diets based on the unique nutrition blueprint of our genes also seem to be on the horizon.

### New Forms of Proteins

According to the Food and Agriculture Organization (FAO), nearly half of the worldwide harvest is fed to the livestock so as to produce meat which will then be consumed by humans. It is estimated that consuming the yield ourselves rather than feeding it to the livestock will provide enough food to nourish the potential 10 billion global human population by 2050.

The world is clamoring for more sustainable protein alternatives that will control the damage to the environment even while offering nutritional value and taste. The answer lies in animal protein substitutes from plants, dairy products produced through fermentation and lab-grown meat.

This will make protein – which is critical for human health - accessible, affordable, healthy and sustainable. According to new research conducted by the Oxford Martin School for the World Economic Forum, Alternative Proteins, balancing the diet with alternative proteins can ease diet-related mortality by up to 5% even as it reduces the impact on the environment.

However, consumer acceptance is a different story altogether. While the tastebuds will demand pure and 'old-fashioned' meat at first, increased awareness and reduced costs will increase the consumer base for the new protein foods.

### Improved Traceability

Consumers want significant more interplay with their food. They want to know what exactly goes into their food and how. This calls for both transparency and efficiency in the food supply chains while ensuring smarter and safer food

#### SAFE

Food 'not safe' is not food



Swachh Bharat Mission

#### HEALTHY

Diets for the palate, body and mind



Ayushman Bharat  
POSHAN Abhiyan, Anemia Mukht Bharat

#### SUSTAINABLE

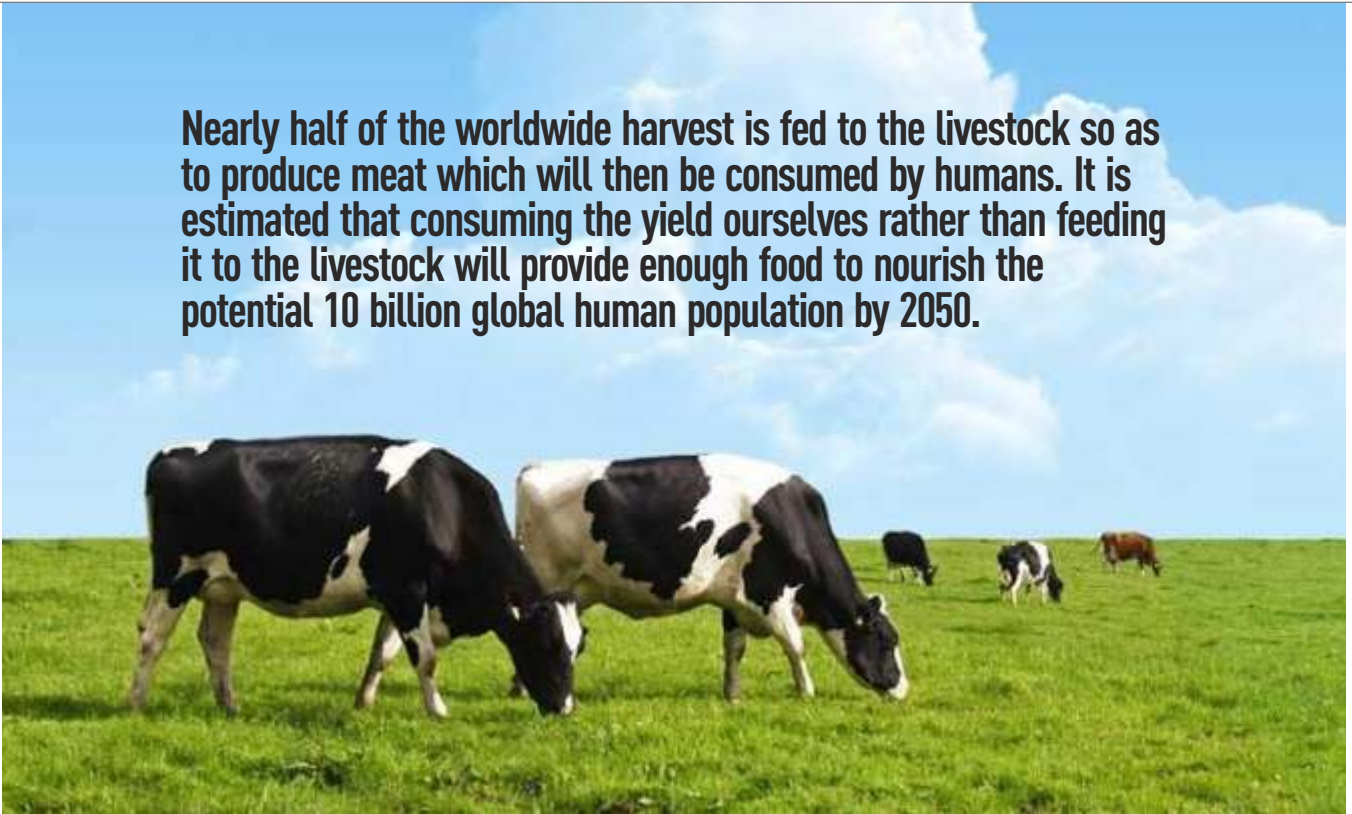
Diets for people and planet



Jal Shakti Abhiyan



**Nearly half of the worldwide harvest is fed to the livestock so as to produce meat which will then be consumed by humans. It is estimated that consuming the yield ourselves rather than feeding it to the livestock will provide enough food to nourish the potential 10 billion global human population by 2050.**



supply. Technological innovations like smart labels, GPS tracking, artificial intelligence and blockchain can prove to be useful in instituting accountability. Food producers, suppliers and retailers with clean, ethical and sustainable practices are likely to win favor with the more aware and evolved consumers.

However, this also opens a minefield of legal, technological, environmental and privacy-related limitations – traceability systems are still in the nascent stage and need to be designed and implemented carefully.

### **3D Printing of Food**

Food technology has advanced to the extent that additive manufacturing techniques enable food products to be 3D-printed layer by layer. The use of fresh ingredients in printing 'cartridges' will deliver textures, flavors and even sensory experiences that have never been experienced earlier.

Robotics is coming into play opening the doors to personalized meals to match individual nutrition requirements. This will find varied applications in mass manufacturing, catering and even at the household level. Again, there is the responsibility of ensuring that this food is safe, nutritious and affordable.

### **In Conclusion**

The emerging trends can feel challenging for some, uncertain for many and even overwhelming for others. But the changes are also generating new opportunities for growth. On the consumer front, the consumer organisations have to play the leading role in promoting consumer awareness on the emerging developments and how to engage with them to ensure nutrition, health and sustainability. ▶

*Source: Secondary research & media reports*



# National Accreditation Board for Testing and Calibration Laboratories (NABL)

## MEDICAL IMAGING ACCREDITATION

In accordance with ISO 15189

### MEDICAL IMAGING ACCREDITATION ENSURES

- International recognition and acceptance of test reports through ILAC and APAC MRA
- Reliability and confidence in the imaging results
- Strengthening trust of end users
- Quality & Competence
- Regulatory Compliance
- Radiological safety compliance to AERB safety codes
- Metrological traceability ensures valid test results

### NABL 100

**GENERAL  
INFORMATION  
BROCHURE**

### Scope of Accreditation

#### MEDICAL IMAGING-CONFORMITY ASSESSMENT BODIES (MI-CAB)

Projectional Radiography & Fluoroscopy  
X-Ray, Bone Densitometry (DEXA), Dental X-Ray-OPG, Mammography etc.  
Fluoroscopy Computed Tomography (CT)

Magnetic Resonance Imaging (MRI)  
Ultrasound and Colour Doppler

Nuclear Medicine  
SPECT  
PET CT  
PET MRI

\*Basic Diagnostic Interventional Radiology Procedures

*(Image guided Core Biopsy and / or Needle Aspiration e.g. Fine Needle Aspiration Cytology)*

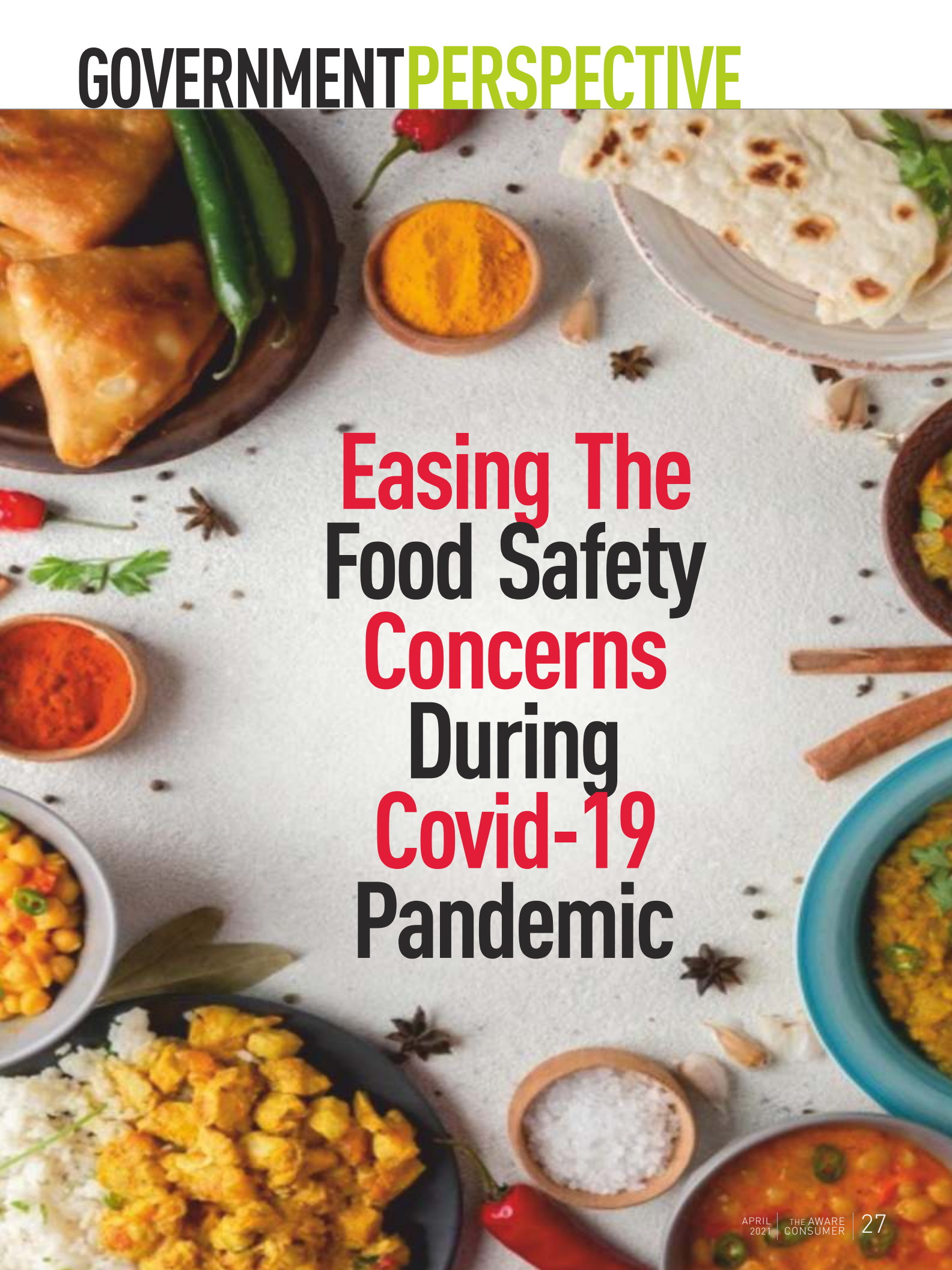
*\*For only such IR procedures that will be carried out by Radiologists*

### NABL 156

Application Form for Medical Imaging –  
Conformity Assessment Bodies (MI-CAB)

### NABL 135

Specific Criteria for Accreditation of Medical  
Imaging – Conformity Assessment Bodies



## Easing The Food Safety Concerns During Covid-19 Pandemic



*The burning question - Can the coronavirus survive on food and if yes, for how long?*

On the one hand, there was the apprehension of coronavirus being present in or on the food, and ordering home deliveries of groceries increased during the lockdown on the other. This is compounded by fears of contracting Covid-19 from takeaway foods and deliveries from restaurants. Do these uncertainties hold water or are they unfounded? Let's find out what the government is doing to allay the pervasive anxiety.

**SINCE THE COVID-19** outbreak more than a year earlier, people in India (and around the globe) have been greatly concerned about contracting the virus through food or food packaging. Consumers were terrified that the food items they purchase may contain virus particles and will infect them despite taking all other precautions and living under lockdown.

Fact of the matter is that, though the novel coronavirus did emanate from an animal source, it actually transmits predominantly from person-to-person. While initially, there was lack of clarity on how long the SARS-Cov-2 virus can survive on different surfaces, the U.S. Food and Drug Administration (FDA) clarified in the initial days itself that there weren't any cases of the coronavirus being spread by food or food packaging.

Yet, the fears remain widespread. A Gaon Connection Survey – the first of its kind on the 'COVID-19 vaccine and Rural India' - published in January 2021 reveals that more than half (56%) of the respondents have consciously changed their eating habits on account of the pandemic. 70% have stopped eating out and 30% have increased

their intake of fruits and vegetables. The face-to-face survey was conducted between December 1-10, 2020 with 6,040 rural respondents across 60 districts in 16 states and one union territory.

