CSE'S STUDY ON JUNK FOOD Why we should worry about food we love to eat?

February 20, 2013



What we know from literature

- Junk food is bad for health
- It lacks nutrition and is loaded with empty calories (refined carbohydrates)
- High on Salt, Sugar and Fats, including Trans fat

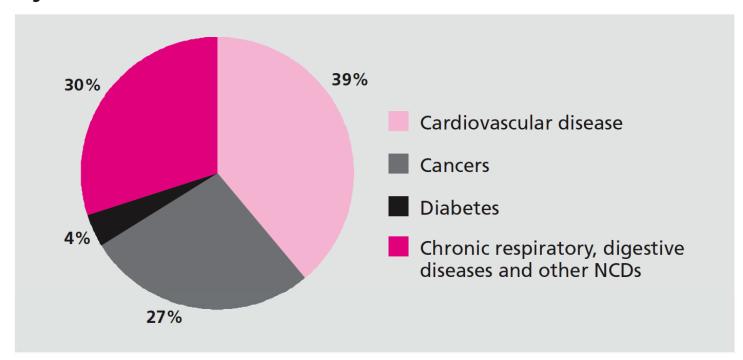
JUNK FOOD

What We Should Know

- "Non Communicable Diseases are the new global epidemic" WHO
- Of the 57 million deaths that occurred globally in 2008, 36 million almost two thirds (63 per cent) were due to NCDs, comprising mainly cardiovascular diseases, cancers, diabetes and chronic lung diseases.

CSE'S JUNK FOOD STUDY

Proportion of global NCD deaths under the age of 70, by cause of death, 2008



JUNK FOOD-WHY SHOULD WEWORRYP

- "Unhealthy diet is one key cause of the growing global burden of disease." WHO
- Changing diet -- low on nutrients and high on salt, sugar and fat, are directly indicted to disease.
- Junk food is responsible for rising cases of obesity and non communicable diseases (NCDs) like cardiovascular diseases and diabetes

Changing diet & NGDs

- The amount of dietary salt consumed is an important determinant of blood pressure levels and overall cardiovascular risk.
- WHO recommends salt intake of less than 5 grams per person per day; NIN recommends 6 gm
- India has a serious salt problem; more than 40% population consume above 10 gm/day

Salt & NGDs

- Since 1994 in Britain, public health campaign to reduce salt in diets labeling of the amount of salt in food.
- In 2001, adults were taking 9.5 gm/day; target to reduce to 6 gm/day
- The prestigious medical journal *Lancet* reports that blood pressure among Britons has decreased. The government finds that it has prevented around 6,000 premature deaths annually by reducing salt by 10 per cent in processed food. It has saved US\$ 2.5 billion in health costs.

Salt & NGDs

• The link between saturated fat and trans-fat and increased risk of heart disease is well established. There is also evidence that the risk of type 2 diabetes is directly associated with consumption of saturated fat and trans-fat and inversely associated with polyunsaturated fat from vegetable sources.

Fats, Trans fat & NGDs

- WHO estimates that worldwide 2.8 million people die each year as a result of being overweight and obese.
- Risks of heart disease, stroke, type 2 diabetes and risks of cancer increase steadily with increasing body mass index (BMI)
- Cause: high fat and sugar consumption
- WHO guidelines: Max 1% energy from Trans fat (2-2.5 gm/day); less than 10% energy from free sugar (about 30 gm/day free sugar; 20-25 gm/day added sugar)

