



# **FoP warning labels for packaged foods in India: CSE perspective**

**March 4, 2021 | 5:00-7:00 PM**

**Amit Khurana, Food safety and Toxins, Centre for Science and Environment**



# Growing burden of diet-related non-communicable diseases (NCDs) in India

- Share of deaths due to NCDs increased from **38% in 1990 to 62% in 2016** (ICMR, 2017)
- **One in four Indian is overweight/obese**
  - **Overweight** (BMI  $\geq 25.0$  Kg/m<sup>2</sup>): **42.5% (urban areas), 18% (rural)**; **obesity** (BMI  $\geq 30$  Kg/m<sup>2</sup>) : 11.2% (urban areas) and 3.7% (rural) (ICMR-NCDIR, 2020)
  - **Increased obesity in women** (16 of 22 states/UTs in NFHS 5 vs. NFHS 4); **increased in men** (19/22); **increase overweight in children** (20/22)
- **28.5% had raised blood pressure** (ICMR-NCDIR, 2020)
- **16.8% male adult population** and **14.6% female** adult population are **diabetic** (NFHS 5); this proportion was 8% and 6% in NFHS 4.

**Big double burden: wasting/stunting/malnutrition on one side as well as overweight/obesity on the other**



# Fast changing food habits with fast foods/junk foods

- India is experiencing a **dietary shift** – increasingly consuming more of processed and ultra-processed foods (packaged food and fast foods); also linked with double burden.
- Ultra-processed foods (junk foods) are more of factory products and less of foods (far from contributing to a balanced diet). They are:
  - **High in fat, salt, sugar** (HFSS) (to increase shelf life, palatability, mask odour and taste of chemicals; also addictive)
  - **High in calories** (empty calories: certain soft drinks); also known as energy-dense foods, foods of minimal nutrition
  - High on refined carbohydrates but little or no fiber, protein, minerals
  - **High on chemicals** (preservatives, flavours, stabilizers) not typically used in Kitchens
  - **Aggressively promoted targeting children in particular**; Attractively packaged
  - **Widely available** and **accessible** than real foods like fruits and vegetables (cheap, small packages almost everywhere)
  - Examples: packaged foods such as savoury snacks, sugar-sweetened beverages, instant noodles, confectionery (chocolates etc) and fast foods such as burgers, pizzas, fries etc.



Front of pack labels for consumers; information at the back of pack for scientific understanding and compliance

Nutritional information at the back of pack is not consumer friendly

- Difficult to see, difficult to understand, too many numbers, requires complex calculation

Front-of-pack (FoP) labels are consumer friendly

- **Easily noticeable** at the front (principal display)
- Known to be **better understood**, enable quicker and informed choice by consumer
- **Can encourage healthy eating habits** in the long-term

Both should complement each other.

Primary purpose of FoP should be to well inform consumers. Back of pack information more suited for compliance and enforcement.



Nutrition Facts			
Serving Size 1 cup (228g)			
Servings Per Container 2			
Amount Per Serving			
Calories 250		Calories from Fat 110	
		% Daily Value*	
Total Fat 12g			18%
Saturated Fat 3g			15%
Trans Fat 1.5g			
Cholesterol 30mg			10%
Sodium 470mg			20%
Total Carbohydrate 31g			10%
Dietary Fiber 0g			0%
Sugars 5g			
Protein 5g			
Vitamin A 4%			
Vitamin C 2%			
Calcium 20%			
Iron 4%			
*Percent Daily Values are based on a 2,000 calorie diet Your Daily Values may higher or lower depending on you calorie needs.			
	Calories	2,000	2,500
Total Fat	Less than	65g	50g
Sat Fat	Less than	25g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrates		300g	375g
Dietary Fiber		25g	30g



# Types/evolution of FoP labels – starting from endorsement logos



**Keyhole**

Keyhole: Norway, Sweden and Denmark (2009); Iceland and Lithuania (2013)



**Choices logo**

Choices logo: Netherland (2006), Belgium (2007), Poland (2008), Czech Republic (2011)



