## **Healthy Future with Smart Food Choices**

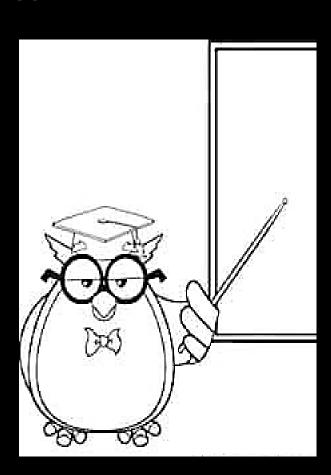


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## What to Expect.....

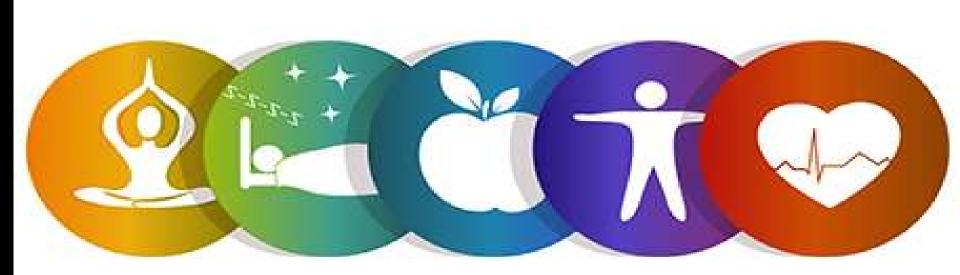
- Good Health essential elements
- Nutritional Transitions in recent times
- Implications & Health outcomes
- Food Groups introspect
- Choosing healthier foods
- Other essentials for a better life
- Conclusion
- Queries



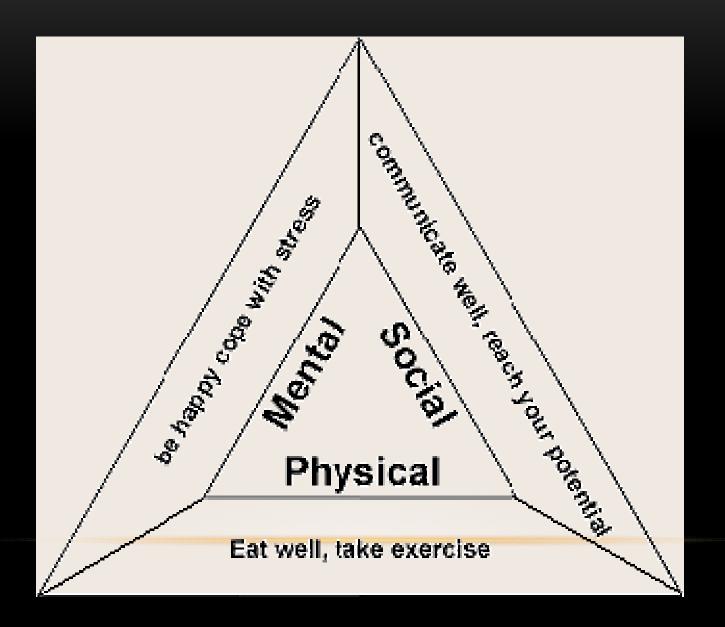
#### **HEALTH**

#### **WHO Defines Health as:**

"A state of complete physical, mental, and social well being, and not merely the absence of disease or infirmity."



## THE HEALTH TRIANGLE



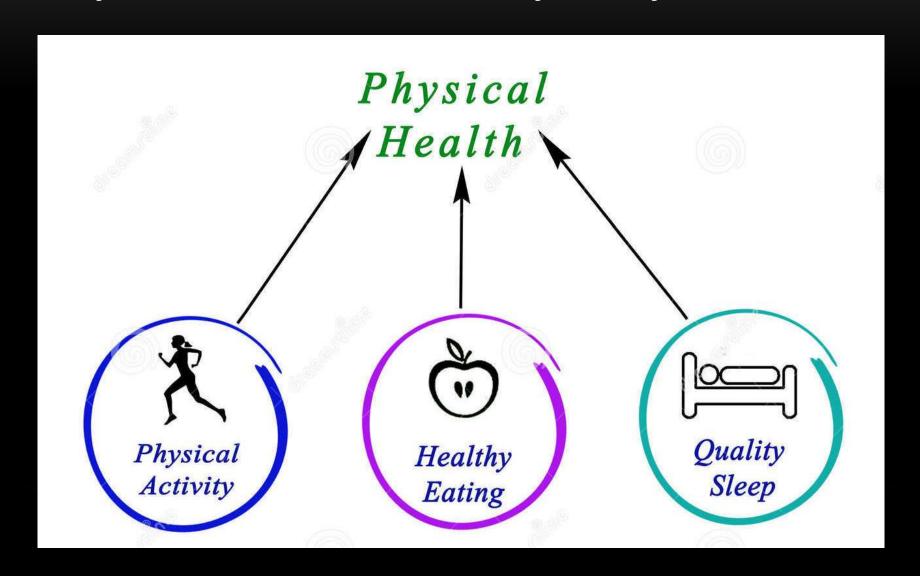
## Wellness

A multi – dimensional state of wellbeing that encompasses a holistic approach towards life