While the shift towards healthy eating and better nutrition is a welcome change, the innate panic among the consumers cannot be left to fester either.

### **The Indian Government's Stance**

The central government has been going the extra mile to ease the fears and dispel the myths surrounding the risks from food products, both raw and cooked, of contracting Covid-19 disease.

As the apex food regulatory body, the FSSAI's mandate itself is to ensure safe and wholesome food for the country. This role of ensuring food safety and hygiene has gained epic proportions during the ongoing public health crisis. The Authority is using its social media presence to publish a series of updates, advisories and guidance to the consumers with suitable courses of action during these unprecedented times. The FSSAI 'Myth Busters' initiative is

also issuing regular clarifications to spell out the correct facts based on latest scientific data. Efforts are on in full swing to disabuse the consumers of the prevailing myths and confusion about this unknown and unexpected disease.

Early on in the pandemic, loud whispers were echoing around the country that “Eating chicken will cause coronavirus!” Amidst the widespread fears, people were very scared of buying meats and shied away from consuming any poultry products.

The FSSAI quickly issued a 'Clarification Regarding Consumption Of Poultry Products And Corona Virus' in its Myth Buster section on <https://fssai.gov.in/cms/myth-buster.php>. It clarified that 'The predominant route or transmission of 2019-nCoV (Corona Virus) appears to be human to human as per OIE, though 2019-nCoV may have had an animal source, which requires further investigation. Poultry has not been found to be involved in transmission of 2019-nCoV to humans so far in any report globally. Similarly, outbreaks of coronavirus in the past

(SARS 2002-03, MERS 2012-13) or corona associated common cold had no involvement of poultry or poultry products world over. Thus, with present knowledge of affairs of 2019-nCoV, consumption of poultry and poultry products may be considered safe.' This advisory emanated from the Ministry of Fisheries, Animal Husbandry and Dairying and referred to the report by the World Organisation for Animal Health (OIE).

Yet, the advisory was followed by a caveat warning the public to follow the general principles of hygiene suggested by the WHO/OIE. It is especially important to observe due precautions when handling meats like - using different cutting equipment for raw meat and cooked food, cooking meat products thoroughly, etc.

There have been many other advisories and clarifications related to Covid-19 such as:

- **On drinking lot of water every 15 minutes** - There is no evidence that drinking lots of water flushes out the new coronavirus. However, in general, it is recommended that people should have adequate water every day for good health and to prevent dehydration.
- **On fear of eating frozen foods and ice creams** - There is no scientific evidence that eating hygienically made frozen foods and ice cream spreads the new coronavirus.
- **On avoiding imported foods** – Food is not known to transmit Covid-19 and imported food is safe to eat.

Along with this, the FSSAI is also propagating other guidelines and safety precautions on a regular basis. There have been advisory updates about:

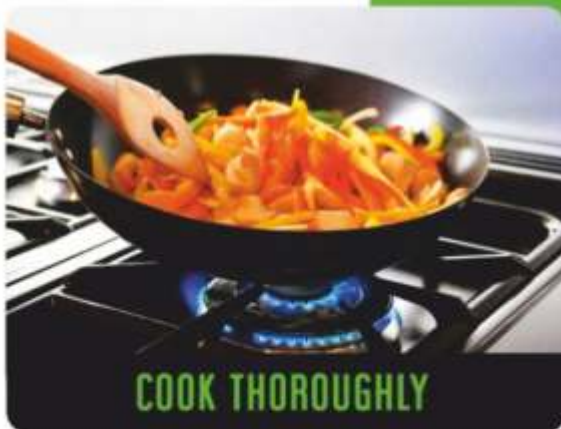
- **Tips For Purchasing Food Safely**
  - Keep a physical distance (of atleast 1m) between you and others while shopping
  - Make sure your local food sellers are washing and sanitizing all surfaces used for food preparation and practicing good hand hygiene
  - Ensure your hands are clean and when you get





# FOOD SAFETY

is crucial to the health of our communities. From farm to fork, we all have a role to play in making food safe. Here's what we can do at home:



**#EatRightIndia #SwasthaBharat #HealthForAll**

home wash your hands with soap and water before handling food

- Wash fruits and vegetables with water particularly if you are eating them raw

#### ■ Food Safety Advice For Preventing The Spread Of Covid-19

- Wash raw fruits, vegetables with clean, potable water
- Cook meat well
- Stay hydrated
- Avoid sharing food utensils, water bottles or cups
- Clean surfaces such as tables with antibacterial wipes
- Use different chopping boards and knives for raw meat and cooked foods
- Eat foods rich in Vitamin C to boost your immune system

#### ■ Keep Food Safety In Mind While Buying Essential Items During Covid-19

- Wash (fruits and vegetables, milk packets, etc.)
- Clean (packets of cereals and pulses, etc. before storing)
- ? • Immediately wash your hands with soap and water

#### ■ Eating Well During Covid-19

- Buy foods with a long shelf life (fresh, frozen, canned)
- Maintain an inventory of food items
- Wash hands before and after cooking/eating
- Avoid sharing eating utensils

#### ■ After Buying Food From Markets

- Wash your hands with soap and water before handling foods
- Wash your fruits and vegetables with water before eating
- Refrigerate all perishable foods as soon as possible (below 5°C)
- Cook food thoroughly (70°C) - especially meat, poultry, eggs and seafood

An e-handbook has also been released on 'Eating Right During Covid-19' related to Food Hygiene, Safety and Nutrition guidelines for consumers to prevent the spread of Covid-19. It covers various precautions people should keep in mind while purchasing food, ordering food from delivery platforms, preparing food and maintaining personal hygiene which have been duly reviewed and vetted by various experts in food safety and nutrition..

Furthermore, the FSSAI also left no stone unturned to dispute commonly prevalent fabrications about certain foods or food products that will boost immunity or even prevent/cure Covid-19.

## Food Businesses Beware

The advisories are not limited to the consumers alone. The FSSAI urgently developed and released detailed guidance on specific measures that 'all types of food businesses including food service, transport, and retail operations' should follow to prevent the spread of COVID-19. Issued in April, 2020, the guidelines were 'developed based on the best practices currently recognized and adopted internationally'.

The specific measures included maintaining high levels of personal hygiene; excluding Covid-19 infected persons from the operations; practising social distancing; and appropriate cleaning/sanitization of the food operations' premises, food contact materials, etc.

## Fear of Food Packaging

It's not just about the food and food products, consumers are alarmed about contracting the novel coronavirus from the packaging of the food items too. The WHO reiterated



in August 2020 that there is 'no evidence of coronavirus being spread by food or packaging and urged people not to be afraid of the virus entering the food chain.'

The WHO Head Of Emergencies Programme, Mike Ryan reassured the world at large that, "People should not fear food, or food packaging or processing or delivery of food. There is no evidence that food or the food chain is participating in transmission of this virus. And people should feel comfortable and safe." This has been reaffirmed by the FSSAI on many an occasion.

## In Conclusion

The Covid-19 pandemic is far from over. The best way to protect ourselves and our loved ones is to follow the oft-repeated precautions of wearing masks, disinfecting hands and commonly-touched surfaces with sanitizers and practicing social distancing.

While it is a fact that food does not transmit Covid-19 and no extra precautions are required while cooking food, regular food safety measures are imperative. The FSSAI is also taking every chance to propagate food safety practices and benefits of healthy eating in general. ▶

Source: Secondary research & media reports

# INTERVIEW

**“Food Safety is a shared responsibility and it is the duty of every stakeholder including consumers to demand safe, healthy and sustainable food.”**





**Q** When you took over as the Chairperson of the Food Safety and Standards Authority of India (FSSAI), what were some of the noteworthy action areas for the Food Authority and where are you today in terms of your priorities for the near future?

I took over the role of Chairperson in the year 2018. That year was eventful for FSSAI as we started accelerating the process of setting standards. As many as 27 new regulations for food standards were notified during the year, including alcoholic beverages, food fortification, organic food, advertising and claims, packaging, residues of pesticides, tolerance limits of antibiotics, etc. At the same time, we also focused on strengthening the laboratory network across the country along with identification of National Reference Laboratories (NRLs). The FSSAI also accelerated the training and capacity building of personnel in food businesses (both in the organised and unorganised sector) through the Food Safety Training and Certification (FoSTaC) programme. The FoSTaC programme today has over 255 training partners, 400,000 FSSs (Food Safety Supervisors) across India, and about 2 lakh people trained under Covid-19 safety training.

Today, our priorities are towards various regulatory reforms for enhancing efficiency and the 'Ease of doing Business' for the Food Business Operators (FBOs). IT-enabled resources are being deployed for improvement of our existing portals of licensing & registration, food imports and laboratories' network along with better delivery of various e-services including e-applications and e-inspections, thus enhancing the range of internet governance. We are institutionalizing and upgrading the scope of market surveillance to identify hot-spot areas of adulteration and conduct national-level surveys for milk, vegetable oils and other high risk commodities. Another core area of focus is improving the infrastructure and capacity of food testing laboratories and development of new National Food Laboratories (NFLs) at Chennai/ Mumbai. We are actively investing our efforts around training and capacity building for Food Safety Officers (FSOs) and field staff as well as increasing the manpower at FSSAI headquarters and across regional offices. We are also strengthening our Food Import



“Recently, the Eat Right India Vision has been declared among one of the Top Visionaries by the US-based Rockefeller Foundation in association with SecondMuse and OpenIDEO from over 1300 applicants for the Food Systems Vision Prize 2050.”

Clearance System in order to ensure that only quality products, compliant with our standards are imported into the country.

More recently, we have significantly improved our connect with the States and UTs by way of regular meetings through video conferencing and visits involving meetings with all regulatory staff, food businesses, training and audit partners as well as other important stakeholders and engaging with Chief Secretaries

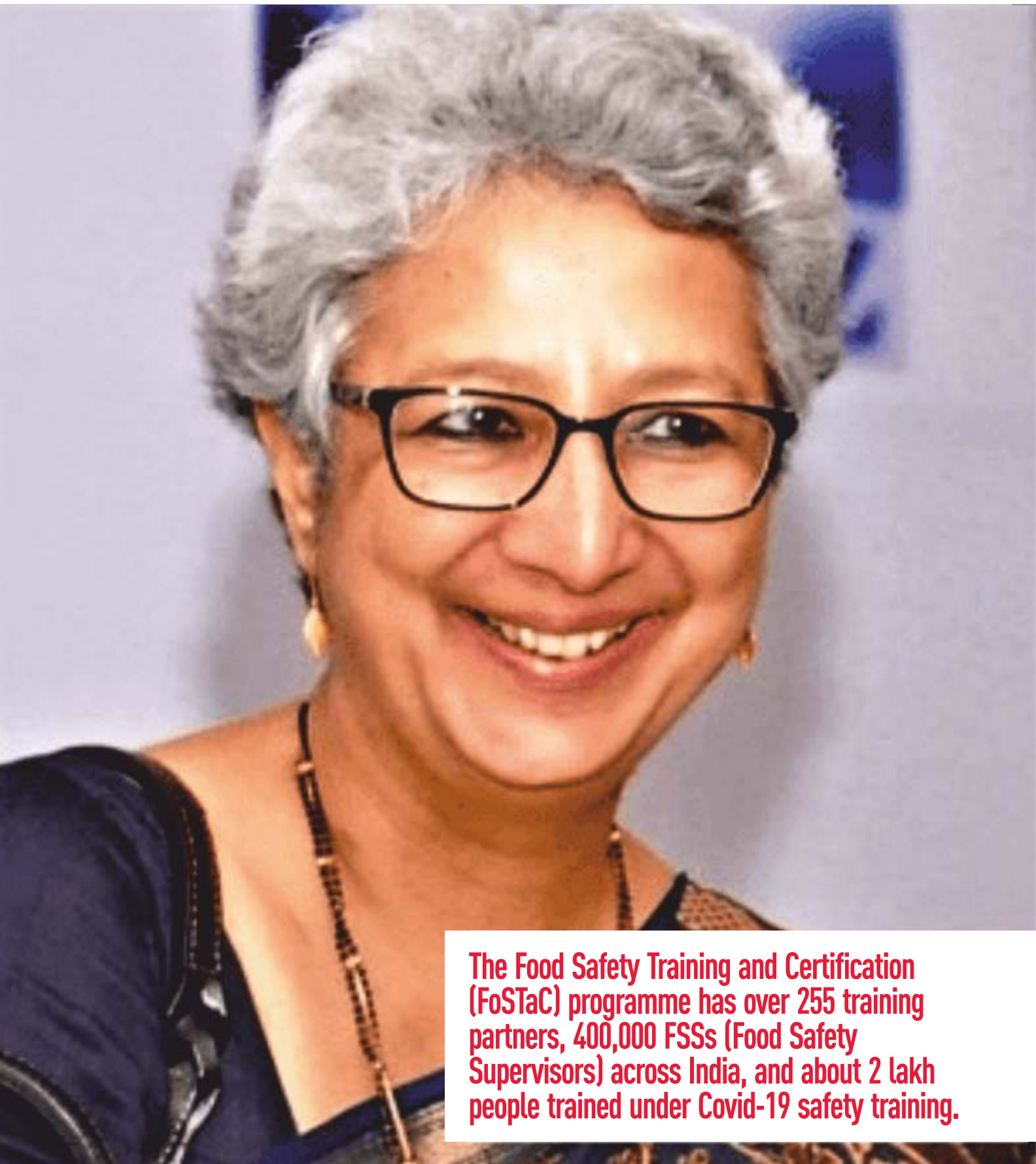
and Health Ministers of States/UTs to have a better coordination at the ground-level. This has helped a lot in improving the overall food safety ecosystem in the country and our efforts in this regard will continue. We are also providing technical and financial assistance to States/UTs for creation of necessary infrastructure, testing equipment and mobilizing resources for carrying out special camps, inspections, awareness drives, etc.

