

# NAP*i*

## Pre- packaged Industrial Food/beverage Products- what ingredients to look for identifying healthfulness

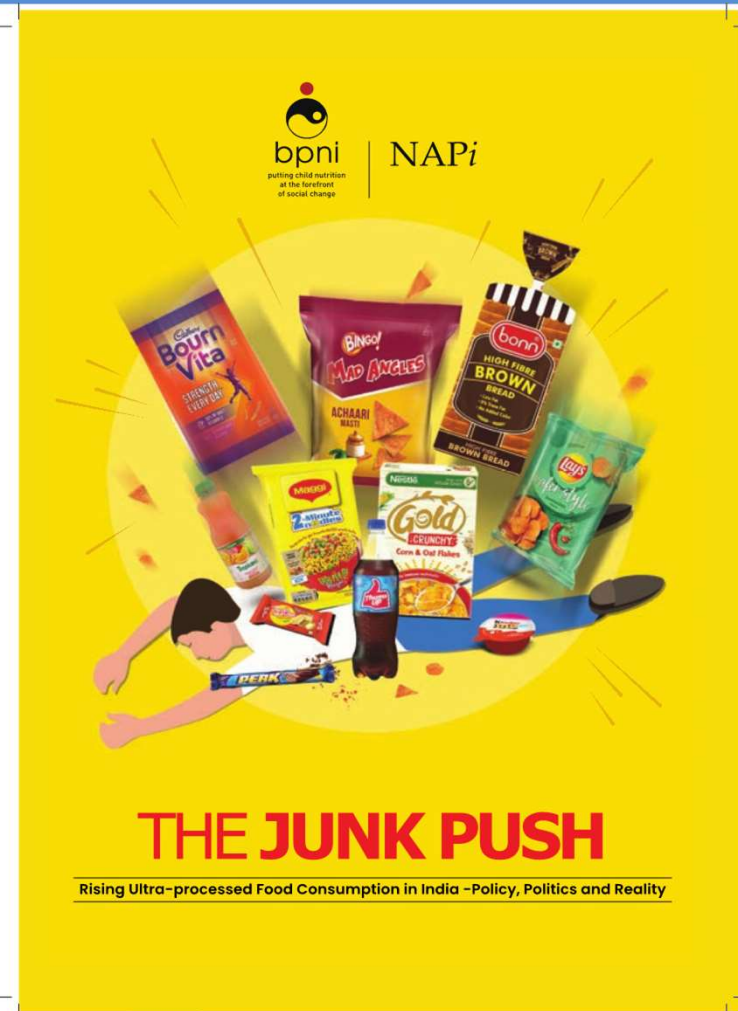
Dr. Arun Gupta MD (Ped), FIAP

Convenor, Nutrition Advocacy in Public Interest (NAP*i*)

Public Awareness Session organised by AIM

15 September 2024

#EndTheJunkPush



# Objectives

- What are Industrial /Ultra processed food products or junk foods?
- What are the risks of increased consumption?
- How they are marketed/advertised to attract you?
- How to identify which are harmful ?
- What can you do?

# We are talking about these pre-packaged foods

## Many names: Junk/HFSS/ Ultra-processed food products(UPFs)



# Definitions of Junk Food

## JUNK FOOD( NIN)

"Unhealthy (junk) foods are those **containing little or no proteins, vitamins or minerals but are rich in salt, sugar, fats and are high** in energy (calories). Some examples are chocolates, artificially flavoured aerated drinks, potato chips, ice creams, French fries etc.

## HFSS(FSSAI Draft notification)

"High fat, sugar, and salt foods are a processed food product with high levels of saturated fat, total sugar, or sodium. The declared values of these ingredients are such that the product does not satisfy the value of energy (kcal) from **total sugar less than 10% of total energy, or from saturated fat 10% of total energy, and sodium less than 1 mg/1 kcal.**"