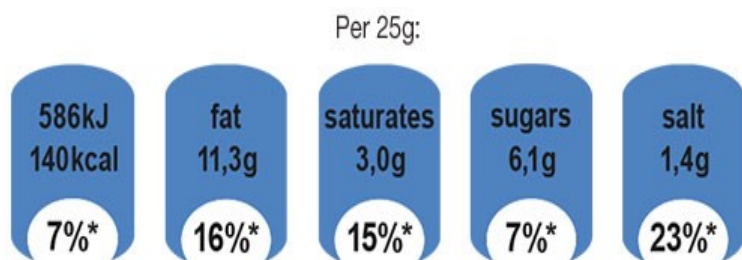
**Healthier choices**

Healthier choices: Singapore (1998), Thailand (2007), Brunei and Malaysia (2017)

- **Do not provide information about specific nutrients (of concern)**
- **Positive directive overall assessment; encourages consumers to overestimate healthfulness; may act more as health claims**



# Types/evolution of FoP labels– Non interpretive systems

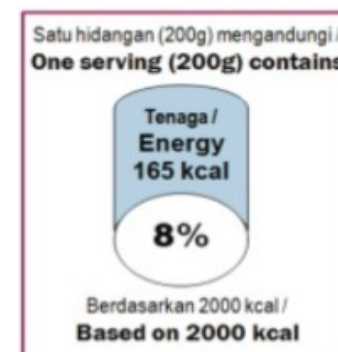


Per 100g:  
2343kJ / 560kcal

Reference Intakes/GDA – European Union  
(2016)



GDA – Thailand (2011)



Energy icon – Malaysia (2012)

- Complex numbers; difficult to understand. Often monochrome. No direction to judge/decide. Some of these numbers are often mentioned at the back of pack; so less value addition and space utilisation
- Often favoured by the industry; it helps them more (and not the consumer). In fact, the consumer is mislead/left confused (by design and quite intentionally).



# Types/evolution of FoP labels – summary indicators



Health Star rating

Health star rating (hybrid): Australia and New Zealand (2014)



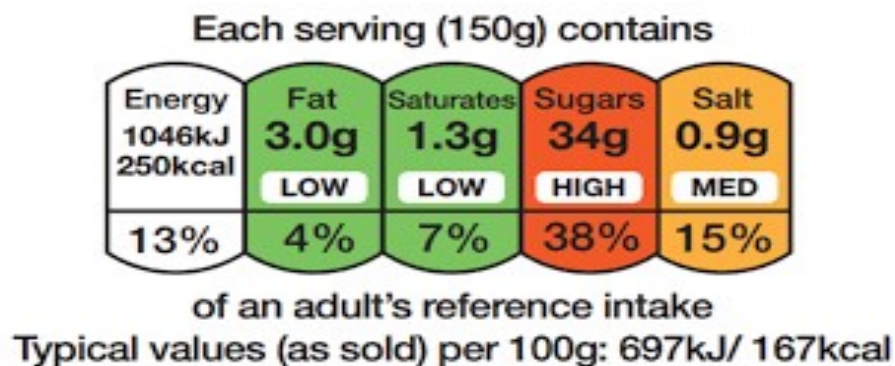
Nutri-score  
(France)

France (2017), Spain (2018), Portugal, Austria, Germany, Luxembourg, Belgium (2019)

- **Does not isolate specific ingredients. Graded assessment. The overall rating/score of the product may be high if say dietary fibre is high but the sugar is also high (also include nutrients other than negative-nutrients)**
- **Such labels, though, may help pick the better option among brands – but may not discourage consumption of foods high in fat, sugar, and salt.**



## Types/evolution of FoP labels– Interpretive nutrient-specific ‘traffic light’ label



Traffic Light label

- Negative nutrients but unclear or mixed messages with both red and green colours on the package.
- Complex numbers
- Numbers are on per-serve basis (not fixed in many countries)

United Kingdom (2006), South Korea (2011), Ecuador (2014), Sri Lanka (2016-drinks, 2019-foods), Iran (2017)



# Types/evolution of FoP labels— Interpretive nutrient-specific ‘warning’ labels

## Interpretive warning labels



Chile



Israel



Proposed warning label in Canada

- No numbers; use of colours and symbols make it easy to understand
- Reflect ‘warning’ on excess of nutrients of concern (need of the hour)
- Nutrient-specific (single symbol for each nutrient); number of symbols easily tell high in one or more nutrients (of concern)
- Suited to transcend language/literacy barriers (which are very high in India)

## Evidence emerging:

- Negative FoP labels such as warning labels rule out chances of positive perception about foods
- Warning labels outperform other labels for consumer understanding
- Greater relative impact on children’s food choices compared to traffic light labels

Finland- Salt (1993), Chile (2016), Peru (2019), Mexico (2020), Israel (2020), Uruguay (2021), Columbia (2021), Brazil (2022), Canada (Proposed)



# FoP labelling in India



Seven years of delay; several committees/groups; many dilutions. Industry pressure continues; FoP labelling still awaited.

