ANUARY 2019 • Vol. 4 • Issue 10 MONTHLY • Pages 64 ₹ 200 AND A • CONTRACT OF CONTRACT

> IN FOCUS Swasth Bharat Yatra: Dandi Se Handi Tak

YEARS OF CELEBRATING THE MAHATMA

OUT OF THE BOX Know What You Eat

EAT RIGHT INDIA

PLUS

REPORT • MY MARKET • THE LAST MILE









"Let's think about making our product which has 'Zero Defect'; so that it does not come back (get rejected) from the world market and 'Zero Effect' so that the manufacturing does not have an adverse effect on our environment"

SHRI NARENDRA MODI Hon'ble Prime Minister







Certification Scheme

A roadmap to World-class manufacturing



HIGHLIGHTS

- 🔅 A scheme by Ministry of MSME, Govt. of India
- Certification on the systems and processes of MSMEs
- 🔅 Handholding MSMEs towards world class manufacturing
- 🔅 Special emphasis on MSMEs supplying to Defence Sector
- Direct subsidy to participating MSMEs
- Creating a credible database of MSMEs for OEMS/CPSUs/Foreign Investors under "Make in India initiative"
- Quality Council of India (QCI) to function as the NMIU (National Monitoring and Implementing Unit) of the scheme

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BEJON KUMAR MISRA | bejonmisra@consumerconexion.org

Well Begun Is Half Done

PRIME MINISTER NARENDRA Modi's vision of leveraging 150th Birth Anniversary of Mahatma Gandhi has inspired the FSSAI with the 'Eat Right India' Movement. Various activities have been planned to create the necessary awareness. The planned activities will be in two phases of 150 days each and Swasth Bharat Yatra will be part of the first

phase. The first phase will culminate by end-January, 2019 and the other activities at the National/State level will include

terrible burden of non-communicable diseases (NCDs), with the lack of proper diet and safe food a major contributing factor. The country has seen an increase in the NCDs burden from 30 per cent in 1990 to 55 per cent

India bears a

1990 to 55 per cent in 2016. Eat Right Melas, Conventions and National Poster Competition. The 2nd phase will commence immediately thereafter and the events and outreach activities will be organized by the States/UTs to reach out to various stakeholders and the citizens up to district and sub-district level with regard to the eating right.

'Eat Right India' movement has been launched by the Food Safety and Standards Authority of India (FSSAI) under the Ministry of Health and Family Welfare. This was launched because food safety and healthy diets are critical in the context of India's high burden of foodborne diseases, under-nutrition, micronutrient deficiencies and growing incidence of obesity and non-communicable diseases (NCDs). The 'Eat Right India' movement is a collective effort of key stakeholders and citizens and is aligned with Government's recent focus on public health through its three key programmes, namely

Eat Right India

Healthy. Safe. Fortified.

'Ayushman Bharat', 'Swachh Bharat Mission', and 'POSHAN Abhiyaan'. 'Swasth Bharat Yatra' is a key element of the Eat Right India movement. The Eat Right

Movement has no choice

but to play the long game. It will take years for changes in health indicators and lifestyle indicators to reflect, and it will be last 18 months before most of the companies introduce their new formulations. So the success or failure of the campaign will not be known for years to come. But it is a start and well begun, as they say, is half done.



Message from the Editor-in-Chief

POOJA KHAITAN

DESKTALK INDIA BEGINS TO EAT RIGHT

WITH A VIEW to spread greater awareness among the citizens on the significance of nutritious and healthy diet, 'Eat India Right' movement was launched by FSSAI with the 'Swasth Bharat Yatra' activity flagging off on 16th October, 2018 (World Food Day) on six tracks from six different locations and covering almost all States/UTs, culminating at New Delhi on 27th January, 2019.

With the understanding of what to eat, it is important to know how much to eat. Eating too less will lead to nutritional deficiencies while eating too much may increase the risk of obesity or diet related noncommunicable diseases.Fast foods and sedentary lifestyle should be avoided to lead a fit and healthy life. Children and youth should be informed about good eating habits and nutritious diets along with adequate exercise. It is important that youngsters be involved in this movement to give them practical knowledge.

'Eat Right India' movement has caught up with consumers pan India and with the World Health Organisation calling for a complete removal of trans fat from the food supply by 2023, the edible oil industry, bakeries and halwais in India, including Halwai Association and Hotel and Restaurant Association of Northern India, too, have pledged to do their bit, committing to phase it out by 2022 with the pledge 'India@75 – freedom from trans fat by 2022.'

Industry experts say that several unhealthy products like aerated drinks and vanaspati are being knocked off the shelves, thanks to gradually increasing awareness.

FSSAI has also proposed that retail chains could nudge consumers to buy healthier food options by ensuring the ingredients and relative healthiness of their products are clearly marked at the points of sale. Of course, there is a thin line between educating people about what to eat but leaving it to them to decide and telling people what to eat. The final choice should remain with the consumer. If someone wants to eat a salty snack, or a candy bar, he or she should have that option. "Consumer choice should always prevail". Moreover, there is nothing called 'good' or 'bad' food. It is about how one consumes those foods as part of the overall balanced diet. All foods have a place in consumers' eating preferences and can definitely be eaten within a specific portion size."

The movement seeks improved behaviour in terms of food choices from the supply side as well as the demand side, thereby setting an example that can be replicated for other issues within India, and by other nations as well.

Clearly, there are quite effective methods in place to alter the way India eats; however, there is a need to throw caution to the wind. The issue is the inability to quantify the changes in habits of citizens in a short span. Therefore, a deflection from strategy should not be based on short-term outcomes. Instead, FSSAI needs to go all guns ablaze in these social and behavioural changes that they have given life to. Because health and competitiveness will follow if India begins to "Eat Right"!

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Under this campaign, FSSAI has asked industry to voluntarily reduce salt, sugar and

saturated fat in packaged food products. Edible oil industry, bakeries, halwais and FMCG companies have taken the pledge to reduce the level of salt, sugar and fat in food products. The movement has received good support by fifteen major players from the packaged food industry.

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McDonald's India has released a statement saying that they will be introducing whole wheat buns on their menu.

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50 I KNOW WHAT YOU EAT



Several decades of scientific research at the India's premier nutrition research organisation, the National Institute of Nutrition (NIN) located in Hyderabad, India, help coalesce several diet-based approaches to effectively prevent undernutrition as well as early onset of lifestyle diseases.

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Diabetes is a condition that impairs the body's ability to process blood glucose, otherwise known as blood sugar. Poorly controlled blood sugar can lead to neuropathy, increasing the risk for issues like acid reflux (GERD), gastroparesis, and diabetes enteroneuropathy.



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Urban India Moving Towards Healthy Eating; Kolkata, Pune, Delhi Lead The Way

People in Ahmedabad, followed by Chennai and Lucknow, have the most nutritionally-deficit diets after Vadodara.

DATA BRIEFING

We have about **150** million foods listed, which includes a range of Indian foods, that people refer to on a daily basis **PEOPLE IN KOLKATA** stay on track the best when it comes to eating right to lose weight while those in Vadodara have the most unhealthy eating diets, shows data collated for 2017 from close to 4 million users over 200 Indian towns and cities.

After Kolkata, people from Pune and New Delhi are the most mindful about what they eat, shows data mined by a smartphone application, HealthifyMe. People in Ahmedabad, followed by Chennai and Lucknow, have the most nutritionally-deficit diets after Vadodara.

The data collated by the fitness application's close to 4 million users, who use the app to record what they eat through the day. Using this self-reported data, the app calculates the user's total calorie intake, including the protein, carbohydrate, fat and fibre intake.

"The data has been collated for the year 2017-18 from 220 cities across India. We have about 150 million foods listed, which includes a range of Indian foods, that people refer to on a daily basis," says Tushar Vashisht, CEO of HealthifyMe.

Interestingly, chapati emerged as more popular than rice among people trying to lose weight even in regions where rice is the traditional staple.

Boiled egg, cucumber and orange is what most people prefer when thinking of healthy food and among unhealthy choices, mutton curry, potato samosa, jalebi, french fries and chocolates are the most popular.

"Clearly people want to eat healthy and they are making a conscious effort to eat healthy meals," Vashisht said.



Cookware should be safe, convenient and durable. A variety of materials are used to make cookware today. The selection is usually dictated by cultures, cuisine and preferences.

WHAT INDIA EATS !!



HEALTHIEST CITIES

- 1. Kolkata
- 2. Pune
- 3. New Delhi
- 4. Navi Mumbai
- 5. Nagpur
- 8. Ghaziabad 9. Bhopal

6. Ludhiana

7. Thane

10. Chandigarh

GOOD COOKWARE IS an integral part of cooking and can have far-reaching impact on health. Cookware should be safe, convenient and durable. A variety of materials are used to make cookware today. The selection is usually dictated by cultures, cuisine and preferences. It's important to understand the difference between materials and how they affect us in order to make the best choice.

- Cast Iron is heavy, inexpensive and doesn't rust easily. Heat is conducted slow and even making it ideal to be used in the stove or oven. Frying pans, saucepan and sometimes kettles are also made of this metal. Food cooked in iron vessels will have enhanced iron content. In India, where anaemia is a major public health concern, iron pots are thus highly desirable.
- Copper (tamba) and its alloy with zinc, brass (peetal) are not too heavy and are good conductors of heat. However, they are easily tarnished and reactive to acids and salt. This can cause food poisoning. Organic acids from food can lead to

Good cookware is an integral part of cooking and can have far-reaching impact on health

excessive copper, which can be detrimental to health. Therefore, they must be coated with tin (kalai). However, being soft, the tin coating wears off rapidly. Bronze, an alloy of copper and tin, is heavy and strong but brittle and costly too.

- Aluminum cookware is light, strong, corrosion resistant, conducts heat well and is inexpensive. Pressure cookers are made of this metal. However, it is extremely soft and reactive. Contact with strong acids, alkalies and salt causes it to dissolve. Also, vigorous stirring and scrubbing during washing causes the metal to wear off. Aluminium in our body can inhibit absorption of important minerals like iron and calcium. It may also accumulate in bones leading to 'de-mineralisation' (softening) of bones. Aluminium deposits have also been found in brain tissue of Alzheimer's disease patients.
- Stainless steel cookware is strong, highly durable, rust-proof and easy to handle. However, it is not a good conductor of heat and may cause food to burn due to uneven heat distribution. This disadvantage has been overcome by the use of copper bottom stainless steel.
- Non-stick cookware cuts back on fat consumption and doesn't allow food

to stick on the pan. It's also easy to clean. However, some concerns regarding PFOAs (perfluoroctanoic acid, a suspected carcinogen) associated with it have been raised. A tear on the surface should be avoided. Do not use abrasive cleaners or stack the pans one on top of the other, and always use wooden spatula.

- Hard anodised aluminium vessels are non-stick, durable and easy to clean. It prevents reaction with acidic foods and leaching of aluminum. It conducts heat well and is reported to be harder than steel.
- Ceramic pottery is unfit for cooking unless glazed, which helps resist wear and tear. Poor quality glaze can be a source of lead & cadmium, which can be poisonous upon ingestion.
- Enamel-coated cookware are colourful, stain, scratch-resistant and does not pick up food odour. With proper care, a fine enamel pot lasts a lifetime, whereas a thin enamel layer that chips easily can be harmful to health.
- Microwave plastics should be used with caution. Only those specifically made for microwave use should be used. Avoid visibly damaged, stained or unpleasant smelling plastics and containers.

UNHEALTHIEST CITIES

- 1. Vadodara
- 2. Ahmedabad
- 3. Chennai
- 8. Jaipur 9. Indore

Secunderabad
Hyderabad

- 4. Lucknow 5. Bangalore
- 10. Surat



FUNCTIONAL FOODS AND JAPANESE FOSHU Foods For Specified Health Use

Japan's Ministry of Health and Welfare initiated a regulatory system to approve certain foods with documented health benefits. Thus, was born FOSHU — Foods For Specified Health Use.



Benefits of FOSHU food range from cholesterol lowering, blood pressure regulating foods, to those that improve bowel and gastro-intestinal health. (Photo: Thinkstock)

HIPPOCRATES. THE

FATHER of medicine included food as a part of treatment to cure disease. Food as medicine is not something new to a nation like ours with a rich heritage of 5,000 years. The fundamentals of using edible herbs, barks, seeds, stems, leaves and other food items to treat illnesses are well documented in our ancient records including texts like Charaka Samhita. They are an integral part of our ancient healing system of Ayurvedic medicine. The system,



FOSHU refers to foods containing ingredient with functions for health and officially approved to claim its physiological effects on the human body. FOSHU is intended to be consumed for the maintenance / promotion of health or special health uses by people who wish to control health conditions, including blood pressure or blood cholesterol.

however, suffers from a lack or inadequate research and controlled clinical trials. This often leads to conflict with the concept of 'evidence-based' medicine fundamental to modern western medicine.

Modern medicine and food science recognise that food serves a primary function of providing energy and nutrients. It is also established that secondary function of food is that it must be good to taste.

It is the tertiary function that deals with the regulation of physical condition of the body that was recognised later. This led to the formulation of special category of foods called functional foods.

Functional foods are defined as foods that provide special health benefits, which go beyond their nutritional components like energy, vitamins, minerals etc. They are natural or formulated foods that enhance physiological performance or prevent diseases. Functional foods have emerged when limitations of modern medicines have been felt and consumer interest in diet and health is at an alltime high.

Taken from many cultures, herbs and plants commonly used for treatments for specific disorders have been carefully identified. By now, modern analytical methods have identified more than 10,000 physiologically active constituents provided by the human diet, some of which have been developed into medicines.

It was the Japanese in the 80s who developed and commercialised the concept of functional foods. Their Ministry of Health and Welfare initiated a regulatory system to approve certain foods with documented health benefits. Thus, was born FOSHU - Foods For Specified Health Use. This was the first time food could legitimately be labelled and categorised as possessing specific health

effectiveness of the products: there must be identification of active constituents and guarantee of its safety. There are over 700 products in the Japanese food market that carry FOSHU status.

This sort of

introduced to encourage

lifestyle-related diseases

scientific evidence. To

secure FOSHU status,

there must be adequate

the maintenance of

based on the

evidence of

consumption of functional foods with

health, prevention of

Benefits of FOSHU food range from cholesterol lowering, blood pressure regulating foods, to those that improve bowel and gastro-intestinal health.

Interestingly, the positive health correlations of functional foods are not on the basis of nutrient content. Non-nutrient constituents contribute beneficial physiological effects that either retard or prevent disease. Some of these include allyl sulfides in garlic and onions that prevent heart disease, phytates in grains and legumes protect against cancer and heart disease, lignans in flaxseeds too have protective effect against cancers, isoflavones in soy protect against osteoporosis.

In India, a wealth of knowledge lies in our ancient texts. Many people have been consuming a majority of these foods for thousands of years to prevent and treat specific health conditions. As there is little recorded history of actual outcomes, their dose controls or identification of possible contaminants, this has put them under uncontrolled and questionable categories.

The average consumer remains unclear, unsure and often under-confident about the usage of foods as medicine, worsened by doubts created by mainstream physicians. It's time that we too establish and put in place a regulatory system for such food, something similar to the Japanese (It's not a coincidence that their average life span is 87 years for women and 78 years for men) or else we may lose out not only patents on haldi and neem but also their health benefits.