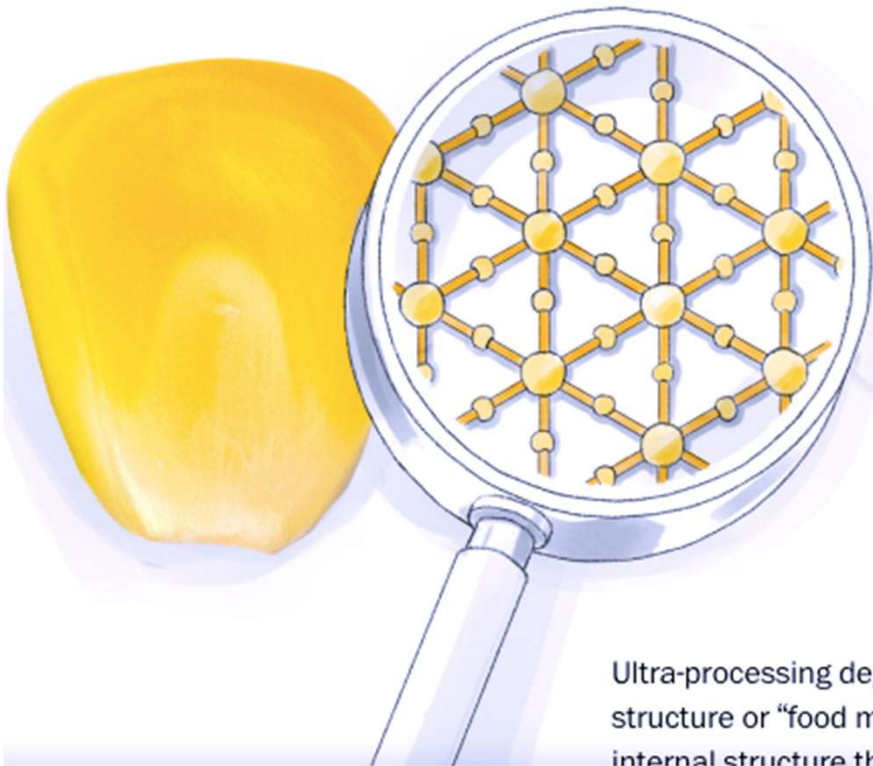


# Corn and 2 types of processing

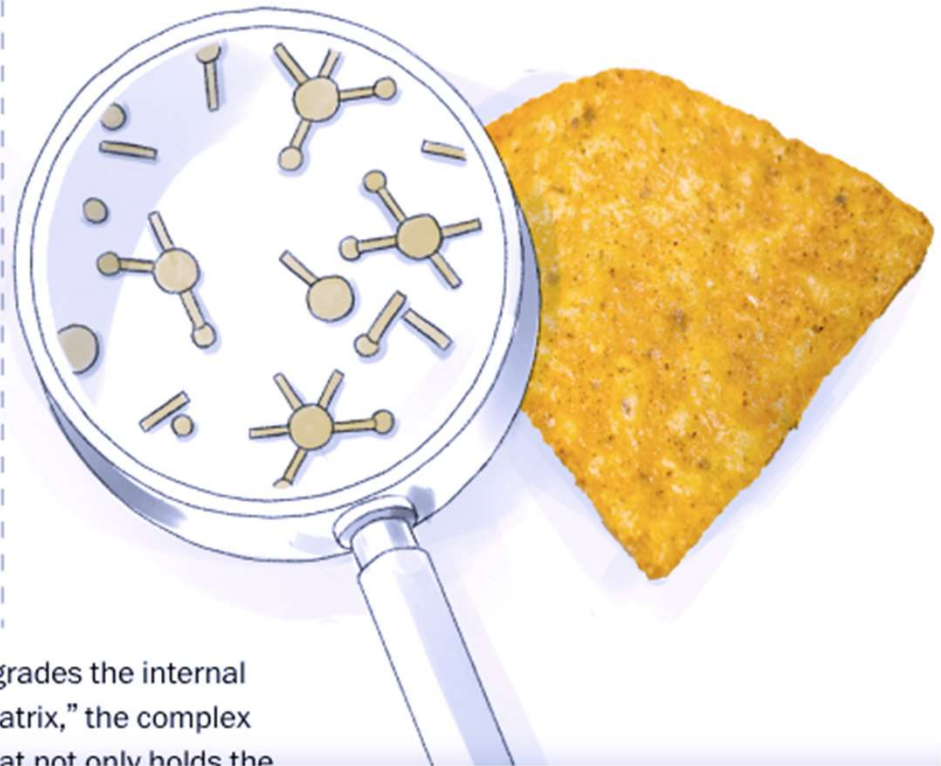
The Washington Post  
*Democracy Dies in Darkness*

Subscribe

Intact  
food matrix



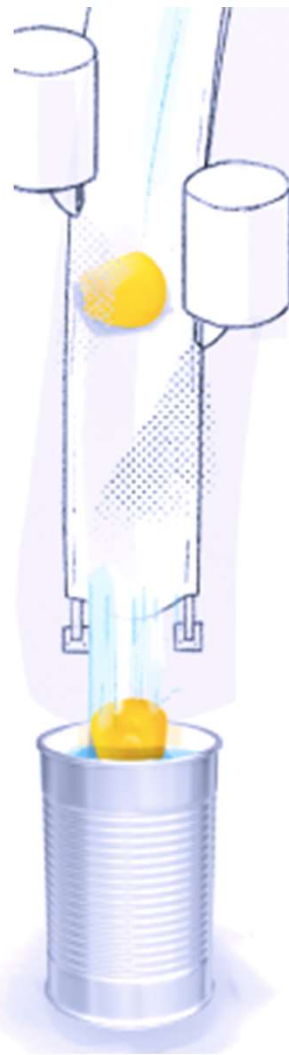
Broken  
food matrix



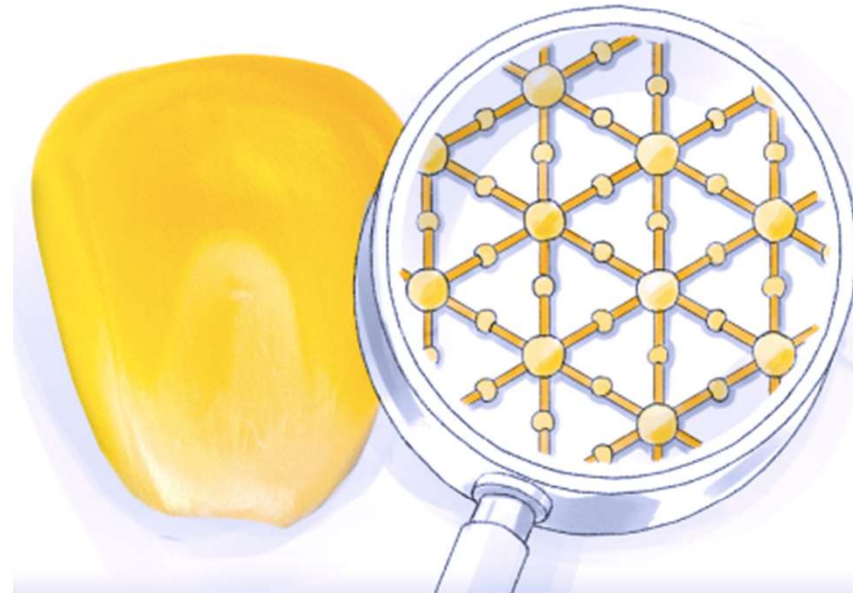
Ultra-processing degrades the internal structure or "food matrix," the complex internal structure that not only holds the

# Corn : Processed

The corn is cooked and soaked to absorb water.



**Intact  
food matrix**



Salt (and in some cases sugar) is added to the water and corn, and then it is canned.

# Corn : Ultra-processed.

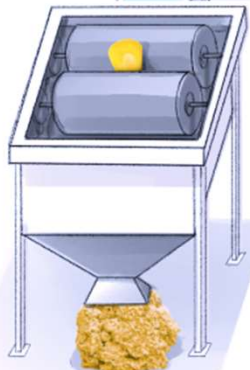
The corn is cooked and soaked to absorb water.



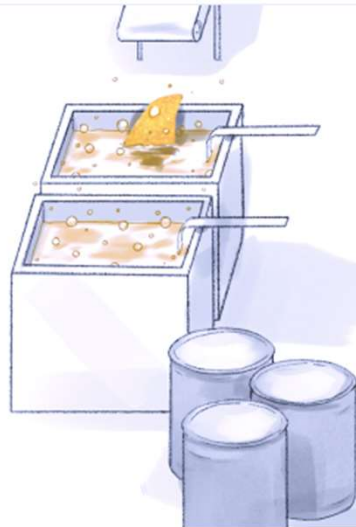
The dough is flattened and cut into chip shapes.



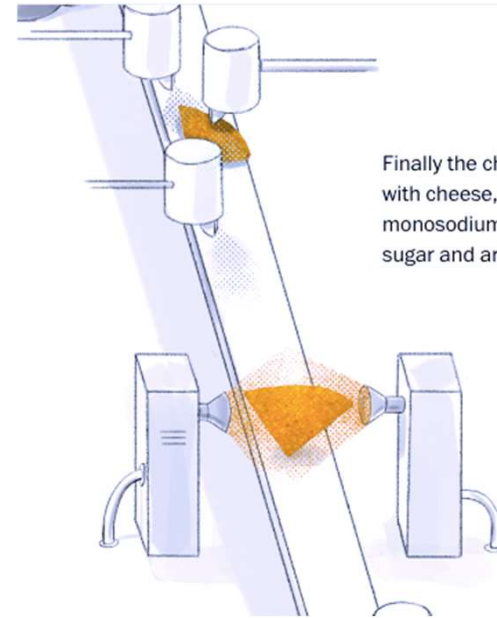
Next the corn is pulverized into a dough. Then it's fed into an extrusion machine and molded into sheets.



The chips are baked in an oven and then deep fried.



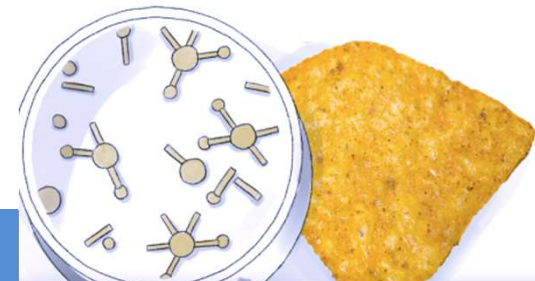
Finally the chips are coated with cheese, salt, monosodium glutamate, sugar and artificial colors.