Through the 'Eat Right India' campaign launched in 2018, FSSAI will continue to ensure provision of safe food and healthy diets to the consumers. Initiatives such as 'Eat Right Campus' for consumers in workplaces, institutions, hospitals, jails and tea estates; 'Eat Right School' for school children and the 'Eat Right Toolkit' for front-line health workers to reach people at the grass-root level have been launched. Our 'Eat Right District Challenge' and 'Food Smart Cities Challenge' are galvanizing a large number of stakeholders. As we move forward, we plan to expand the reach of these initiatives in different parts of the country and nudge people's behaviour towards right eating habits.

**Q** You were already aware about the role India had within the Codex Alimentarius Commission because of your earlier assignment within the Ministry of Health & Family Welfare, Government of India, according to you what are some of the key challenges even today in harmonizing the Codex Standards with our existing laws and standards?

It is clear that the global market demands safe and high quality products and, therefore, we need to ensure that all food products are produced and manufactured to match high food standards. The harmonization of our food standards, in fact, can be viewed as a necessary

**Mrs. Rita Teaotia, IAS (Retd),**  
Chairperson of FSSAI on the various actions and initiatives of the Authority and how far it has been successful in improving the overall food safety ecosystem in the country.



**The Food Safety Training and Certification (FoSTaC) programme has over 255 training partners, 400,000 FSSs (Food Safety Supervisors) across India, and about 2 lakh people trained under Covid-19 safety training.**

prerequisite to improving the quality of domestically produced food products and allowing fullest possible facilitation of exports. Moreover, it is also pertinent that if we have less stringent national food standards, we run the risk of being a dumping ground for substandard products manufactured by third-world countries.

Whereas the importance of the Codex standards in consumer protection and facilitation of international trade cannot be ignored, in practice all Codex standards cannot be used as the basis for our own regulations on account of several issues. Some major factors that have been impeding the harmonization process include:

- Insufficient awareness among producers regarding quality food production and food safety issues.
- Lack of adequate knowledge and infrastructure for application of scientific principles including complex safety systems like HACCP, particularly in the production of food at the primary producers' level.
- Lack of appropriate industrial infrastructure.
- Lack of awareness and access to advanced technology for unorganized food sector.
- Widespread occurrences of high levels of chemical contaminants in our environment and absence of a comprehensive plan to control these.
- Tropical climatic conditions leading to varied levels of microbial contamination (aflatoxins) etc.
- Codex standards developed without inputs/scientific data from India are difficult to be adopted at national level, since these are not truly representative of the Indian scenario.

Even with these challenges, the FSSAI had initiated the harmonization of national food regulations/standards almost a decade back through a consultative process with an ecosystem of stakeholders, and based on the recommendations of the scientific support system in the Food Authority, harmonization of horizontal safety standards have to a large extent been accomplished in the last few years.

Likewise, harmonization of vertical food standards was also undertaken subsequently and it is expected that we will have many of our food standards at par with the Codex vertical standards in the near future. Nevertheless, the harmonization process needs to be advanced with much care as improperly conceived harmonization of standards across the board, without any prerequisite activities, will only result in a system which will be frequently subjected to violation as a rule, rather than followed or adhered. This is the reason we give equal importance to capacity building, development of infrastructure and collaboration with related Ministries and stakeholders.

**Q FSSAI has launched the Eat Right India awareness campaigns in partnership with food industry, industry associations and other stakeholders, according to you how successful is the campaign today and why?**

The Eat Right India movement, led by FSSAI, has been launched to transform the food ecosystem of the country to

ensure safe, healthy and sustainable food for everyone, at all times. The movement adopts a judicious mix of regulatory, capacity building, collaborative and empowerment approaches through a range of initiatives to achieve its vision. Through this, FSSAI targets both the demand side as well as the supply side of food. While the supply side interventions are aimed at building capacities of food businesses to promote self-compliance in food safety, the demand side initiatives work towards motivating consumers by engaging and educating them on eating right as well as demanding safe and healthy food.

The best outcome from this campaign has been that it has ignited a large-scale social and behavioral change among the people of India towards safe, healthy and sustainable eating habits. Simultaneously, nudging food businesses to reformulate packaged foods into healthier options has helped push the supply side in the right direction. Over 20 food businesses have already taken a pledge to voluntarily reformulate their packaged food products with less content of fats, salt and sugar.

We have backed our Eat Right India campaign with consumer-focused regulations such as Fortification of Food (2018); Safe Food & Balanced Diet for Children in Schools (2020); Banning of Transfats (2021).

Recently, the Eat Right India Vision has been declared among one of the Top Visionaries by the US-based Rockefeller Foundation in association with SecondMuse and OpenIDEO from over 1300 applicants for the Food Systems Vision Prize 2050.

The various initiatives rolled out under the Eat Right India campaign have seen reasonable success and need to be scaled up to cover every corner of the country as we move forward. There is a need to align with all Ministries/Departments associated with food for the purpose of creating convergence and a coherent messaging to consumers and creating safety and hygiene protocols across the food chain.

**Q Front of the Pack Labelling (FOPL) and Hygiene Rating Scheme are pro-consumer initiatives in countries like India, do you feel it should be implemented on fast track mode or gradually? Should it be made voluntary or mandatory in India and why?**

Food is an essential part of health and wellbeing; and poor diet is the number one risk factor for disease and death. There are rapidly rising incidences of non-communicable diseases (NCDs) in the country. Acknowledging the fact that a major contributing factor to obesity and diet related NCDs is the rising consumption of unhealthy foods high in Fat, Salt and Sugar (HFSS), FSSAI started working on bringing about a change in the existing labeling regime about a year and a half back.

The matter regarding Front-of-Pack labelling has been under consideration of the Authority. The existing global practices were referred and various consultations



*I sincerely hope and desire that consumer organizations work in tandem with the Food Authority and spread awareness amongst consumers and empower them about their rights as well as responsibilities.*



with stakeholders like government organizations, consumer organizations, and industry associations were held. Front-of-the-Pack Nutrition Labelling is, however, still under discussion and we aim to finalize it soon.

As bringing about a change through regulations typically takes time, we believe that while this will be mandatory in nature, it should be implemented gradually so that sufficient time is given to food businesses to invest judiciously in packaging as well as reformulation or other additional requirements that need to be planned at their level.

Food Safety is a shared responsibility and it is the duty of every stakeholder including consumers to demand safe, healthy and sustainable food. Demand always helps in generating supply. Only when a consumer demands safe and healthy food, will food businesses be pushed to provide us with healthier options.

We have made third party audits mandatory for most central licenses. Similarly, for hygiene rating, while it is not mandatory, we believe it is important. The Hygiene Rating Scheme is a technology-driven, consumer-friendly scheme where food establishments are given a rating on a scale of 1 to 5, where 5 indicates Excellent Compliance and 1 indicates Poor Compliance of food hygiene and safety standards. The ratings are displayed in the form of symbols i.e. smileys. This scheme not only encourages food businesses to ensure high standards of hygiene and sanitation but also allows consumers to make informed food choices. I sincerely hope that we will see acceleration under this scheme as consumers affirm choices for high rated establishments, encouraging more and more businesses to enrol themselves for the Hygiene Rating scheme.

**Q As you know, THE AWARE CONSUMER focuses on the rights and responsibilities of the consumers, what**

**in your perspective, should be the role of consumer organisations to facilitate FSSAI in amplifying various initiatives and key messaging?**

Consumer organizations can play a big role in making consumers aware about the recent changes in regulations and other important issues pertaining to food. Consumer organisations have a good reach at the grass-root level and can also influence the decision of consumers in the right direction. I sincerely hope and desire that consumer organizations work in tandem with the Food Authority and spread awareness amongst consumers and empower them about their rights as well as responsibilities.

FSSAI from time-to-time works on dispelling myths, clarifying misconceptions and ensuring that consumers are able to make informed choices by providing scientifically credible information on a range of topics related to food. A 'Myth Busters' section is available on our website, [www.fssai.gov.in](http://www.fssai.gov.in) that addresses myths or any negative/incorrect information circulating in the media, which misleads consumers or confuses them. All consumer organisations should visit our FSSAI page and make an attempt to disseminate right and authentic information to the consumers.

In this age of digital technology, FSSAI also uses various communication tools to disseminate right information on safe and healthy eating practices in the interests of the public. Every day, posts in Hindi and English from the official handle of FSSAI incorporating key messages of food safety, personal hygiene practices, healthy eating habits and other valuable tips for citizens are posted on various social media platforms. As consumer organisations directly connect with consumers, a lot of the messages can be passed to the target audience through the network of consumer organisations. ▶

# AFTERWORD



**Pyush Misra**  
Director,  
Consumer Online Foundation

## United Nations' Codex Efforts For Food Safety

### CODEX ALIMENTARIUS



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

The Codex Alimentarius is an internationally prescribed code of food standards for all nations. It has the blessings of the United Nations and calls on all the member nations to formulate their own laws accordingly.

*The Codex Alimentarius Commission (CAC) is an international food standards body established jointly by the FAO and the WHO.*



*Goal 2 of the Sustainable Development Goals of the United Nations is focused on ending hunger, achieving food security and improved nutrition and promoting sustainable agriculture by 2030.*

**IT GOES WITHOUT** saying that the United Nations has been making concentrated efforts on attaining food safety and security right since its very inception. The UN's World Health Organization (WHO) is the world's directing and coordinating agency on international health. It is also charged with promoting food safety around the world.

The Food and Agriculture Organization (FAO) is another specialized agency of the United Nations that leads international efforts to defeat hunger. The overarching goal is to achieve global food security by ensuring that all the people in the world have regular access to high-quality food that enables them to lead active and healthy lives.

The FAO often collaborates with the WHO on projects related to consumers' health. And as we all know, our health can be safe only when our food is safe. Accordingly, the WHO and FAO together declared June 7th as the 'World Food Safety Day' to ensure safe food for every consumer. 7th June, 2019 was celebrated as the first-ever the World Food Safety Day.

Prior to this, the WHO and FAO also worked together to launch the Codex Alimentarius way back in 1961. Informally known as Codex, this is a collection of international recognized standards, codes of practice, guidelines and other recommendations relating to foods, food production and food safety. The main goal is to protect consumer health while ensuring fair practices in international food trade.

It has 189 members - 188 member countries and one member organization (The European Union). There are 237 Codex observers - 58 inter-governmental organizations, 163 non-governmental organizations and 16 United Nations organizations.

### Need for the Codex Food Code

Since the beginning of time, humans have been producing, selling and consuming food locally. Food was definitely traded between countries now and again, but international food trade has exploded so much over the last century that food products are among the most-traded commodities in the world today.

While this makes all kinds of foods available in literally all parts of the globe, the food is also more likely to become unsafe or unhygienic due to improper handling, storage, transportation, etc., thus increasing the incidence of food-borne illnesses. Then again, as the food products are traveling long distances, sometimes around the world, various chemicals are added to preserve them for longer periods. This longevity comes with its own drawbacks that can impinge on the quality of the food and in turn, the consumers' health.

The Codex has instituted several independent science-based international standards which are considered the benchmark of food safety and quality. They cover all processed, semi-processed and raw foods. It prescribes general standards for food labeling, food hygiene, food

additives and pesticide residues, contaminants in food, risk assessment procedures derived from modern biotechnology and also methods for analysis and sampling of foods. Along with these, there are standards for specific foods like meat, fish, milk, fats, oils, chocolate, sugar, honey, mineral water, etc. The standards are bound into 28 volumes which include 237 food commodity standards and 41 hygienic and technological practice codes. Clear guidelines are prescribed for managing governmental import and export inspection and certification systems for foods.

The Codex standards are actually voluntary in nature. Every country has to interpret them in the form of national legislations or regulations to make them enforceable. However, each country's own food measures and regulations are evaluated against these standards, and if found wanting or even needlessly stringent, the said country can be called on to justify the same.

This way Codex is harmonizing food safety measures on

an international level by promoting sound agricultural practices, proper use of pesticides, acceptable processing of products and other hygiene codes that ensure that the food is both safe and acceptable in international trade. Furthermore, it also ensures that the national regulations of any country do not obstruct trade between economies. In fact, the Codex standards also serve as an international reference point for resolving disputes between the trading countries related to food safety and consumer protection.

