



IS YOUR FOOD EATING YOU?

The
**UNSEEN
DANGERS**
of
ULTRA-PROCESSED FOOD



putting child nutrition
at the forefront
of social change

NAPi



INTRODUCTION

The World Health Organisation recognises “In the first 2 years of a child's life, optimal nutrition fosters healthy growth and improves cognitive development. It also reduces the risk of becoming overweight or obese and developing NCDs later in life” and recommends “healthy diet” for all individuals. For infants and young children it includes breastfeeding exclusively during the first 6 months of life, continued breastfeeding for 2 years and beyond, complimented with a variety of adequate, safe and nutrient-dense foods after 6 months of age. Salt and sugars should not be added to complementary foods. For adults, it includes fruits, vegetables, legumes (e.g. lentils and beans), nuts and whole grains (e.g. unprocessed maize, millet, oats, wheat and brown rice) raw chicken/meat and eggs. WHO also recommends consuming less than 5% of the daily diet as *free sugar (added sugar or naturally present sugar in foods)*, less than 10% as saturated fats, less than 1% as trans fats, and less than 5gms/day of salt (One Teaspoon).

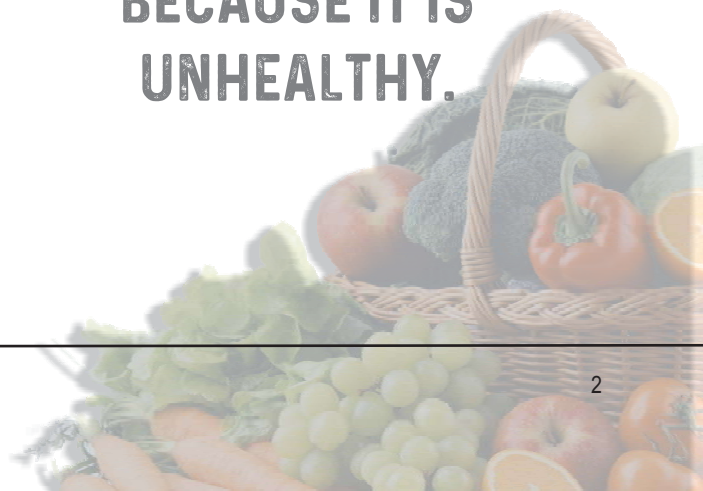
Historically we used to rely on eating 'real food' for our diet e.g. meals prepared and cooked with additional condiments and spices to help to enhance or improve its flavour. In modern times, we tend to consume processed foods (like e.g. *soft drinks* and salted *chips*), which contain preservatives, sweeteners, colouring agents, or flavours and are generally high in salt and sugar. Processed foods are fast replacing real foods globally and India is catching up too. In a small family survey on 45 families, in South Delhi, we found that people of all age groups consumed '*health drinks*' under the influence of television advertising thinking it will provide health benefits. People did not bother to look at the label for nutritional content e.g. how much sugar or salt it has.

When obesity in Brazilian adults went up from 7.5% in 2002 to 17.5% in 2013, Professor Carlos Monteiro from University of Sao Paulo, and his team researched their

dietary patterns. They found that consumption of processed foods made people eat more, and led to increased obesity and type -2 diabetes. This was happening in spite of the fact that people were buying less sugar and oil. They found that consumption of *highly processed or ultra-processed*, ready to eat, sugary and packaged food products had gone up. According to the extent and purpose of food processing, they proposed a 'Nova' food classification. This classification did not depend on type of nutrients.

In this document “The Unseen Dangers of Ultra-processed Food”, we briefly describe 4 food groups as per Nova Classification, share information about the health risks due to consumption of highly processed foods and offer advice to choose your foods before you buy.

**THE WORLD HEALTH
ORGANISATION'S
RECOMMENDED DIET
DOES NOT INCLUDE
ULTRA-PROCESSED FOODS
BECAUSE IT IS
UNHEALTHY.**



CLASSIFYING FOODS

It is important to identify which food groups cause more harm than others. This led to the discovery of a new way of looking at the various food groups and NOVA Classification was born.

NOVA CLASSIFICATION OF FOODS ACCORDING TO ITS PROCESSING

There are four food groups: unprocessed or minimally processed foods, the culinary ingredient foods, processed foods and the ultra-processed or highly processed foods (UPFs).

Group 1-Unprocessed or minimally processed foods

These are real foods like edible parts of plants (e.g. seeds, fruits, leaves, stems, roots) or of animals (e.g. muscle, eggs, milk). Other examples are carrots, potato, onion, banana, and grains (wheat, rice, oats, barley, millets, ragi, corn), raw chicken or nuts. These are eaten as boiled, cooled, pasteurized, roasted, crushed, ground, fermented, fried or frozen. For example, fermenting the milk makes it into yoghurt. Cooked rice pulao, chapaati, lentils, veggies, idli, dosa, and herbs like mint belong here. These are prepared domestically not industrially processed.