A variety of spices and flavor enhancers are added before the chips are bagged.

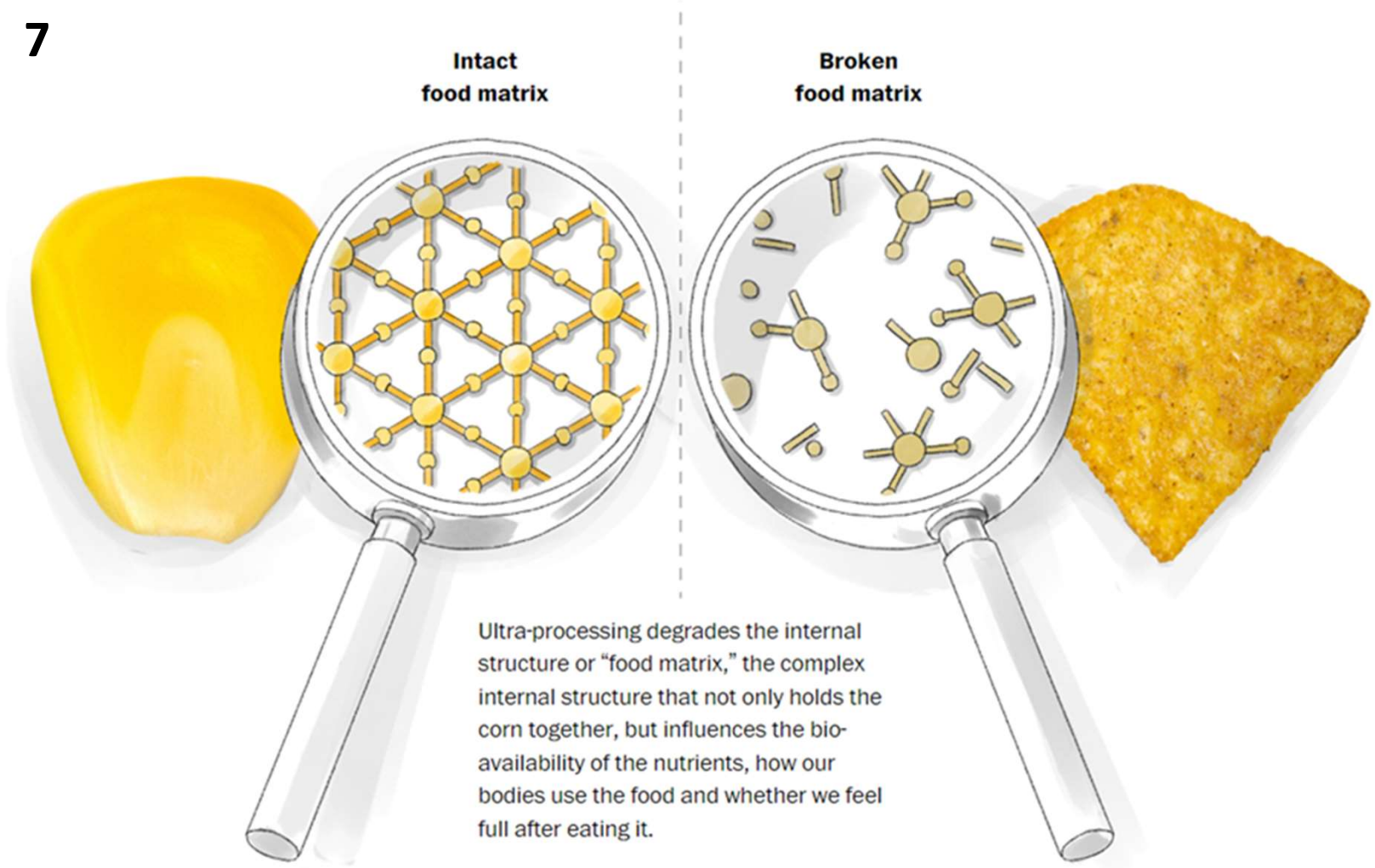


**Broken food matrix**





7



**Intact  
food matrix**

**Broken  
food matrix**

Ultra-processing degrades the internal structure or “food matrix,” the complex internal structure that not only holds the corn together, but influences the bio-availability of the nutrients, how our bodies use the food and whether we feel full after eating it.