Additionally, the WHO and FAO also launched the Project and Fund for Enhanced Participation in Codex (Codex Trust Fund) to provide monetary support to various

countries to build a strong, solid and sustainable national capacity to engage in Codex. Managed by the Codex Trust Fund Secretariat in the WHO, it exposes the developing and least developed countries to Codex, helps them understand its importance and boosts their participation in the international standard development process. The Codex Trust Fund 2 was officially launched in 2016 and will run for 12 years.

### Where Does India Stand?

The Government of India has designated the FSSAI as the nodal point for liaison with the Codex, known as 'National Codex Contact Point of India' (NCCP). It participates in the Codex meetings and also prepares the national response to Codex matters.

The FSSAI also established a separate National Codex Committee (NCC) for working in association with the Codex. Shadow Committees on various subject matters corresponding to the Codex Committees have been constituted under the NCC to facilitate its functions and assist it in the study or consideration of technical matters. Currently 12 Shadow Committees are in existence.

Both the NCCP and NCC together promote and coordinate Codex activities in India and facilitate the country's input to the work of Codex through an established consultation process. ▶

**For more than 50 years the member countries of Codex have agreed on global standards for foods traded internationally. These standards have led to improvements in consumer safety and public health across the world, while simultaneously reducing unnecessary trade barriers between countries.**

Source: Secondary research & media reports

## Front-Of-Pack Labeling – A Public Health Strategy

Front-of-Pack (FoP) labeling is a crucial intervention proposed by the WHO and Codex Alimentarius to reduce consumption of processed foods and beverages that are associated with unhealthy diets. This will empower the consumer to make healthy food purchase decisions.



*'Consumers require accurate, standardized and comprehensible information on the content of food items' -WHO, 2005*

**THE LABELS ON** packaged foods carry tons of information. There is the list of ingredients, net weight, storage information, manufacturing date, batch number, price, best before and many other details. Since 2009, it is mandatory to provide nutritional facts per 100gm/100ml/serving on nutrients like energy, protein, carbohydrates and fat, including the quantity of sugar, saturated fats and trans fats.

But how many of us actually turn the pack over to check out the ingredients? Do we ever pay attention to anything more than the price, weight and expiry date at best?

Alas, most of the purchase decisions are still influenced by the big bold claims on the front of the packets. The nutritional information at the back gets a cursory glance from a mere fraction of the population that happens to be more conscious and concerned.

The sugar, calorie, fat or sodium content may evoke disbelieving groans at times. But are these woke folks also aware about how to really interpret the numbers, compare other products and make the right purchase decision?



*Can this be moved to the front and made easier to decipher?*

Several studies reiterate that the back-of-pack nutritional information is quite complex and confusing for the lay consumers. There are scores of nutrient numbers that even consumers with high nutrition knowledge and numeracy skills find difficult to decode and understand. To add to this, the actual health impact of the food resides in the whole ingredients (whole grains, fruit or added sugar) which is mostly not quantified on the labels of multi-ingredient foods.

Unfortunately, people are unknowingly consuming excess salt, saturated fat, sugar, etc. that can lead to chronic diseases like diabetes, cardiovascular disorders and even cancers in the long run. Therefore, the labeling guidelines fall short in promoting healthy food choices. The consumers need to be empowered to compare different items, interpret the good or bad health impact of their ingredients and identify the more nutritious/safe choice easily.

## Proposed Regulation In The Works

The United Nations, and the World Health Organization (WHO) in particular, have been calling for various legal and regulatory measures across the world to control the incidence of obesity and other non-communicable diseases (NCDs) associated with unhealthy diets. Mandatory labeling requirements, restrictions on advertising directly to children, increasing taxation and reformulation are some of the already implemented measures.

Now front-of-pack (FoP) nutrition labeling systems is topping the charts as an essential tool for helping consumers make healthier choices.

WHO has made it a global policy to encourage governments to develop mandatory FoP labeling systems. It has formulated varied recommendations that the governments can consider when creating their own systems for helping consumers interpret the nutritional value of the food and beverage products of choice. These include warnings about high or excessive content of critical nutrients as well as providing score indicators that will aid in comparing the nutritional values in foods across a range of products.

In 2019, the WHO presented its recommendations to the Codex Alimentarius to coordinate with the latter's work on FoP nutrition labeling. In fact, the Codex Committee on Food Labeling (CCFL) has been developing guidelines on FoP nutrition labeling since 2017 itself. The goal was to offer general principles to help countries develop their own models and yet facilitate global consistency in enabling the consumers to understand the nutritional value of foods.

This is particularly significant as the Codex standards and guidelines are the first international reference point for food regulations. However, this has resulted in an explosion of diverse FoP nutrition labeling systems around the globe. A strong Codex standard founded on evidence-based experimentation is extremely essential for guiding uniform national regulations.

## What is India doing?

In December, 2019, the Delhi-based think-tank, Centre for Science and Environment (CSE) released the findings of its study which tested 33 foods, including 14 packaged foods and 19 fast foods, wherein the samples were found to be overwhelmingly high in fat, sugar and sodium (HFSS). This raised concerns about the burden of diet-related chronic disease. The government is particularly keen on helping the consumers limit their consumption of processed foods that are high in fat, sugar, salt, trans and saturated fats.

Indeed, the global recommendations for moving the nutrition information upfront will definitely improve both visibility and awareness.

India has been quick on the uptake too - in 2018, the Food Safety Standards Authority of India (FSSAI) published draft regulations for front-of-pack nutrition





*The actual health impact of the food resides in the whole ingredients (whole grains, fruit or added sugar) which is mostly not quantified on the labels of multi-ingredient foods.*

labelling and wants to make symbol-based FoP nutrition labeling mandatory across the country.

The draft guidelines include different symbols and nutrient profiling models. It has also derived a format based on nutrient-level cut-offs and dietary allowances as recommended by the Indian Council of Medical Research (ICMR) for Indians. The recommendations of the WHO and Codex will be considered for cases where Indian-specific nutrient cut-off levels are not available. But how will the contents exceeding the threshold limits actually be depicted on the packets so as to help consumers make informed and healthier food choices?

The draft guidelines propose that if the total calories, fats, trans-fats, sugar and sodium per serving exceed the stipulated limits, it would be marked by a red colour. Along with this, certain specific information has to be declared on the front of pack along with the name of the food, brand name, veg/non-veg symbol. The proposed format has two parts:

**Part 1:** Declare the amount of energy, total fat, trans fat, total sugar and salt per serving.

**Part 2:** Declare the per serve percentage contribution to the recommended dietary allowance (RDA). The blocks of nutrients for HFSS food shall be coloured 'RED' - in case the value of energy (kcal) from sugar is more than 10% of the total energy (kcal) provided by 100g/100ml of the product; the value of energy (kcal) from trans-fat is more than 1% of the total energy (kcal) provided by 100g/100ml of the product and total fat or sodium content provided by 100g/100ml of the product is more than the threshold values as specified in the schedule.

However, the above proposed formats are not sitting well with the manufacturers, the scientific community and the consumers themselves for various reasons:

- The FoP labeling seems to focus only on HFSS content in the packaged foods and beverages. The overriding argument is that many regional and traditional legume-based snacks actually contain considerable amounts of protein, but could end up being termed HFSS. Conversely, products like ready-to-drink buttermilk or flavoured milk have substantial amounts of added sugar/salt, but they may get exempted from the mandatory FoP labeling.

- The system of declaring only added saturated fat does not appear to be rational.
- Moreover, why stick to the per serving format for FoP labeling only? Other formats using nutritive value per unit information can be explored.
- Creating a nutrient profile of every food item is under consideration; but fixing threshold levels of the nutrients of concern in all the foods is a colossal task in itself. Not to mention the challenge of nutrient profiling for proprietary foods that are prepared by different methods in different parts of the country.
- There is considerable resistance over the use of the red mark by the food industry as the color is usually associated with danger and is likely to deter consumers from purchasing the products.
- The FoP system will again be interpreted by the literate and nutritionally aware consumer groups only as the nutrients of concern will still be mentioned in text format on the labels. Pictorial representation with images and logos is always better as those who cannot read will not be able to decipher which of the nutrients have been marked red.
- The FoP symbols will still be competing with the regular food marketing attributes like food images, brand, logo and claims for consumer attention.

Some manufacturers are demanding that the FSSAI should encourage voluntary and positive labelling (like in other countries) rather than making the FoP guidelines mandatory. But this does not stand to logical reasoning.

The FoP labeling guidelines have been included in the draft Food Safety and Standards (Labelling and Display) Regulations, 2019. However, strong research based solutions for developing understandable and acceptable labelling formats are essential before making the FoP labels mandatory.

## Conclusion

The need of the hour is simple markings or symbols on the front of packaged foods and beverages that warn consumers about the presence of possible dangerous ingredients. Only then can they make informed dietary choices that will – if not enhance health – at least help prevent, reduce or manage the risk of chronic disease. ■

*Source: Secondary research & media reports*



*Checking the hygiene rating of the food joints ensure safety of food and peace of mind!*

## Is Your Favorite Eating Joint Hygiene Rated?

Did you know that the FSSAI is sprucing up the quality of outside food with the 'Hygiene Rating Scheme' initiative? Food joints that pass muster are awarded a hygiene rating accordingly that is helpful for both the FBOs and the consumers.

**EATING OUT HAS** become a regular ritual for most of us. Some of us eat out due to necessity and many of us out of choice. Today's fast-paced lifestyle and increased mobility, particularly among the younger generation, leaves little time for preparing and eating meals at home. Therefore, many of us are increasingly opting to eat out or have our food delivered from eating joints, especially at workplaces, colleges or during travel. Apart from this, social events and celebrations are also increasingly being held outside the house, where food from outside has become a focal point of enjoyment.

With the advent of multiple international cuisines and a large number of fine-dining places and world-class restaurants - offering both variety and high quality of food - a large number of people choose to eat out for pleasure. In addition, thanks to an evolving social culture centered on coffee shops and restaurants, eating out has become fashionable, especially for youngsters.

While we love to eat out, can we be sure if the food we eat is safe or not? Given the frequency of eating out these days, it is important to assure consumers that the food they eat is safe and hygienic for consumption no matter where they eat. Moreover, a tropical country like

India, with a hot and humid climate, is susceptible to food spoilage and contamination from bacteria that thrive in such a climate.

Both food handlers and consumers often lack awareness on basic food safety, hygiene and sanitary practices leading to consumption of unsafe food. This results in food-borne illnesses, which affect a large number of people in the country. Thus, food safety is of utmost importance. After all, food that is not safe is not food.

So, how do you know that the place where you eat serves safe food? The Food Safety and Standards Authority of India (FSSAI) has crafted a solution to help you make the right food choices.

As the apex regulatory food authority in the country, the mandate of FSSAI is to ensure safe and wholesome food for all the 135 crore citizens of our humungous nation. The Food Safety and Standards Act (FSS), 2006, specifies general hygiene and sanitary practices to be followed in food service establishments in Schedule 4.

The FSSAI ensures that these are implemented through various regulatory, training and capacity-building and compliance measures. To make it easy for consumers to make informed choices about the food they eat, FSSAI has now introduced a

voluntary scheme - called 'Hygiene Rating Scheme' - for food service establishments.

The Hygiene Rating Scheme is a technology-driven, user-friendly scheme where food establishments are given a rating on a scale of 1 to 5, where 5 indicates Excellent Compliance and 1 indicates Poor Compliance of food hygiene and safety standards. The rating are displayed in form of symbols i.e. smiles.

This scheme encourages food businesses to ensure high standards of hygiene and sanitation and allows consumers to make informed food choices. It is currently applicable to food businesses supplying food directly to consumers, either on or off premise - including restaurants, cafes, bistros, diners, dhabas and other eating joints including bakeries, sweet shops and meat retail shops. The scheme also includes interfacing with e-commerce platforms, such as food delivery services and apps, to encourage their associated eating places to adopt the scheme.

### How Does This Scheme Operate?

A comprehensive checklist has been created based on the criteria a food business needs to meet based on the hygiene and sanitation standards laid

## FSSAI Hygiene Ratings Scheme

Hyg. No.	Category	% Score
	Very Good	81 to 100
	Good	61 to 80
	Fair	41 to 60
	Needs Improvement	21 to 40
	Poor	20 or below

down in the FSS Act, 2006. The food business is then audited based on this checklist and awarded a rating by a third-party audit agency empanelled by the FSSAI.

A certificate is generated based on this rating and displayed for consumers at the premises. This helps consumers identify if the place is hygienic or not. A rating of 3 stars and above is considered a 'Good Rating'.

This Hygiene Rating is helpful for both food businesses and consumers. Through this rating process, food businesses have the opportunity to understand the basic criteria for ensuring safe food and implement these practices through training and capacity building of their food handlers. Moreover, food businesses that are compliant can showcase their efforts to consumers by displaying this certificate prominently at the premises. This gives them a competitive edge over other businesses and wins the trust and loyalty of their consumers.

For consumers, this rating is a helpful tool to easily identify if the food being served is safe or not. This empowers consumers to make informed choices and exercise their right to choose a place to eat not only on the basis of taste and service but also health. It also plants the idea of food safety and hygiene in the minds of consumers, making those who are unaware also cognizant of the importance of food safety when they eat out.

Overall, such a scheme benefits everyone as a whole because improved hygiene standards means fewer instances of food-borne illnesses among citizens overall, better health and productivity of people, reduced burden on the healthcare system and ultimately growth and development of the economy and the country as a whole.