April 2018 onwards: phase of delay and dilutions

FSSAI sets up **expert committee** on junk food in schools, which also strongly recommends strengthening of nutrition labelling and **front-of-pack labelling of calories, sugar, fat, saturated fat and salt**

Prabhakaran committee **endorses guidelines of 2013 committee**. Emphasises concrete action to resolve ambiguities on serving size and nutritional information people need

FSSAI again **sets up a panel, led by B Sesikeran**, former director of National Institute of Nutrition, to review the draft regulations in view of industry's concerns on FoP labels. **Committee's suggestions were not made public**

CSE released its study "Communicating diseases" based on a laboratory analysis of salt, fat, trans fat content of 33 packaged and fast foods. **Highlighted foods that would be labelled 'red'** based on the FSSAI-proposed thresholds (based on WHO-SEARO)

FSSAI notifies **FSS (Labelling and Display) Regulations, 2020**. FoP labelling not part of it.

March 2013

June 2015

May 2017

April 2018

Aug 2018

July 2019

Dec 2019

Dec 2019

Dec 2020

Jan 2021

FSSAI sets up **11-member expert committee** led by D Prabhakaran to assess the consumption of fat, salt and sugar in India and its health impacts

FSSAI puts up **draft FSS (Labelling and Display) Regulations, 2018**. Requires declaration of salt. Proposes **front-of-pack labelling of calorie, total fat, total sugar, trans fat and salt**. Provides thresholds for red colour coding

FSSAI issues **draft notification FSS (Labelling and Display), Regulations, 2019** with severely diluted FoP labelling. **Total fat is replaced with saturated fat, salt with sodium, total sugar with added sugar**. RDA of added sugar kept same as that of total sugar (50 g)

FSSAI mentions about **delinking FoP from labelling** regulations and the need to revise thresholds proposed by itself twice in draft regulations (2018, 2019).

FSSAI conducting discussions with stakeholders based on a study it got conducted in 2020; parallel working group operational on FoP labelling.

March 2013-April 2018: phase of delay



**Key issues still open:**

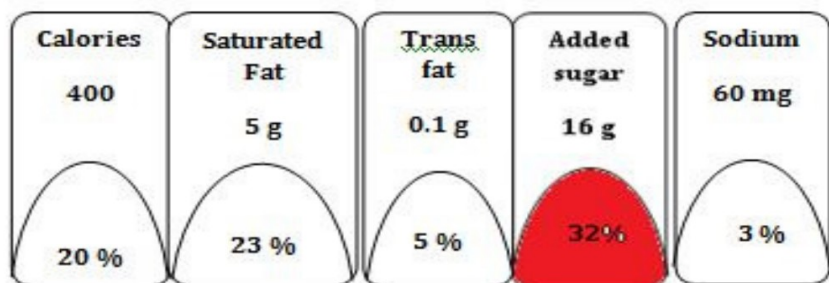
- 1. Design of the FoP label**
- 2. Nutrients to be mentioned**
- 3. Thresholds to be used**
- 4. Timelines of implementation**

**Industry continues to push back. Consumer health/interest put at the back-burner**



Issue of design: warning labels are proving to be most effective in fulfilling the primary purpose of FoP labels – i.e. informing consumer and promoting healthy food habits

### FSSAI proposed in 2019 or similar number-centric will not help consumer



Will be **RED** if quantity in g/ml per 100g/ml of the product exceeds the threshold

- Complicated numbers; mixed message w.r.t. red and non-red blocks; duplicates information at the back of pack. Numbers based on serving size (which is not standardised in India)
- Industry proposed/voluntarily-practiced monochrome GDA / energy icons are not effective either. It's a step backward. Mexico – moved from GDA in 2014 to warning label in 2020. it's a tactic to digress/delay mandatory labelling.