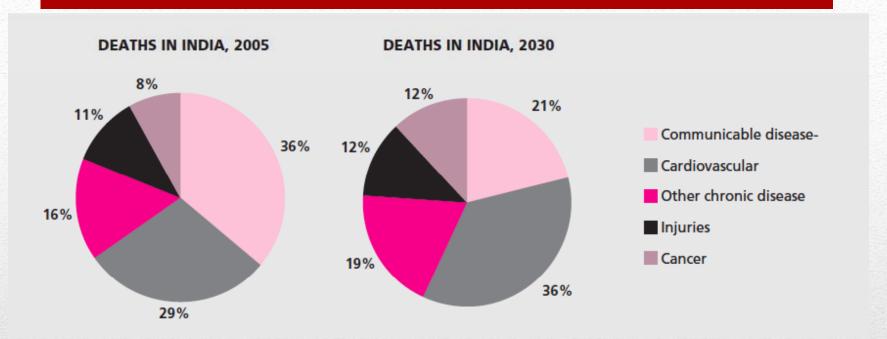
Fats, Trans fat & NGDs

Key Indicators for NFHS-3	NFHS-3 (2005-06)	Urban	Rural
Women who are obese or overweight	14.8	28.9	8.6
Men who are obese or overweight	12.1	22.2	7.3

Notes: All figures are in %age; Source: NFHS-3

• Percentage of women obese or overweight in the second National Family Health Survey (1998-99) were 10.6%

But why should poor India worry about rich man's disease?



 Public Health Foundation of India – half of all mortality in India in 2005 due to NCDs; by 2030 it is likely to rise to two-thirds

But why should poor India worry about rich man's disease?

- National Restaurant Association of India (NRAI) 2010 report: fast food industry growing at a compound growth rate of 35-40 per cent annually.
- A major chunk of these markets is captured by global players like
- McDonald's, Kentucky Fried Chicken, Pizza Hut, Domino's, Subway, Taco Bell, Coca Cola, PepsiCo, Barista etc. Domestic players like Nirula's, Haldiram's, Bikanerwala etc. are not lagging behind either.

But why should poor India worry about rich man's disease?

What CSE Tested for:

- 1. Fats: total fats and trans fat
- 2.Salt
- 3. Total carbohydrates in carbonated beverages total carbohydrates is equivalent to total sugar
- •We wanted to know how unhealthy they were
- How true were their claims

GSES JUNK FOOD STUDY

Methodology

PML used internationally accepted methodologies to test fats, trans fats, salt and carbohydrates.

- Total Fat: The Association of Official Analytical Chemists International (AOAC) method (922.06) was used
- Trans Fat Analysis: The AOAC method (996.06) using Gas Chromatography
- Salt: AOAC method (937.09)
- Total Carbohydrate: Estimated by the Anthrone method

GSES JUNK FOOD STUDY

Samples

37 samples of most popular branded junk food –

- 5 potato chips,
- 2 Indian snacks,
- 2 instant noodles,
- 4 carbonated beverages,
- 8 burgers
- 4 sandwiches
- 4 pizzas
- 5 potato fries
- 2 fried chicken
- 1 cake

GSE'S JUNK FOOD STUDY

• Fats: 15-30% of total calories

• Trans fats: Max. 1% of total calories

• Carbohydrates: 55-75% of total calories

• Proteins: 10- 15% of total calories

• Sugar: 20-25 gm/day added sugar

• Salt: 5-6 gm/day

Nutritional Guidelines

Category	Kilo calories allowed (per day)	Carbohydrate s (g/day)	Salt (g/day)	Total fats (g/day)	Trans fats (g/day)
Adult male	2320	290-348	6.0	39-78	2.6
Adult female	1900	238-285	6.0	32-64	2.1
Child (10-12 yrs)	2100	263-315	6.0	35-70	2.3

Nutritional guide

Potato chips

Average fats: 33 gm/100 gm

Carbs: 57.5 gm/100 gm

Trans fats: 0.6-3.7 gm/100 gm

Salt: 1.2-3.5 gm/100 gm

What these numbers mean?

Munching a standard-sized packet (65-75gm); *finish about half of the daily fats quota*.

Munching a packet of Lays March, 2012 batch will *exceed Trans fat quota* And a packet of Uncle Chips Spicy Treat – *60-70% salt quota*

Carbonated Beverages

Carbs:

14 gm/100ml (Pepsi Cola)

14.8 gm/100ml (Coca-Cola)

They say all of it is Sugar

What these numbers mean?

A 300 ml bottle will have over 40 gm sugar; consumption of a single bottle will exhaust your added sugar quota almost twice over

Instant Noodles

Total fats: 14 gm/100 gm

Carbs: 72 gm/100gm

Trans fats:

0.6 gm/100 gm (*Masala Maggi*)

0.7 gm/100 gm (Top Ramen, Super Noodles)

Salt:

4.2 gm/100 gm (Masala Maggi)

3.2 gm/100 gm (Top Ramen, Super Noodles)

What these numbers mean?