Group 2-Processed culinary ingredients

These are obtained directly from group 1 or from nature by processes such as pressing, refining, grinding, milling, and spray drying. These are used in cooking and seasoning to make foods delicious. Examples are salt, sugar, oil and butter from milk, ground spices, salted butter, iodised salt, and vinegar figure in this group.



Salt



Sugar



Oil



Butter

Group 3: Processed foods

These are usually prepared from Group 1 foods by adding sugar, oil, or salt. They are preserved, pickled, salted or fermented. Processing of food increases its durability or modifies its taste. Some examples are: fruits preserved in sugar syrup (murabba), vegetables preserved in salt water/oil (pickles), simple cheese made from milk, canned fruits or veggies etc. Indian sweets/mithai, traditional salted snacks, e.g. 'mathadi' belong here. Alcoholic drinks like beer and wine falls in this group. Sugar or salt content determines whether these are unhealthy.



Group-4: Ultra-processed foods (UPFs)

These are produced in the factories and mostly sold as “packaged food”, “ready to eat” anytime anywhere foods. The UPFs are usually advertised with the aim to replace real foods. Real foods are a very small proportion of or are even absent from the UPFs.

The processing includes carbonating, firming, whipping, bulking and anti-bulking, de-foaming etc. They have typically five or even more ingredients. They contain at least one additive that we don't ever use in the kitchen. These ingredients may be sugar, oils, fats, salt,

anti-oxidants, stabilisers, and preservatives. Casein, lactose, whey, and gluten, hydrogenated oils, hydrolysed proteins, soy protein isolate, maltodextrin, invert sugar and high fructose corn syrup are only found in UPFs. Additives also include dyes and other colours, colour stabilisers, emulsifiers, flavours, and non-sugar sweeteners. These make foods intensely palatable.

Examples for infants and young children include: Infant formulas, follow-on formula and packaged baby milk/cereal/food products. For adults there are so many examples: Packaged “instant” soups, noodles, packaged breads with added emulsifiers, poultry and fish “nuggets” and “sticks”, sausages, burgers, and other reconstituted meat products, carbonated drinks, packaged fruit juices, health or energy drinks, sweet or savoury packaged snacks, ice-creams, yoghurt with added artificial sweeteners chocolates, candies, mass-produced packaged breads and buns, margarines and spreads, biscuits, cakes, breakfast cereals, energy bar/protein bars, processed meats (bacon, ham and salami), instant sauces, ready to heat products including pre-prepared pies, pasta and pizza dishes.



Figure 1-3 provide examples of some real and ultra-processed foods being consumed in India by different age groups

We have divided foods into various age groups, 0-6 months when babies are dependent on mother's milk

only, after six months they need additional foods, and after 3 years children consume almost same as adults, and after 8 years this is very much the same and different in different parts of India. We hope these examples will help identify the food groups.

FIGURE-1



* Breastmilk is all that a baby needs for 0-6 months. For those where artificial milk has to be used for reasons, animal milk falls in minimally processed group and powdered milks fall in UPFs.

FIGURE 2

REAL FOODS
(Unprocessed or minimally processed foods)

ULTRA-PROCESSED FOODS

3 years to 8 years



Homemade Meal



Kheer



Poha



Cheela



Sooji Halwa



Noodles



**Sweetened Beverages
(Cold Drinks)**



Bread and Cakes



Frozen Snacks



Health Drinks

FIGURE 3

REAL FOODS
(Unprocessed or minimally processed foods)

