DR REKHA HARISH
MD FIAP

PROF & HEAD, DEPT OF PEDIATRICS, HIMSR
Ex PROF & HEAD, DEPT OF PEDIATRICS, GMC JAMMU
EB MEMBER CIAP 2010, 2012
NATIONAL CONVENER IAP TASK FORCE FOR PREVENTION OF CHILDHOOD OBESITY [2012-2015]
ADVISOR IAP TASK FORCE FOR PREVENTION OF NON COMMUNICABLE DISEASES 2017
NATIONAL CHAIRPERSON- IAP TASK FORCE FOR PREVENTION OF NCDs 2019-21
VICE PRESIDENT NZ INDIAN ACADEMY OF PEDIATRICS 2019
MEMBER NCD TECHNICAL ADVISORY GROUP ASIA PACIFIC PEDIATRIC ASSOCIATION 2020
NEED FOR EFFECTIVE LABELLING TO DISCOURAGE JUNK FOOD CONSUMPTION IN CHILDREN: PEDIATRICIAN’S PERSPECTIVE

CSE 4-3-20
WHY CHILDREN?
WHY DO WE NEED TO EXPAND FROM FSS?
WHAT KIND OF LABEL CAN BE UNDERSTOOD BY CHILDREN?
HOW CAN WE HAVE A CLEAR, CONCISE, COLORFUL, SIMPLE, EASILY UNDERSTOOD LABEL ON UP FOODS?
ALL NEED TO WORK ON THE GOAL-
CHILDREN REFUSE TO CONSUME JUNKFOOD!
THE CNNS SURVEY FIRST OF ITS KIND

Comprehensive National Nutrition Survey
2016 – 2018
Key findings

- There is a growing risk of non-communicable diseases among children aged 5 to 9 years and adolescents aged 10–19 years in India.

- One in ten school-age children and adolescents were pre-diabetic with fasting plasma glucose >100 mg/dl & ≤126 mg/dl or with glycosylated haemoglobin (HbA1c) between 5.7%–6.4%.

- One percent of school-age children and adolescents were diabetic with fasting plasma glucose >126 mg/dl.

- Three percent of school-age children and 4% of adolescents had high total cholesterol (≥200 mg/dl) and high low-density lipoprotein (LDL) (≥130 mg/dl).

- One-quarter (26%) of school-age children and 28% of adolescents had low high-density lipoprotein (HDL) (<40 mg/dl).

- One-third (34%) of school-age children (≥100 mg/dl) and 16% of adolescents (≥130 mg/dl) had high serum triglycerides.

- Seven percent of school-age children and adolescents were at risk for chronic kidney disease (serum creatinine > 0.7 mg/dl for 5–12 years and > 1.0 mg/dl for ≥13 years).

- Five percent of adolescents were classified as having hypertension (systolic blood pressure >139 mmHg or diastolic blood pressure >89 mmHg).
2018: WHO- 5x5 framework for tackling NCDs:

• **THE 5 DISEASES**: CV disease, chronic respiratory disease, cancer, diabetes, mental & neurological conditions

• **THE 5 KEY MODIFIABLE RISK FACTORS**: unhealthy diet, physical inactivity, air pollution, tobacco & alcohol.
The NOVA FOOD CLASSIFICATION

• **Group 1: Unprocessed** or minimally processed foods: edible parts of plants/animals after separation from Nature or modified/preserved by minimal processes. No substance has been added.

• **Group 2: Processed Culinary ingredients**: substances extracted from food/Nature and used to prepare, cook and season Group 1 foods, e.g. salt, sugar, oil or fats.

• **Group 3: Processed foods**: group 1 foods modified by adding salt, sugar, oil or fats, to preserve or enhance their sensory qualities.

• **Group 4: Ultra processed foods**: formulations of substances derived from foods plus cosmetic additives, with little if any intact food. These foods are designed to be durable, omnipresent, hyperpalatable and highly profitable.