Highly salty food with lots of empty calories; 70% of calories is just from refined carbohydrates

Eating a packet will exhaust more than half of your daily salt quota

Burgers

Total fats: 10.5 gm/100 gm in veg --- 13.5 gm/100 gm in non-veg

Carbs: 43 gm/100 gm in veg 33 gm/100 gm in non-veg

Trans fats: 0.4 gm/100 gm

Salt:1.8 gm/100 gm in veg --- 1.2 gm/100 gm in non-veg

What these numbers mean?

Highly salty food with lots of empty calories; non-veg high on fat (40-45%); veg high on refined carbs (55%)

FFGS

Total fats: 20 gm/100 gm

Carbs: 56 gm/100 gm

Trans fats: 1.6 gm/100 gm

Salt: 0.4 gm/100 gm; Add to taste

What these numbers mean?

Rich in Trans fat; a medium fries (about 150 gm) will exceed your safe limit for Trans fat

Chicken fries

Total fats: 23.4 gm/100 gm

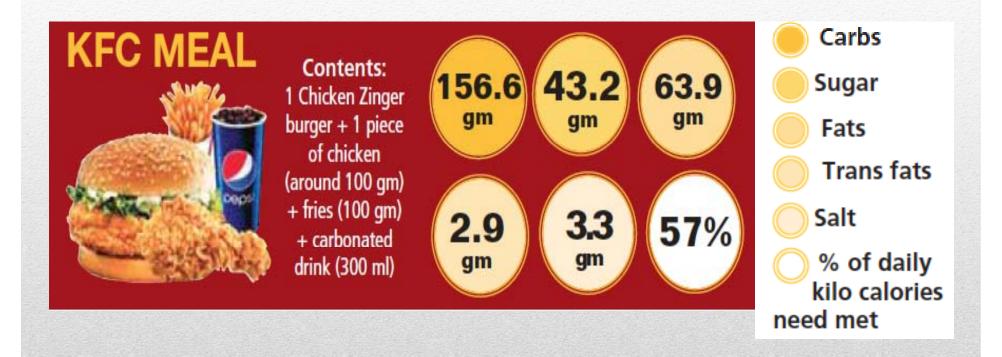
Carbs: 14 gm/100 gm

Trans fats: 0.7 gm /100 gm

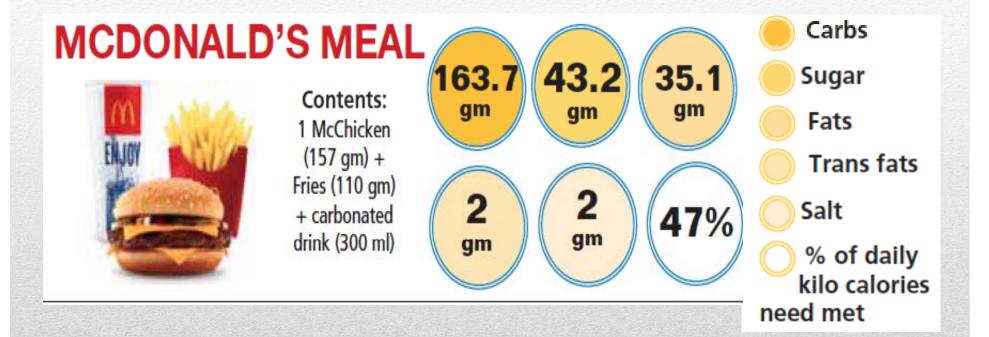
Salt: 0.9 gm/100 gm

What these numbers mean?