ULTRA-PROCESSED FOODS

8 years and above



Meal



Idli Sambhar



Biryani



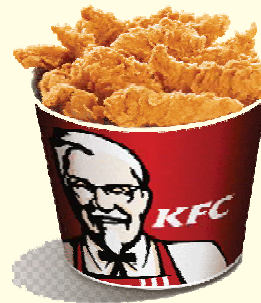
Omelette



Dahi Balle



Pizza



Fried Chicken



Frozen Kabab



Burger



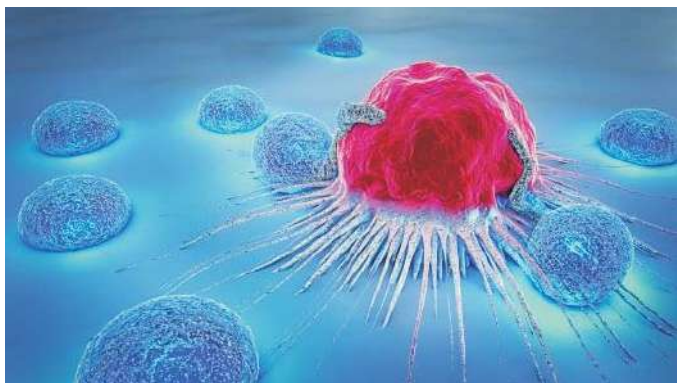
Alcohol

HEALTH RISKS OF CONSUMING ULTRA-PROCESSED FOODS

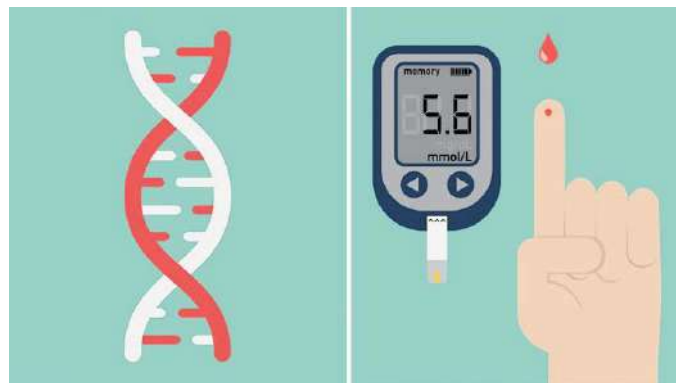
Now you may ask what's the harm in consuming such UPFs in our fast paced lives when we can always study the calorie count per serving. Well here's the catch! Scientific research has investigated associations between levels of consumption of UPFs and health outcomes. Increased consumption of UPFs led to greater eating rate and weight gain than the unprocessed foods, in spite of the

same calorie count. Negative health impacts include obesity, asthma and wheezing in children; increased overweight, obesity, Type -2 diabetes, cardio-vascular diseases, cancer, depression, irritable bowel syndrome, dyspepsia, frailty (exhaustion, muscle weakness) and 'all cause mortality' in adults. None of studies found beneficial health outcome with consumption of UPFs.

Cancer



Diabetes



Obesity



Heart Disease



WHAT CAN YOU DO?

UPFs are aggressively marketed and advertised for increasing its sale and consumption. Marketing tactics include targeting gullible children and adolescents, use of celebrities to advertise, use of health claims and projecting as equivalent to real foods. As a consumer you can make a choice by being aware and learning to identify the food before you buy or eat. Covid-19 provides an excellent opportunity for you to transform your diet patterns by making healthier food choices and rejecting the unhealthy UPFs. Our recommendations:

GENERAL RECOMMENDATIONS

1. Eat real foods of group 1 and 2 to boost your immunity and to beat obesity. This will help beat Covid-19 or similar infections.
2. Check if the food is ultra-processed, it will help you decide whether or not to eat or give to your children. Age wise tabulation is helpful in identification.
3. Don't be misled by what is advertised about food, be wary of information from industry.
4. Trust information sources such as WHO , Government of India or public interest groups like NAPI/BPNI.

SPECIFIC RECOMMENDATIONS

Group 1 Foods: *Make these foods the basis of your or your baby's diet.* These are nutritious, delicious, appropriate, and supportive of socially and environmentally sustainable food systems.

Group 2 Foods: *Use processed culinary ingredients in small amounts* for seasoning and cooking foods and to create culinary preparations. Oils, fats, salt, and sugar contribute towards diverse and delicious diets without making them nutritionally unbalanced.

Group 3 Foods: *Limit the use of processed foods.* Consume them in small amounts as part of meals that is based on real or minimally processed foods. It is likely

that ingredients such as sugar and salt and techniques used in the manufacture of processed foods such as fruits in syrup, cheeses, Indian sweets, unfavourably alter the nutritional composition of the foods from which they are derived.

Group 4 Foods: *Avoid ultra-processed food products.* UPFs are nutritionally unbalanced. As a result of their formulation and promotion, and intense palatability, people consume in excess displacing real or minimally processed foods. UPFs damage cultural food preferences, social life, and the environment through production, distribution, marketing, and consumption.

(Adapted from the Brazilian dietary guidelines.)

Box-1: Task for the Government of India

Brazil has much to offer. They have begun to fix the food system and in 2014. Guidance to people is “Avoid consumption of ultra processed foods, avoid smacking, and teach children to be “wary of all forms of food advertising”.

The Government of India can demonstrate its will to reform the food system for positive life-long impact on people's health. It could a)adopt NOVA classification of foods as a policy, b) ensure appropriate labelling on foods and c) end their promotion through a legal framework. A new campaign “Junk the ultra-processed foods” is warranted.

INFORMATION YOU CAN TRUST

Useful Resources

Healthy diet, World Health Organisation <https://www.who.int/news-room/fact-sheets/detail/healthy-diet>

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Popkin, B. 2020. Ultra-processed foods' impacts on health. 2030 Food, Agriculture and rural development in Latin America and the Caribbean, No. 34. Santiago de Chile. FAO. <http://www.fao.org/3/ca7349en/ca7349en.pdf>

Disclaimer: This document does not replace a complete dietary advice that your health worker could provide you nor does it mean that it is complete prevention from Covid-19.

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