**Part 1** declares the amount of energy, saturated fat, trans fat, added sugar and sodium per serve

**Part 2** declares per serve percentage contribution to RDA (this block to be coloured red if nutrients, except calories, exceed the defined threshold)

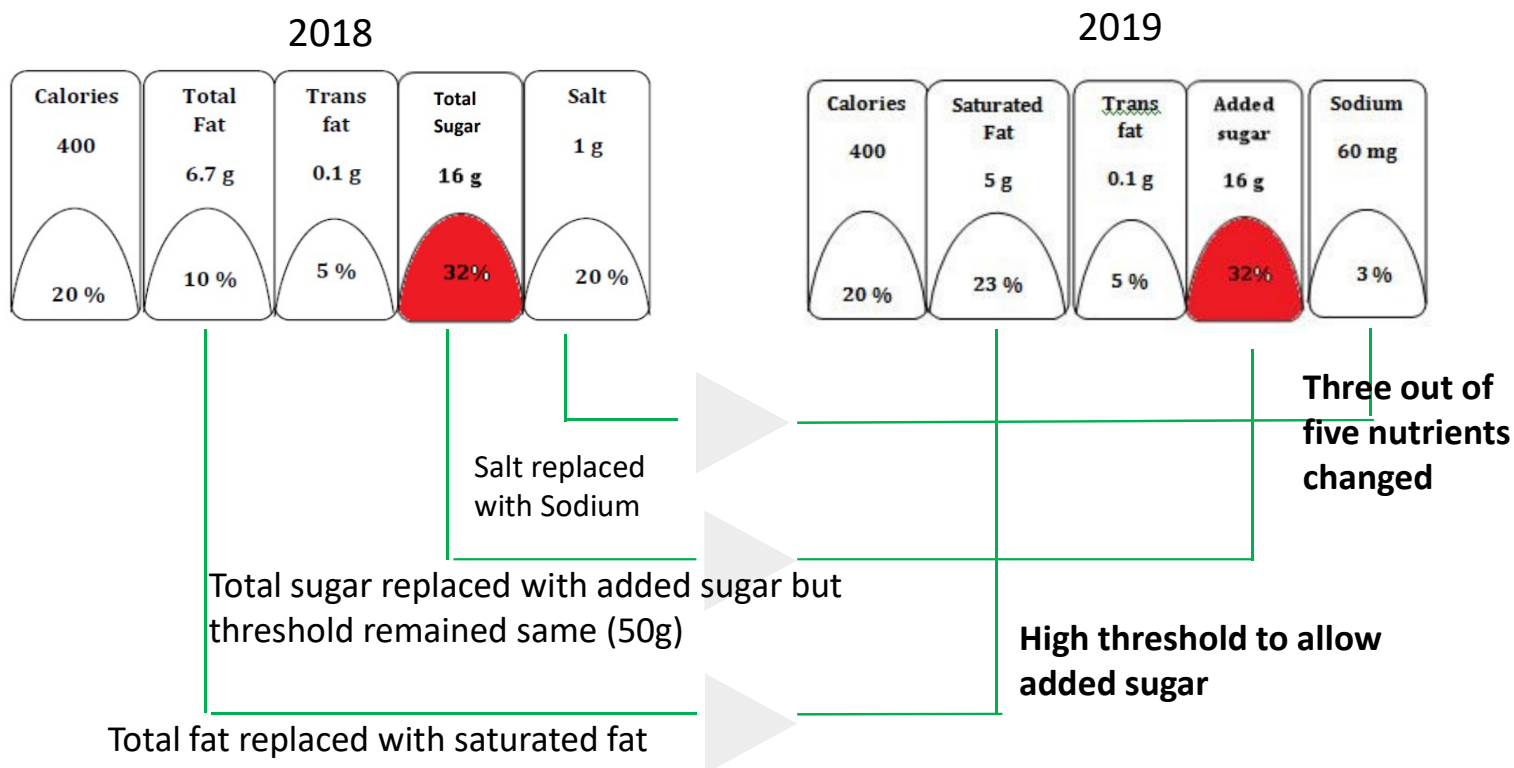
### Proving to be most effective



- Very critical in the Indian context – many languages, high illiteracy, familiarity with english and numbers (math) even low; nutritional literacy another big concern
- FoP is meant for consumer understanding; must be interpretive.
- Warning labels are being found most effective.