A two piece KFC chicken (about 250 gm) will exceed your Trans fat and total fat



The combo effect



The combo effect

Dominos meal

Contents: Pizza (Non Veg Supreme 25.4cm BURST) 4 slices + Nutty Choco Lava cake + coke (300 ml)

	g/serving	Percent of daily allowance
Salt	2.43	40.53
Carbohydrate	360.83	103.69
Total fats	47.99	61.52
Trans fats	1.23	47.47

The combo effect

India's labeling rules

- 3. Nutritional information Nutritional Information or nutritional facts per 100 gm or 100ml or per serving of the product shall be given on the label containing the following:
- (i) energy value in kcal;
- (ii) the amounts of protein, carbohydrate (specify quantity of sugar) and fat in gram (g) or ml;
- (iii) the amount of any other nutrient for which a nutrition or health claim is made:

Provided that where a claim is made regarding the amount or type of fatty acids or the amount of cholesterol, the amount of saturated fatty acids, monounsaturated fatty acids and polyunsaturated fatty acids in gram (g) and cholesterol in milligram (mg) shall be declared, and the amount of trans fatty acid in gram (g) shall be declared in addition to the other requirement stipulated above;

3. (v)(iii) (iii) The food, in which hydrogenated vegetable fats or bakery shortening is used shall declare on the label that 'hydrogenated vegetable fats or bakery shortening used- contains trans fats;

Provided further that, a health claim of 'trans fat free' may be made in cases where the trans fat is less than 0.2 gm per serving of food and the claim 'saturated fat free' may be made in cases where the saturated fat does not exceed 0.1 gm per 100 gm or 100 ml of food.

Conclusion: Tell us if you claim you are good; don't tell us if you are bad

India's labeling rules

Lay's Trans fats (mis)

labeling



Pre-February, 2012

- Claimed 0 gm trans fat in 14 gm serving **correct** as per Indian law; **serving** size a 'joke'
- Claimed 0 gm trans fat in 100 gm wrong and misleading; had 0.9 gm

Bingo Oye Pudina

(mis)labeli

Claimed 0 gm trans fat in 20 gm serving – correct as per Indian law; serving size a 'joke'

Claimed 0 gm trans fat in 100 gm

Wrong and misleading; had 0.6 gm



Haldiram's aloo bhujia (mis)labeling

Claimed 0 gm trans fat in 10 gm serving border-line case; had **0.25 gm; its** serving size is a 'super joke'

Claimed 0 gm trans fat in 100 gm – wrong and misleading; had 2.5 gm



Top Ramen Noodles (mis)labeling



Claimed 0 gm trans fat in 80/100 gm serving – wrong and misleading; had 0.55/0.7 gm; violation of even the 'absurd' Indian rules

The rest of packaged junk food don't even mention trans fat; they are not required as per the law

What about non-packaged – burgers, pizza, fries, fried chicken – they are not required to do so by the law on their package

They put information on website

GSE'S JUNK FOOD STUDY

McDONALD'S NUTRITION INFORMATION

Menu Item	Energy (kCal)	Protein (g)	Total fat (g)	Carbohydrate (g)	Sodium (mg)	Serve Size
Sandwiches and Wraps					-	
Chicken Maharaja Mac	488.0	21.2	22.6	50.4	1270	231
McChicken™	416.0	15.3	21.4	40.8	600	157
Filet-O-Fish	362.0	13.8	17.7	37.3	650	125
Chicken McGrill TM	280.0	11.1	11.0	34.1	560	129
McVeggie™	465.0	11.9	23.9	50.6	860	167
McAloo Tikki TM	337.0	8.2	13.6	45.5	550	143
Salad Sandwich	294.0	7.0	14.2	34.6	240	121

Double-stanuaru McDonald's India



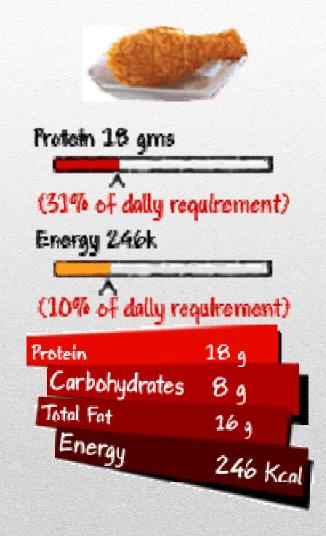
McDonald's USA Nutrition Facts for Popular Menu Items