# Apples

## Group 1



Apple

Unprocessed or  
minimally  
processed  
foods

## Group 2



Home-baked  
apples

Processed culinary  
ingredients

## Group 3



Packaged  
applesauce cups

Processed foods

## Group 4

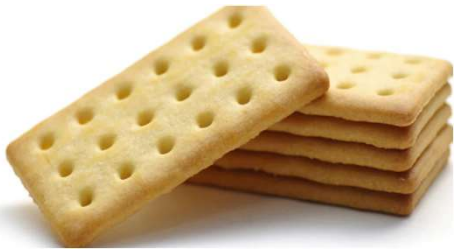


Packaged apple  
puff snacks

Ultra-processed foods

# Potatos From to Farm to the Packet!

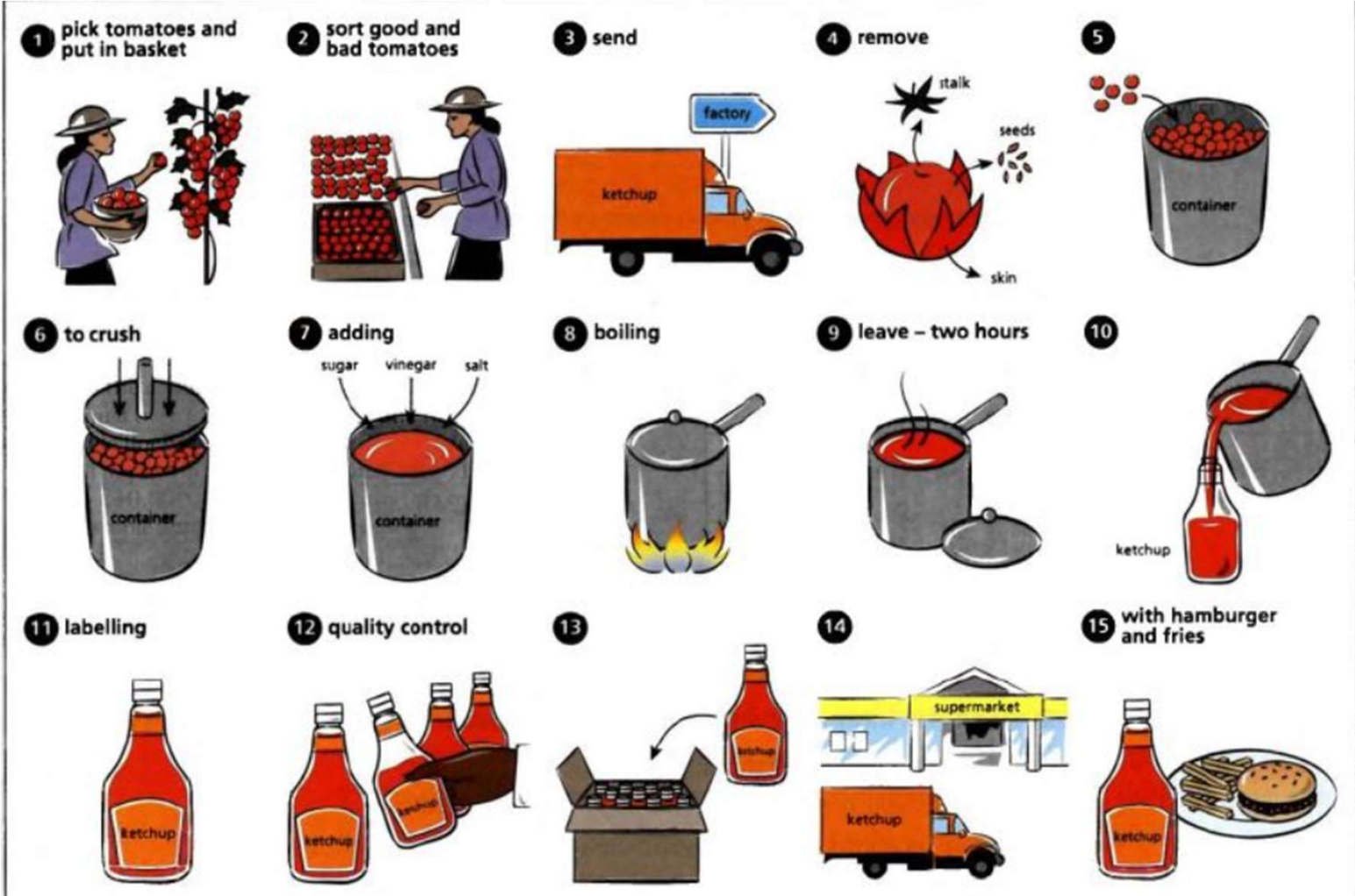




Biscuits with sugar, sodium, fat preservatives, colouring agents, emulsifiers and other additives



# Tomatoes



Source : <https://www.ielstrainingtips.com/process-diagram-tomato-ketchup/>



# WHAT ARE THE RISKS OF INCREASED CONSUMPTION?

# Why are Junk Foods harmful?

**They're**

- **Ultra-processed.**
- **Addictive.**
- **High in refined flour (Maida)**
- **High sugar and saturated fats**
- **High in sodium.**
- **Full of cosmetic additives**
- **Ingredients are often low-quality**
- **High in inflammatory oils.**

This article is more than 3 months old

# Ultra-processed food linked to 32 harmful effects to health, review finds

World's largest review finds direct associations with higher risks of cancer, heart disease and early death



Andrew Gregory  
Health editor

Wed 28 Feb 2024 23.30 GMT

Share

Eating higher levels of ultra-processed food may shorten lifespans by more than 10%, according to a new, unpublished study of over 500,000 people whom researchers followed for nearly three decades

# Ultra-processed foods need tobacco-style warnings, says scientist

UPFs should also be heavily taxed due to impact on health and mortality, says scientist who coined term



Andrew Gregory  
Health editor

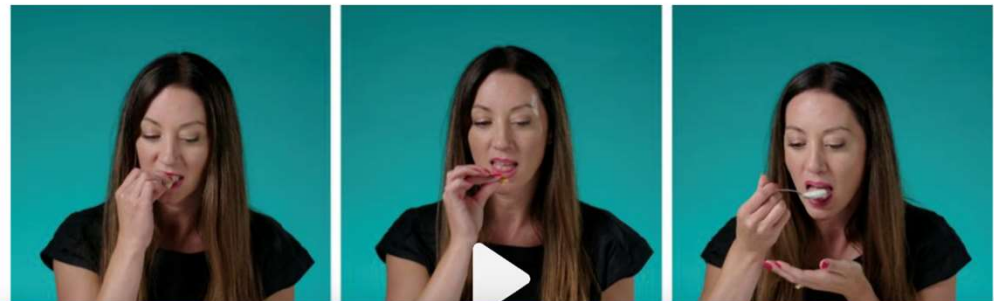
Thu 27 Jun 2024 04.01 BST

Share

# These ultraprocessed foods may shorten your life, study says

By Sandee LaMotte, CNN  
5 minute read · Updated 12:41 PM EDT, Tue July 2, 2024

Facebook X Email



# HOW THESE ARE MARKETED?



# Projecting to protect your health



Navbharat Times: 26 June 2024 &  
Dainik Bhaskar: 26 June, 2024



Hindustan Times (Delhi): 29 June, 2024

## APPEAL

- Features celebrity – Siddharth Malhotra
- Claims to provide immunity, hydration, and nutrition
- Claims to have no artificial flavours and to be approved by 108 quality test.
- Contains nature identical flavouring substance

## CONCEALING IMPORTANT INFORMATION

**TOTAL SUGARS**  
14 G /100 ML

**ADDED SUGAR**  
11 G /100 ML

► **Real Litchi Juice: Dabur India Limited (Juices)**

# Projecting to be healthy



Times of India: 5 April, 2024

## APPEAL

Claims to contain 100 percent atta, zero maida bread but contains only 53% atta(wheat flour)

## CONCEALING IMPORTANT INFORMATION

### ADDED SUGAR

3.4 G /100 G

### SODIUM

363 MG /100 G

▶ **100% Atta Bread: Harvest Gold**  
(Bread and ordinary bakery wares)

Contains only  
53%wheat flour

# Conceal important information

## Manipulating through celebrity behaviour



### APPEAL

- Carries visuals of real coconut trees and coconut
- Features celebrity - Katrina Kaif eating the coconut cookie

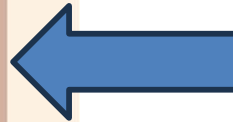
### CONCEALING IMPORTANT INFORMATION

**TOTAL SUGARS**  
35.4 G / 100 G

**ADDED SUGAR**  
35.08 G / 100 G

**TOTAL FAT**  
12.1 G / 100 G

**SODIUM**  
279 MG / 100 G



Hindustan Times: 16, 23 & 26 June, 2024  
Delhi Times: 27 June, 2024

▶ **Americana Coconut cookies: Bonn**  
(Fine bakery wares)

## Touching your sense of taste



Times of India: 7 June, 2024

### APPEAL

Projecting itself to be the most loved beverage of India featuring youth

### CONCEALING IMPORTANT INFORMATION

**TOTAL SUGARS**  
11.8 G / 100 ML

**SODIUM**  
173.4 MG / 100 ML

▶ **Lahori Zeera: Archian Foods Pvt. Ltd.**  
(Water based flavoured drink)



# Emotional exploitation..

## Using comedy n humour...



Accessed on: 24 June, 2024 <https://youtu.be/qQLqWE3UGrQ?feature=shared>

### APPEAL

- Features celebrity comedian - Kapil Sharma
- Offers a free joke on scanning the QR code

### CONCEALING IMPORTANT INFORMATION

**TOTAL SUGARS**  
11.7 G /100 ML

**ADDED SUGAR**  
11.7 G /100 ML

► **Sprite: The Coca-Cola Company**  
(Water based flavoured drink)

## Evoking emotions of rebellion



Accessed on: 24 June, 2024 <https://youtu.be/VWIBFdoRN6Y?feature=shared>

### APPEAL

- Features celebrity - Yash
- Focuses on youth and their aspirations
- Urging youth to defy society by listening to their heart