So the next time you visit your favourite restaurant, be sure to check its Hygiene Rating. If it doesn't have one, you can encourage the restaurant to get one. You will then be able to enjoy your favourite foods without worrying about an upset

stomach. Other customers will also benefit from this initiative.

Moreover, being a completely online and transparent food rating scheme, it is primed to change perceptions of the Indian food sector across the globe.

## Steps For Getting A Hygiene Rating For Food Business Operators

- Ensure that your food business is licensed/registered by FSSAI.
- Register on the Hygiene Rating Portal (<https://fssai.gov.in/hygieneRating/home>).
- Carry out a self-assessment based on the checklist and make improvements accordingly.
- Appoint one Food Safety Supervisor (FSS) for every 25 food handlers. The FSS should be trained and certified under FSSAI's Food Safety Training and Certification (FoSTaC) programme. The FSS in turn should train all food handlers.
- Ensure that the finished food products are tested atleast annually by a NABL accredited lab notified by FSSAI (only for licensed FBOs).
- Display the 'Food Safety Display Board' prominently in the consumer-facing area in the business premises.
- Get a third-party audit done from an FSSAI empanelled audit agency.
- Based on the verification, a Hygiene Rating Certificate displaying scores will be generated. Display the certificate prominently at the premises.

Moreover, the food samples have to be tested on a regular basis. The FBO should also redo the self-assessment (not earlier than 3 months from the previous inspection) and print the new certificate. The re-inspection will be done automatically as per the first in - first out queue with the Food Safety Officer. The new verified rating certificate can then be printed online and displayed on the premises once again.

The FBOs that have a Hygiene Rating score of 4 (Good) or more can also enroll for the 'Responsible Place to Eat' tag. It has to then comply with certain voluntary conditions for the FSSAI to rate it as 'Right Place to Eat'. This enhances the FBO's scope and responsibility towards providing safe and nutritious food to a larger community. This will also work as a motivation to take care of the employees, the underprivileged and also serve the customer beyond the mandatory, by making them aware of healthy choices and giving them access to such options.

## Statistics for Hygiene Rating

Total FBOs enrolled: 3800+  
Total Hygiene Rating Audit Agencies: 40+  
Total Number of Auditors: 185+

Mr. Murli, Darling Residency (College Cafeteria) elaborates, "Hygiene rating was a nice detailed experience. The matrix makes our score line very clear and visible to my team as well as my guest who are students. This will help parents to have confidence about their wards health in college campus."

D Srinivasan, Annapoorna (Restaurant), Chennai observes, "Hygiene rating is a twin blessing. One it communicates to my guest our original score. Two It is an easy way to check our compliance to FSSAI. We take it as a tool for hygiene management in our group."

Mr Ravi, Vasanthi Bhavan opines, "We were getting confused with so many unscientific ratings .This science based FSSAI's Hygiene Rating is a very great relief. Now my guests and our managers both will know where we stand. This will be a tool for improvement and building confidence."

## Menu Labelling

FSSAI has recently finalized a regulation (which would be voluntary to begin with) specific to menu labelling that will mainly cover food service establishments, restaurants

and/or FBOs. This regulation will empower the consumers with information on food they eat as food service establishments will declare the quality (type of preparation, composition, nutritional value including energy and presence of any allergens) and quantity (amount, number, size, etc) of the products per serving.

### Revolutionizing Food Testing Scenario with Rapid Test Kits

The FSSAI is committed to support and promote the ambitious 'AatmaNirbhar Bharat Abhiyan' campaign and has introduced a policy for approval of indigenously developed rapid food testing kits/equipments/methods. Such quick and easy-to-use testing kits have the potential to revolutionize the food testing landscape by increasing the outreach of testing at the ground-level and reducing time taken to test food items.

Many research and scientific institutions are actively engaged in development of rapid kits/equipments across fields in different parts of the world. Very recently, Department of Science and Technology (DST) has supported promotion and implementation of various appropriate technologies (including rapid ones) in India for addressing the issue of COVID-19. A lot of aspiring minds have come forward to develop simple testing kits and solutions for coronavirus. DST has played a key role in scouting for solutions that are relevant to the country and can help in preparing for exigencies arising out of COVID-19 pandemic. This hasn't only showcased the enormous talent of bright minds in our country, but also given an impetus for implementation of the mission 'AatmaNirbhar Bharat Abhiyan' and the Vocal for Local mission by promoting innovation.

FSSAI has published a Regulation in the Gazette, namely "Food Safety and Standards (Laboratory and Sample Analysis) First Amendment Regulations, 2020". This step will



(Please Mention Your License no.)

■ Restaurant

## With Us You Will Get Safe Food We Follow These 12 Golden Rules

Hygiene Rule Codes		Hygiene Rule Codes	
1	Keep premise clean and have regular pest control	7	Wear clean clothes/ uniform
2	Use potable water for food preparation	8	Wash hands before & after handling food and after using toilets, coughing, sneezing, etc.
3	Cook food thoroughly. Keep hot food above 60°C and cold food below 5°C	9	Use water proof bandage to cover cuts or burn wounds
4	Store veg & non veg food, raw & cooked food in separate containers	10	Do not handle food when unwell
5	Store cold food below 5°C and frozen products at -18°C or below	11	Use clean and separate dusters to clean surfaces and wipe utensils
6	Use separate chopping boards, knives, etc. for raw/ cooked & veg/non veg food	12	Keep separate & covered dustbins for food waste

If any concern

Give your Feedback to Company Name

Call toll free **1800 112 100**

SMS or Whatsapp **9868686868**

Always quote FSSAI Number for quick action

(Company Name)

(Contact Details)

**Download FSSAI APP**

or Logon to <https://foodlicensing.fssai.gov.in/cmsweb/>

Connect with us:

- ① Food Safety and Standards Authority of India
- ② fssaiindia

### Food Safety Display Boards

ensure that indigenously developed kits/equipments for food testing are validated and approved under the FSSAI regulations on a fast track basis. Further, to facilitate ease of business in the food testing ecosystem. The validation/verification criteria for these kits/equipments is being developed by domain experts in the field.

#### Origin of Thought!!!!!!

In the past few years, the food

processing industry has witnessed an array of new or improved rapid kits/equipments/methods for the detection of foodborne pathogens, toxins and other contaminants etc. As the use of the Hazard Analysis & Critical Control Points (HACCP) model and other food safety systems have become firmly entrenched in quality assurance/quality control (QA/QC) programs, the industry's need for "faster, better, cheaper" real-time test results, has also increased



**Hygiene Rating Certificate Sample**

multi-fold.

Several recent rapid and automated kits/equipment/methods are commercially available to close the gap between rapid detection of foodborne contaminants etc. and instantaneous, on-line monitoring to ensure the safety of food products. Considering the above analytical advancements and further to reduce the screening time of food products by Food Safety Officers and surveillance activities in the States/UTs, FSSAI has decided to frame a policy for fast track approval of rapid food testing kits/devices. The ultimate goal for these rapid testing devices and equipments is to provide results within a few hours, if not in “real time.”

**Execution of Thought!!!!!!**

FSSAI has constituted a committee for scrutinization of Rapid Analytical Food Testing (RAFT) Kits/

Equipments/Methods for various applications received by FSSAI under its RAFT Scheme. The RAFT Committee scrutinizes the application in two stages: Final Approval and Provisional Approval.

The Committee recommends those rapid kits/equipments/methods for final approval, without any verification from identified laboratories, that meet the requirements of the Food Safety and Standard Regulations and are validated against International Standards.

Provisional approval is recommended for those rapid kit/equipment/metho

ds which need verification from identified laboratories. Any rapid kit/equipment/ method which does not meet any criteria and does not have relevant documentation in place etc. is rejected by the Committee.

Conformance certificate with a validity of three years is issued to approved rapid kits/equipments/ devices and provisional conformance certificate with a validity of one year is issued to provisionally approved rapid kit/equipment.

As on date, a total of 124 Applications have been scrutinized by the RAFT Committee. Out of these, status of 109 applications was placed before the Food Authority in its last meeting. Out of these 109 applications, 53 rapid food testing kits/equipments/methods have been approved, 12 rapid food testing kits/equipments/methods have been provisionally approved and 44 rapid food testing kits/equipments/methods

were not approved. The status of all approved & provisionally approved rapid kits/equipments was placed on the website of FSSAI dated 12.01.2021 which can be seen at link: [https://www.fssai.gov.in/upload/uploadfiles/files/Status\\_RAFT\\_Applications\\_12\\_01\\_2021.pdf](https://www.fssai.gov.in/upload/uploadfiles/files/Status_RAFT_Applications_12_01_2021.pdf)

The rapid food testing kits/equipments approved by FSSAI are to be used for screening and surveillance purposes only. For enforcement purpose, the method as described in the FSSAI Manuals of Methods of Analysis of Foods and/or the method as described in tables of Appendix B of Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 shall be used.

The RAFT kits are most advanced, easy to use, portable hand-held devices. They don't require any sophisticated equipment and reagents to run the tests. The tests can be performed anywhere by anyone without any specific training requirements. The typical time period taken by the conventional methods to analyze samples for chemical parameters like antibiotics in milk is about 2-3 days. With RAFT approved kits, the time can be considerably reduced to about 10-15 minutes.

FSSAI has made quick progress towards the use of advanced technologies for food testing since the year 2019. These new food testing kits/equipments for detection of foodborne pathogens and toxins ensure “faster, better, cheaper” testing of food. There is a need to popularize these Rapid Tool kits to ensure they are widely used. More importantly, there is a need to promote our start-ups who are working in the area of food testing so that our local innovations can be mainstreamed.

**Conclusion**

Like all other government schemes, this also needs to be marketed and popularized properly. For instance, only when the consumers are aware of the hygiene rating will they be able to interpret what they see and make a decision accordingly. ▶

# FOOD

## Waste Not, Want Not!

Food is wasted at every level from the initial production down to the final consume. Waste consciousness coupled with better storage infrastructure will ensure that no man has to sleep on an empty stomach ever.



**WE SIT DOWN** with a plate full of food only to realize halfway that we are not all that hungry or don't feel like eating anymore. Without a second thought, the leftover food is consigned to the dustbin.

And what happens at our parties, weddings and other functions. The buffet tables are overloaded with rich and delectable dishes. But, again, the excess food is thrown away.

The Food Waste Index Report 2021 released by the United Nations Environment Report (UNEP) reveals that 931 billion tonnes (17%) of the total 5.3 billion tonnes of food produced in the world for human consumption was lost or wasted in 2019. Households account for 61% of the food waste, food services for 26% and retailers for 13% of the wastage. The global food waste is roughly equivalent to India's total production of foodgrains, oilseeds, sugarcane and horticultural produce in 2019-20.

On a global per capital level, 121kgs of food is wasted every year of which 74kgs happens in households.

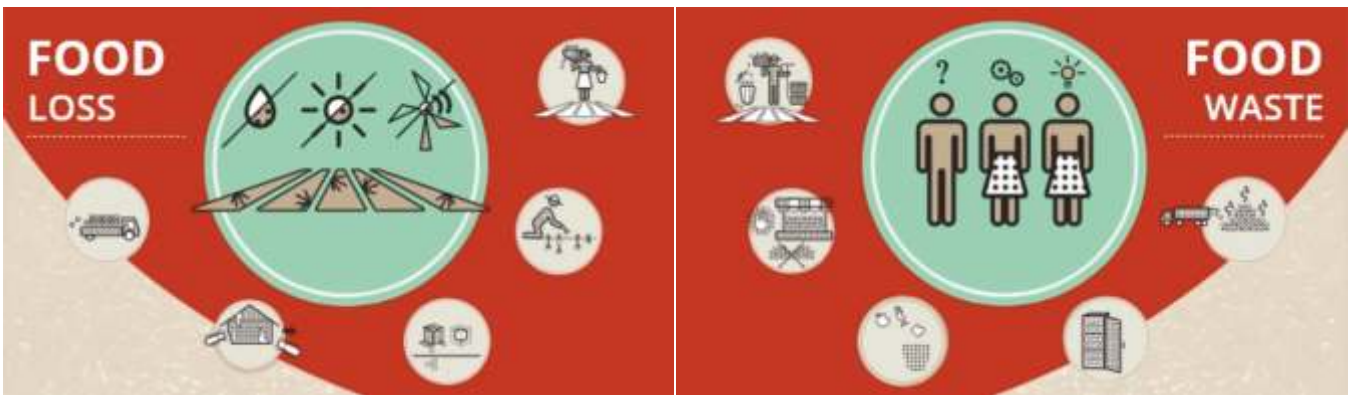
The global quantitative food waste per year is roughly

## The Indian Scenario

The situation is no better in India. According to the United Nations Food and Agriculture Organization (FAO), up to 40% of the food produced in India is wasted. Putting a monetary value on the quantum of food wastage, it averages around US\$14 billion per annum. As per the UNEP report, Indians waste around 50kgs of food per person per year.

For instance, it has been reported that the total food grain production in 2019-20 was roughly 292 million tonnes, while only 225-230 MT is needed to feed the population in a year. And yet, the United Nations also reports that about 190 million Indians remain undernourished. In fact, India ranks on the 103rd position in the Global Hunger Index (GHI).