We provide a nutrition analysis of our menu items to help you balance your McDonald's meal with other foods you eat. Our goal is to provide you with the information you need to make sensible decisions about balance, variety and moderation in your diet.

				n Fat		e**	at (g)	e**		(mg)	* •		**	es (g)	**	(B)	* •			%	DAILY	/ VALU	JE
	Nutrition Facts	Serving Size	Calories	Calories from	Total Fat (g)	% Daily Valu	Saturated Fa	% Daily Value	Trans Fat (g)	Cholesterol	% Daily Value	Sodium (mg)	% Daily Value	Carbohydrates	% Daily Value	Dietary Fiber	% Daily Value	Sugars (g)	Protein (g)	Vitamin A	Vitamin C	Calcium	Iron
	Burgers & Sandw	viches																					
i	Angus Chipotle BBQ Bacon†+++	10.3 oz (294 g)		350	39	60	18	88	2	145	49	2020	84	66	22	4	14	16	45	10	2	25	35

McDonald's USA

Hot & Chaspy Chicken (Drum pc.)



Double-standard KFC, India



NUTRITION GUIDE

Serving Size (gms)
Calories
Calories from Fat
Total Fat (gms)
Saturated Fat (gms)
Trans Fat (g)
Cholesterol (mgs)
Sodium (mgs)
Carbohydrates (gms)
Dietary Fiber (gms)
Sugars (gms)
Protein (gms)

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Chicken												
OR Chicken- Whole Wing	49	120	70	7	1.5	0	50	380	3	0	0	11
OR Chicken- Breast	163	360	190	21	5	0	110	1080	11	0	0	34
OR Chicken-Breast without skin or breading	116	160	35	3.5	1	0	85	580	2	0	0	31
OR Chicken- Drumstick	51	120	60	7	1.5	0	45	310	3	0	0	11
OR Chicken- Thigh	96	250	160	17	4.5	0	80	730	7	0	0	17
EC Chicken- Whole Wing	56	190	110	13	2.5	0	55	410	6	0	0	12

KFG, USA

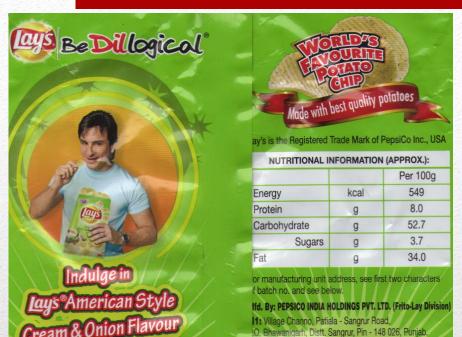


First massive advertisement campaign (Saif, Dil Logical); SNACK SMART – ZERO TRANS FAT AND COOKED IN HEALTHY OIL

Claim zero Trans fat; we found 0.9 gm/ 100 gm

misleading public

LAY'S POTATO CHIPS: December 2012



The package remain the same; Saif is there, so is 'Dil logical'; but surreptitiously remove, SNACK SMART – ZERO TRANS FAT AND COOKED IN HEALTHY OIL, is gone.

No claim on Trans fat; we found 3.7 gm/ 100 gm

ent;

misleading public

'n' watch the world slow down around you

LAY'S POTATO CHIPS; March 2012

2: C-5, MIDC Ranjangaon, Taluka Shirur, Pune - 412 220,

13: JL no. 2 & 4 (Kendua Panchayat), Mouja Jaldhulagari a Andul Mouri, P.O. Dhulagarh, P.S. Sankrail, Distt. Howrah,

IGREDIENTS: Potato, Edible Vegetable Oil, Sugar, Salt, *Spices

What followed CSE's study

Label changed: Lay's American style cream and onion

- Serving size changed to 30 g from initial 14 g

NUTRITIONAL	INFORM	MATION (API	PROX.):
		Per 14g	Per 1000
Energy	kcal	77	549
Protein	9	1,1	8.0
Carbohydrate	g	7.4	52.7
Sugars	g	0.5	3.7
Fat	.0	4.8	34,0
Saturated Fat	g	1.3	9.0
MUFA	g	2.2	15.4
PUFA	9	1.3	9.6
Trans Fat	g	0	0
Cholesterol	mg	0	0