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Consumers, Beware

EYE ON EATING DISORDERS OF TEENAGERS



OVER-EATING OR UNDER-EATING,

both are equally harmful to the body. Alot has been said on junk food and over indulgence in it. Starving the body to attain certain body goals also leads to eating disorders. Eating disorders pose serious hazards to adolescents and young adults and are often hidden from family, friends and even doctors, sometimes until the disorders cause lasting health damage and have become highly resistant to treatment.

According to the Family Institute at Northwestern University, US, three per cent of teenagers between the ages of 13 and 18 have eating disorders. Boys as well as girls may be affected. Even when the disorder does not reach the level of a clinical diagnosis, some studies suggest that as many as half of teenage girls and 30 per cent of boys have seriously distorted eating habits that can adversely affect them physically, academically, psychologically and socially.

Eating disorders can ultimately be fatal, said Dr Laurie Hornberger, a specialist in adolescent medicine at Children's Mercy Kansas City, US. "People with eating disorders can die of medical complications, but they may be even more likely to die of suicide. They become tired of having their lives controlled by eating and food issues."

The problem is common among, though not limited to, gymnasts, dancers, models, wrestlers and other athletes, who often struggle to maintain ultra-slim bodies or restrictive weight limits. The transgender population is also at higher risk for eating disorders.

It is not unusual for teenagers to adopt strange food-related behaviours, prompting many parents to think "This too shall pass". But experts say an eating disorder - anorexia, bulimia or binge-eating - should not be considered "normal" adolescent behaviour. They urge the adults in the youngsters' lives to be alert to telltale signs and take necessary action to stop the problem before it becomes entrenched.

The importance of early diagnosis was recently underscored by an

expert committee of the American College of Obstetricians and Gynecologists, whose members are often asked to explain menstrual irregularities and other consequences of abnormal food behaviours in young girls and women.

The college's Committee on Adolescent Healthcare noted that "adolescent females with eating disorders may present with one or more gynaecological concerns or symptoms." These can include a delay in puberty; irregular menses; complete stoppage of periods; pelvic pain; a thin, dry, inflamed vagina; and shrinkage of the breasts.

"People with eating disorders can die of medical complications, but they may be even more likely to die of suicide. They become tired of having their lives controlled by eating and food issues."

While such gynaecological symptoms usually self-correct when normal eating habits and body weight are restored, certain effects of eating disorders, especially when longstanding, can have lasting health consequences. One is an insufficient development of bone density at a critical time of bone growth, resulting in a lifelong high risk of fractures. Another is possible cancer-inducing damage to the upper digestive tract and salivary glands from frequent selfinduced vomiting, a practice common to bulimics.

Dr Anne-Marie Amies Oelschlager, a paediatric and adolescent gynaecologist at Seattle Children's Hospital and a co-author of the new report, said that many youngsters "don't realise their eating disorder can have a long-term impact. During adolescence you pile on bone density - establishing, in effect, a bonedensity piggy bank - that is supposed to help sustain bone strength for life."

Even though treatment of eating disorders is beyond the scope of

gynaecological practice, the expert committee urged the college's members to recognise and screen patients at risk for a food-related problem and identify those who should be referred for further evaluation and therapy, if needed.

A reversal of eating disorders frequently requires both physical and psychological treatment. Sometimes immediate hospitalisation is needed to stabilise the patient before treatment of the disorder can begin.

The first step, though, is to recognise the possible presence of an eating disorder. The committee suggested that as part of an examination, the doctor ask the patient "how she feels about her weight, what she is eating, how much she is eating and how much she is exercising" and follow up with an appropriate physical exam and lab tests.

Parents and friends can play a critical role in recognising a girl or boy with an eating disorder and getting the person into therapy.

"An eating disorder is one of the hardest things to watch a child go through," said Dr Nancy Sokkary, another co-author of the committee opinion who specialises in paediatric and adolescent gynaecology at Navicent Health Children's Hospital in Macon, Georgia. But like youngsters with eating disorders, a fair percentage of parents are in denial themselves, she said.

Potential mistreatment is another obstacle. Sokkary said that doctors may mistakenly prescribe oral contraceptives for a girl whose irregular or absent menstrual cycle is really caused by an eating disorder. The pill simply masks the problem and makes it difficult to accurately monitor successful treatment of the eating disorder, indicated by a return of normal menses.

Furthermore, Sokkary said in an interview, the estrogen in oral contraceptives "doesn't help restore normal bone mineral density - in fact, it sometimes makes it worse. Rather, weight restoration is the most effective therapy for improving bone mineral density."



EAT RIGHT - BALANCED DIET

BALANCED DIET IS essential for proper growth and development, and to remain active. Balanced diet is a wholesome diet which provides adequate proportions of essential nutrients from all food groups (carbohydrates, fats, proteins, vitamins, minerals, and water) necessary to maintain good health. It provides adequate intake of both macronutrients and micronutrients, proper regulation of metabolic processes, and maintenance of an optimal body mass.

A Balanced Diet For a Normal Adult Should ProvideCarbohydrates

- 50-60% of a day's total calories should come from carbohydrates which equals to 5-6 servings of cereals, preferably coming from complex carbohydrates; whole wheat chapati, brown rice, millets; bajra (pearl millet), ragi (finger millet) jowar (great millet) etc.
- Simple sugars like crystalline sugar, sweetened carbonated beverages, preserved fruit juices, and sugar syrups should be avoided
- Processed foods high in fat, sugar and salt should be eaten sparingly
- It is highly recommended to do regular physical activity and avoid smoking and drinking alcohol.

Tips to achieve balanced diets

- · Eat variety of foods to ensure a balanced diet.
- Include differently coloured, seasonal vegetables and fruits in your diet.
- Eat foods made with whole grains like whole wheat bread, millets, and brown rice.
- Include low fat dairy products in the diet.
- Ensure moderate use of edible oils and animal foods, limit the use of ghee/ butter and avoid Vanaspati/margarine/shortenings.
- Limit the consumption of processed grains including foods made with white flour (Maida) etc.
- Minimize the use of processed foods rich in fats, sugar and salt (avoid trans fats).
- · Avoid overeating to prevent overweight and obesity.
- Drink plenty of water and take beverages in moderation.
- Exercise regularly and be physically active to maintain ideal body weight.
- Ensure the use of safe and clean foods. •

RESEARCHFEATURE



THE EAT RIGHT INDIA MOVEMENT

THE FOOD SAFETY and Standards Authority of India (FSSAI) has launched a national campaign 'The Eat Right Movement' to improve public health and combat lifestyle diseases.

It is voluntary and collaborative movement built on two broad pillars – "Eat Healthy and "Eat Safe". It is a collective effort to encourage people towards making right food and dietary choices. It focuses on both sidesdemand and supply side to come together.

On demand side it focuses on empowering citizens to make right food choices. On supply side, it requests food businesses to reformulate their products, provide better nutritional information to consumers and make investments in healthy food as responsible food businesses.

Under this campaign, FSSAI has asked industry to voluntarily reduce salt, sugar and saturated fat in packaged food products. Edible oil industry, bakeries, halwais and FMCG companies have taken the pledge to reduce the level of salt, sugar and fat in food products. The movement has received good support by fifteen major players from the packaged food industry – Nestle, Mapro, MTR, Britannia, Bikanervala, Patanjali, Bagrry's, Hindustan Unilever, Weikfield, Kraft Heinz, Del Monte, Haldiram, Kellogg's, ITC and Marico as well. They have signed up with voluntary commitments to begin reducing salt and sugar in their products by 2020.

Food Safety and Standards Authority of India (FSSAI) FSSAI is a nodal statutory agency responsible for protecting and promoting public health in Indiathrough regulation and supervision of food safety. It was established under the Food Safety and Standards Act, 2006 and operates under aegis of Union Ministry of Health & Family Welfare.

The FSSAI is headed by a non-executive Chairperson, appointed by the Central Government, either holding or has held the position of not below the rank of Secretary to the Government of India. Preeti Sudan is the current Chairperson for FSSAI and Pawan Kumar Agarwal is the current Chief Executive Officer for FSSAI.

The FSSAI has its headquarters at New Delhi. The authority also has 6 regional offices located in Delhi, Guwahati, Mumbai, Kolkata, Cochin, and Chennai.14 referral laboratories notified by FSSAI, 72 State/UT laboratories located throughout India and 112 laboratories are NABL accredited private laboratories notified by FSSAI.

research feature



The main aim of FSSAI is to

- 1. Lay down science-based standards for articles of food
- 2. To regulate manufacture, storage, distribution, sale and import of food

3. To facilitate food safety

Keeping with it's main aim of facilitating food safety, the Food Safety and Standards Authority of India (FSSAI) thus launched the Eat Right India movement in order to spread awareness about eating right and safe food. With the outburst of several non-communicable diseases amongst the youth and the elderly population, FSSAI has put forward this initiative. The three factors which the Eat Right India is going to address is Eat Safe, Eat Healthy & Eat Fortified.

Under the Eat Right India movement, FSSAI has introduced two campaigns and expects every individual to join these and make a difference. The two campaigns are: 'Swasth Bharat Yatra' and 'Save Food, Share Food, Share Joy'

Swasth Bharat Yatra

Swasth Bharat Yatra is FSSAI led initiative and supported by the Ministry of Health & Family Welfare, Government of



India. It is a PAN - India Cyclothon which will cover all the major cities of India for about 100+ days. It is organised to create awareness on combating diseases like obesity, heart diseases and micronutrient deficiency. This campaign is assumed to

influence the population and bring about a change in the lifestyles of people.

'Save Food, Share Food, Share Joy'

What is IFSA?

Known in its full form as "Indian Food Sharing Alliance"; IFSA has been formed by the Food Safety and Standards Authority of India (FSSAI) to help solve India's food waste and hunger crisis by working with various partner organizations, Food Recovery Agencies and NGO's.

Aims and Objectives

 Food Safety and Standards Authority of India (FSSAI) plays a key role not only in food safety and hygiene but also in ensuring availability of wholesome food and encouraging citizens to eat the right foods. Therefore, the aim of FSSAI via IFSA is primarily to help recover or

research feature



prevent food from waste, loss and surplus in the country while also educating the population on the same.

- Through this initiative, FSSAI envisions a behavioral change that will help prevent basic food waste at home, the workplace and in schools through guidance and the sharing of best practices.
- IFSA also strives to feed the growing Indian population, of which many go to bed hungry on a daily basis. This can be done through food recovery agencies and innovation in surplus food sharing – while continuously ensuring that the food distributed is safe to eat.
- Another priority is to educate food business on best practices and encourage them to adopt the same in order to prevent food loss along the supply chain.
- Lastly, IFSA aims to be able to provide strategic policy, regulatory, and programme support to food loss and waste reduction initiatives.

Working Collaboratively Across Sectors IFSA seeks to:

Provide policy, regulatory, strategy and programme support for food loss and waste reduction initiatives through coordinated efforts.

Promote feeding needy and in-distress people by surplus food (both pre-packaged and fresh and cooked food) recovered through registered agencies and promote innovation in surplus food sharing while ensuring that the food distributed is safe to eat.

Raise awareness about food loss and food waste amongst citizens and bring about behavioral change in them to prevent food waste at home, school or at workplace through guidance and sharing of good practices.

Recover the surplus food generated to feed the needy and hungry Reduce the amount of food waste generated Increase the amount of safe and nutritious food donated to those in need

IFSA brings together Citizens, Food Businesses, Corporates, Civil Society Organizations, Volunteers, Government and Local Bodies in a coordinated manner to prevent food being lost or wasted throughout the supply chain, from initial production down to final household consumption **b**

A Movement To

India bears a terrible burden of non-communicable diseases (NCDs), with the lack of proper diet and safe food a major contributing factor. The country has seen an increase in the NCDs burden from 30 per cent in 1990 to 55 per cent in 2016.

IN NOVEMBER 2017, top officials at the Food Safety and Standards Authority of India (FSSAI) sat up when they flipped through the pages of the India State-level Disease Burden Trends report. While life expectancy had gone up, more Indians were dying of non-communicable diseases such as ischemic heart disease, chronic obstructive pulmonary disease (COPD), stroke, diabetes, and chronic kidney disease, the report stated. 'Risks, which include diets low in fruit, vegetables, and whole grains, but high in salt and fat, were India's third leading risk factor for health loss in 2016'.

The World Cancer Research Fund contends that 27 to 39 per cent of the main cancers can be prevented by improving diet, physical activity and body composition. The Global Status Report on NCDs-2010, has stated that salt consumption has direct implications for high blood pressure as well cardiovascular issues -- and that saturated and trans-fat consumption increases the risk of diabetes as well as coronary heart disease.

What one eats, and how one eats, is definitely a significant reason why NCDs have become one of the major issues in India, as well as across the globe. The way we eat cannot be directly regulated, but there are three major factors that can be controlled: What we eat, what we know about what we eat and awareness about what we should eat (quantity/choice).

The first aspect comes from the standardisation of food, the idea of safety of the food that is available for human consumption. In this context, The Food Safety and Standards Act 2006 has enabled amalgamation of all the laws and regulations, and has further led to the creation of the Food Safety and Standards Authority of India (FSSAI).

The second task comes from the aspect of sharing the information about what we eat. How do I know what I am eating is right? For this, FSSAI has enabled labelling, especially the content and nutritional information.



The third and final task is the mammoth one of telling citizens what they should eat, the choice of food or its quantum.

According to FSSAI, one in four Indians is at risk of dving from one of the Non-Communicable Diseases, such diabetes, blood pressure, heart disease or cancer. And diabetes has become India's fastest growing disease since 2000, according to a study released in 2017 by two research institutes - The Indian Council for Medical Research and the Institute for Health Metrics and Evaluation - and advocacy group Public Health Foundation of India. The same year, the International Diabetes Federation claimed there were over 72 million cases of diabetes in India. a number which, some experts say, will almost double by 2025, if current dietary trends continue. These numbers forced the food safety regulator to not just accelerate its ongoing draft regulation on labelling packaged foods with high fat, sugar and salt (HFSS) content with red dots, but put their best minds together to draw up a larger plan.

On July 10, the Eat Right Movement was launched to usher in a 'new food culture' by nudging businesses and consumers to cut down on salt, sugar and trans-fat in their food. In a video on the campaign's website, actor Rajkummar Rao, the pro bono ambassador for the 'movement', as the stakeholders like to call it, recites the campaign's tagline – 'Aaj se thoda kam.' The idea is not to go cold turkey but slowly reduce the amount of salt and sugar that you eat, which should be easier for people to follow. In another video, Rao asks whether the heart or the head should decide what you eat, concluding that health is a matter of the mind, so be smart about what you eat.

Any technique adopted to alter the way citizens think, behave and function in society has a long gestation period before a positive outcome can be expected. It should be understood that the premise for adopting a technique for social and behavioural change comes from the fact that it cannot be a discontinuous function, it cannot be a jump from A to B; instead, it has to be a transition with constant nudging.

The reason why the "Eat Right Movement" could be a huge success is that it taps that narrow space of potential between what consumers will ignore because it is unattainable, and what they won't consider important to begin with. Had the movement supported a dramatic reduction in HFSS foods, most consumers would not pay heed to it; but if the movement had just been a simplistic awareness programme, consumers would not consider it important enough to participate in the process. The "Eat Right Movement" not only nudges consumers to take the right step, but also involves them in the process of building a healthier India.

The second important aspect of the movement is that it involves collaboration, as well as voluntarily commitment from the major Food Business Operators,

research feature



Always buy seasonal vegetables and fruits. Consuming them other than their seasons means that you are consuming the foods with much added preservatives. Example apple from mid-August to End of November.