Dr Paula Goel
UPFs consumption contributes to obesity

Each percentage point increase in the household availability of UPFs resulted in an increase of 0.25 percentage points in obesity prevalence.
Cross-sectional and longitudinal studies show that ultra-processed food consumption is associated with obesity, hypertension, dyslipidaemias, metabolic syndrome, heart attacks, stroke, breast cancer and total cancer.
The Y-Y paradox

Chittaranjan S Yajnik, John S Yudkin

THE LANCET • Vol 363 • January 10, 2004
The **JUN’CS’** Food:

- **J**- Junk food (foods high in fats, especially saturated and trans-fats, sugars and salts, and foods lacking in micronutrients/minerals)
- **U**- Ultra processed foods (as defined in the fourth category of NOVA classification)
- **N**- Nutritionally inappropriate foods. Home-made foods can also qualify to be nutritionally inappropriate if prepared in recycled oil, or contain high amount of sugar, fat or salt.
- **C**- Caffeinated/colored/carbonated beverages
- **S**- Sugar sweetened beverages
THE FIRST JUNK IN HUMAN LIFE-
LABELLING OF INFANT MILK SUBSTITUTE AND INFANT FOOD-

• “TO BE TAKEN UNDER MEDICAL ADVICE”.

• Should be used only on the advice- Prescription of a health worker

• All should have a picture of a beautiful baby being fed by mother

• All infant foods need to have warning too –That home made foods are ideally recommended for infants
THE MILIEU AND THE CHILD

- Working & Guilty Parents who lack time
- Screen Addicts since infancy/Mobiles in hand
- Money in pocket
- Pumped by advertisements-TV/Movies/video games/internet websites/smart phone apps
- Have Pestering Power From infancy
- Yielding Grandparents
- Free Home Delivery 24x7/Sales
- Schools thrust is on academics
- JUNCS Sales at strategic points around school
- Home is no different from a School Canteen
- Misses breakfast/lunches alone
- Foods are mandatory part of any Celebration/Reward/Punishment
CURRENT FRONT OF PACK LABEL FOR CHILDREN?

- **Daily energy requirement** is approximately 2000-2150 kcal for a 10-11 year old
- ~25% from each main meal (3 meals/day) and 10-12% from snacks (2 snacks/day).
- Therefore, thresholds have been calculated on the basis that each 100 g of product provides approximately 230 kcals
- **Sodium (mg) & energy content (kcal)** is equal to or higher than 1:1, the product is considered excessive in sodium. The ratio is derived from a max RDA of 2000 mg of sodium, on an av total daily energy intake of 2000 kcal
- **Sugar** thresholds are based on the rationale that a product is considered excessive in free sugars, if amount of energy (kcal) from free sugars [free sugars (g) x 4 kcal] is equal to or higher than 10% of the total energy (kcal) for the product. A lower threshold of 5% is used for sugar sweetened beverages.
- **Total fat** is considered excessive, if amount of energy (kcal) from total fats [total fats (g) x 9 kcal] is equal to or higher than 30% of the total energy (kcal) and excessive in saturated fats, if in any given quantity of the product the amount of energy (kcal) from saturated fats [saturated fats (g) x 9 kcal] is equal to or higher than 10% of the total energy (kcal).

- **CHILDREN ARE GROWING UP IN THE “JUNKY” ENVIRONMENT, INSTEAD OF HOME MADE COMPLIMENTARY FEEDING ALSO THEY ARE GIVEN JUNK BOUGHT FROM MARKET**
- **HOW WILL ADULT CUT OFFS BE APPLICABLE TO <10 YRS CHILDREN TOO?**
PEOPLE MUST BE WarnED ABOUT BOTH PACKAGED AND FAST FOOD THROUGH NOTICEABLE WARNING SYMBOLS

- Easy to notice – Since it comprises of colours and symbols
- Easy to interpret – does not require any calculation
- Enables consumer to identify unhealthy foods – more than any other FoP label
- Helps transcend the literacy and language barriers
Israel (Proposed)

Israel proposes icons in their warning labels for "High sugar", "High sodium" and "High saturated fats"
WHICH NUTRIENTS SHOULD BE HIGHLIGHTED ON FOP

- Salt
- Sugar
- Fat
- Trans fat
- Calories
- Sodium vs Salt
- Added sugar
- Saturated fat
- Trans fat
- Calories
- Total fat.
Under the new regulations, companies will have to display nutritional data clearly on front of their product packs.