Yet, there is a difference between food wastage, food loss and food surplus. Food loss refers to the food that is lost through the supply chain from the farm to the plate on account of problems in harvesting, storing, packing,



*Food that never gets eaten both wastes resources and increases global warming.*

30% for cereals, 40 to 50% for root crops, fruits and vegetables, 20% for oilseeds, meat and dairy and 30% for fish. The total food losses and waste amount to US\$ 680 billion in industrialized countries and US\$ 310 billion in developing countries.

On the other hand, The United Nations Food and Agriculture Organization (FAO) estimates that about 815 million people or 10.7% of the world population is suffering from chronic undernourishment. What's more, more than 690 million people went hungry in 2019, affecting 8.9% of people globally. The ongoing pandemic has emerged as an additional threat to food systems and recent estimates suggest a sharp rise in hunger with an additional 83 to 132 million people staying chronically hungry due to Covid-19. The irony is that even if we could save just one-fourth of the food currently wasted or lost, it would easily feed all the hungry people in the world.

The United Nations Sustainable Development Goals of 2015 call for ensuring healthy lives, promoting well-being and ending world hunger by 2030. But, with the hunger statistics rising every day, meeting this goal does not look likely even by the end of the decade.

transportation, infrastructure or market/price mechanisms. Food waste is intentionally wasting or throwing away food because of excess consumption, food getting spoiled or just rotting due to hoarding by consumers (like we have seen during the lockdown imposed by the Covid-19 pandemic). On the other hand, food surplus is the overproduction of food which does not reach the end consumer as is thrown away by the vendor itself.

This means that food is wasted every which way - on the field, in transport, in storage, in processing, in wholesale and retail, in cutting, in cooking and as leftovers.

## It's Not Just About Hunger Alone

Reducing wastage and loss of food is not just about eradicating hunger, improving nutrition or achieving food security. There are many more unseen and unrealized repercussions that weigh us down heavily in the long run:

- It is a direct waste of the land, water, soil, seeds, fuel and other resources that are used to produce the food. According to the FAO's Food Wastage Footprint report, 250 km<sup>3</sup> of water and 28% of the world's agricultural



area is used to produce food that is ultimately lost or wasted each year.

- It contributes to climate change and global warming. The FAO estimates the carbon footprint of global food waste is equivalent to 3.3 billion tonnes per year and accounts for 6.7% of global greenhouse gas emissions.
- It cripples the economy and stunts growth as well.

### What Can we Do?

All of us have to pitch in by developing a culture of waste consciousness. Right now we are weighed down by an overindulgence in both purchasing and consumption. The new motto should be - Buy and cook only as much as you need. Our tradition teaches us to take only as much as we can eat and not leave a single bite on the plate. We need to go back to our age-old customs and respect food as God. We should also ensure that any food that still remains left over and in consumable condition should always reach an empty stomach – be it a human or an animal.

Even restaurants, hotels, caterers, supermarkets, etc. should make it a point to give away the edible food waste to the staff, workers, beggars or at least feed the cows and dogs rather than just throwing it away on the road or in the bins.

The retail sector also needs to up its game with efficient measures to check spoilage, improve distribution and reduce wastage. Supermarkets should be willing to stock produce that looks less-than-perfect rather than carelessly throwing the odd balls away. Customers should not hesitate to buy them either.

There are food banks and other private non-profit organizations that are more than willing to collect the leftover food and distribute it to the needy. Many cities like Chennai, Kochi, Mumbai, Bangalore, and Gurugram are installing community fridges outside retail outlets and even private residences where people deposit their extra food which can be taken by the hungry and needy for free.

Even if the food is not fit for human consumption, it can be used for cattle or in piggeries. Any remaining unusable food can still be composted, thus returning it to the soil in a literal sense.

The government can even use print, electronic and digital media to spread awareness about controlling food



wastage and the plight of our hungry fellow-citizens. Fines should be imposed on wastage of both raw and cooked foods by supermarkets, restaurants, banquets, etc. Those who practice consciousness can be incentivized or rewarded for their efforts.

### The Deeper Malady

The food losses occur mainly at early stages of the food value chain in most of the developing countries and India is no exception. A major portion of the food loss in our country springs from the handling, storage, and transport of food grains, vegetables and fruits. A 2016 study pegged the annual farm produce wastage at a whopping Rs 92,651 crore.

It is sad to note that a chunk of the food grains procured, secured and distributed by the government actually does not reach the consumer's plate. It is lost in one form or the other - from the farm to the procurement centers and store houses and from there to the wholesalers/retailers/consumers.

The primary reason is definitely the lack of proper storage facilities and integrated supply cold chain for agricultural products. Indeed, India's food production has grown by leaps and bounds, but the storage capacity is still lagging terribly behind. So much so that, even a bumper crop becomes a pain in the neck for the authorities. The excess stockpiled food grains only end up damaged or decayed beyond use.

Such deficiencies are not just limited to insufficient space in the warehouses and excess food grains lying in the open. There is improper handling, worm infestations and more. Torn sacks and spilled grains are the norm rather than the exception.

The Food Corporation of India (FCI) had even commissioned a study by the Indian Council of Agricultural Research (ICAR) to come up with scientific methods for improving the storage facilities and thus reducing wastage.

Just last year, the Food and Civil Supplies Minister, Late Ram Vilas Paswan proudly proclaimed in the Parliament that only 0.02 lakh tonnes of grain procured by the Food Corporation of India (FCI) qualifies to be called 'wasted'. He announced that, "Far from public perception that there is huge wastage of food grains in FCI's godowns, we have been able to control it to negligible quantity." He even went on to credit the newly adopted methods of storage and distribution that "reduced wastage of food grains to negligible". But the real truth that FCI is only a small contributor to the mountains of food lost and wasted in the country was safely hidden under the reams of data.

In fact, Prime Minister Narendra Modi himself has often vociferously repeated that the country needs to scale up its capability to store and distribute farm produce, and do it quickly at that. The NDA government has also kickstarted a massive Rs 6,000 crore project - 'Sampada' - involving both public and private players to develop an integrated supply cold chain for agricultural produce on a national level.

Along with this, the farmers need to be educated on better harvesting practices. Other infrastructure improvements for strengthening the supply chain, like roads, transport, drying and processing facilities and cold storages will also help combat the unnecessary food losses.

The three new farm laws are also designed to encourage greater participation of private entities in both procurement and storage. However, they still remain embroiled in agitations and controversies in the face of farmers' unfounded fears and political hara-kiri.

International assistance is also forthcoming. The FAO is working on supporting countries to take action to reduce food loss and waste. The International Food

Policy Research Institute (IFPRI) is also conducting various studies to identify the origin and cost of food waste and loss at all stages - from production and post-production to processing, distribution and consumption - at the local, regional and global level. It is currently working with the CGIAR Research Program on Policies, Institutions and Markets (PIM) to gauge the investment required to effectively reduce post-harvest losses through infrastructure development and technology improvements combined with best practices.

## What is the FSSAI doing?

The Food Safety and Standards Authority of India (FSSAI), Ministry of Health and Family Welfare, Government of India has launched the Indian Food Sharing Alliance (IFSA) in association with other major food sharing organizations across the country in an attempt to solve India's colossal food waste and hunger crisis. This 'Save Food, Share Food, Share Joy' social initiative mobilizes everyone from the citizens, food businesses, corporates and volunteers to the civil society organizations, government and local bodies in a coordinated manner to prevent food from being lost or wasted throughout the supply chain - right from initial production down to final household consumption. Both the leftover and surplus food is then used to feed needy and hungry families.

The aims and objectives of IFSA are:

- **Care:** Help minimize food wastage across the supply chain by means of redistribution to poor and needy
- **Aware:** Mobilize people to minimize their food wastage through widespread awareness programs across the country by Food Recovery Agencies
- **Share:** Facilitate safe distribution of surplus food by connecting trained food recovery agencies with food chains
- **Prepare:** Educate food businesses on best practices and encourage them to adopt the same in order to prevent food loss along the supply chain
- **Declare:** Provide strategic policy, regulatory and programme support to food loss and waste reduction initiatives

Therefore, the coalition spreads awareness about the importance of controlling food wastage, puts surplus food back into the supply chain, reduces the environmental costs of food wastage and also secures food for the future generations.

## Conclusion

Stringent actions are needed to control food loss and wastage, reduce malnourishment and eliminate hunger. All of us have to join hands at every level to ensure that not a single morsel of food is wasted and no belly stays hungry ever! ▶

Source: Secondary research & media reports

## How Do We Ascertain That The Food Is Safe To Consume?

Food inspection, testing and analysis are imperative procedures for ensuring good quality food and safeguarding public health. Compliance with the testing regulations is part of the food safety fabric of the FSSAI.

Food testing in the laboratory provides analytical data on the quality of the food.

**CONSUMERS HAVE THE** right to expect their food to be safe, of good quality and suitable for consumption. The Food Safety and Standards Act, 2006 marked a paradigm shift in the policy approach – it was no longer just limited to preventing food adulteration but incorporated a more holistic approach of ensuring safe and wholesome food for the public.

Indeed, the focus of food safety shifts from simply controlling outbreaks of food-borne illnesses to preventing problems before they happen. Accordingly, the FSSAI has established a set of standards and other provisions that direct and control food safety for all kinds of food business operators (FBOs). This includes good manufacturing practices, hygienic practices, sanitary practices and hazard analysis so as to ensure that the food is safe for human consumption. Strict penalties are imposed when the food establishments fail to comply with any of the rules and regulations.

Despite all these checks and balances, contaminants can enter the food in different forms, that too at different points of the food chain – from production, packaging and transporting to even when in storage. There is biological contamination from bacteria, viruses, moulds and parasites, chemical contamination from residue of insecticides and pesticides, heavy metals contamination from lead, mercury, cadmium and other toxins present in the water used for food preparation, physical contamination from dirt, stones, pieces of plastic/glass and so on.

This is why it is essential to test the food for various contaminants on a regular basis – this proactive approach will help identify and address the potential hazards of food contamination before it reaches the consumers.

### Checking for Food Authenticity

Laboratory testing is an integral part of the food safety ecosystem of the country. It involves complex scientific analysis to identify potential problems and support quality control of the food products. By identifying the source of contaminants, it also enables the food manufacturers to take remedial action, thus preventing an outbreak.

The FSSAI ensures credible food testing through a robust network of laboratories. NABL (National Accreditation Board for Testing & Calibration Laboratories) is the quality control board in India which audits the working of the laboratories and thus provides third party assurance. The FSSAI recognizes and notifies NABL (National Accreditation Board for Testing and Calibration Laboratories) accredited food laboratories across the country under Section 43 of the FSS Act, 2006. There are:

- 190 primary food testing laboratories (in both public and private domain) where expert food analysts carry out varied and detailed analyses of food samples.
- 19 referral food laboratories that work as appellate bodies for

analyzing appeal samples of food lifted by the Food Safety Officers, local bodies and the imported food samples.

- 12 national reference food laboratories (NRL) and 2 ancillary national reference food laboratories (ANRL) for setting up a country-wide standard for routine procedures, validation of such standard procedures/testing methods, development of new methods and ensuring proficiency in testing across the food laboratories with special reference to the risks or food categories. Either a primary or a referral food laboratory can be declared as a NRL subject to certain criteria.

The FSSAI prescribes scientific methods of sampling and analysis that should be followed by all the food testing laboratories. It also specifies package rates for food testing applicable uniformly to all types of food samples.

However, the number and spread of the food laboratories is still proving to be grossly inadequate. To supplement the food testing labs, the FSSAI has launched the 'Food Safety on Wheels' initiative where mobile vans are used to conduct simple tests on-the-go for common adulterants in milk, water, edible oil and other food items of daily consumption. They also help the state field functionaries to enhance their outreach by conducting surveillance activities even in far-flung areas.

Additionally, the mobile units conduct training and certification



*The Food Safety and Standards Act, 2006 – was no longer just limited to preventing food adulteration but incorporated a more holistic approach of ensuring safe and wholesome food for the public.*

**The Food Safety Index (SFSI) is based on 5 parameters, with different weightages against each:**



Human Resources and Institutions Data



Compliance



Food Testing-Infrastructure and Surveillance



Training and Capacity Building



Consumer Empowerment

programmes for food handlers and supervisors in food businesses. They even try to build awareness about food safety, hygiene and promote healthy eating habits among the public.

The FSSAI also recognizes foreign laboratories to reduce the time taken to clear food consignments at ports. It is further involved in ensuring that the food exported from India meets the international regulatory standards.

Besides this, FSSAI has developed an advanced IT solution to assimilate the food labs in the country – InFoLNet (Indian Food Laboratories Network) and categorize them based on regulatory requirements, routine testing, appellate testing, etc. The Laboratory Management System (LMS) is a centralized system that connects and collates all the laboratories online. It also functions as a one-stop portal for food laboratory information - from ownership details, infrastructure availability, technical capacity and scope of testing through to test

results of different samples. The centralized information will prove extremely useful in deciphering risk analysis, enriching standards and capacity building and training.