(FBOs) wherein it is not only the final consumer who is part of the movement, but the stakeholders such as FBOs who have the capacity to influence the way food is produced and made available to the people. It is the classic chicken-and-egg case. Consumers complain they do not have healthy options when they eat out or buy packaged food whereas the businesses say consumers do not want healthy options. The Eat Right Movement aims to strike that balance.Businesses will have to take the first step while consumers have to become more aware of what they eat.

Fifteen companies from the packaged food industry – NestleNSE -0.27 %, MaproNSE 0.00 %, MTR, BritanniaNSE -1.94 %, Bikanervala, Patanjali, Bagrry's, Hindustan Unilever, Weikfield, Kraft Heinz, Del Monte, Haldiram's, Kellogs, ITC and Marico – have signed up with voluntary commitments to begin reducing salt and sugar in their products by 2020.

Each company pledge is different. HUL has committed to reducing salt levels to enable intakes of 5g per day. In their tomato ketchup and sauces, for example, this means a 15 to 50 per cent reduction in sodium by 2020 to meet the benchmark of 750mg/100g. They have also pledged to reduce the sugar in their range of children's frozen desserts to a maximum of 12g per portion in the same time frame.

Likewise, Kraft Heinz will reduce the salt content in its tomato ketchup by 50 per cent in 2025 from its current levels, and to have nutrition declarations on the front of their packaging on all their products by the end of 2020; Kellogg will reduce sugar in their ready-to-eat cereals by 10 to 15 per cent and sodium by 10 to 30 per cent by 2020; Nestle will reduce sugar by 6 per cent on average and salt by 10 per cent by 2020, and MTR will reduce salt and sugar by 6 per cent and 5 per cent by 2025.

The consumption of vanaspati has been dwindling and production and consumption has gone down since 2012. Trans fatty acid content, which was between 6 to 10 percent in 2012, has been brought down to less than 5 percent in 2017. This is low as per WHO standards, but our commitment is to bring it down to 2 percent, and work is on to improve the interesterification process (a process that creates oil more suitable for deep frying). However, different countries have different consumption patterns. In Europe and the United States per person fat consumption is 45 kg per annum, while in India it is 13-14 kgs per person per annum," explains Dr.KD Yadav, chairman of the technical committee of the Vanaspati Manufacturers Association.

Thus, eating right doesn't have to be complicated simply begin to shift to healthier food and beverage choices. Start building a smarter plate by choosing fruits and vegetables, whole grains, lean protein and low-fat dairy — foods that are packed with the nutrients you need without all the added sugars and solid fats. In addition, you can help reduce your risk of high blood pressure, heart disease and stroke by eating less sodium.

It is crucial to discuss the problems of malnutrition, obesity and other health related issues based on our unhealthy way of living.Every step taken toward nutrition is important for keeping India healthy. 'Eat Right India' is one step in this direction.

REPORT

50 Years of Food in India: Changing Eating Habits of a Rapidly Changing Nation (of Foodies)!

– Lucy Plummer

THE EATING HABITS of the average Indian have undergone some changes over the past 50 years. Statistics produced by FAOSTAT indicate that the nation is consuming more on the whole, but it's not all bad news, Indian's are living longer than ever before!

The Food and Agriculture Organisation of the United Nations (FAOSTAT) analysed the consumption patterns of countries across the world over a period of 50 years.

It analysed the average person's consumption in the six main food groups: grain (rice, wheat, maize and other cereals), dairy and eggs (milk, animal fats), plant produce (vegetables, fruits, starchy roots), meat (beef, pork, poultry, seafood, other meat), sugar and fat (sugar and sweeteners, vegetable oils, oil crops, sugar crops) and others (pulses, alcoholic beverages).

Here's what it found for India.

In 1961 the average Indian had a daily calorie intake of 2,010. Their daily diet consisted of 43% grains (378g), 23% produce (199g), 12% dairy & eggs (108g), 12% sugar and fat (108g), 2% meat (17g) and 8% as other (68g).

In 2011 the average Indian had a daily calories intake of 2,458. Their daily diet consisted of 34% produce (450g), 32% grains (416g), 18% eggs and dairy (235g), 10% sugar and fat (129g), 2% meat (29g) and 4% as other (58g).

The graphs show the average daily food consumption of Indians in 1961 and 2011. Photo Source: National Geographic



And in the past 25 years...

The average daily protein consumption has risen from 55g per day to 59g per day in the past 25 years (from 1990-2015) with the protein from animal consumption increasing from 9g per day to 12g. The share of dietary energy supplied from cereals and roots has decreased from an average of 66g per day to 59g.

The number of people undernourished has fluctuated, dropping from 210 million to 177 million between 1990 and 2000 before dramatically increasing between the years 2004-2006 where the recorded number of undernourished people shot up from 177 million to almost 240 million in the space of just 5 years. That figure has steadily been declining since 2006 and has remained consistent since 2009 to present at around 194 million.

So, what does it all mean?

The above statistics show that the average Indian is consuming more calories than they did 50 years ago. India's consumption of eggs, dairy and plant produce has increased more than two-fold in this time. Whilst the average Indian diet remains primarily vegetarian, the consumption of meat and animal-based products has also increased. Furthermore, the consumption of grains has decreased whilst the average daily sugar and fat intake has also increased.

Despite all the changes and regardless of its fast-growing population and economy however, India remains one of the most vegetarian countries in the world.

Primarily next to Rwanda and Ethiopia, Indians consume less meat per person than any other country.

Flick

Photo Source:

The Changing Indian Diet

Over the past 50 years, India has changed remarkably as a country. It's population has more than doubled during this time and so has its economy. It's only natural then that this has had some impact on the nation's diet.

As a matter of course, diets vary and evolve over time. For the average Indian, this has certainly been the case. Factors such as income, food prices, individual preferences and beliefs, cultural traditions, as well as geographical, environmental, social and economic factors have all influenced changes in diet, both on an individual and on a national level.

A very brief glance into some of the major changes in India's recent history can offer some insight into the factors affecting dietary changes in the past 50 years.

Not too long before the official start point for these figures, in 1961, India had faced one of the world's worst recorded food disaster, the Bengal Famine in 1943. Shortly after, by the end of World War II, poverty and hunger were in abundance and this resulted in various malnutrition-related epidemic disorders. Poverty drove people to walk long distances and eat a simple diet. The food imports, therefore, concentrated largely on cereal grains. This no doubt had a lasting impact on the eating habits of those affected at that time.

A decade later in the 1970s, the 'White Revolution' by the National Dairy Development Board (NDDB) made milk and other dairy products more easily and widely accessible. The usage of ghee, butter, paneer, and cheese enhanced the diet especially of the urban Indians thus pushing up the averages for the national daily intake of dairy and animal product.

More recently, the influence of Western products and eating habits has increased significantly as well as the modernisation and industrialisation of food production processes.

Traditionally, the Indian diet uses less processed ingredients and more natural ingredients than that of Western countries and it's culture is more geared towards a sit-down meal with family or friends, unlike the West whose inhabitants are more likely to grab a meal on-the-go.

Particularly in metropolitan areas and among younger generations, however, this tradition is slowly changing. Many processed and convenience foods such as pickles and





Meal times are traditionally more family-orientated, sit-down affairs in India.

papads are now easily available as well as the popularisation of Western foods such as pizzas, burgers and fries. All such factors are playing their part in bumping up the national average of fat and sugar.

So, are Indians becoming unhealthier?

Well, if we were to judge this based on the length of time that people are living for, we may be coerced into saying that no, they are not. In 1960 the nation's life expectancy was only 42 compared to 68 in 2015. But if we look at the wider picture, at rapidly rising health issues gripping the nation, it would be difficult to draw the same conclusion.

A study by the World Health Organisation (WHO) reported that 8.7% of the world's diabetes sufferers (or 69.2 million people) live in India. Yes, the nation's people might be living longer, but they aren't necessarily enjoying good health in their later years.

There is no doubt that authentic Indian food is healthy. It is full of 'superfoods' that Western countries are only just starting to catch on to. But, are all traditional Indian foods healthy and fit to be consumed by the modern man? It's questionable. With time, needs change. As consumers, the average Indian today is a lot more informed about food than 50 years ago and they have more choice. Unfortunately, however, more choice does not always mean better choice.

For Indians, living a healthy life trumps travelling the world or making better friends

A country known for its delicious parathas, ghee-laden curries, and sugary snacks is fast making healthy living a priority.

Nearly half (48%) of Indian consumers surveyed by market intelligence firm Mintel are aiming for a healthier lifestyle in the coming years. Healthy living topped the list of consumers' goals and aspirations for the next three years, ranking above better time management (30%), improving relationships with family and friends (25%), and travelling (24%). Mintel interviewed 3,029 adults aged between 18 and 64 in June 2016.



The goals and aspirations of Indian consumers

Living a healthier lifestyle Better time management Improving relationships with friends and family Travelling Getting married Having a child

Most Indians Eat Unbalanced Diet

Eating habits of Indians, especially women, are not healthy as around 10% of them consume fried foods daily and 36% weekly, according to the National Family Health Survey

OVER HALF OF all Indians, especially women, eat an unbalanced diet devoid of fresh fruits, green vegetables, pulses, meat and milk products that are needed to lead a healthy life, new figures show.

The National Family Health Survey (NFHS-4) 2015-16 by the health ministry revealed that fewer than half (47%) of all women consume dark green, leafy vegetables daily and another 38% eat them only once a week.

A well-balanced diet is one that contains enough proteins, fats, carbohydrates, vitamins and minerals.

The NFHS-4 showed that only half (45%) of women eat pulses or beans daily and an equal percentage consume them weekly. Milk or curd is consumed daily by 45% of women and weekly by 23%. Seven percent never have either milk or curd and 25% consume these dairy products only occasionally.

– Neetu Chandra Sharma

Poverty and discrimination against women are responsible for women's poor diet in India, said Ranjana Kumari, director of Centre for Social Research.

"In India by and large, food habits are discriminatory in terms of gender. There are two classes in India—those who can't afford vegetables, fresh fruits and milk and the others who can afford them but discriminate between male and female children. Women in India are trained to eat less and their dietary requirements are not understood, so most of them suffer from anaemia," Kumari said.

"Also, the market trends have changed in recent years and the market is pushing junk food. More and more



Most respondents cited increased happiness as their main motivation, besides looking and feeling better.

"Many Indians believe leading a healthy lifestyle will have a knock-off effect on their personal happiness," Ranjana Sundaresan, senior research analyst at Mintel, said in a statement. "There has been quite a bit of publicity regarding the rise in lifestyle diseases among Indians, and, thus, growing awareness of the importance of being healthy."

And companies are taking note.

Local supermarkets are increasingly stocked with superfoods from around the world and nutritious traditional grains such as ragi (finger millet) and jowar (sorghum) have made a comeback in both households and trendy restaurants. Moreover, snack food giants from Nestle to PepsiCo are tweaking their recipes to cut the salt, sugar, and fat in their noodles, chips, and sodas, besides introducing new products for the health-conscious consumer. Mintel says that in Asia it's India that witnessed the most number of "natural" food products being launched between 2012 and 2016. "Natural" items accounted for 28% of all food products launched in the country last year, up from 22% in 2012.

As a result, India was the fifth-largest market for "natural" food product launches. And there's plenty of room to grow: Indian consumers are willing to pay more for options that are made with fruits and vegetables or those that come with added nutrition.

"It is known worldwide that healthy and natural foods tend to be more expensive, and many think twice before making a purchase. However, powered by higher disposable income and increasing health consciousness, India's growing middle-class urban population is now more willing to pay the additional cost for healthier options," Sundaresan said.



women, especially young women, are eating unhealthy food..," she added.

Experts say eating the recommended amount of fruits and vegetables, which contain vitamins, minerals and antioxidants, every day can reduce the risk of chronic diseases.

In India, however, more than half (over 54%) of women do not consume fruits even once a week. Very few women consume chicken, meat, fish or eggs on a daily basis, and about a third of them consume these foods weekly, the survey report revealed.

Fried foods and unhealthy beverages are major triggers for non-communicable diseases (NCDs) such as diabetes, hypertension and obesity that are growing rapidly in India.

Fried foods and unhealthy beverages are major triggers for non-communicable diseases (NCDs) such as diabetes, hypertension and obesity that are growing rapidly in India.

The findings of NFHS-4 indicate that the eating habits of Indians, especially women, are not healthy and have not changed much in the 10 years since NHFS-3 (2005-06).

"Around 10% of women consume fried foods daily and 36% weekly. Aerated drinks are consumed daily by 5% of women and weekly by 20% of women. The pattern of daily food consumption has remained more or less the same since 2005-06 except there has been a decrease in the daily consumption of dark green, leafy vegetables among both women and men, and an increase in the daily consumption of milk or curd," the survey report said.

The pattern of food consumption by men is similar to that of women, but men are slightly more likely than women to consume milk, curd and fruits regularly. Men are also less likely than women not to eat any chicken, meat, fish or eggs.

"Low intake of fruits and vegetables is linked to heart disease in Indians. Green vegetables and fruits intake, which provides good fibre content and essential vitamins, could prevent diabetes, obesity, liver disease and cancer as well," said Anoop Misra, chairman at Fortis-C-DOC, Centre for Diabetes, Metabolic Diseases and Endocrinology.

The survey showed an even dietary pattern across the states. However, more women eat dark green leafy vegetables at least once a week in Rajasthan (61%), Kerala (63%) and Uttar Pradesh (73%) than in the rest of India.

Women's consumption of other types of food at least once a week varies widely across the states, particularly of milk or curd (from 24% in Mizoram and 30% in Odisha to 91% in Haryana, 93% in Karnataka, and 96% in Sikkim) and fruits (from 19% in Odisha to 83% in Kerala).



SPEAK UP ABOUT FAKE MEDICINES

VISIT FIGHTTHEFAKES.ORG

FAKE MEDICINES HARM – NOT HEAL

There are a lot of shady ingredients found in fake medicines that are directly responsible for serious disability and even death. This includes poisons such as mercury, rat poison, paint and antifreeze.









Fake tuberculosis and malaria drugs alone are estimated to **KILL 700,000 PEOPLE A YEAR*.**

*International Policy Network

HORIZONS

FOOD BUSINESS Reuse Recycle Upstain

What can we do with our food waste?

Food waste, scraps, peels can be utilized efficiently in various interesting ways to put back into the environment.

Section 1: Peels and their nutrients

- Section 2: Creating a home compost pit
- Section 3: Recipes from food waste
- Section 4: DIY experiments with food waste.

Section 1: Peels and their nutrients

In all likelihood, the first thing you do when you eat an orange is tear off that thick peel and throw it straight into the garbage. Guess what? You're missing out on a lot of nutrients. The peel of an orange has nearly twice as much vitamin C as the flesh inside. And though it may seem gross at first, there are plenty of tasty ways you can eat orange peels if you're willing to get a little creative. The same is true of lots of fruits and veggies; the peel is often the most nutritious part, and can be eaten despite what you think. Bananas? Yep. Watermelon? Sounds unbelievable, but its true: that rind is great for you. Here are 12 foods with powerful peels you should be eating, along with suggestions for how to add them to your diet.

Apples

The skin of an apple contains about half of the apple's overall

dietary fiber content. A medium apple also delivers 9 milligrams of vitamin C, 100 IUs of vitamin A, and 200 grams of potassium. By removing the peel, you lose about a third of those nutrients. The peel also has four times more vitamin K than its flesh: about 5 percent of your daily value. Vitamin K-also prevalent in meat and in spinach and other green veggies-helps you form blood clots that patch you up when you have a bad scrape and helps activate the proteins your body needs for cell growth and healthy bone maintenance. An apple's skin boasts potential benefits beyond its vitamin content, can help lung function, ease breathing problems and protect your lungs from irritantsfights off brain

tissue damage and protects your memory, inhibits or kills certain types of cancer cells throughout the body, stimulates muscle growth, increases skeletal muscle and decreases risk of obesity.