### CONCEALING IMPORTANT INFORMATION

**ADDED SUGAR**  
10.9 G /100 ML

**TOTAL SUGARS**  
10.9 G /100 ML

► **Pepsi: Pepsico**  
(Water based flavoured drink)



# Deception...

## Enticing with fun and mangoes



Accessed on: 24 June, 2024 <https://youtu.be/t3yBsR4FTGw?feature=shared>

### APPEAL

- Features celebrity - Alia Bhatt
- Advertisement is infused with taste of fun and Xuberance while keeping the essence "Mango fruity fresh and juicy"
- Use of animated cartoon such as "yeti" to attract people

### CONCEALING IMPORTANT INFORMATION

TOTAL SUGARS	ADDED SUGAR
15.6 G /100 ML	14.2 G /100 ML

► **Frooti: Parle Agro**  
(Juices)

## Projecting to be healthy



Accessed on: 24 June, 2024 <https://youtu.be/LdoajKU7x-c?feature=shared>

### APPEAL

- Features celebrity -Ranveer Singh
- Claims to be made of 100 % Atta (Whole Wheat Flour) and 0% Maida.
- Contains 20% Atta (Whole Wheat Flour) only

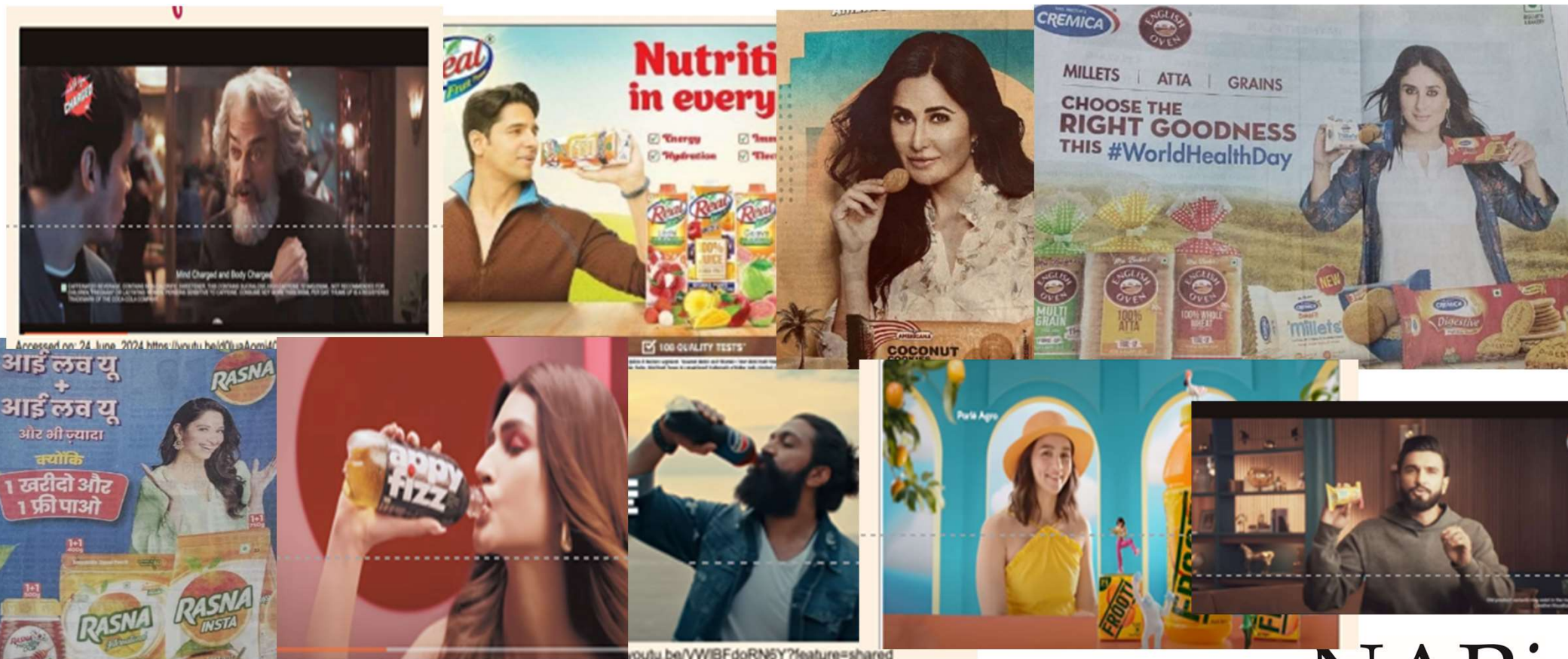
### CONCEALING IMPORTANT INFORMATION

TOTAL SUGARS	ADDED SUGAR
14.4 G /100 G	12.7 G /100 G
TOTAL FAT	
21 G /100 G	

► **Nutrichoice Digestive High Fibre Biscuits: Britannia**  
(Fine bakery wares)

# Celebrity Endorsement

- **23 out of 50** advertisements used celebrity influence for marketing the products.



# HOW TO IDENTIFY WHICH ARE HARMFUL?

# Processed vs Ultra processed Foods

## Processed (Healthy, least harmful)

- Canned beans, vegetables
- pre-cut fruit
- Cheese
- Canned fish,
- Fruits in syrup,
- Local bakery bread
- Plain yogurt

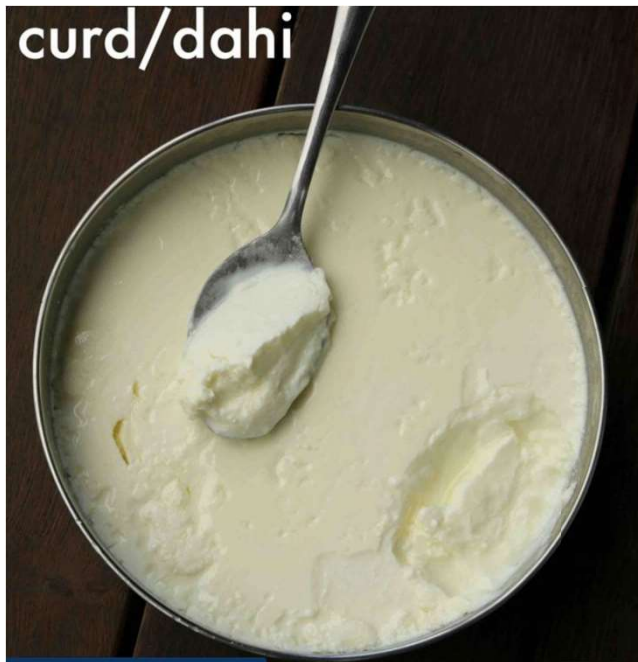
Foods that have been canned, frozen, chopped, pasteurized, or dehydrated as processed.