**Nutritional Testing of Food**


Food testing is not limited to checking for the presence of contaminants in the food. It also enables the authorities to determine the exact composition of the food and communicate this to the consumers along with requisite precautions and other measures. Nutritional labels stating the calorific value, fat, saturated fat, cholesterol, carbohydrates, dietary fiber, sodium, sugars, protein, vitamins, calcium, iron, additives and other constituents of the food are derived from these testing laboratories. The tests can also substantiate claims like 'low fat', 'low sugar' and 'low cholesterol'. Even the shelf life, storage instructions and other risk factors are determined based on the testing parameters.

In fact, FBOs have to ensure that the ingredients, additives, heavy metals, naturally occurring toxins, etc. in their foods are within the recommended levels prescribed in the FSSAI regulations. Incorrect nutritional labeling on the food packages can invite penalties to the manufacturers.

**How Food Testing Helps Consumers**

Consumers can rest assured that the food they consume has passed the requisite tests at different points of the supply chain and is safe to consume. Moreover, as people are aware of the nutrients and other components of the food, they can make informed purchase decisions to suit their health and dietary choices. They are also empowered to avoid certain compounds that they are allergic to or simply do not wish to consume. ▶

*Source: Secondary research & media reports*



## **SLEW OF MEASURES UNDERWAY AT FSSAI**

Food safety is among the major concerns of India and the FSSAI is not leaving any stone unturned to ensure food safety for the consumers.

A note from the PR team of the Food Authority.



# AatmaNirbharBharat Abhiyan



ECONOMY



INFRASTRUCTURE



SYSTEM



DEMOGRAPHY



DEMAND

Transformingindia.MyGov.in



**FOOD IS CENTRAL** to our lives not just for sustenance but also as an expression of altruism among people. All major festivals and celebrations around the world are centred around food. As everyone must eat, what we eat becomes a powerful symbol of who we are.

If the food we eat is not safe, we become vulnerable to food borne illnesses, which in turn reduces our ability to absorb nutrients and fight infections; thereby impacting our overall health. As food chains are becoming longer, complex and globalized, contamination of food leading to food borne diseases is a serious concern. At the same time, residues of antimicrobials in food have received much attention in recent years due to growing food safety and public health concerns. Hence, there is a need to build resilient food safety systems world-wide, using technological innovations to reduce pre- and post-harvest contamination during production, storage and transport; prevent food frauds and adulteration; digitize systems and processes to facilitate trade with other countries; use fortification techniques with better micro-nutrients and reformulation of food products to improve the nutritional value of foods along with appropriate methods of reducing food loss and wastage.

## What Are We Doing?

Food safety is perennial and is the first and foremost step towards a balanced diet and healthy nutrition. FSSAI is institutionalizing and upgrading the scope of market surveillance to identify hot-spot areas of adulteration and conduct national-level surveys for milk, vegetable oils and other high risk commodities to maintain high levels of food safety measures. We are constantly working with States and UTs for improving the infrastructure and capacity of food testing laboratories and development of new National Food Laboratories (NFLs) at Chennai/ Mumbai. We are actively investing our efforts around training and capacity building efforts for Food Safety Officers (FSOs) and field staff as well as increasing the manpower at FSSAI headquarters and across regional offices. We are also strengthening our Food Import Clearance System in order to ensure that only quality products, compliant with our standards are imported into the country.

People in both developed and developing nations have been experiencing many changes in their way of living as well as eating habits. The ever increasing demand from

people for new types of food products drives changes in the food system.

In India, the Eat Right India movement (led by FSSAI) has been launched to address this ever changing demand by transforming the food ecosystem of the country. For this, India has adopted a systems approach that is aligned with the UN's Sustainable Development Goals. Our strategy is to utilize a 'Whole of Government Approach' to bring together various other Ministries and Government departments on a common platform and a 'Whole of Society Approach' for implementation at the ground level.

In the past few years, the food processing industry has witnessed an array of new or improved rapid kits/equipment/methods for the detection of foodborne pathogens, toxins and other contaminants etc. As the use of the Hazard Analysis & Critical Control Points (HACCP) model and other food safety systems have become firmly entrenched in quality assurance/quality control (QA/QC) programs, the industry's need for 'faster, better, cheaper' real-time test results has also increased multi-fold.

Several recent rapid and automated kits/equipment/methods are commercially available to close the gap between rapid detection of foodborne contaminants etc. and instantaneous, on-line monitoring to ensure the safety of food products. Considering the above analytical advancements and further to reduce the screening time of food products by Food Safety Officers and surveillance activities in the States/UTs, FSSAI has decided to frame a policy for fast track approval of rapid food testing kits/devices. The ultimate goal for these rapid testing devices and equipments is to provide results within a few hours, if not in 'real time'.

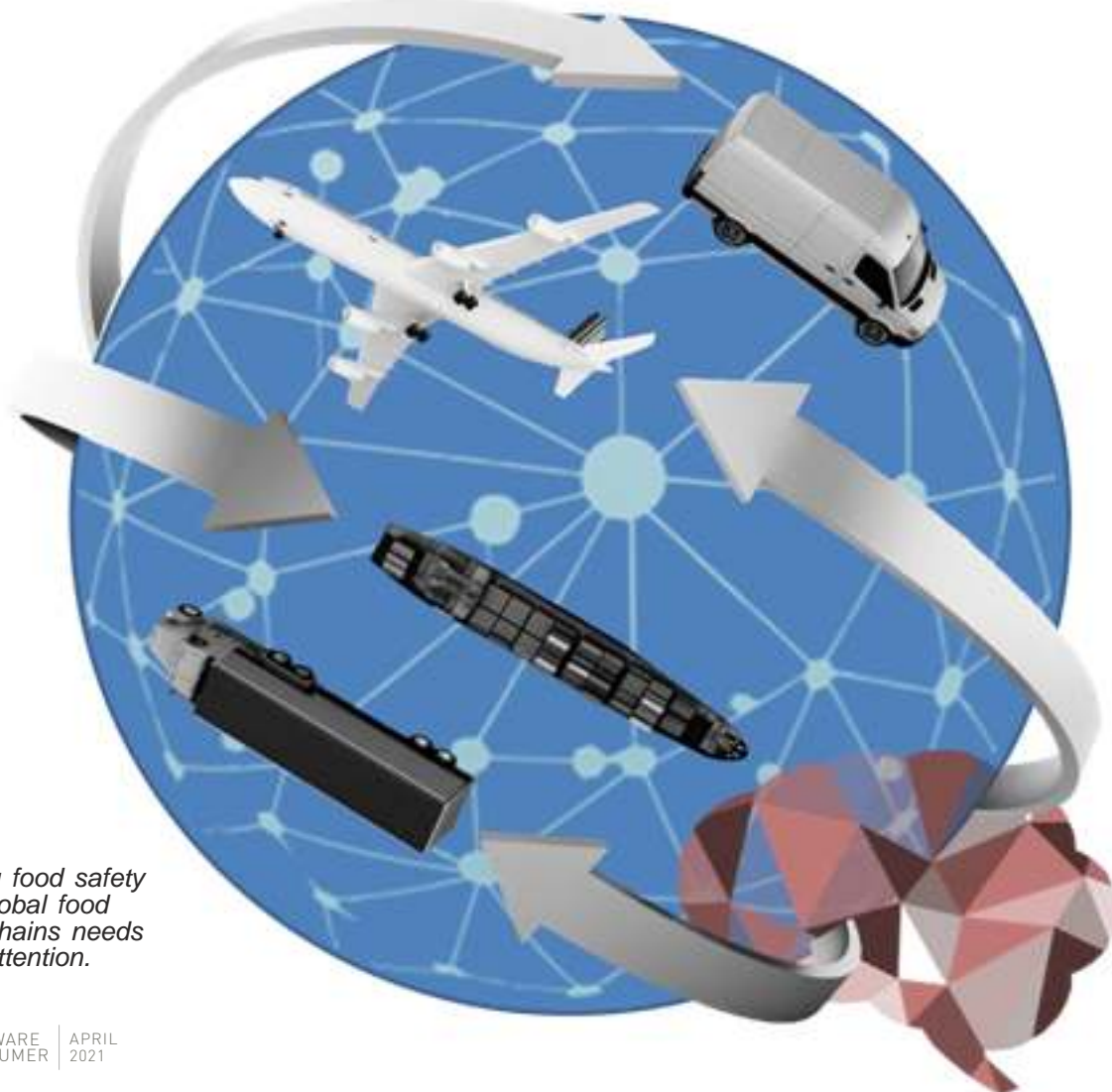
FSSAI is committed to supporting and promoting our Hon'ble Prime Minister, Shri Narendra Modi's 'Aatma Nirbhar Bharat Abhiyan' campaign and has introduced a policy for approval of indigenously developed the rapid food testing kits/equipments/methods. The Rapid Analytical Food Testing (RAFT) committee scrutinizes kits/equipment/methods for various applications received by FSSAI under its RAFT Scheme.

The FSSAI has made quick progress and 53 rapid food testing kits/equipments/methods have been approved already with many others under consideration. There is a need to promote our start-ups who are working in the area of food testing so that our local innovations can be mainstreamed. ▶

# THE LAST MILE



– A GLOBAL RESPONSIBILITY



*Ensuring food safety in the global food supply chains needs urgent attention.*



**ACCORDING TO THE** National Geographic – 'What The World Eats', every day, 7.7 billion people around the world eat, consuming 14.5 million tonnes of food. Therefore, the importance of ensuring food safety cannot be understated.

The World Health Organization (WHO) clearly states that, "Access to sufficient amounts of safe and nutritious food is key to sustaining life and promoting good health". The unsafe food creates a vicious cycle of disease and malnutrition, particularly affecting infants, young children, elderly and the sick. In fact, unsafe food is the root cause of scores of diseases with millions of people falling sick and dying every year, resulting in the loss of 33 million healthy life years.

The food-borne diseases strain the health care systems, harm tourism, hamper trade and weaken the nation's economy. However, the effects are no longer limited to individual countries.

Globalization is triggering consumer demand for a wide variety of foods. People are open to trying out

catering and retail. However, the legislations tend to diverge a lot when it comes to organization, infrastructure and teaching capacity across countries for food protection.

The variance in the shape and substance of the regulations highlights the fact that every country is naturally concerned about protecting its own citizens. For a more global approach, the WHO and the FAO are instituting international food safety management systems designed to make the global food trade efficient, effective and safe for all. The Codex Alimentarius – consisting of several independent science-based international standards - serves as the common global benchmark that guides governments on framing their own national food safety and quality legislations.

For instance, a majority of the food safety laws in different countries are based on the Hazard Analysis and Critical Control Points (HACCP) which is a key solution to ensure that food safety production is operated according to the Codex Alimentarius International Food Standards. It has a systemic, risk-based approach to prevent the

**Unsafe food is a global health threat that can endanger everyone on the planet. Given the shared responsibility, a global approach to food safety is crucial now.**

different cuisines from around the world and are purchasing varied imported foods and ingredients that were otherwise restricted to local areas. The diversified dietary demands are making the food supply chains more complex, longer and crossing multiple national borders. The Food and Agriculture Organization (FAO) estimates that the world agricultural trade has increased more than threefold in value between 2000 and 2016, rising from USD 570 billion in 2000 to USD 1.6 trillion in 2016. Moreover, food trade accounts for approximately 10% of the total annual trade globally.

While people are enjoying the speed and range of product distribution through global trade, local foodborne disease outbreaks can quickly escalate into international emergencies. The current Covid-19 pandemic is a case in point.

Don't the consumers have the right to expect that the food they purchase is safe to eat? It follows that food safety has become a global challenge today. Furthermore, the WHO constantly reiterates that there is an inextricable link between food safety, nutrition and food security. Therefore, food quality and preservation need to be tackled on a global footing.

### **The Global Food Safety Landscape**

The need for food safety is recognized around the world and almost every country has incorporated its own food safety laws and enforcement practices for safeguarding the food supply chain from hazardous microbial and chemical agents – right from manufacture, processing, packaging and storage to transportation, distribution, trade,

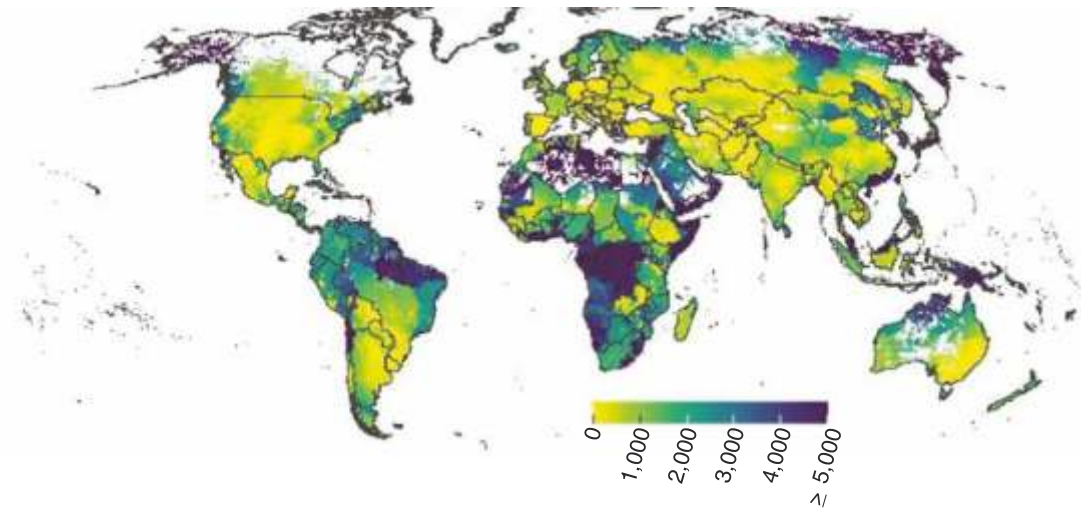
biological, chemical and physical contamination of food at a number of key junctures during production, packaging and distribution. This is a preventative system for countering health hazards as it is based on identifying potential food safety problems before they happen.