Potatoes

A potato's skin packs more nutrients—iron,



calcium, potassium, magnesium, vitamin B6 and vitamin C—ounce-forounce than the rest of the potato. For example, 100 grams of potato peel packs seven times more calcium and 17 times more iron than the same amount of potato flesh. Ditch the skin and you'll also lose up to 90 percent of a potato's iron content and half of its fiber. And don't forget the skin of a sweet potato is loaded with a significant amount of beta-carotene, which converts to vitamin A during digestion. Vitamin A is essential for cell health and immune system regulation, and it is extremely useful in maintaining organ function

Cucumbers

The dark green skin contains the majority of a cucumber's



antioxidants, insoluble fiber and potassium. The cucumber peel also holds most of its vitamin K. The next time you have a Greek salad, ask the chef not to peel your cukes. Kiwi You've probably been spooning out the green flesh inside for years, but a kiwi's fuzzy exterior is also edible. In fact, the skin contains more flavonoids, antioxidants and vitamin C than the insides—and double the fiber. So ditch the spoon, wash the kiwi and eat it like a peach. If you find the fuzz unappetizing, scrape it off first.

Mango

Researchers found that mango skin contains



Carrots

Since the skin of a carrot is the same color as what's directly beneath it (like a tomato or a red

pepper), the peel and its flesh have similar nutritional properties. However, the highest concentration of phytonutrients is found in a carrot's skin or immediately underneath. Just rinse the carrot thoroughly rather than peeling it.

Watermelon

All watermelon contains citrulline, which has antioxidant properties and



converts to arginine, an essential amino acid that is beneficial to the heart, immune system and circulatory system. But most of that citrulline is found in the rind. Eating a rind might sound unappetizing, but it can be pickled (like a cucumber), or simply sautéed and seasoned. Or throw it in a blender with the watermelon flesh, and add some lime.

Bananas

A banana's peel contains way more fiber than its flesh, and is likewise richer

in potassium. The peel also contains lutein, a powerful antioxidant that plays a role in maintaining healthy eye function. An amino acid called tryptophan is more highly concentrated in the peel than the insides. Among other things, tryptophan is believed to ease depression by increasing the body's levels of serotonin, a neurotransmitter in the brain that affects mood. Although the peel has a bitter taste and tough, ropey consistency most people aren't used to, an overripe banana (brown or black) becomes thinner, sweeter and easier to chew. You can also put the peel (ripe or overripe) through a juicer with the rest of the banana. Or you can boil the peel for several minutes to make it softer, or throw it in the frying pan. If you want to get really creative, bake a banana peel in the oven for 20 minutes or so, or until it becomes dried out, then use it to make tea.

Section 2: Creating a home compost pit

The large amounts of waste from our kitchen is eventually dumped in landfills and later incinerated, causing pollution and damage to the environment in the form of CO2 emissions. One way to reduce this impact is to recycle your kitchen waste and use it to make a home compost pit and natural fertilizer. This will not only lessen environmental impact but also create rich topsoil for your plants. You can then grow anything from beautiful tomatoes to onions, herbs and other fruits at home – reducing your individual food mileage and carbon footprint.

Here's how to create your own home compost pit:

- To begin with, start by segregating waste at home. By this it means – separate organic (fruits and vegetables or their peels etc) from plastic and nonrecyclable waste. This segregation will make it easier to pick out the organic waste later, to use as compost.
- Gather dry organic matter such as dried leaves and sawdust in a large container (these help generate the carbon that is needed for composting).
- 3. Use a large earthen pot (not plastic) and line the bottom of it with a layer of soil from the ground.
- Add food waste in layers, alternate between organic waste (fruits and vegetables) and dry waste (leaves and sawdust).
- 5. Cover this mix with a plank of wood to help retain moisture and heat.

Within 2 - 3 months, your pile should start forming compost that is dry, dark brown and crumbly and smelling of earth. By segregating, recycling and composting, a family of 4 can reduce their waste from 1000 Kg to less than 100 kg every year.

Section 3: Recipes from food waste

Use recipes from this cookbook of 50 recipes designed from food-waste: http://www.gibbs-lab.com/wp-content/ uploads/2016/05/Cookbook050516.pdf

Section 4: DIY experiments with food waste

Here are some interesting and easy things you can do at home to recycle your food waste:

1. Face masks

 Ground coffee mask:Use leftover brewed ground coffee stash mixed with coarse sugar to make yourself an exfoliator. The sugar removes dead skin and the coffee helps increase blood circulation.

- Overripe banana mask:Mash an overripe banana and mix with one tablespoon of yogurt. Spread it onto your face for 15-20 mins. Rinse off with warm water. Banana is rich in magnesium, potassium and zinc which will add glow to the skin.
- Cucumber mask:This vegetable contains anti-inflammatory properties that reduce the redness and puffiness in the eyes. Place two cucumber slices over the eyes and rest for 15 minutes or apply cucumber juice under the eyes. The remaining cucumber can be made into a puree that can be applied as a pack onto face. Remove after fifteen minutes.
- Apple peels mask:Mash apple peels and add some honey to it, mix it well and apply on face for 15-20 mins. Rinse off with cool water for a refreshed skin.

2. Using left over roots and stems

Use leftover roots and stems of herbs such as basil, parsley etc to sow back into the soil of any plant at home and watch the supply of your favorite delicious herb grow at home. Just ask your vegetable vendor to sell you your herb bunch with the stem! http://urbanette.com/instant-facemasks-from-the-kitchen.

Guidelines For Home

1. Shop Smartly:

- Plan meals in advance
- Use Grocery lists
- Avoid impulsive buys

2. Be Realistic: Buy exactly what you need. Avoid unnecessary stocking up the goods.

3. Place foods in the proper storage area (refrigerator or freezer) quickly to avoid bacterial growth:

- Freezer frozen foods: vegetables and meats, precooked frozen meals, ice creams and ice.
- Refrigerator fruits, vegetables, cheese, milk, meat, fish, poultry, eggs, cooked food: leftovers
- Cool Places oils and fats, canned foods.
- Room temperature cereal and pulses, root and tubers, bananas, spices and condiments.

4. Don't over peel:

Peeling of fruits and vegetables should be done carefully and over

HOW TO BEST ORGANIZE YOUR REFRIGERATOR



horizon \\ FOOD BUSINESS - REUSE RECYCLE UPSTAIN

peeling should be avoided as it creates food waste.

5. Pic attached. Dark green box perishable food items etc

Note: The unaccepted food can be used in various environment friendly waste disposal techniques.

6. Reuse leftovers:

Excess food should be stored at optimum temperature for later use.

Example: pickles, salads, lemon etc., after storing in refrigerator can be reused as flavoring agents if left earlier.

7. Monitor what you throw:

- Throw only unavoidable food waste items eg; - scraps, peels etc;
- Keep a strict watch over what you are throwing and thus act accordingly to reduce food waste.

8. While having Meal:

Storage

• Check in your belly: Take a

moment to ask your body what and how much it wants to eat.

- Clean your plate: Before leaving the dining table, ensure your plate is clean i.e.; no leftovers.
- Educate others: Make family members aware about the issue of food loss and this will make them more attentive to waste less.
- Don't over-serve: Over-serving will lead to generation of leftovers therefore it should be avoided.

9 .Organize Dinner / Party of surplus food:

In case food is available in excess, organize dinner/party for neighbors/ friends so that wastage of food can be prevented.

10. Use it up all:

- Have a plan B to use all the surplus food by preparing new dish or feed for pets before it gets expired.
- · Look for recipes on websites that

An overview about some of the food products storage conditions and their use by dates Category of food Type of food Product Use before Use before (At Room (At Refrigerated Temperature) Temperature) Perishable Food Milk (Pasteurised) 5-6 hours 5-6 days Cut Fruits and Vegetables 24 hours 1-2 days Yogurt 1-2 days 2-3 days 1-2 days 4-5 days Cheese Meat and poultry 1-2 days 5-6 days Fish 1-2 days 4-5 days 7-10 days 2-3 weeks Eggs Fresh fruits and vegetables 1-2 days 3-4 days Cooked food 4-6 hours 12-24 hours Milk (UHT) 5-6 months 6-7 months Flour 1-3 months 2-6 months Grain 4-6 months 10-12 months Semi Perishable Food Potatoes 1-2 weeks 2-3 months Onion 1-2 months 2-3 months Garlic 3-5 months 10-12 months Ginger 7-10 days 1 month **Baked Foods** 2-4 days 7-14 days **Drv Fruits** 5-6 months NA Sugar 6-7 months NΑ Non-Perishable Food Dried beans 5-6 months 10-15 months **Spices** 6-7 months NA Canned foods 4-5 years 1-2 years Salt 6-7 months NA

can be searched for by ingredients to use up food at home.

11. Community Kitchens:

A group of people who meet on regular basis can plan, cook and share healthy, affordable meals. These kitchens thus enable the development of food independence skills such as food growing and harvesting, meal planning, budgeting, food preparation and cooking.

12. Preserve food :

The various actions of micro-organisms result in the loss of edibility or nutritive value of food. By canning, pickling or drying, the life span of some foods can be increased.

- Drying: This process acts by reducing the moisture content in the food which in turn arrests bacterial growth. Drying can be done either by direct exposure to sun, using dryer or oven. Fruits and vegetables can also be preserved by this method.
- Freezing: Micro-organisms require a certain level of temperature for their survival. Freezing foods lower the temperature to levels that make the environment unsuitable for microbial growth. Low temperatures can be achieved by using freezer.
- Canning: In this process, the food is first processed and then sealed in airtight containers. While themicroorganisms are killed by processing the food, their entry and proliferation is restricted by canning it in an airtight environment.
- Pickling: Cucumber, beef, peppers and some vegetables may be preserved by pickling. This technique involves dipping the food in some liquid chemical that prevents the growth of micro-organisms but still maintains edibility of the food. The preserving liquids used are vinegar, brine, alcohol and some other oils.

13. Donate Food:

Donate what you won't use- Donate it to a food kitchen/ local food bank organizations before it expires so it can be consumed by someone who needs it.

 Donate the gross stuff, too!- Club together in a colony to jointly collect the gross stuff and donate it to environment friendly waste disposal techniques.

GOVERNMENTPERSPECTIVE

The EatRight Movement

Moderate The Fat Intake

(high fat intake is a risk factor for obesity and other non-communicable diseases)

Prefer cooking methods with less oil!

#AajSeThodaKam #EatRightMovement

Visit: www.fssai.gov.in/EatRightMovement

FOOD FIRMS:

Can India's Eat Right Movement 'Nudge' Food Firms To Reformulate And Aid NCD Fight?

A broad coalition of regulators, health bodies and food firms is pinning its hopes on a new 'Eat Right Movement' to help curb India's alarming rates of non-communicable diseases (NCDs).

Issai

THE EAT RIGHT Movement claims to be a comprehensive strategy to address unhealthy diets and to improve public health through improving consumption habits and the availability of healthy food products.

In India, NCDs account for one in five disease-related deaths. Moreover, according to regulator FSSAI, micronutrient deficiencies are on the rise and the country is fast becoming the diabetes capital of the world.

The Eat Right Movement is based on two pillars. 'Eat Healthy' encourages citizens to make healthy food choices and cultivate healthy dietary habits. This includes choosing nutritious and fortified foods, limiting high fat, sugar and salt (HFSS) foods, as well as incorporating physical activity.

'Eat Safe' is about ensuring food safety to prevent food borne diseases, and includes maintaining hygiene and sanitation, proper waste disposal, following safe food practices and fighting food adulteration.

Not long back, the FSSAI issued a warning regarding formalin adulteration in fish after large amounts of adulterated products were seized in raids in several areas across the country.

Commitment to healthier food

The Eat Right Movement also "nudges" food businesses to promote healthier food options and provide better nutritional information to consumers through the phasing out of trans-fats in food products (by the edible oil industry, bakeries and halwais or confectioner caste) by 2022, and the reformulation of food products by major food firms to reduce the content of sugar and salt in packaged food.

Some of the food firms who have committed to this effort include Baggrys, Britannia, Fieldfresh, Del Monte, HUL, Kelloggs, Kraft Heinz, Nestle and Patanjali.

It also includes the provision of healthier food options by the food services sector and the introduction of menu labelling on nutrition information, and the promotion of healthier food options and responsible retail practices by food retailers and e-commerce players.

The Eat Right Movement brings together three ongoing initiatives of FSSAI: the Safe and Nutritious Food (SNF) Initiative focused on behavioural change around food safety and nutrition at home, school, the workplace, and on-the-go; the Eat Healthy Campaign focused on the reduction of HFSS foods in diet; and Food Fortification which focuses on promoting five staple foods of wheat flour, rice, oil, milk and salt that have been fortified with key vitamins and minerals to improve their nutritional content.

Resources and publicity

As part of this initiative, The Eat Right Movement microsite provides easy access to nutritional information and tips by experts. It also has an AI chat bot to answer queries.

There is also an Eat Right Toolkit or training manual for health and wellness centre workers, as part of a resource for national nutrition and public health programmes. Other resource books on safe and nutritious foods (of different colour codes) for homes, schools, workplaces, and for eating out have also been released.

To further publicise The Eat Right Movement, actor Rajkumar Rao featured as a spokesman for a video and ad campaign, 'Aaj Se, Thoda Kam' — translating to something like *"From today, slightly less"*.

In a blog post, Rao said, "What is heartening to know is that 80% of the heart diseases and diabetes (cases in India) can be averted through simple lifestyle modifications and by consuming nutritionally balanced diet."

"I support the FSSAI's initiative of reducing the consumption of foods high in fat, sugar and salt. As these foods, if consumed in excess for a long period of time, can lead to severe health complications."

At the launch, Professor Vijay Raghavan, principal scientific advisor to the Government of India, said, *"Thoda kam (slightly less) in salt, sugar and fat is very good."*

"This has to be a combination of persuasion, regulation and science. When these three come together, thoda kam will be very effective and will change the health of our country."

He added that synergy between government, civil society and industry is critical to its success.

Celebrity chef Sanjeev Kapoor has also committed to the movement by promoting healthy food on his channel to his 80 million viewers.

Reducing NCDS

Dr Balram Bhargav, director-general, Indian Council of Medical Research (ICMR), said the Eat Right Movement and *thoda kam* will help to greatly reduce cases of NCDs.

He added, as a knowledge partner, ICMR has supplied national data on these health issues and will continue to supply more state-level data which will identify where the problem is in which states, which *"will help the country tremendously"*.

At the launch, FSSAI CEO Pawan Agarwal said that its aim was to cut down salt or sugar and oil consumption by 30% within three years, and that 15 major food manufacturers have already come on board to pledge to reformulate their food products, reduce unhealthy ingredients and launch more healthy products over a period of three to seven years.

Shri Ashish Bahuguna, FSSAI chairperson, added that these voluntary nutrition commitments were a giant leap

government perspective

FOOD FIRMS: CAN INDIA'S EAT RIGHT MOVEMENT 'NUDGE' FOOD FIRMS TO REFORMULATE AND AID NCD FIGHT? //



Eat Right Movement rests on five key pillars – Eating healthy, Eating safe, Eating fortified, no food waste and physical activity. Eat Right India movement or Swasth Bharat Yatra has been given the slogan 'Dandi Se Handi Tak' which has been inspired by Mahatma Gandhi's Dandi March and 'Salt Satyagraha' of 1930.

towards combatting negative nutrition trends in society and, along with social and behavioural changes for positive nutrition in citizens, would help to reduce the burden of NCDs on the nation.