## Ultra-processed( Unhealthy always harmful

- ready-to-eat meals,
- chips,
- cookies,
- hot dogs,
- Juices
- Cold drinks,
- sugary cereal,
- fast food burgers and fries.
- Mass produced breads
- Sweetened Yogurts



# Examples of Processed vs UPF or Healthy vs Unhealthy ...Curd V/S Flavoured Yogurt



# Real Corn V/S Packaged Corn Flakes and Chips





# Commercial Bread V/S Home made or local bakery Breads/Rotis



# Orange V/S Tang





# Consumers Struggle to Understand the harmful nutrient content



# Struggle to Understand the harmful nutrient content



NUTRITION FACTS / INFORMATION	
AMOUNT PER 100g (approx.)	
ENERGY	479 kcal
PROTEIN	5.9 g
CARBOHYDRATE	73.4 g
OF WHICH SUGARS	32.2 g
FAT	18.0 g
SATURATED FAT	9.4 g
TRANS FAT	0 g





**NAP*i***

**Can you pick up any pre-packaged food/beverage product at home?**





# How to Identify UPF/Junk Foods: Check ingredient that you cant find in your domestic kitchen



**INGREDIENTS:** WHEAT FLOUR (ATTA) (43%), REFINED PALM OIL, SOY PROTEIN ISOLATE (16%), SUGAR, ALMONDS (4.3%), SWEETENERS [965(i) & (ii)] (2.5%) [SWEETENED CONDENSED MILK & MILK SOLIDS], OATS FIBRE, RAISING AGENTS [503(ii) & 500(ii)], FLAVOURS (NATURAL & ARTIFICIAL FLAVOURING SUBSTANCES), EMULSIFIERS [322(i), 471 & 472e], IODISED SALT AND DOUGH CONDITIONER (223).

(Numbers in brackets as per International Numbering System)

CONTAINS WHEAT, SOYA, MILK, NUTS, OATS AND SULPHITE.

STORE IN A COOL, HYGIENIC AND DRY PLACE. TRANSFER CONTENTS TO A CLEAN AIRTIGHT CONTAINER ONCE OPENED.

## Chips

WITH THE CORRESPONDING ALPHABET BEFORE THE ADDRESS IN THE MFD. ADDRESS PANEL.

**INGREDIENTS:** RICE GRITS, SEASONING (REFINED PALMOLEIN, SUGAR, #SPICES AND CONDIMENTS, IODIZED SALT, NATURE IDENTICAL FLAVOURING SUBSTANCES), HYDROLYZED VEGETABLE PROTEIN AND NATURAL FLAVOURS AND NATURAL FLAVOURING SUBSTANCES), REFINED PALMOLEIN, DEGERMED CORN GRITS AND BENGAL GRAM GRITS.

#USED AS FLAVOURING AGENTS.

CONTAINS SOY MAY CONTAIN...



# High in Sodium -719.8 mg/ 70 grams



### Nutritional Information

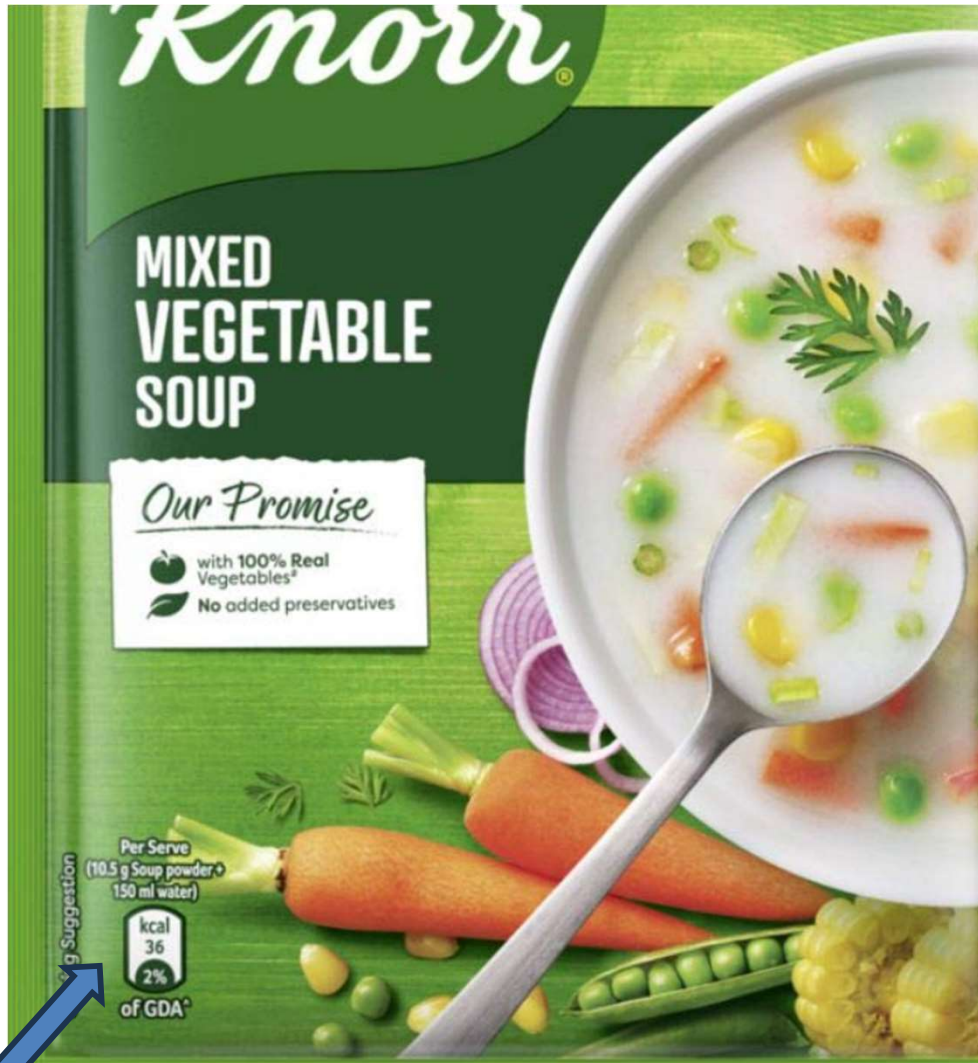
If a serve is 70 g

Nutrition Information*	Per 100g	Per Serve	%GDA* Per Serve
Energy (kcal)	384	269	13%
Protein (g)	8.2	5.7	11%
Carbohydrate (g)	59.6	41.7	16%
-Total Sugars (g)	1.8	1.3	1%
-Added Sugars (g)	1.3	0.9	-
Total Fat (g)	12.5	8.8	13%
-Saturated Fat (g) (not more than)	8.2	5.7	29%
-Trans Fat (g) (not more than)	0.13	0.09	-
Sodium (mg)	1028.3	719.8	30%
			%RDA* Per Serve
*Iron (mg)	6.90	4.83	16%

\*Approximate Value

#Guideline Daily Amounts of an average adult (2000 kcal). Pack contains 6 serves.  
Per serve contribution to RDA - 13% energy, 2% added sugar, 13% total fat, 26% saturated fat, 5% trans fat and 36% sodium.  
\*One serve (70 g) of MAGGI Masala Noodles meets 16% Iron RDA for sedentary adults and 15% Iron RDA for 16-17 year old teenagers (ICMR, 2020).