The Codex Alimentarius has also developed the Good Manufacturing Practices (GMP) concept for consumer protection. These are internationally recognised quality assurance guidelines that lay out the basic operational conditions and procedures for the production of food, beverages, cosmetics, pharmaceuticals, dietary supplements and medical devices. Manufacturers must strictly implement these measures along with mandatory product inspection at critical control points to ensure that their products are of high-quality and safe for human use.

Apart from this, there are several private internationally-recognised food safety organisations and certification programs that enable the food players to ensure that they meet the food quality and safety standards in a way that transcends borders.

### **Fulfilling the Shared Responsibility**

Every food product manufacturer or trader has to mandatorily comply with the food safety regulations of its own country. Additionally, when trading in the foreign market, the global food manufacturer/trader is also obliged to conform with the food safety and consumer protection laws of the countries where they are actively trading, so as to receive approval from the foreign governmental regulators. That's not all either – many of the leading food industry players also get audited and



Optimised distance between food production and consumption (km)

certified by different international regulatory bodies, including private food regulators.

However, food safety is not the responsibility of the food manufacturers alone. Other stakeholders involved in the food chain, like the policy-makers, producers, civil society organisations, academic and scientific institutions and even the consumers have their own responsibility and accountability. What's more, their roles are highly interconnected and interdependent. Active collaboration among all the stakeholders is vital to ensure effective food safety across the globe.

### The Indian Scenario

The Indian Government has instituted the Food Safety and Standards Act in 2006 and the FSSAI is the apex food regulator in the country. It is responsible for ensuring that the food is safe, healthy and sufficient for the consumers even while upholding the international regulations by establishing globally benchmarked food product standards.

In fact, Section 16 of the FSS Act expressly requires the FSSAI to assist the international governmental and non-governmental organizations in coordinating their work on food standards and also promote consistency between international technical standards and domestic food standards through international cooperation. Accordingly, the regulator focuses on strengthening its food safety collaboration with various countries by meeting their representatives, liaising with the officials from concerned Embassies/High Commissions and with concerned ministries/ departments, organizations, agencies etc. on matters pertaining to international issues in food safety. There have been formal engagements with relevant food safety agencies in Denmark, France, Germany, Netherlands and New Zealand.

By constantly striving to be at par with the best national food regulators in the world through engagement/partnership with various international regulatory bodies and multi-lateral agencies, the FSSAI aims to eventually be recognized as one of the trusted leaders in the field of food safety.

However, a lot more has to be done to ensure adequate safety of our food products in the country and across the world. Continuous improvement of the food safety standards, especially for food processing and storage facilities, is needed. The FSSAI should also work on issues like quick recall of unsafe foods, robust tracing and tracking system and strong labelling on genetically modified foods and other harmful additives and ingredients in the packaged foods.

The legislations are there but they have to be implemented on a broader and more consistent footing. The municipal regulators should up their surveillance quotient to ensure that all food business operators always meet the stipulated standards without fail. The violators should be punished with strict penalties corresponding to the level of the infringement. The authorities should further empower the food businesses to properly address the violations, like unhygienic practices on the premises.

At the same time, food growers, manufacturers and service providers need to cooperate with the government by adopting the appropriate regulations and also be willing to assist the policymakers in setting the relevant benchmarks whenever needed.

There is still a lot of scope for building consumer awareness about the common food hazards and food safety methods. The consumers are largely unaware of their rights as well as the initiatives instituted by the FSSAI. Both the regulators and consumer organizations have to invoke awareness among the public to demand safe and quality food on the one hand and how to make informed choices on the other. And consumers, on their part, are also duty bound to be cognizant of their legal right and duty of care principles.

### Conclusion

Protecting people from the serious health effects of consuming unsafe food is a global challenge. No government, authority, institution or company can do it alone. ▶

Source: Secondary research & media reports

## Misleading Claims Of Special Immunity-boosting Foods That Prevent Covid-19

With the Covid-19 pandemic disrupting our lives like never before and the abounding fears of contracting the SARS-Cov-2 virus, people have been popping immunity-boosting vitamin C, zinc, iron and other pills by the day. Discussions are centered around home remedies like drinking warm water, ginger and turmeric decoctions and taking steam on a regular basis.

Will these precautions and supplements really boost the immune system and safeguard the body from disease, let alone keep the novel coronavirus at bay for sure? And what about the 'immunity-laden' biscuits, khakhras, powders, juices and even water flooding the market with claims of actually preventing or curing the coronavirus?



*There is an estimated increase of 20% to 40% in the sale of immunity-boosting foods.*

**WE ARE READY** to do anything to stay safe during the Covid-19 pandemic? While consumers are ready to try almost anything due to the prevailing uncertainty, can things like immunity-boosting health salts and pocket eau de cologne with germ protection make the cut with the public? Let's find out:

Boosting immunity has been buzzing in my mind right since the Covid-19 was declared as a pandemic. I have tried all kinds of supplements, nutraceuticals, ayurvedic concoctions and home-made brews and forced them on my family too. I am hoping this will strengthen our body's immune system and keep us safe in these unpredictable times.

– *Aryan Malhotra, Chandigarh*

7 June 2020 **World Food Safety Day**

Safe food in markets is everyone's business

Ignore fake news. There is no scientific evidence that any food prevents or cures COVID-19

#WORLDFOODSAFETYDAY2020

World Health Organization India | fssai FOOD SAFETY AND STANDARDS AUTHORITY OF INDIA Inspiring Trust, Assuring Safe & Nutritious Food | Food and Agriculture Organization of the United Nations | Eat Right India

*Boosting immunity; averting the coronavirus; treating Covid-19 – is this even possible with foods and other products? Why are the consumers getting confused with false and misleading claims?*

The market is flooded with a mind-boggling mixture of products that claim to boost the body's immunity and prevent Covid-19. I am inundated by new varieties on the shelves every time I visit the supermarket. The claims are tempting and while I do toss a few into my cart everytime (just to be on the safe side), I am not really sure about how effective - or even safe – they actually are.....

– **Ruchikka Karda, Hyderabad**

I steer clear of all the so-called immunity-boosting products touted by the devious marketers. The claims sound so dubious that I wonder how anyone can fall prey to them at all. Yet, in a country like India anything is possible and people will continue to believe in 'babas' and shifty advertisers rather than knowledgeable sources like the government or even the medical and scientific community!

– **Amit Jalan, Patna**

Am I glad that the 'anti-virus' is no longer limited to our computers and mobiles? There are so many anti-virus products for Covid-19 that can destroy the coronavirus and keep us safe and secure. I like to use as many of them as I can as it will keep me and my family safe in this difficult time.

– **Ria Mehra, Guwahati**

The pandemic has already wreaked enough havoc in our lives; why are suspect advertisers compounding the chaos with their tall claims of enhancing the immunity and preventing the virus from attacking the body? Why don't people realize that the fishy companies are out to make a quick buck?

It's not just about fleecing the already ravaged consumers only. The claims of these fishy products lull them into a false sense of security among the people which leads them to indulging in high-risk behaviours. They think they are safe from the virus and can roam around freely without any heed to masks, sanitizers and social distancing. All of us will pay a heavy price in the end!

– **Dr. Jagadish Rao, New Delhi**

I really liked the immunity-booster bread available in the supermarket – I enjoyed the taste and was so happy that it was keeping us safe from the virus. I made it a point that every member of my family should have at least one slice of the bread in the morning every day. I wonder why it has suddenly disappeared from the aisles? The salespersons also do not answer my queries and appear to be clueless about the disappearance!

– **Asif Khan, Lucknow**

Dettol did it and Lifebuoy was not far behind. Surprisingly, Siyarams tried the gimmick and so did Zodiac. Modern Foods jumped onto the bandwagon and Biryani Blues restaurant couldn't resist the temptation either. Dabur is riding the wave too.

I am dazed by how insensitive, callous and money-minded the bigwigs can be even during these unprecedented times. Is there no end to human greed



Can things get any worse?

and self-interest? How can they even think of profits when the common man is reeling from the lockdown, the salary cut and the job loss?

It is a relief to see the Advertising Standards Council of India (ASCI) pulling up these companies for their false and misleading claims in preventing/curing the coronavirus. No surprises there, none of them have been able to prove their tall claims and withdrew their promotions after being flagged by the regulator.

I just hope that they are severely punished for their devious behaviours and it prevents other miscreants from creating so much confusion during the already harrowing pandemic.

– **John Dias, Goa**

### Conclusion

There is no scientific evidence to support claims of companies selling 'immunity boosting' foods which supposedly enhance immunity and prevent us from contracting Covid-19. While government regulators are monitoring the advertizing space, it is advisable to safeguard your health and money in a wise and careful manner. ▶

Source: Secondary research & media reports

## SOURCES / REFERENCES

<https://www.who.int/>  
<http://www.fao.org/>  
<https://fssai.gov.in/>  
<https://foodregulatory.fssai.gov.in/>  
<https://www.consumersinternational.org/>  
<https://www.thelancet.com/>  
<https://www.raps.org/>  
<https://www.downtoearth.org.in/>

<https://poshan.outlookindia.com/>  
<https://sharefood.fssai.gov.in/>  
<https://en.reset.org/>  
<https://www.indiatoday.in/>  
<https://www.sesotec.com/>  
<https://www.jagranjosh.com/>  
<https://en.wikipedia.org/>  
<https://www.thehindubusinessline.com/>

<https://www.insightsonindia.com/>  
<https://en.gaonconnection.com/>  
<https://foodregulatory.fssai.gov.in/>  
<http://www.ils-i-india.org>  
<https://www.ncbi.nlm.nih.gov>  
<https://www.ox.ac.uk/news>  
<https://www.bmj.com/>  
<https://onlinelibrary.wiley.com> ▶



CONGRATULATIONS

**INDIA**  
**OVER**  
**4 CRORE**

COVID-19 VACCINE DOSES  
**ADMINISTERED TOTAL!**

**PREVENTIVE HEALTH MEASURES TO BOOST IMMUNITY**



**Drink warm  
Water  
throughout  
the day**



**Daily practice  
of Yogasana,  
Pranayama &  
Meditation  
for at least  
30 minutes**



**Use spices like  
Turmeric,  
Cumin,  
Coriander  
and Garlic  
in cooking**

## NABH AYUSH ENTRY LEVEL CERTIFICATION PROGRAM

### TAKING QUALITY TO OUR ROOTS



#### NABH

is a constituent board of Quality Council of India (QCI).

It is playing a pivotal role at the National level in propagation, adoption and adherence to healthcare quality standards in AYUSH healthcare delivery systems.

With an objective to bring more light to AYUSH related treatments, the Government of India in 2014, formed the Ministry of AYUSH and consequently brought in the National Accreditation Board for Hospitals & Healthcare Providers (NABH) to start implementing quality healthcare standards for hospitals providing AYUSH treatments as well.

In the recent years, there has been a paradigm shift from allopathy system to traditional healthcare. To support this trend, health insurers have started offering AYUSH treatment covers as part of their health insurance policies. NABH Ayush Entry Level Certification Standards provide an objective system of empanelment by insurance and other third parties. These standards also address the need for quality control and quality monitoring in AYUSH healthcare as required by the Pradhan Mantri Jan Arogya Yojana (PM-JAY) under the Ayushman Bharat Scheme.

**NABH AYUSH Entry Level Certification standards are easily downloadable from NABH website.**



[www.nabh.co](http://www.nabh.co)



[nabh@nabh.co](mailto:nabh@nabh.co)

# THE AWARE CONSUMER

India's Most Credible  
**Consumer Monthly**

Save upto

**50%**

on subscription



## Subscribe **today!**

{ Save **₹ 3,600/-**  
FOR 36 ISSUES }

Please accept my subscription of **THE AWARE CONSUMER**

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

PH. NO. \_\_\_\_\_ E-MAIL \_\_\_\_\_

PAYMENT  CASH  CHEQUE CHEQUE/DD NO. \_\_\_\_\_

DRAWN ON \_\_\_\_\_

DATE \_\_\_\_\_ SIGNATURE \_\_\_\_\_

No. of Issues	News Stand Price	Discount	You Pay	You Save
12	₹ 2,400/-	20%	₹ 1,920/-	₹ 480/-
24	₹ 4,800/-	30%	₹ 3,360/-	₹ 1,440/-
36	₹ 7,200/-	50%	₹ 3,600/-	₹ 3,600/-

Cheque / DDs should be drawn in favour of **HAMARA CONSUMER DOST PVT. LTD.**

Send your subscription to: The AWARE CONSUMER, F-9, 2nd Floor, Kailash Colony, New Delhi-110048

Contact: 9311044424 • E-mail: bejonmisra@theawareconsumer.in