The FSSAI is also in the midst of finalising its food labelling and display regulations for packaged food which will include a red warning for HFSS food, within a few months. It is expected to be introduced next year.

Companies are also being advised to take it upon themselves to self-assess and monitor. FSSAI is also looking at plugging loopholes in advertising that companies can leverage with regards to the claims they make. He points out, "Voluntary commitment does not mean the regulations will not come in. Regulation will come in nevertheless. But when this does happen, the transition will be quicker and less painful for food businesses."

But not all stakeholders are onboard with the blanket approach of recalibrating ingredient quantities of their products. This is truer for companies that already have comparatively low levels of salt, sugar and fats in their products. Anil Talreja, partner, Deloitte points out that one of the main reasons why some of the brands are hesitant to implement the movement is because they believe that it simply adds another layer of regulations to the existing heavily regulatory framework governing food products. He says, "The proposed measures will not only cause an increase in the costs of additional compliances but will also lead to more complexity in so far as regulations like labelling are concerned." Companies will have no option but to comply with any

changes in the regulations proposed.

In case of restaurants, unless checks and balances are strictly maintained and recipes don't largely change over time in terms of the quantities of salt, sugars and fat levels or calorie counts in them, standardisation can be an issue. Beyond a point, people want to have fun and they will eat what they really feel like, points out Anjan Chatterjee, founder and managing director, Speciality Restaurants.

Speaking on belonging to the segment of restaurateurs that are proactively achieving recipe standardisation, Chatterjee says that companies just need to go the extra step and say that they will also seriously start looking at the calorie value of their foods.

"Whenever governance comes in, obviously, there are going to be some people that won't care for it. But it is going to be the next step in the industry," he says.

However, it may be prudent to say that the chain of events could go from taking the stakeholders, institutions and bodies along, educating them and then putting governance in play.

5 million preventable deaths occur every year



Helpline 1800-11-0456 Reach out to us before you are one of them

INTERVIEW

Soon, Packet Labels To Tell If Food Is Healthy Or Not

"The biggest challenge before the food regulator today is to fight the battle of perception. With mass and social media getting aggressive, the general sense today is that what we eat is far more unsafe than it was a few years ago. The reality may not be so," says **Pawan Agarwal**, CEO, Food Safety and Standards Authority of India (FSSAI).

Pawan Agarwal

CEO, Food Safety and Standards Authority of India (FSSAI)

SHMAM

() You are the man behind the countrywide drive called 'Eat Right India'. What is the message you intend to point towards?

The 'Eat Right India' movement is a collective effort of key stakeholders and citizens to ensure that people have access to safe and healthy diets. This movement targets both the demand and supply side i.e. citizens

and food businesses, under an overarching supportive policy framework to create an enabling environment.The 'Eat Right India' movement employs simple, powerful and innovative messages aimed at bringing about behavioural change and initiate capacity building programs to engage and enable the citizens to not only make the right food choices but also demand safe and healthy food. This movement also focuses on nudging the food industry to follow safe food practices, reformulate their food products into healthier ones and actively promoting safe and healthy food choices. The Swasth Bharat Yatra, which involves the relay cyclathons moving in six regions across the country is part of the overall 'Eat Right India' movement that FSSAI has initiated.

This is a huge task because unlike the West where food businesses are mostly in the organized sector, with large food chains and even retail organized through superstores, Indian food sector is still fragmented where large-scale street-vending is common. Unlike in the West, where regulatory approach is around enforcement, here in many cases businesses are not even aware of safety requirements. Awareness building and capacity building therefore become extremely important part of our efforts.

() What are the key measures instituted by FSSAI towards food safety in the last few years?

I have put in place standards for almost all foods. A food must meet a set of criteria if it is suitable for human consumption. While most of the food standards have been notified, the remaining ones will be notified in the near future. Recently, we released standards on antibiotic and veterinary drug residues as there is a huge concern about its presence in poultry and meat. Honey standards have been notified and will take effect from January next vear. Organic food standards have come into force from 1 July. Now, our enforcement officials will take samples of the foods and test them for residues. The businesses will be prosecuted in case the samples are found to have adulterants or residues beyond permissible limits. We are also getting 6,000 milk samples from organised as well as unorganised markets across 1,100 cities and towns tested, and will release the report by year-end. There is a perception that milk has antibiotics and pesticide residues. Over 250 food laboratories have been notified by FSSAI for testing food. There are over 3,000 food safety field offices under the state governments to carry out inspections and compliance. Recently, we have got an additional close to 500 positions under FSSAI to help us in better enforcement. Next, we are going to build capacities of food businesses so that they can ensure safety by themselves. We have started Food Safety, Training and Certification (FoSTaC) system. Under this,



all food businesses need to have at least one person trained and certified as per our standards. Around 40,000 people, out of a total of 3.5 lakh, have been trained so far under this programme. The focus is largely on restaurants, hotel segment, manufacturing and processing units.

() How effective have these measures been in ensuring safe food?

The results of these measures are difficult to quantify but these are steps in the right direction. As a regulator, we need to put in place a system. We can't pick up every sample as the entire food ecosystem is very large. Many of these things will take years to get embedded.

• What more needs to be done to make food available in the market in packaged form as well as loose completely safe for consumption?

First and foremost, greater public awareness around food safety is needed. Second, training is required to build capacities around food safety in food businesses. Third is to have more effective enforcement. Since we have a large number of businesses to regulate and have small staff, we expect businesses to ensure food safety by themselves. But we do verify that they are meeting that trust or not through inspections, sampling and testing.

• There is a significant shift towards healthy eating even in the packaged snacking category. What initiatives are being taken by FSSAI to promote this trend?

We recently came out with 'eat right' movement on July 10 to nudge food businesses to reformulate their products so that they are healthy. Many companies have come forward and pledged to reformulate. In food safety paradigm, we are creating standards and perimeters and bench marking them with global standards. We are rapidly moving towards food safety paradigm where we work as partners of the food industry and not as policing over the food industry. This shift is rapidly happening.

Labelling is another area of concern across packaged foods. What's been done on this front?

We are in the process of developing regulations for front-of-pack labelling to identify food as healthy and not so healthy. The draft is currently with the government for approval. The proposed packaging labels for food will depict if the food is healthy or not in terms of salt, sugar and saturated fat content. The industry has raised some concerns. The entire issue is about thresholds. The industry wants higher threshold levels, while the medical practitioners who deal with public health, World Health Organisation (WHO), Indian Council of Medical Research (ICMR) define some other thresholds. We are trying to understand the concerns raised by industry and may make minor changes, if required, in the proposed regulation. Traffic light labelling can be used to indicate the status of the contents. Globally, there are many examples. We have not reached a conclusion on this yet.


Sh. Pawan Agarwal, CEO FSSAI

FSSAI is working to make sure that the food available in the market is safe for consumption by creating awareness, training businesses and enforcement. It has a big task at its hand as it handles around 10,000–12,000 complaints every month and regulates over 28 lakh small, medium and big food businesses in the country.

() There is also a major debate on Genetically Modified (GM) foods. How is FSSAI addressing this issue?

We are coming out with regulations on GM foods to regulate this segment. In India, our Food, Safety and Standards Act provides for the role of FSSAI to regulate GM foods. The regulation doesn't mean that we are allowing or disallowing it. Once we have regulations in place, we will be able to take a case-by-case approach. The concerns about GM foods vary across the countries. European Union (EU) has taken a certain view. In North America, a lot of their food is GM food, while Japan imports a lot of GM food.

• What's been done on the advent of organic foods and the challenges related to authenticity associated with it? There are loopholes still being exploited by players in the market.

We have created organic food standards based on the existing certification system of National Programme for Organic Production and (NPOP) and Participatory Guaranteed Scheme (PGS). Any food that meets one of these standards gets FSSAI approval. The new standards have become effective from July 1. Organic

foods will henceforth carry Jaivik Bharat logo. So with the new standards coming into force, the products can be tested for authenticity and if the products are found to have any pesticide residue above the threshold limits, the manufacturers will be liable to be prosecuted. Earlier

standards were not under the law. The punishment for not complying with the

food standards varies from six months' imprisonment to life term and a fine of up to Rs 10 lakh.

• While compliance from branded food players is very high, that's not the case with unbranded players that form a significant part of the food market. Is there a way to make them equally compliant, responsible and accountable for products manufactured by such players?

We are moving towards making regulations and their enforcement more effective through large-scale surveillance and monitoring activities. As far as the law is concerned, it does not make any distinction between branded or non-branded players. The whole effort on building capacity in the food business is around making businesses more responsible from the food safety angle. So that unintentional incidents of food safety while manufacturing, transportation or storage could be avoided.

O The food delivery business is also changing drastically in the digital age. How is FSSAI prepared to deal with this change?

We have been proactive on this front. We have come out with regulations for e-commerce platforms a few months ago and are now working towards its more effective implementation. We have had a series of meeting with the players. The e-commerce players, which include Swiggy, Zomato, Food Panda, Uber Eats, Amazon, Flipkart and BigBasket, are working towards making their platforms fully compliant with FSSAI norms.

(1) The social media platforms are full of posts accusing food and beverage companies of use of ingredients by food companies that are harmful to health. It's very difficult to ascertain the authenticity of such information on various digital platforms. Is FSSAI doing anything on this front to curtail the unnecessary commotion in the general population?

Social media has a lot of fake news, which is a challenge for everyone including us. We monitor social media and take note of any information that requires attention. We do take it up with the companies as well as the local enforcement officials in case any action is warranted. There are these 15-20 posts which are going around and keep repeating. We seek a report from the company involved and advise it to take action if needed. But if the post is generic in nature, it becomes even far more challenging. We have a consumer complaint grievance cell. Ideally, these complaints should come

there and we can take proper action. We get around 10,000-12,000 complaints every month. About 70-80% of them are consumer complaints or queries, the rest are licensing related queries from businesses.

• Overall food adulteration is on a rise despite strict norms put down by FSSAI. Why is this happening?

How does the 'Eat Right India' movement help?

This is a perception issue. We are making more efforts towards better enforcement and compliance so that people have greater confidence in the food available in the marketplace. However, if more people get caught it doesn't necessarily mean that things have gone worse from bad. As far as penal provisions are concerned, the current laws provide for strict punishment for offenders.

Fact of the matter is that things have improved as far as adulteration is concerned. Now the paradigm is on food safety across the value chain. If the food has not been safely processed, contaminants or toxins can come inadvertently, and the food becomes unsafe even when no adulterants are there.

People's understanding of food safety concerns is very limited. And they are not demanding safe and healthier food from the businesses. Unless they demand, why should businesses comply! Therefore, 'Eat Right India' movement is about creating awareness, tell the people what are the safety concerns, what food is healthy and what food should be avoided or taken in moderation, safe food, issues of food safety, issue of personal hygiene and surrounding hygiene, issues of micro-nutrient deficiencies, deficiencies of vitamins in diet and addressing them through balanced diet or fortified staples of food.

The Swasth Bharat Yatra, which involves the relay cyclathons moving in six regions across the country is part of the overall 'Eat Right India' movement that FSSAI has initiated.

AFTERWORD



Pyush Misra Director, Consumer Online Foundation

FOOD IS ONE of the most powerful forces for life. Hippocrates, the father of medicine was the first to suggest the healing power of foods. He stated, "Let food be thy medicine and medicine be thy food". Lyman (1989) stated that, "just as foods determine our moods, so do our moods determine, what we eat".

Leathwood and Pollet (1983) and Deutch (2001) also supported this fact that the food we eat can have a huge impact on our moods. Certain foods have a feel-good factor that may help in modulating stress as people cannot always control their environmental stress. Therefore, good nutrition is emerging as a key strategy for stress management. It is suggested that a balanced diet may reduce stress level, improve mood, brain function and energy level. They explained the fact that food isn't just fuel for the body but it also feeds the mind and affects human behavior.

Today, almost 500 million people suffer from stress worldwide (WHO). Nutrient and bioactive factors found in food can have an important influence on cognitive functioning and mood (Prashad 1998). Diet has the potential to affect mental health and well-being at every stage of life. Stress can lead to unhealthy eating habits. It makes the body crave for foods that are energy dense but nutrient deficient to attain quick satiety. During stress the body's ability to conserve nutrients is compromised and the intake of "junk foods" or convenience foods

increases.Research and surveys carried out in the past reveal that food isn't just fuel for the body; it feeds the mind and changes the moods of

Good Mood Foods:

Stress Busters!

human beings. Good mood foods are considered as a panacea for life as it is the key for stress management of life. Good nutrition can have a strong positive correlation with our moods as in general a healthy diet provides us nutrients that help us in depressed conditions. Inadequate nutrient intake has been associated with depression. The right selection and intake of food can help us in feel happier and more energetic which may be helpful to overcome the stress, depression and anxiety of the people particularly in the youth. Certain neurotransmitters like serotonin, dopamine level enhancing foods; omega 3 fatty acids, niacin, folic acid, magnesium, selenium, phenylalanine and tyrosine. tryptophan containing foods can help us in stress management.

Studies have shown that people with depression can have lower blood levels of many nutrients including zinc, vitamin-D and omega 3 fatty acids. With the right nutritional intervention, the impact of stress on the body can be reduced and be effectively repaired too. It is essential to include protective foods such as vitamins and minerals which will help in coping with stress effectively. For instance B complex vitamins help the body cope with stress and control the nervous system; proteins, assist in growth and tissue repair; vitamin A is essential for boosting immunity and is an anti infective vitamin; vitamin C is a strong antioxidant, prevents free radical formation, helps in lowering the amount of cortisol in the body; minerals such calcium, magnesium, zinc and selenium are required for smooth muscle contraction and relaxation, healthy nervous system and maintenance of electrolyte balance as well as bone health.

Functional Aspects of Foods in Stress Alleviation

Almonds

This is referred to as intellect food or brain food. Almond with cow's milk and honey, improves brain power, helps in relieving nervous disorder and insomnia.

Amla

It is by far the most widely used herb in Ayurveda and it offers many benefits, one of which is its ability to fight the ill-effects of stress. Amla comes loaded with vitamin C which keeps the walls of the capillaries flexible. One of the first signs of stress is the constriction of blood vessels and capillaries right through the body and vitamin C can help counter this. Traditionally, amla juice taken with honey and rose petals in

> hot milk helps in improving mental alertness, strengthens nerves and improves memory.



Apples

Apples contain phosphorous and folic acid which helps reduces oxidative stress. This, in turn, helps cellregeneration which is known to be adversely affected in times of stress.

Barley

Good tonic for nervous disorders. High mineral content useful in treating stress and fatigue.



Basil/ Tulsi

Basil aids in concentration and relaxation. It is used to relieve anxiety and headaches. Basil helps regulate blood sugar levels, can relieve spasms, and benefits

the circulatory system, too. Besides adding great flavour to your food, basil is a rich source of vitamins A and C, and has abundant amounts of magnesium, iron and potassium. Historically, this herb has been used as an aphrodisiac and an antidepressant.

Banana

Bananas are the superfood, containing tryptophan and magnesium for a mood boost coupled with high carbohydrates for energy. Carbohydrates have quite a relaxing effect on the body as they produce the neurotransmitter, serotonin which gives out a sense of calm. They are rich in potassium too. Potassium deficiencies are associated with breathlessness, fatigue, insomnia and low-blood sugar which are often triggered by stress. Potassium is also essential for healthy heart muscles. It offers serious mood lifting power, with a combination of vitamins B6, A and C; fibre, tryptophan, potassium, phosphorus, iron carbohydrate and protein.