# High in Sodium-Approx 400 mg/10grams



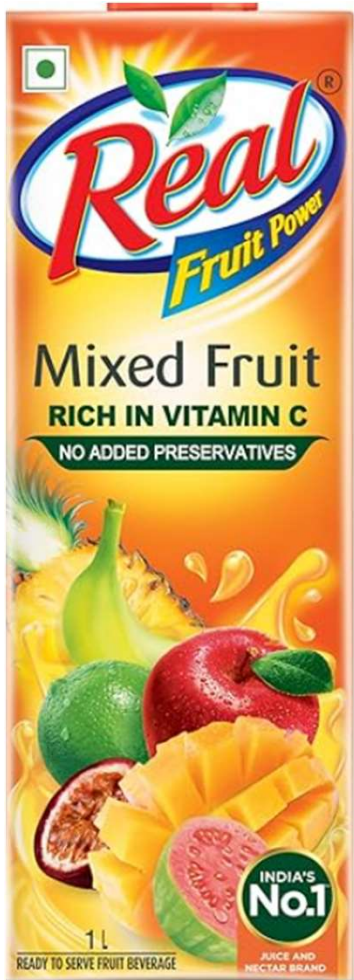
Nutritional Information (Typical Values)	Per 100 g product	Per Serve of cooked dish* (160.5 g)	% GDA <sup>a</sup> / Serve of cooked dish*
Energy (kcal)	344	36	2
Protein (g)	11.4	1.2	
Carbohydrates (g)	68.2	7.2	3
Total Sugar (g)	22	2.3	
Dietary fibre (g)	7	0.7	
Total Fat (g)	2.8	0.3	<1
Saturated Fat (g)	1.3	0.1	1
Trans Fat (g)	0.03	Trace	
Sodium (mg)	4040	424	18

\* % of an Adult's Guideline Daily Amount (per 100g of product).  
\*As per suggested method of preparation.  
Per Serve = 10.5 g Soup powder + 150 ml water. One Pack serves Four.

68447590  
8 901030 824739 >



# Real Juice 18.9 gram per serve /150 ml



**NUTRITIONAL INFORMATION**  
(APPROXIMATE VALUES)

Serve Size: 150 ml | Servings per pack: 6.7

	Per 100 ml	Per Serve % contribution to RDA
Energy	53 kcal	4 %
Protein	0 g	-
Carbohydrate	13.1 g	-
Total Sugars*	12.6 g	-
Added Sugars	8.3 g	25 %
Total Fat	0 g	0 %
Sodium	0.7 mg	0.05%
Iron	0.04 mg	0.3%*
Vitamin C	18 mg	33.8%*
Calcium	1.1 mg	0.2%*
Potassium	33.8 mg	1.4%*

\*% RDA contribution calculated on the basis of average requirements of adult per day.  
\*RDA values calculated basis ICMR 2020 for Men- Moderate Work.

**Réal Belief**  
Something that's good for children should also make them smile. That's why, what your child needs is a unique blend of fruit goodness and irresistible taste. At Réal, we believe that healthy is happy.

**Réal**  
Let your kids enjoy the taste of Réal.

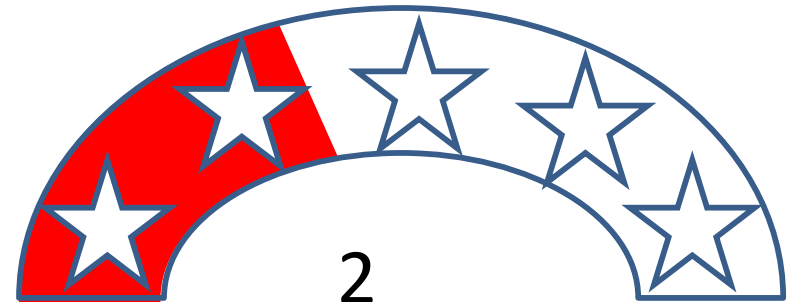
**Ingredients**  
Water, Concentrated Mixed Fruit juice (10.2%)\* [From Apple, Orange, Guava, Apricot, Mango, Banana, Lime, Passion Fruit, Pineapple], Sugar, Acidity Regulator (INS 330), Antioxidant (INS 300), Stabilizer (INS 440), Colours [INS 160a (ii) & (iii)] and Flavours (Natural and Nature Identical Flavouring Substances).

THIS CONTAINS 50% FRUIT JUICE CONTENT.  
Refrigerate after opening and consume within 5 days.

Serve Size: 150 ml | Servings per pack: 6.7

	Per 100 ml	Per Serve % contribution to RDA
Energy	53 kcal	4 %
Protein	0 g	-
Carbohydrate	13.1 g	-
Total Sugars*	12.6 g	-





Indian Nutrition Rating

**HIGH IN  
CALORIE**

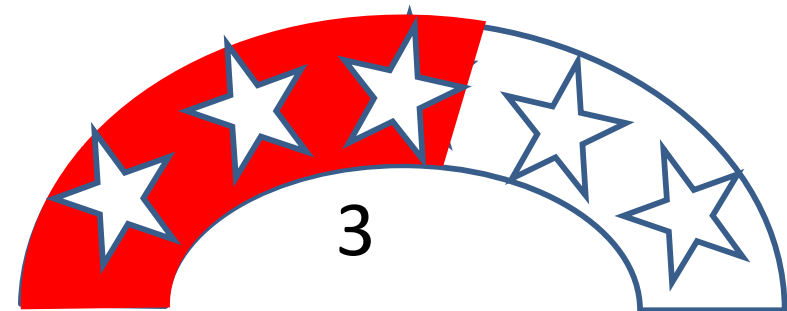
**HIGH IN  
TOTAL  
SUGAR**

**HIGH IN  
TOTAL  
FAT**

**HIGH  
IN  
SODIUM**

WHO SEARO Cut Off limits for negative nutrients

# Kelloggs cornflakes original breakfast cereal



Indian Nutrition Rating

**HIGH  
IN  
SODIUM**

**HIGH IN  
TOTAL  
SUGAR**

As per WHO SEARO Cut Off limits for negative nutrients

# Kurkure Masala Munch



Indian Nutrition Rating

**HIGH IN CALORIE**

**HIGH IN TOTAL FAT**

**HIGH IN SODIUM**

As per WHO SEARO Cut Off limits for negative nutrients



# Dhoodh Atta Biscuit by Patanjali

Category-2

**Fine Bakery Wares**

WHO Thresholds per 100g

Total Sugars	6g	Total Fat	8g	Total Sodium	250 mg
--------------	----	-----------	----	--------------	--------



## Health Risk Factors

Total Sugars (g) per 100 gram	Sodium (mg) per 100 gram	Total Fat (g) per 100 gram
<b>24g</b>	<b>349mg</b>	<b>17g</b>

**HIGH IN SUGARS**

**HIGH IN SODIUM**

**HIGH IN FAT**

## Ingredients that makes this product an UPF

**Ultra-Processed Food Product/ UPF**

Wheat flour (atta-58.6%), edible vegetable oil (palm), sugar, liquid glucose, milk solids (1.7%), edible common salt, leavening agents (INS-500(ii), INS 503 (ii), INS-341(i)), cheese dough conditioner (INS 223), antioxidant (INS 319), Emulsifier (INS 322(i), contains added flavour, natural, nature identical artificial flavouring substances (milk and vanilla)

## WHY MISLEADING?

➤ According to Consumer Protection Act (2019) Section 2 (28) (iv) the advertisement deliberately conceals important information i.e; High Total Sugars, High Sodium, High Total Fat.

➤ According to Food Safety and Standards Act (2006) Section 53(b) the advertisement misleads about the nature of the biscuit by claiming 100% wheat whereas the ingredients list has only 58.6% wheat flour. Also, exaggerate the features of the product by claiming "Milk biscuit" whereas the milk solid ingredient is only 1.7%.