Product:

American Style Cream & Onion

NUTRITIONAL INFORMATION (APPROX.):

		Per 100g	Per Serve
			(30g)
Energy	kcal	549	165
Protein	g	8.0	2.4
Carbohydrate	g	52.7	15.8
Sugars*	g	3.7	1.1
Fat	g	34.0	10.2
Sodium	mg	770	231

McDONALD'S NUTRITION INFORMATION

Menu Item	Energy (kCal)	Protein (g)	Total fat (g)	Carbohydrate (g)	Sodium (mg)	Serve Size (g)
Sandwiches and Wraps			-			
Chicken Maharaja Mac	488.0	21.2	22.6	50.4	1270	231
McChicken™	416.0	15.3	21,4	40.8	600	157
Filet-O-Fish	362.0	13.8	17.7	37.3	650	125

Nutrition Information (March 2012)

McDONALD'S NUTRITION INFORMATION

	Serve Size (g)	Energy (kCal)	Protein (g)	Total fat (g)	Trans fat (g)	Total carbohydrate (g)	Sugars (g)	Dietary Fiber(g)	Sodium (mg)		
Breakfast Menu											
Egg & Cheese McMuffin™	115	301	14	14	0.2	29	2	2	636		
Sausage McMuffin™ 115 283 16 11 0.2 29 2 2 1012											
Sausage & Egg McMuffin™	160	366	22	17	0.2	30	3	2	1081		

Nutrition Information (recent)

McDonald's Nutrition Information: before and after

- Website now provides information on sugar, dietary fiber and trans fat content
- No information on daily values yet as they provide in the US

Protein 18 ams

KFC Nutrition information: before and after

 Website now provides information on serving size, trans fats and salt

Nutrition Information (March, 2012)

(31% of daily requirement)

Energy 246k

(10% of daily requirement)

Protein 18 g

Carbohydrates 8 g

Total Fat 16 g

Energy 246 Kcal

Nutrition Information (recent)

Non-veg products											
	Draduct Nome Average Parties I					Fat (g)			İ		
Product Name	Average Portion	Energy (kcal)	Carbohydrate (g)	Protein (g)	Total Fat (g)	MUFA (g)	PUFA (g)	Sat. Fat (g)	Trans Fat (g)	Sodium (g)	
Fiery Grilled Drum Pc	77.3 g	131.7	0.52	19.43	5.77	2.78	1.30	1.69	Not Detected	0.61	
Popcorn Chicken	64 g	273.4	20.45	11.67	16.10	7.04	1.94	7.04	Not Detected	0.63	

Regulations still the same

- FSSAI comes up with draft regulations on labelling and claims
- No regulations yet for monitoring the serving sizes of products
- Trans fat labelling rules remain the same
- Claims can still be made as per convenience: claim if you are good; don't tell us if you are bad
- No check yet on food advertisements

Junk food ban in schools?

- 2010: Delhi based NGO Uday foundation filed Public Interest Litigation (PIL) in the Delhi High Court to get junk food banned in schools
- January 2012: Court orders Food Safety and Standards Authority of India (FSSAI) to come up with guidelines for foods being served in schools within six months
- Current status: Job of developing guidelines to provide 'quality and safe food' in schools assigned to the AC-Neilson ORG Marg Pvt. Ltd. by FSSAI
- No ban on junk foods in schools yet

All governments restricting junk food

- 1.Banning advertisements in children's programmes
- 2. Removing junk food from schools
- 3.Imposing a 'fat tax' on food items like processed food if they contain more than 2.3% saturated fat.
- 4. Working to regulate food business to contain salt, sugar and fat

Urgent action

- 1. Change labeling rules for Trans fat and salt
- 2. Ban junk foods from schools and places where children can have easy access to these foods
- 3. Implement stricter advertisement guidelines for children TV channels; allow on other channels only after 9 pm
- 4. FSSAI should come out with regulations to reduce salt, sugar and fats in junk foods, including imposition of 'fat, sugar and salt tax'.

Urgent action: what we need to do?