Issue of nutrients: the nutrients proposed in the 2018 draft should be considered (except trans fats)



**Trans fat should not be there as it will be eliminated by the time FoP is implemented. FSSAI has fixed upper limits. Meeting a necessary condition cannot be allowed to become a claim.**



Issue of nutrients: mentioning 'salt' will help the consumer, 'sodium' will not only help industry, but might as well become meaningless for consumer

- Salt **commonly known among consumers** (importantly its linkages with hypertension/blood pressure )
- Salt is **much easier to understand** compared to sodium
  - Common people more familiar with **grams than milligrams** (1 g of salt vs 400 mg of sodium)
  - Numbers like **3 or 4 grams** are better understood than **1200 mg or 1600 mg**
  - **Requires no conversion** (which involves a good sense of arithmetic, units and the conversion factor – say 2.54); very difficult for most of the Indian population and impossible for many.
- **Recommendations/public messaging** also given as salt for easier understanding (by WHO, ICMR/NIN). **Even FSSAI says namak** in its 'aaj se thoda kum' campaign; **does not say thoda kum 'sodium'**
- **Sodium is already mandated for back of the pack labels** by FSSAI; It suits there. Will complement 'salt' at FoP
- Several **countries mention salt** on FoP: UK, Sri Lanka, Iran, Ecuador, Columbia, Finland
- **Industry deliberately pushing for sodium to make it difficult for consumers (in the garb of making it scientifically accurate, whereas most sodium (~90%) in food comes from salt only); Putting sodium on FoP will not help the consumer. It will only help the industry.**



## Issue of nutrients: 'added sugar' can't be differentiated/quantified; sugar should be mentioned

- There's no nutritional need or benefit that comes from added sugar. Most sugar present in packaged foods is added.
- **But there is no analytical lab method to differentiate/quantify 'added sugar' from total sugar; No way for enforcement agencies to check compliance; they will have to entirely depend on industry declaration, which may not disclose it accurately.**
- Added sugar is mandated to be mentioned at the back of the pack along with total sugars; sugar can be displayed on the front-of-pack
- **FoP label in no country mentions added sugar**
- However, the thresholds for total sugar should be based on no more than 50 grams.
  - WHO SEARO nutrient profile model also considers the sum of both intrinsic sugar and added sugar (as total sugars) as the limiting threshold in cases where added sugar threshold is not provided. While calculating this, it uses the 10 per cent upper limit value (population nutrient intake goal of 10 percent calories from free sugars) which for 2000 kcal is 50 grams.
  - NIN has also suggested added sugar intake (a subset of total sugar) to be 25g in children and 30g in adults (and not 50 g which the FSSAI draft of 2019 mentioned but was mentioned for total sugar in its 2018 draft)



# Issue of nutrients: total fat should be mentioned and not saturated fat

- Fats are of different types - Saturated fatty acid (SFA), monounsaturated fatty acids (MUFAs) and polyunsaturated fatty acids (PUFAs). **All provide same calories (9 per gram). Selective labelling of saturated fat would mean that they are bad and all others are fine to consume, which may not be the case.**
- **Consumers know fat much better than saturated fat (and how they impact body).**
- **Saturated fats are not like 'TRANS FATS' which should not be consumed at all. In fact they are required by the body.**
- With saturated fats, the industry will still have the option to move to MUFAs/PUFAs, with total fat remaining high.
- **Putting saturated fat on the FoP will demonise it and the foods that have high saturated fats such as dairy (milk, cheese, ghee etc), which are important/key source of nutrition from animal foods for predominantly vegetarian population of India (dairy an important source of nutrition in rural India as well)**
- **In the Indian context, more suitable public health message has been about having an appropriate mix of different fatty acids (and oils/fats since these contain a different mix of fatty acids).**
- While recognizing that no amount of fat however good it may be will make the packaged food healthy, it is **equally important to note that evidence is emerging:**
  - That questions the association of saturated fat and cardiovascular diseases/mortality in general.
  - Pro-inflammatory nature of PUFAs (specifically those with higher n-6 PUFAs)
  - Greater role of excess carbohydrates in metabolic diseases
  - While reliance on refined oils which are high in PUFAs is increasing over the last many years but so are diet related NCDs
- **WHO in the guiding principles for FoP suggest that FoP should include total fat; WHO SEARO model also provides thresholds for total fats (except in few cases).**



Issue of thresholds: WHO-SEARO nutritional profiling model should be adopted; FSSAI's draft of 2018 was based on these