Broccoli

One of the good mood foods is broccoli which

has stress relieving vitamin B6. It also contains folic acid which is important in fighting depression.

Blueberries

Blueberries are full of antioxidants and



vitamin C. These nutrients are great stress busters as they fight free radicals which adversely affect memory.

Chamomile Anthemis nobilis

Chamomile may reduce stress and discomfort, and it is useful for digestive health. It helps in

health. It helps in calming down and relaxing the nerves.

Chocolate

Chocolate may interact with a number of neuro transmitter systems (including dopamine, serotonin and

endorphins) that contribute to appetite, reward and mood regulation. Chocolate contains two analogues similar to the cannabinoid responsible for euphoria from cannabis. Chocolate also contains amino acid gammaaminobutyric acid (GABA) that is said to reduce anxiety.

Fish

Fish like mackerel, salmon, tuna, sardines contains



omega 3 fatty acids which boost the levels of serotonin, a neurotransmitter for good mood. It also has stress fighters like B6 and B 12. Tyrosine, is a brain energizer, helps the body to make brain stimulating chemical.

Flaxseeds

Flaxseeds are rich in alpha linolenic acid



(ALA), an omega 3 fatty acid that is a precursor to the form of omega 3 fatty acids found in fish oils called eicosapentaenoic acid or EPA. Omega 3 fatty acids found in flax seeds are good brain foods.

Figs

Figs have highest mineral content among all fruits. An



excellent source of potassium, calcium and fibre.

Honey

Honey is a nerve rejuvenator used to treat fatigue, depression and insomnia. Acetylcholine present in it works on the nerves.



Horseradish



Horseradish contains elements that may relieve depression and fight cancer. It is an expectorant and decongestant, and it

contains antibacterial principals.

Jamun

Jamun fruit, also called Indian blackberry, is a popular seasonal fruit in India. It

is has a low glycemic index, improves immunity and bone strength. The fruit is rich in nutrients like calcium, iron, potassium and vitamin C, which makes it great for boosting immunity.

Milk

It contains an amino acid tryptophan, which stimulates

the production of serotonin that calms the mind and helps to induce sleep. It's a traditional Milk can affect processes outside the human gut, a proven example is the hypotensive effect of milk bioactive peptides through angiotensin -Iconverting enzyme (ACE) inhibition. Milk also contains some opioid peptides having pharmacological similarity to opium. The caseins (α 1, α 2, β and κ) and whey proteins are potentialsources of such opioid peptides. These opioid peptides have antihypertensive and antidepressant activities. Milk also contains DHA, α -Lactalbumin and phospholipids, which affect mood and reduce stress.

Nutmeg (Myristica fragrans)



Nutmeg has been used since ancient times as a brain tonic. It is used to inhibit mental sluggishness and improve nervous system

functions. Modern science has shown that nutmeg possesses substances that may relieve stress and anxiety, and it is an effective sleep aid. It also has antibacterial and muscle relaxation properties. Nutmeg contains copper, iron, potassium and magnesium.

Oats



Oats are an excellent source of soluble fibre B- glucan, which has been associated with reduced cholesterol levels and reduced risk of heart disease. Oats are also loaded with phytochemicals which in turn help regulate the digestive system and blood sugar levels, which are adversely affected by stress.

Garlic (Allium sativa)

Garlic provides multiple health benefits, including moodregulating functions, improving the flow of bile, and hormone production. It can also help to expel pinworm is rich in antioxidants, iodine, and sulphur. A clove of garlic daily is beneficial for heart health too.

Green Tea/ Kahwa

Green tea contains L theanine that helps in brain relaxation, thereby reducing stress and anxiety with tranquilizing effects. Consumption of 50 mg of L theanine which is equivalent to 2-3 cups of tea has shown to stimulate alpha - brain waves which are associated in decreasing tension.



Turmeric (Curcuma longa)

This is the yellow spice of curries which is widely used in Ayurvedic medicine of India. Turmeric may be used internally as

well as externally to relieve pain and inflammation. Turmeric protects the liver. It's rich in antioxidants and is anti carcinogenic. It prevents blood clots, and may prevent the progression of multiple sclerosis and Alzheimer's disease.

Walnuts

An excellent source of omega 3 essential fatty acids and uridine. This combination is thought to be a natural



antidepressant. Walnuts are also rich in B6, tryptophan, protein and folic acid which contribute to good mood. Higher blood levels of omega 3 fatty acids have been linked with lower rates of depression.

"I get way too much happiness from good food. 77





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MYMARKET

McDonald's India Joins **Eat Right Movement**; Launches Whole Wheat Buns



McDonald's India has released a statement saying that they will be introducing whole wheat buns on their menu. WITH SCORES OF people becoming aware of the benefits of eating healthy and clean, junk and fast food brands are making efforts to clean up their act. One of world's biggest fast food chains, McDonald's, had last month announced that they were doing away with preservatives and other artificial ingredients from the food that will be served in all their outlets across America. Now the restaurant chain has released a statement saying that they will be introducing whole wheat buns on their menu. The chain's India operations had first teased the buns on their Twitter page on October 8. It officially announced the launch of the buns with a press release, which said that the fast food joint was "Inspired by FSSAI's 'Eat Right Movement'", to introduce the whole wheat buns lined with sesame seeds on top. So if you were looking for an excuse to hit McDonald's stores in the coming days, you have it!

From the iconic McAloo TikkiTM Burger to widely popular Filet-o-FishTM Burger, all can now be relished with the whole wheat buns", said the release, adding, "Enhancing the goodness of protein-rich breakfast at McDonald's, whole wheat buns are also available with the products on the breakfast menu that won over the hearts of customers soon after it was launched." The release also listed the potential benefits of consuming whole wheat buns, saying that the buns are a source of fibre, while the sesame seeds may help in digestion. Speaking about the launch of the newly launched healthier alternatives of the traditional buns, Westlife Development Limited's Vice Chairman Amit Jatia said, "McDonald's in India has been setting the standards for the industry. We announced 'The Good Food Story' earlier this year with a commitment to bring wholesome and nutritious food options to our consumers."

He added by saying, "I am delighted that we have made another significant and bold move in this direction by offering whole wheat buns to our health-conscious customers. Our latest offering is a rich source of fibre and other nutrients.' However, weight watchers and health freaks still need to beware, as even though the buns may be healthy, the rest of the ingredients in your burgers remain the same. Burgers served at fast food restaurants contain vegetables and meats, but are also loaded with excessive salt, trans fats and preservatives, which are mostly present in the sauces. Consumption of fast food must be restricted to once in a while.

RUCO Initiative To Collect, Convert Used Cooking Oil Into Biofuel

The Food Safety and Standards Authority of India (FSSAI) launched RUCO (Repurpose Used Cooking Oil) initiative to enable collection and conversion of used cooking oil to biodiesel. Under this initiative, 64 companies at 101 locations have been identified to enable collection of used cooking oil.

Key Facts

The initiative was launched nearly month after FSSAI notified standards for used cooking oil. According to FSSAI regulations, maximum permissible limits for Total Polar Compounds (TPC) have been set at 25%, beyond which the cooking oil is unsafe for consumption. Beside this, FSSAI is also working in partnership with Biodiesel Association of India (BAI) and food industry to ensure effective compliance of used cooking oil regulations.

Background

According to FSSAI, India has potential to recover 220 crore litres of used cooking oil for production of biodiesel by 2022 through coordinated action. Currently, biodiesel produced from used cooking oil is very small, but robust ecosystem for conversion and collection is rapidly growing in India and soon it will reach sizable scale. FSSAI is also looking at introducing regulations to ensure that companies using large quantities of cooking oil hand it over to registered collecting agencies to convert it into biofuel.

Fortified Milk

Fortification:

Fortification is the process by which manufacturers add micronutrients such as vitamins and minerals to food. The purpose is to reduce the rate of common deficiencies and diseases that





would otherwise occur in the absence of these nutrients. This is especially important in regions where the soil and thus the plants that grow in the soil — is nutrient poor. Though fortification is sometimes optional, the federal government mandates the inclusion of certain nutrients in cereal, salt and even milk because of concerns over public health.

Milk Fortification with Vitamin A and Vitamin D

Milk is a rich source of high quality protein, calcium and of fat-soluble vitamins A and D. Vitamins A and D are lost when milk fat is removed during processing. Many countries have a mandatory provision to add back the vitamins removed as it is easily doable. It is called replenishment as the nutrients lost during processing are added back.

Fortification of milk with Vitamin A and Vitamin D is required in India because of the widespread deficiencies present in the population. A Recent National Nutrition Monitoring Bureau (NNMB) survey and a Report of the expert group of ICMR in 2012 has stated that India has very high burden of Vitamin A and D deficiencies, amongst both young children and adults particularly in urban areas are physically less active and have a very limited exposure to sunlight.

Since milk is consumed by all population groups,

fortification of milk with certain micronutrients is a good strategy to address micronutrient malnutrition. India is the largest producer of milk in the world with 146.3 million tonnes of production and per capita availability of 322 grams per day. The dairy industry in India has progressed from a situation of scarcity to that of plenty.

Milk Fortification: Standards

Milk is one of the most nutritious foods. Vitamins A and D though important for various bodily functions and naturally present in milk are removed along with fat when the milk is processed to produce toned, double-toned and skimmed milk.

At the processing level, four types of fluid milk are commonly produced in India: Fortifying standardized (Fat -4.5%), toned (Fat -3%), double toned (Fat -1.5%) and skimmed milk (Fat < 0.5%) with vitamin A and vitamin D will ensure that these will also reach consumers who purchase low-fat milk and provide them with significant amounts of their daily needs of these vitamins.

The technology to fortify milk is simple. All the vitamins and minerals that can be added to milk are available in dry powder form as well as in the liquid form. The fat-soluble vitamins are also available in an oily form as well as in the water soluble form. The fortification process does not require any sophisticated equipment.

Dairy firms to start voluntary milk fortification

Urging private and public dairy companies to begin voluntary milk fortification, the Food Safety and Standards Authority of India CEO Pawan Agarwal said food fortification is the most cost-effective and globallyrecognised strategy to address micro-nutrient deficiencies.

"A large majority of stakeholders are in favour of food fortification but a few misinformed elements are creating confusion around the issue. We need to ensure it does not get derailed due to misinformation or lack of awareness," he said.

FSSAI notified standards for fortifying staples such as edible oil, milk, atta, maida and salt. The food safety authority has been urging industry to undertake voluntary fortification of their products especially edible oil and milk, before it is made mandatory.

"Several ministries and government bodies have written to FSSAI to make fortification mandatory. However, we want to first assess whether the industry is ready. Fortification needs to be scaled up step-by-step before being made mandatory," Agarwal said while speaking at the National Consultation of Milk Fortification.

Issues addressed

Hitting out at the critics of the FSSAI's fortification strategy, he said the fortification standards were finalised by its Scientific Panel, which comprises scientists and public health experts, after careful deliberations for over one and half years. He said the panel finalised these standards keeping in mind the balance between health benefits and toxicity levels.

Swadeshi Jagran Manch, the economic-wing of RSS, has recently written to the Prime Minister opposing mandatory food fortification. It has raised several concerns such as costs of fortification, and use of synthetic vitamins made from animal sources. It has also alleged that making it mandatory will favour a few select multi-national companies and the proposal was influenced by some foreign-funded NGOs.

"Let the public health issues be dealt by scientists and experts in FSSAI. If there are some concerns regarding the standards, they need to be looked at by the scientific panel," Agarwal said.

Talking about costs involved in fortification, he said, "Costs of fortification in the case of milk with Vitamin A and D is minimal, about 2-3 paise per litre, and players such as Mother Dairy who have undertaken large scale milk fortification have absorbed such costs."

He also said as per FSSAI regulations, premixes used for fortification need to be manufactured from vegetarian sources, and not from animal sources. He said the prescribed dosage of the premix used in fortified staples is within safe limits and the focus is on ensuring the safety of the fortified food products rather than whether they are natural or synthetic. Currently 13 state cooperatives and 11 private dairies have begun offering fortified milk to consumers.

Edible Oils To Be Fortified Compulsorily Across India

FSSAI has made fortification of edible oils a compulsory mandate across the nation. After actively having discussions with the stakeholders the regulator is to put forth a strategy soon.



FORTIFICATION OF EDIBLE OILS

The Chief Executive Officer of FSSAI, Pawan Kumar has informed that though the move has not been liable on companies as yet, but the time has come for mandatory fortification of edible oil. "Already 47 per cent of the refined packaged edible oils are fortified nationally. Food fortification is cost-effective and sustainable strategy. The cost incurred on food fortification is very little. The regime of fortification of edible oil should start soon. Transition is not difficult, and technology is easily available by bothgovernment and various bodies," he said.

"FSSAI also has a dedicated team at its headquarters to help with the process. Even groups like TATA and the Global Alliance for Improved Nutrition (GAIN) have developed programmes to help with fortification of edible oil," he added.

VITAMIN D DEFICIENCY

The report further explains that the organisation, Global Alliance for Improved Nutrition (GAIN) has found out that India's 80 percent population is deficient in Vitamin D. The reports by GAIN says that less than 50 percent of the recommended daily allowance

(RDA) is consumed by the Indian citizens. This deficiency of Vitamin D is thus seen in 50-90 percent of the population while 61.8 percent has a sub-clinical Vitamin A deficiency.

"There are 27 countries across the globe which have already mandated the fortification of edible oil. These include Bolivia, Morocco, Mozambique, Nigeria and Tanzania. According to sporadic studies, there is a high prevelance of Vitamin A and D deficiency in India," says T Longvah, director in-charge, National Institute of Nutrition (NIN), Hyderabad while speaking to F&B News.

OUTOFTHEBOX



QUIZ I

1. Which if these should NOT be done while handling food?

- a. Washing and drying hands thoroughly
- b. Wiping hands on your clothes or hair while cooking
- c. Wearing clean clothes
- d. Keeping nails short and clean

2. Where should raw meat be stored in the refrigerator?

- a. In the freezer
- b. In the chiller tray
- c. In the middle trays with moderately cold temperature
- d. In the lowest tray with vegetables and fruits

3. Which of these should be done when using microwave ovens?

- a. Covering the container with an airtight lid during reheating
- b. Stirring the food in between reheating
- c. Using aluminium utensils
- d. Repeated heating

4. Which of these exercises help in reducing the risk of inquiries?

- a. Aerobic Activities
- b. Resistance, strength building
- c. Weight-bearing
- d. Balance and stretching activities

5. Amla is rich in ...

- a. Vitamin C
- b. Vitamin B complex
- c. Vitamin A
- d. Vitamin D

6. Excess cholesterol in blood causes

- a. Goitre
- b. Arthritis
- c. Heart diseases
- d. Anaemia

7. Which of these is NOT a good practice while preparing food?

- a. Wash fruits and vegetables before peeling or cutting to avoid losing nutrients
- b. Using plastic, marble, glass or pyroceramic chopping boards
- c. Soaking cut egetables in water for long periods
- d. Using separate cutting boards for vegetables and animal products

8. We should restrict pickles and sauces in your diet because

- a. They are high in sodium
- b. They are high in calcium
- c. They are seasonal
- d. They are expensive

9. Which of these is a good practice to prepare safe food?

- a. Use the same oil for frying repeatedly
- b. Undercook or overcook the food
- c. Use separate oil, cooking and serving utensils for preparing the allergen containing food
- d. Cook food without using a lid

10. You should purchase oil

- a. That is sold loose, especially mustard oil
- b. That is viscous or very thick
- c. That is fortified
- d. That is with suspended impurities.