## Marketing Tactics

Use of children ✓

Emotional Appeal

Health Claims

Use of celebrities ✗

Use of emotional appeal ✓

Happiness

Easy to digest and contains fiber, vitamins and minerals that is the perfect choice for health.

Use of health claims ✓



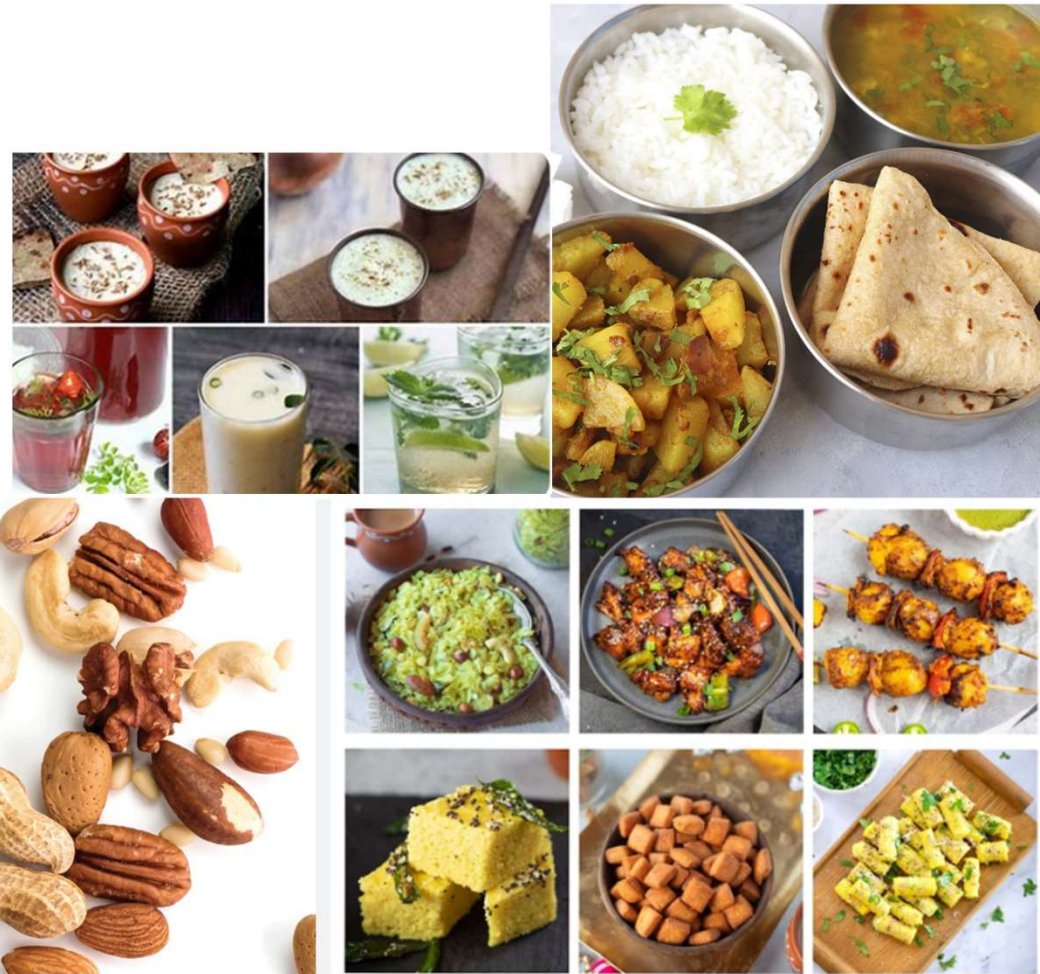
# WHAT CAN YOU DO?

# Steps...

- Reduce if you are using these
- Avoid any advertised food product
- Share the information with your family/friends
- Check the nutrition information before you buy
- Check the ingredient list before you buy
- Report to us if you see a misleading ad.
- Complain to Consumer Protection Authority, MIB, Press Council, FSSAI if you see any misleading advertisement.
- Contact NAPI <https://www.napiindia.in/>

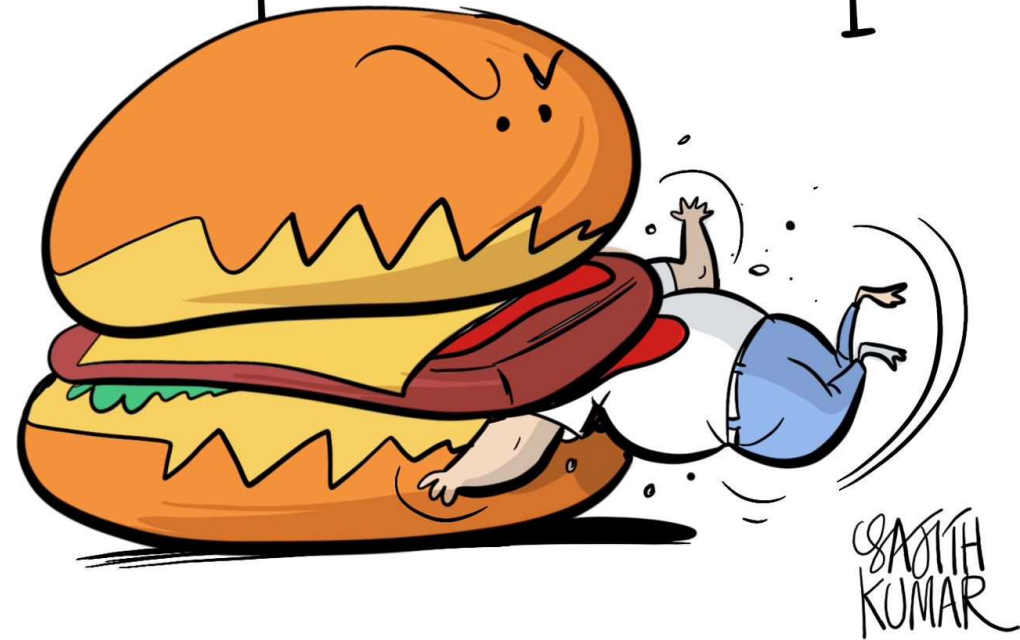
# Healthy Alternatives

- Home cooked snacks and meals
- Real unpacked foods
- Use of diverse whole grains
- Fruits and vegetables
- Nuts
- Traditional drinks
- Things that are not advertised





# Chomp! Chomp!



Thank you !!!

#EndTheJunkPush

#WholsEatingWhom

# #EndTheJunkPush



THANK YOU !

# Unseen dangers of ultra-processed foods in 13 languages.

<https://napiindia.in/unseen-dangers>

जानिये आपके खाने में क्या है ?

तमारो पोरक तमने पाई रहेल छे ?

तुमचं जेवण तुम्हालाच खात आहे का

अति-संसाधित  
(अल्ट्रा-प्रोसेस्ड)  
खाद्य पदार्थों के  
अदृश्य खतरे

अल्ट्रा प्रोसेस्ड  
आहारना  
अजाण्या भोजमो:

अति प्रक्रिया केलेल्या  
खाद्यपदार्थांचे न  
दिसणारे धोके





# Lets change our birthday celebrations !