<table>
<thead>
<tr>
<th>PROVISIONS</th>
<th>CURRENT LAW</th>
<th>PROPOSED REGULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUTRITION LABELLING</td>
<td>FSS (Packaging &amp; Labelling) Regulations, 2011</td>
<td>Draft FSS (Labelling and Display) Regulations, 2019</td>
</tr>
<tr>
<td>• Energy (in Kcal)</td>
<td>• Energy (in Kcal)</td>
<td>• Protein</td>
</tr>
<tr>
<td>• Protein (in g)</td>
<td>• Carbohydrate with sugar</td>
<td>• Total fat</td>
</tr>
<tr>
<td>• Carbohydrate with sugar (in g)</td>
<td>• Trans fat</td>
<td>• Saturated fat</td>
</tr>
<tr>
<td>• Total fat (in g)</td>
<td>• Cholesterol</td>
<td>• Sodium</td>
</tr>
<tr>
<td>• Trans fat (in g) [included after law was amended in 2016]</td>
<td>• Added sugar</td>
<td>These nutrients are to be declared at the back of pack per 100 g or ml or per serve</td>
</tr>
<tr>
<td>• Saturated fat (in g) [included after law was amended in 2016]</td>
<td></td>
<td>Their per serve contribution to RDA*, considering 2,000 Kcal, 67 g of fat, 22 g of saturated fat, 2 g of trans fat, 50 g of added sugar, and 2,000 mg of sodium will also be declared</td>
</tr>
<tr>
<td>These nutrients are to be declared at the back of pack per 100 g or ml or per serve</td>
<td></td>
<td>Serving measure and number of servings</td>
</tr>
<tr>
<td>Serving size only in case of per serve declaration of nutrients</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THRESHOLDS FOR FOP LABELLING??

- Thresholds have been logically defined by the WHO-SEARO nutritional profiling model.
- This was the basis of thresholds provided by FSSAI in draft labelling regulations of 2018 and 2019.
- The FoP labels can be easily based on these thresholds.
THE DEBATE --- AN IDEAL FOOD LABELLING?

- **HOW TO LABEL?**
- **TRAFFIC LIGHT BASED?**
- **WHICH NUTRIENTS SHOULD BE INCLUDED?**
CAN CHILDREN UNDERSTAND SERVING SIZE?

RATIONALE FOR SERVING SIZE IN A SINGLE USE SMALL PACK?

A POSSIBILITY-IF HE GETS HOLD OF A PACK WITH GREEN LABEL FSS/SERVING SIZE, HE CAN OVER CONSUME IT.
COMMONEST MEAL ORDERED

- Hamburger
  (Double quarter pounder with cheese)

- Large french fries [FREE]

- A can of coke

- M&M's McFlurry
Nutrition facts

<table>
<thead>
<tr>
<th>Nutrition</th>
<th>Total amount</th>
<th>RDA (for an adolescent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALORIES</td>
<td>2010 kcl</td>
<td>2000-2500 kcl</td>
</tr>
<tr>
<td>TOTAL FATS</td>
<td>85g</td>
<td>70g</td>
</tr>
<tr>
<td>SATURATES</td>
<td>36g</td>
<td>18g</td>
</tr>
<tr>
<td>CARBOHYDRATES</td>
<td>251g</td>
<td>289g</td>
</tr>
<tr>
<td>SUGARS</td>
<td>133g</td>
<td>30g</td>
</tr>
<tr>
<td>FIBER</td>
<td>10g</td>
<td>25g</td>
</tr>
<tr>
<td>PROTEIN</td>
<td>67g</td>
<td>55g</td>
</tr>
</tbody>
</table>