QUIZ II

1. How can one reduce sodium in the diet

- a. Add less salt while cooking
- b. Avoid adding table salt while eating
- c. Avoid pickles and sauces
- d. All of the above

2. Which of the following is a good practice while choosing cooking utensils?

- a. Do not use of pots and pans with non-stick coatings at high temperatures
- b. Cooking in cracked or damaged utensils
- c. Using cookware with complicated designs
- d. Reusing utensils for cooking different dishes

3. Which of these foods are known to cause food allergies?

- a. Nuts
- b. Rice
- c. Soybean
- d. Both a and c

4. You should purchase pulses and cereals if

- a. There are clumps in pulses and cereals
- b. There is unpleasant odour
- c. They are clean and not insect infested
- d. There is a musty smell or cottony growth

5. Anaemia is due to deficiency of:

- a. Iodine
- b. Calcium
- c. Phosphorus
- d. Iron

QUIZ III

1. What is normal BMI for Indians is

- a. Less than 25.5 kg/m²
- b. Between 18.5-23.5 kg/m²
- c. Less than 18.5 kg/m²
- d. More than 30 kg/m²

2. Cross contamination of food happens when

- a. Row food/meat/poultry and readyto-eat foods are stored separately
- b. Hands and nails of the food handler are clean
- c. Work surfaces, chopping boards and equipment are not cleaned before and after every use

d. Food is kept covered

3. The ideal temperature in your fridge should be?

- a. 4-50 degrees C
- b. 1 and 4 degrees C
- c. 0 to 4 degrees C
- d. -2 to 0 degrees C

4. What is BMI?

- a. Basal Metabolic Index
- b. Body Mass Index
- c. Body Metabolic Indicator
- d. Body Mass Indicator

5. Tea spoon is bigger than

- a table spoon
- a. No
- b. Yes

6. Which one of the following is an emptycalorie food?

- a. Cheese
- b. Bread
- c. Candy floss
- d. Potatoes

7. Meat, fish and eggs are rich sources of:

- a. Carbohydrates
- b. Proteins
- c. Vitamins
- d. Fibre

8. Excess of fat intake is linked to

- a. Obesity, diabetes and cardiovascular disease
- b. Hair fall, brittle bones, dull skin
- c. Goitre, stunted growth, cretinism
- d. Kidney failure, ulcers, pancreatitis

9. What are the basic steps for washing hands?

- a. Wash thoroughly with water and dry
- b. Apply soap, wash thoroughly, rinse and wipe with paper or clean, dry cloth towels
- c. Apply soap, wash thoroughly
- d. Wash with warm water and wipe with hand towels

10. which of these is NOT considered a nutrient?

- a. Vitamins
- b. Minerals
- c. Fibre
- d. Fats.
- c. Sometimes
- d. Maybe

6. Where should raw meat be stored in the refrigerator

- a. In the freezer
- b. In the chiller tray
- c. In the middle trays with moderately cold temperature
- d. In the lowest tray with vegetables and fruits

7. Which of the following is/are food borne disease?

- a. Food poisoning
- b. Food infections
- c. Food allergies
- d. All of the above.

OUTTHERE

KNOW WHAT YOU

SOUND NUTRITION AND the right physical exercise determine one's good health. Several noncommunicable chronic diseases occur due to faulty diet and sedentary lifestyle. Conditions such as Hypertension, Diabetes Mellitus, Coronary Artery Disease and certain types of cancers are correlated with nutrition and exercise. Several decades of scientific research at the India's premier nutrition research organisation, the National Institute of Nutrition (NIN) located in Hyderabad, India, help coalesce several diet-based approaches to effectively prevent undernutrition as well as early onset of lifestyle diseases. Over the years, the Institute has released several popular publications for easy access to the community. However, in this fast-paced and Tech savvy world, people have grown health conscious and are looking for a reliable source for instant answers to health related questions. In

KNOW YOUR RISK (bmi calculator)

The body mass index (BMI) or Quetelet index is a value derived from the mass (weight) and height of an individual. The BMI is defined as the body mass divided by the square of the body height, and is universally expressed in units of kg/m2, resulting from mass in kilograms and height in metres.BMI from 18.5 up to 25 kg/m2 may indicate optimal weight, a BMI lower than 18.5 suggests the person is underweight, a number from 25 up to 30 may indicate the person is overweight, and a number from 30 upwards suggests the person is obese. Lean athletes often have a high muscle-to-fat ratio and therefore a BMI that is misleadingly high relative to their body-fat percentage.

 $BMI = \frac{mass_{kg}}{height_m^2} = \frac{mass_{lb}}{height_{in}^2} \times 703$

response, the Centre for Bioinformatics, NIN has now created a pathway to healthy life by way of a powerful online platform. We introduce a userfriendly website "Count What You Eat" that has a wealth of information and tools at your disposal.

NUTRITION DEFINITION BY WORLD HEALTH ORGANIZATION

Nutrition is the intake of food, considered in relation to the body's dietary needs. Good nutrition- an adequate, well balanced diet combined with regular physical activity - is a cornerstone of good health. Poor nutrition can lead to reduced immunity, increased susceptibility to disease, impaired physical and mental development, and reduced productivity.

Measure What You Eat

"Measure What You Eat" Calculator helps you know the recommended amounts for each Food Group. Eating foods from different foods groups will help you get necessary nutrients essential for health and wellbeing, including a reduced risk of chronic diseases such as heart disease, type 2 diabetes, obesity and some cancers.

Read What You Eat

Food labels are the source of nutritional information and other important aspects about the packaged food. Nutrition labeling on food packages is an important tool for the consumers to make healthy food choices.

EAT.



Disclaimer: This is a sample food label. The individual food label may vary as per the food product.



Activity Calculator

Physical activity is an integral part of healthy lifestyle. Let us understand how many calories we can burn by doing some basic physical activities.For each activity, please enter the time spent in the box placed next to it.

One Hour of These Activities And The Calories They Make You Lose

Walking - 150 calories Running - 714 Playing Tennis - 372 Dancing - 354 Swimming - 342 Household chores - 198 Jogging - 444 Playing volley ball - 174 Gymnastic - 342 Cycling - 342 Watering plants - 132 Fishing - 210 Digging - 360 Cleaning / Mopping - 210 Playing Badminton - 348 Dusting -168 Driving - 168 Walking Up/Down stairs - 288 Warm-up - 288 Doing light work activities - 198 Loading, Unloading of Objects - 336 Harvesting -336 Carpentering - 336 High intensity work - 468 Playing Tournament/Wood cutting/lifting heavy loads - 468 Sitting (Reading/Writing) - 90

Disclaimer: The results are approximate energy expenditure for a man weighing 60 Kg/ woman weighing 55 kg (as per the selection). Individuals with higher body weight will be spending more calories than those with lower body weight. The results are based on values taken from National Institute of Nutrition, Hyderabad.The results are indicative figures, please consult the healthcare professional/ dietitian for further advice.



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INFOCUS



Dandi Se Handi Tak

SWASTH BHARAT YATRA, a Pan India Cycle rally, is inspired by Mahatma Gandhi's Dandi March and 'Salt Satyagraha' of 1930. Through his tireless yatras, Mahatma Gandhi led the nation towards freedom from Colonial Rule. This yatra would also lead the nation towards freedom from diseases by cascading the message of Eat Right India to every corner of the country.Swasth Bharat Yatra has been given the slogan 'Dandi Se Handi Tak' and is in sync with the 150th birth anniversary of Mahatma Gandhi.

Under this Yatra, 150 volunteer cyclists will cover 50-60 kilometers and will halt at two to three towns and cities on their route. Volunteer cyclists will hand over the symbolic relay baton to the next batch of cyclists at the stopover points and return while the new relay cyclists do their round and convey the message of Swasth Bharat. Cyclists will cycle on alternate days and activations will be organized in-transit and on the interim days when the baton is relayed to the next batch of cyclists at a flag off the event. The last batch of cyclists will converge in New

Delhi on 27th January 2019, concluding the Swasth Bharat Yatra in the first phase of the Eat Right India movement.

The 'Swasth Bharat Yatra' was flagged off on 16th October, 2018 (World Food Day) on six tracks from six different locations and will cover almost all States/UTs, culminating at New Delhi on 27th January, 2019. The convoy of 150 cyclists would include an 'Eat Right Mobile Unit' and a Mobile Food Testing Unit. The Convoy would make 'stop-overs' in cities and towns and have transit 'halts' and activities in over 2000 locations spread over 100 days.

On the occasion of World Food Day recently, the Swasth Bharat Yatra got underway simultaneously in six locations across India - Leh (Jammu and Kashmir), Panaji (Goa), Thiruvananthapuram (Kerala), Puducherry, Ranchi (Jharkhand) and Agartala (Tripura).

The kick-off event was a prabhat pheri at all these locations with people from a wide cross-section of society

including children, NCC cadets, NSS volunteers, etc. participating. After day-long activities in these cities, 150 volunteer-cyclists (at least 25 from each location), along with a convoy of vehicles for education, awareness and safety would be flagged off from these remote locations.

Altogether, about 7,500 cyclists are expected to participate and they together will cover a distance of over 18,000km. They will cycle about 50km or more moving from one city to another in a relay format.

Thousands of other cyclists are likely to join for shorter distances and lakhs of people will directly participate in various activities, including prabhat pheris across the country. This would not only mobilise the masses, but also create a large pool of local community champions to sustain the movement.

Along with this, Eat Right melas, Eat Right conventions and a national poster competition are planned with a view to amplify and deepen engagement with various stakeholders, particularly with our young people.

Continuing its unstinted efforts to ensure safe and wholesome food for every citizen of the country, the Food Safety and Standards Authority of India (FSSAI), under the Ministry of Health and Family Welfare at the Centre and the food safety commissioners at the state level, is leading a massive mobilisation drive through the largest ever pan-India cycle rally, the Swasth Bharat Yatra.

Driven by passion and a clear vision, the mission of Swasth Bharat Yatra is to connect a country of 130 crore citizens physically and in thought, bringing alive Mahatma Gandhi's dream of a healthier India to commemorate his 150th birth anniversary.

This yatra aims to build awareness around food safety, combating food adulteration and healthy diets to make this a household habit and culture. FSSAI has dispatched specially-fabricated Eat Right mobile units to all the six locations and Food Safety on Wheels, a mobile food testing unit as a part of the convoy.

Several VIPs kick-started the Swasth Bharat Yatra at different locations. Ranchandra Chandravanshi and K K Shailja, state health ministers started it in Ranchi and Thiruvananthapuram, respectively. The chief executive counsellor of Ladakh started the yatra in Leh, the commissioner and mission director, National Health Mission (NHM) in Agartala and the collector in Puducherry.The events witnessed huge enthusiasm among the local citizens and the media. The first batch of cyclists has been flagged off from these places to begin its journey towards Delhi.

In keeping with the philosophy and spirit of the Swasth Bharat Yatra as a people's movement, it was led by school students, NCC and NSS cadets and other partners. Students and volunteers made a strong pitch for promoting right eating habits, pointing to the alarming increase in food related lifestyle diseases. They urged everyone to join the movement by inculcating right eating habits and invited volunteers to register as cyclists via the Swasth Bharat Yatra portal.

In Delhi, this occasion was marked by a special press conference addressed by students from different

schools.Calling them Eat Right Champions, the students addressed the media in a highly engaging and interactive format. They explained the scale and scope of the outreach activities and the key messages of Eat Right India movement and Swasth Bharat Yatra.

They hoped that young people, in the spirit of solidarity, across the country would join the Swasth Bharat Yatra to make a difference to the way its citizens eat. The young Eat Right Champions accepted the fact that they often eat driven by convenience and impulse rather than nourishment and good health. They recognised the fact that due to unsafe food and poor diets, people around the world today face numerous health challenges. They showed serious concern about the fact that six of the top ten risk factors for burden of disease in India are food-related.

On one hand, the problem of chronic hunger continues unabated and diets of most people lack essential vitamins and minerals, and on the other, overweight and obesity are on the rise. Unsafe food and poor diets result in foodborne illnesses, wasting and stunting, the growing incidence of diabetes and cardiovascular diseases. This calls for urgent action, particularly by young people, so that everyone is mindful of what to eat, how to eat and when to eat.

They also appreciated the fact that the Government of India was committed to the cause of malnutrition through measures such as the Targeted Public Distribution System (TPDS), convering approximately 80 crore people; the POSHAN Abhiyaan; the Integrated Child Development Services (ICDS), covering approximately 9.83 crore mothers and children, and the Mid-Day Meal (MDM) Scheme, covering approximately 10.03 crore children to improve nutrition outcomes in the country. The collective financial outlay of TPDS, ICDS and MDM together, for the financial year (FY) 2018-19 is about Rs 2 lakh crore.

However, they were concerned that despite numerous programmes and policies being operational in the country, still 19.6 crore people are chronically undernourished, 38.4 per cent of children below the age of five years are stunted, 21 per cent are wasted and 35.7 per cent are underweight. Over 50 per cent of women of reproductive age group (i e between 15 and 49 years) are anaemic and prevalence of anaemia among men is 22.7 per cent.

Realising that good nutrition is critical to good health as well as the growth and development of the nation the students understood the importance of the Eat Right India movement. They also remarked how the Eat Right India movement is focused on preventive healthcare as per the National Health Policy 2017 and is at the heart of the government's flagship programmes like the Ayushman Bharat Yojana, POSHAN Abhiyaan, Anaemia Mukt Bharat and Swacch Bharat Mission.

They thanked the government for their continued efforts towards addressing issues of under nutrition and malnutrition in the country, particularly among the vulnerable sections of the society, adding that more efforts were required to engage, excite and enable people to eat right. They thanked the food businesses, who have shown courage and conviction to reformulate their food

swasth bharat yatra - dandi se handi tak //

products and provide healthier options to them so that they can gradually reduce their intake of salt, sugar and fat content and eliminate trans-fats altogether and make India trans-fat free by 2022-India@75.



Understanding that repeatedly heating and using cooking oil can

lead to the formation of trans-fats and other harmful elements that are hazardous to health, they appreciated the efforts of the all the stakeholders involved in reusing used cooking oil to make biodiesel instead not only as a healthy but an environmentally safe practice.

They also thanked food businesses that have begun to fortify edible oil and milk voluntarily in the open market, which amounts to almost 47 per cent of packaged oil and 21 per cent of packaged milk.

Fortification is being promoted by notification of standards for five staples (wheat flour, rice, oil, milk and salt), +F logo for easy identification by consumers and technical support to states for ICDS and MDM programmes to adopt fortified food products. The students acknowledged FSSAI's efforts to raise the bar of food safety and promote healthy diets in the country.

To engage, excite and enable citizens to eat right, FSSAI has developed powerful, holistic messages on personal and surrounding hygiene, detecting adulteration, eating a balanced diet and avoiding foods high in fat, sugar and salt (HFSS).

Simple, scientifically-accurate material has been cocreated with domain experts such as guidance booklets like The Pink Book for home kitchens, The Yellow Books for schools, The DART Book for testing adulteration, etc.

National-level resource persons and health and wellness coordinators have been trained to disseminate these messages widely. Consumer guidance notes to educate consumers and address common misconceptions are also released regularly.

They also referred to FSSAI's unique Food Safety Training and Certification (FoSTaC) programme that trains and certifies food safety supervisors on each food business premise.