- **WHO thresholds are based on the Population Nutrient Intake Goals for preventing obesity and related NCDs, which are similar to what the Indian agencies (ICMR/NIN) recommend (such as for fats, salt, sugar)**
- The applicability of the model has been **tested in India** using a range of over thousand packaged products commonly consumed by children
- **2000 kcal** used as basis for setting thresholds is suitable for Indian adult population
- The concept of three meals (with 25% daily calorie/nutrient contribution) and two main snacks (10-12% contribution) also suits Indian dietary habits
- **There is no need to revise these thresholds (as being discussed at FSSAI due to strong industry pressure)**
  - **WHO thresholds have enough buffer**
    - **Calorie requirement of 3-9 year old children is much less than 2000 Kcal which is actually a big consumer group**
    - **The model very well considers technical feasibility for production**
    - **The thresholds are anyways based on higher value of the range - for example 30% in case of fats (15-30% range); 10% in case of sugars (wherein 5% is desirable)**
  - **FSSAI had also proposed these WHO SEARO thresholds in its 2018 draft**



Issue of timelines: No time for delay. Industry can't be allowed to delay any further. FSSAI must come up with a law on FOP labelling soon with clear timelines for industry.

- FoP has been recommended in India for **7 years now**. A delay on the premise that companies need time to reformulate their products is a bad idea.
- Some products **can/will not be reformulated** to an extent to fall under the thresholds.
  - **CSE study in 2019** showed that many of these packaged foods have fat and salt content many times the threshold.
- **Law required soon. Implementation time of 3 years** as proposed by FSSAI in 2018 could be considered:
  - A relaxation of **30 per cent over the thresholds in year 1, 15 per cent in year 2** before finally implementing in year 3.
  - **This would mean those which can really be reformulated will get time of 3 years and those which are quite high in negative nutrients will get labelled soon**
- **Many are multinational companies who know the global best practices; they follow norms when the regulator gets tough but try to delay/dilute as much as possible in India.**



How all the **33 tested products** would look if the proposed red marking rule is applied to high fat and salt foods

Times the threshold for  
Salt: 0.25 g sodium/100 g for chips, namkeen and instant noodles;  
0.35 g/100 g for soups and fast food (FSSAI)  
Fat: 8 g/100 g (WHO recommendations for Southeast Asia)

#### CHIPS

SALT 3.1 FAT 4.1	SALT 2.4 FAT 3.6	SALT 4.4 FAT 4.4	SALT 2.2 FAT 4.6	SALT 3.6 FAT 4.6	SALT 5.1 FAT 2.1

#### NAMKEEN

SALT 7.9 FAT 5.6	SALT 4.8 FAT 5.4	SALT 2.7 FAT 5.4	SALT 3.9 FAT 4.3

#### FRIED CHICKEN

SALT 1.6 FAT 2.7

#### SOUP

SALT 11.7 FAT 1.1

#### INSTANT NOODLES

SALT 5.8 FAT 1.9	SALT 6.2 FAT 2.8

SALT 6.7 FAT 2.2

#### BURGER

SALT 1.5 FAT 1.7	SALT 1.5 FAT 1.3	SALT 1.7 FAT 1.4	SALT 1.4 FAT 2.4
SALT 1.4 FAT 1.2	SALT 1.1 FAT 1.1	SALT 1.3 FAT 1.2	SALT 1.6 FAT 1.3

#### SANDWICH AND WRAP

SALT 1.8 FAT 2.2	SALT 1.6 FAT 2.3	SALT 2.1 FAT 1.7

#### PIZZA

SALT 1.5 FAT 1.2	SALT 1.6 FAT 1.5	SALT 1.3 FAT 0.9	SALT 1.9 FAT 1.3

#### FRIES

SALT 1.0 FAT 1.7	SALT 0.5 FAT 1.9	SALT 0.8 FAT 1.8

Burgers already have extremely high salt content. Adding fries to them in combo meals can be very harmful to health

CSE study in 2019 found, based on a laboratory study, that the salt and fat content of these foods is much higher than the threshold proposed by FSSAI in 2018 (based on WHO-SEARO nutritional profiling).



**For information, contact:**

Amit Khurana

Director, food safety and toxins programme, CSE

[k\\_amit@cseindia.org](mailto:k_amit@cseindia.org)

Sonal Dhingra

Deputy programme manager, food safety and toxins programme, CSE

([sonal.dhingra@cseindia.org](mailto:sonal.dhingra@cseindia.org))