4.5 HOURS RUNNING
=10.5 MILES RUN
running (5mph)

8.5 HOURS WALK = 21 MILES WALK
(2.5mph)
[leisure walk for 1 hour ~240 calories]
TO SAVE CHILDHOOD: URGENT NEED FOR -
- SIMPLE
- CLEAR
- COLOR CODED
- INFORMATIVE LABEL
- EASY TO UNDERSTAND
HELPS IN LOGICAL DECISION
PLEA ON BEHALF OF NCD PREVENTION ACADEMY & INDIAN ACADEMY OF PEDIATRICS

JUNK FOOD NEEDS NO LESS THAN RED ALERT

WHY CAN'T WE TREAT JUNK FOOD LEGALLY AS TOBACCO ??????
Let's reach our awareness target - no demand of junk food

We don't need junk food, say school kids

MOVE HC The court had earlier slammed Centre for delay in enforcing the ban

Harish V Nair

New Delhi: On Wednesday, a group of school students joined the growing lobby demanding ban on the sale of junk food in schools and college canteens across the country. "Uncontrolled consumption of junk food and beverages is leading to obesity. Does the fundamental right of an individual or a group to engage in an economic activity allow him to harm the lives of others?" asked the petition filed by 10 students of Father Agnel School. They also submitted postcards to the bench headed by Acting Chief Justice Ved MT Anand.

JUNK THIS

What uncontrolled consumption of such foods and beverages can do to you:

- JUNK FOOD
  - Biscuits, burgers, cola, fries and chips are the most consumed snacks among children.
  - Junk food mostly comprises refined sugar and fat that can lead to several health problems.
  - Their regular consumption leads to excess weight and obesity.
  - Junk food is a major cause of heart diseases.

- RED AND BLACK BEANS
  - Meat and fish are rich in proteins.
  - They are also rich in vitamins and minerals.
  - They are low in fat and cholesterol.

- FRESH FRUITS
  - They are rich in vitamins and minerals.
  - They are low in fat and cholesterol.

- NUTS
  - They are rich in proteins.
  - They are also rich in vitamins and minerals.
  - They are low in fat and cholesterol.

- BREAD AND GRAINS
  - They are rich in carbohydrates.
  - They are also rich in vitamins and minerals.
  - They are low in fat and cholesterol.

- MILK AND DAIRIES
  - They are rich in proteins.
  - They are also rich in vitamins and minerals.
  - They are low in fat and cholesterol.

- FRUIT JUICE
  - They are rich in vitamins and minerals.
  - They are low in fat and cholesterol.

- GREEN LEAFY VEGETABLES
  - They are rich in vitamins and minerals.
  - They are low in fat and cholesterol.

- WATER
  - Drink plenty of water.
  - Water helps in maintaining the body.

We want the government to take "has written" in all latest health told the court: "On one hand.
<table>
<thead>
<tr>
<th>Fat/FA</th>
<th>REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL FAT</td>
<td>20-35 %E</td>
</tr>
<tr>
<td>SFA</td>
<td>&lt;10% E</td>
</tr>
<tr>
<td>Total PUFA (LA + ALA + EPA + DHA):</td>
<td>6 – 11%E</td>
</tr>
<tr>
<td>n-6 PUFA (LA)</td>
<td>2.5 – 9%E</td>
</tr>
<tr>
<td>n-3 PUFA (ALA)</td>
<td>0.5 – 2%E</td>
</tr>
<tr>
<td>TFA</td>
<td>0%</td>
</tr>
<tr>
<td>MUFA</td>
<td>15 – 20 %E</td>
</tr>
</tbody>
</table>

DIETARY GUIDELINES
ENERGY FROM FATS : (% OF TOTAL CALORIES)

• Adults - 20 - 35%
• Children: 4 to 18 yrs 25 - 35%
  < 4 yrs- 30 to 40%
• < 10% saturated fats: replacing them with MUFAs & PUFAs.
  ➢ Trans fats consumption as low as possible[WHO<1%]
  ➢ Fats for cooking-
    High MUFA canola oil, olive oil.
    High n-3 PUFA alpha-linoleic acid eg. walnut oil, Fish oil/Flaxseed oil. to a lesser extent, soybean oil, are also beneficial.
benefits of n-6 FAs Sunflower/Safflower/Corn Oils-UNCERTAIN??