Over 50,000 food supervisors have been trained under FoSTaC in just one year, thus building capacity of food businesses to ensure compliance towards food safety.

The students appreciated the Eat Right Toolkit that been developed for Health and Wellness Centres under Ayushman Bharat Yojana, to ensure that these messages reach the grassroots level, with interesting activities and training aids to train ASHA, ANM and other frontline health workers to carry the message to every household.

In keeping with Gandhiji's strong belief in involving the local community in social movements, one of the key outcomes of the mass outreach through the Swasth "It is health that is real wealth and not pieces of gold or silver.". - Mahatma Gandhi Bharat Yatra would be the creation of local champions for Eat Right India.

These local champions would be empowered to drive change through simple, powerful messages on safe and healthy eating,

creating a grassroots movement with a deep foundation in the heart of the community.

The true strength of the Eat Right India Movement and the Swasth Bharat Yatra lies in its networks and partnerships. The Movement, by its very design, is based on active participation of all stakeholders-consumers; producers; central and state governments; professional associations like the Indian Medical Association, the Association of Food Scientists and Technologists etc; civil society organisations; leaders and peers in the local community; frontline health workers etc, all of whom have a role in the yatra and the movement.

The awareness that food safety and unhealthy diets are a compelling and real public health problem today is expected to lead to action by all these stakeholders on a long-term basis, thereby creating a sustainable ecosystem for safe and wholesome food.

Gandhiji's life and his message have contemporary relevance and are of great value even today. This is also true about his views on food and nutrition, where key decisions on what to eat, how to eat and when to eat are taken by individuals and not the government. As an extraordinary leader, Gandhiji stirred popular imagination of the time and unleashed the power of ordinary people, inspiring all women and men in the country towards a unifying goal of freedom from the British Empire.

Faced with multiple public health challenges, the country needs a mass movement that could once again stir popular imagination.While several activities are planned at the national level this year, next year, events and outreach activities will be organised by the states and Union Territories (UTs) to reach out to various stakeholders and the citizens up to the district and sub-district level.This would give further momentum, enhance outreach and ensure sustainability of the movement. The Eat Right movement is a truly collaborative movement with participation of various Central and state government departments, members of the local community, professional associations, civil society, industry associations and all businesses, small and big.

The Eat Right movement is completely aligned with Prime Minister Narendra Modi's vision that all programmes associated with the 150th birth anniversary of Mahatma Gandhi should be designed around the theme of Karyanjali – Gandhi in action.

The Eat Right movement and the Swasth Bharat Yatra are planned to reach the masses, which are the real engines of change. This is expected to trigger a mass, one-of-a-kind public health movement in India that would fundamentally transform the way India eats.

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THEPRESCRIPTION

Eating Well With Diabetes



Diabetes is a condition that impairs the body's ability to process blood glucose, otherwise known as blood sugar. Poorly controlled blood sugar can lead to neuropathy, increasing the risk for issues like acid reflux (GERD), gastroparesis, and diabetes enteroneuropathy.



MANY STAPLE FOODS in the South Indian diet are good for your health. From fresh guava to lentils to vegetarian cuisine, there are lots of nutrient-rich choices. However, deep fried items, high-fat foods and refined flour are also common and should be limited.

If you have diabetes, you can work with your healthcare team to develop a plan that is right for you. It will likely include exercise, a meal plan, blood sugar monitoring and perhaps medication.

What is type 2 diabetes?

Diabetes is a disease where the pancreas does not make enough insulin or the body does not use insulin properly. Insulin is a hormone made by the pancreas.

When the body is working well, insulin helps carry sugar (glucose) from your blood to your cells where it is used for energy. If you have diabetes, your body's cells do not receive enough glucose, so it stays in your blood. High blood glucose (or high blood sugar) can lead to heart, kidney, vision and blood vessel problems.

Who has a higher risk of diabetes?

Some ethnic groups in Canada have a higher risk of getting diabetes, including people of South Asian descent. There are certain genes that affect insulin function. Having these genes increases your risk of diabetes. These genes are commonly found in high risk populations such as people with South Asian heritage.

What to eat...and when

If you have diabetes, it is important to eat every 4 to 6 hours to keep your blood sugar levels stable. Try to have three daily meals at regular times and have healthy snacks when you are hungry. A balanced meal has foods from at least 3 of the 4 food groups:

- 1. Vegetables and Fruit
- 2. Grain Products
- 3. Milk and Alternatives
- 4. Meat and Alternatives

You can work with a Registered

Dietitian to make a personal meal plan. An example of a healthy meal plan may look like this:

Breakfast:

- 2 small whole wheat dosas
- ¼ cup of savoury chutney (try dhal chutney, coriander mint chutney or onion tomato chutney instead of coconut chutney)
- 1 cup of sambhar
- ½ cup of papaya
- Tea, coffee or water (without sugar/honey)

Snack:

- 1 small orange
- 3/4 cup of diluted buttermilk

Lunch:

- 1/2 cup of mung dal (pacha payiru)
- ½ cup of rasam ½ cup rasam
- 1 cup of cauliflower or broccoli
- $\frac{1}{2}$ cup of rice (try brown rice)
- 1 orange
- ³⁄₄ cup of low-fat yogurt

Without ongoing, careful management, diabetes can lead to a buildup of sugars in the blood, which can increase the risk of dangerous complications, including stroke and heart disease.

Snack:

- 2 tsp of peanut butter on 1 whole wheat roti
- ½ cup of berries

Dinner:

- ¾ cup of vegetable pilau
- ½ cup of masoor dal (paasi paruppu)
- 1 cup of poriyal with minimal oil (use non-starchy vegetables such as green beans, plantain stem/flower, cabbage, snake gourd, okra, eggplant or bitter gourd)
- 1 small whole wheat roti/chappati

Snack:

¾ cup of low-fat yogurt1 apple

Choosing healthy fats

In addition to the four food groups, it is also important to include healthy fats in your diet. People with diabetes are at higher risk for heart disease so choosing better fats is important. Healthy fats are found in:

- oils (olive, canola, sunflower)
- nuts
- seeds
- avocado
- oily fish such as salmon.

Try to limit saturated fats such as ghee, butter, cream, lard, shortening or coconut oil. You can also lower saturated fat by choosing lean meat, skinless poultry and low-fat milk products. Choose lower fat cooking methods such as baking, broiling, barbequing or roasting.

Limit foods that are high in fat such as:

- Sweets such as ladoo, jalebi, adhirasam, gulab jamoon and so on
- Coconut
- Pakoras
- Samosas
- Bhaji
- Medu vada
- Chips: banana, plantain, potato, jackfruit or tapioca
- Murukku
- Pappadums

Choosing carbohydrates

Carbohydrate is a word for foods that have starch, sugar and fibre. The type and amount of carbohydrate you eat and when you eat it is important. Having too much carbohydrate in a meal can cause your blood sugar to go too high. Your personal meal plan will have the right levels of carbohydrate for you.

If you have diabetes, choose more high-fibre foods. A type of fibre called soluble fibre may help control blood sugar levels. Try these highfibre foods:

- Vegetables: snake gourd, plantain, cauliflower, spinach, corn, sweet potato, green beans, broccoli, mustard greens, carrots
- Fruits: plantain, apple, banana, berries, mango, papaya, pineapple, guava, melon, pomegranate
- · Grains: Use whole grain wheat,





besan, brown rice, millet or sorghum to make roti, dosa, adai, appam, puttu, uppuma and venpongal

- Legumes: Lentils, dried beans and peas
- Nuts and seeds: almonds, cashews, pistachios

Limit foods such as:

- Jam, sugar, jaggery and honey
- Ice cream
- Chocolate
- Candy
- Baked goods
- Payasam
- Halwa, ladoo, jilebi, and other sweets

These foods are mostly fat and sugar. They can make your blood sugar levels go too high. Talk to your dietitian about the type and amount of sweet foods that can fit into your meal plan.

Bottom line

By making small changes to traditional recipes, you can still enjoy your favourite foods. To help manage your blood sugar levels, followa personal meal plan that is more high fibre foods and the right types of fat.

TIPS FOR DIABETES

Dietary tips for Diabetics

- Base your diet on....the 'no fast, no feast principle'.
- Don't skip breakfast. Start your day off with a good breakfast. Eating

breakfast every day will help you have energy as well as steady blood sugar levels.

- Eat small meals at regular times. It is helpful to eat 3 small meals plus 3 snacks spread out through the day. People tend to eat larger portions when they are overly hungry.
- Keep calorie intake the same. Regulating the amount of calories you eat on a day-to-day basis has an impact on the regularity of your blood sugar levels. Try to eat roughly the same amount of calories every day, rather than overeating one day or at one meal, and then skimping on the next.
- Ideally your plate should be half filled with veggies, a quarter with cereal and the remaining quarter with proteins.
- Drink plenty of water; it helps to remove the toxins from the body.
- Avoid simple carbohydrates like sugar, refined flour, white breads; cornflakes instead opt for wheat flour, oats, brown rice etc.
- Exercise is one of the cornerstones of diabetes management. Exercise atleast 30 min all seven days in a week, choose an activity you will enjoy and follow it, like walking, cycling, swimming, aerobics, power yoga etc

Myths and facts about eating to prevent or control diabetes

MYTH: You must avoid sugar at all

costs.

Fact: Calories come from carbohydrates, protein and fats. Carbs constitute 50-55% of total calories, out of which 10% of calories can come from simple sugars provided the diabetes is under control and also the sugar is not taken alone but in combination with a healthy meal. The key when eating dessert or a sweet treat, is to make sure that it is part of a healthy meal plan, or combined with exercise.

MYTH: A high-protein diet affects the kidneys in diabetics.

Fact: Proteins are must for muscle regeneration and also provide satiety and helps to reduce blood sugars. A healthy diet must include protein, carbohydrates, and fats. A meal should always include protein along with carbs, it gives better blood sugar control.

MYTH: You have to cut way down on carbs.

Fact: Carbohydrates form the basis of ones diet comprising of 50-55% of total calories. The serving size and the type you eat are especially important for carbohydrates. Carbs come in two forms the good ones(whole wheat, dahlia, oats etc) and the bad ones(simple carbs like sugar, refined flour, bread etc). Focus on whole grain carbs since they are a good source of fiber and they are digested slowly, keeping blood sugar levels more even.

MYTH: You'll no longer be able to eat normally. You need special diabetic meals.

Fact: A healthy diet is what a Diabetic needs to follow. Eating a balanced diet comprising of all food groups, and keeing in mind moderation and variety as key to a healthy diet is what is required.

MYTH: Sugar Causes Diabetes

Fact: The most common nutrition myth is probably the misconception that sugar causes diabetes. If you have diabetes, you do need to watch your sugar and carbohydrate intake, to properly manage your blood sugar level. However, if you do not have diabetes, sugar intake will not cause diabetes. So far, a diet high in calories, being overweight and an inactive lifestyle are the main risk factors for Type 2 diabetes.

OPINION

India Bets Big On **Eating Right**

– Anil Talreja



THE 'EATING OUT' culture in India has grown over years and has flourished as a viable business option , thanks to a fast-food intensive market , growing QSRs and food e-tailing options present.

With this, there is a simultaneous inclination towards healthy alternatives that have taken precedence, especially amongst the millennials.

A more responsible and nutritive food regime is the new India's first choice. This can work wonders for businesses, if they buck up soon and align their product offerings with this growing consumer demand. Important that businesses reinforce trust and show that they care for a consumer's wellbeing.

The above trend, further brings another insight – Today's consumers is a much more informed person who has increased focus on the quality of ingredients and hygiene plays a key role in his/her choice of products as well as consumption pattern.

In view of this, India has seen a series of food outlets shut shop, trying to keep pace with the increasing demands for quality and food safety. A number of quick service restaurants (QSRs) and makers of beverages are still struggling to stay in the game and retain customer. It is apparent that safety and quality of food has emerged as the prime concerns amongst consumers, with the rise in complaints by consumers in relation to substandard food being delivered to them.

A welcome step, in this regard by the FSSAI is to delist unlicensed eateries and outlets and to push food companies to become more transparent. E-commerce food aggregators and delivery platforms need to be more vigilant and work assiduously towards complying with the guidelines listed by FSSAI.

India's new tech-savvy consumer 'watches out' what it consumes

Consumers today are increasingly demonstrating an inclination for being in control of what they are consuming. FSSAI's Eat Right Movement has emerged at the right time to nudge individuals towards making healthier choices. Now the onus is on the online food platforms to fill the trust deficit by giving serious consideration to aligning themselves with regulatory measures. Compliance plans need to be put in place to expedite the process of de-listing non-registered sellers of goods.

Ways to Eat Healthy at the Indian Restaurants



WHEN DINING AT an Indian restaurant, it can sometimes be hard to find a meal that is healthful. According to the American Heart Association, a lot of the wonderful flavors of Indian food come from things like clarified butter, which is used to fry the ingredients of many dishes. Some dishes also include ingredients, such as coconut oil and milk, which are high in saturated fat. Luckily, there are ways to eat healthy while enjoying all of the tastes that Indian restaurants have to offer.

Opt for a Salad Appetizer

Eating salad is a healthy tip for dining out. Many Indian restaurants will offer a green salad on the menu. Because you are aiming to eat healthy, it is best to avoid dressings that are high in fat. If you can't avoid the dressing, try asking for it on the side so you can control your portion.

Stick with Chicken or Seafood

The American Heart Association suggests that you opt for chicken or seafood dishes over ones with beef and lamb, which are higher in fat. Chicken or shrimp dishes are very common at Indian restaurants and are full of protein.

Avoid the Fried Food

Fried foods are high in fat, calories and cholesterol and should be avoided if you are trying to lose or maintain your weight. Fried items at Indian restaurants include samosas, pakora, and some kinds of flat breads. You can opt for grilled or steamed meals instead to fill your belly in a healthier way.

Choose Meats Cooked Tandoori Style

Tandoori style means the meat has been oven-grilled instead of fried. Heather Bauer, R.D., C.D.N. states that sticking with grilled meats is "always a winner" and suggests ordering a tikka dish if you are looking for extra flavor. These dishes are usually seasoned with spices and tomato.

Skip the Soup

If you are watching your sodium intake, it is best to avoid most soups. Many soups at Indian restaurants can be high in sodium. If you would like something similar, you can go for a hearty stew to fill you up faster and keep you from eating more later in the meal.

Order Roti Bread Instead of Naan

Roti bread is the healthiest option of the assorted breads you can choose from at an Indian restaurant. According to Heather Bauer, R.D., C.D.N., it is a smarter choice because it is made from whole-wheat.

Go Light on the Rice

Many Indian dishes are served with rice. It can be very easy to get carried

away when adding rice to your plate. This can add extra calories to your meal, so stick with a small portion of rice.

Order from the Lunch Menu

Many Indian restaurants will have a lunch menu from which you can order. Ordering from the lunch menu means you will be getting a smaller portion, so you won't have to worry as much about over-eating.

Carbohydrates Proteins Vegetables

Don't be Afraid to Custom Order

When dining out, you always have the option to custom order. If there is something that you'd really like, but you don't want some of the ingredients, you can request that your meal not include them. Also, you can usually request the fried foods to be substituted with grilled foods, or that your food be cooked in a vegetable-based curry instead of coconut milk.

Skip Dessert

While desserts are almost always sweet and appealing, they are best avoided when trying to eat a healthful meal. Instead of going with the fatty dessert options, try ending your meal with coffee or tea. This way, you still have something a little sweetened without the calories.

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