#### PHYSICAL HEALTH

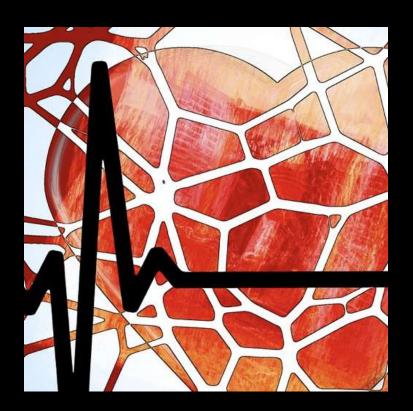
Physical health deals with the body's ability to function



## **Nutritional Transitions in recent times**

India is facing an *Epidemic* of Diet-Related non-communicable diseases (DR- NCDs)

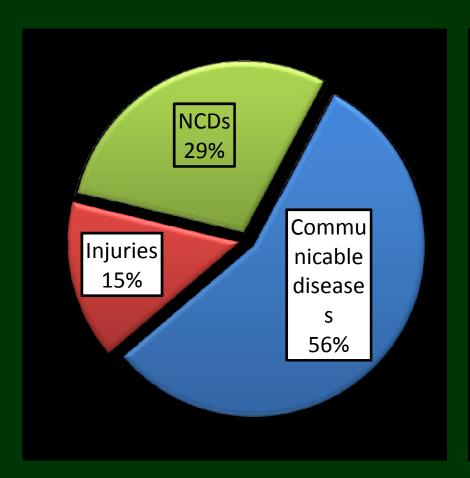
There is also widely prevalent under-nutrition

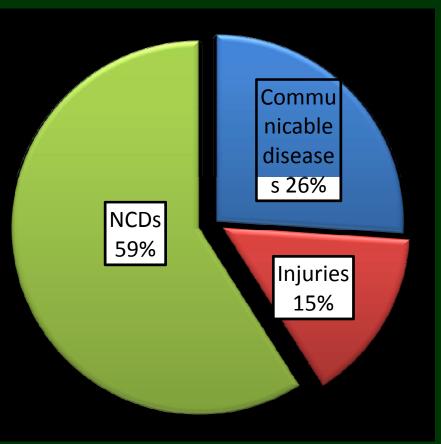


## **India's Transition to NCDs**

Disease burden estimates 1990

Disease burden estimate 2020





Source: Nutrition Transition of India, 1947-2007, Ministry of Women and Child welfare

## Nutrition transition over 30 years

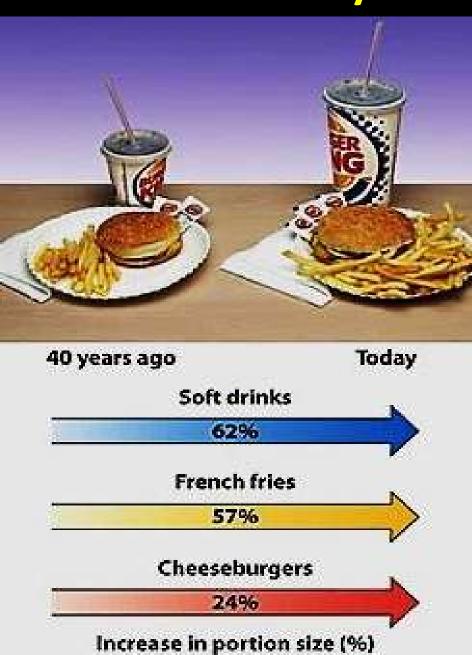
- \*7% decrease in energy derived from carbohydrates
- 6% increase in energy derived from fats
- Decreased intake of coarse cereals, pulses, fruits and vegetables
- Increasing intake of meat products and salt

Nutrition transition in India: secular trends in dietary intake and their relationship to dietrelated non-communicable diseases

Misra et al, J Diabetes. 2011 Dec;3(4):278-92

## **Nutritional Transition with Urban Lifestyle**

- Portion Distortion
  - Combo offers, unlimited refills
- Appetite vs. Hunger
- Decreased Energy Expenditure:
  - Modern Technology
  - Change in recreational activities



## Why is it becoming a problem?

- New outlets opening every week within easy reach
- Bigger portions at lower price movie combos, Meal combos
- Home delivery options Zomato, Swiggy, Uber eats....
- Culture of celebration with junk foods among youth
- Stylish to spurge and be seen in trendy cafe's, bistros, etc.
- Greater affordability due to rising incomes



## Implications & Health outcome

Along with declining levels of physical activity due to rapid urbanization have resulted in escalating levels of the following Non Communicable Diseases (NCDs) in Indians:

- Obesity
- Atherogenic dyslipidemia
- Subclinical inflammation
- Metabolic syndrome
- Type 2 Diabetes Mellitus
- Coronary heart disease.

## **Gut Bacteria & Health**

Digestive tract is home to trillions of microorganisms — bacteria, yeasts, fungi, and viruses, collectively known as the **Microbiome** 

The Microbiome helps the body

- Digest food
- Regulate metabolism
- Control the immune system



Research has shown that eating a high-fat, high-sugar diet eliminates certain essential bacteria from the gut, impairing balance and causing the immune system to malfunction

## What is the real problem with our diet?

https://time.com/5562994/diet-disease-mortality/



## **CARBOHYDRATES**

- Instant Energy Source
- Needed to maintain good health



## WHAT HAPPENS WHEN YOU CUT OUT CARBS FROM YOUR DIET....



"I'm on a low-carb diet. Whenever I feel low, I eat carbs!"

## Good Carbs

**Bad Carbs** 

Complex

Harder to Digest

Burns calories being digested

Keep you feeling fuller longer

Natural 'Sugar'

Doesn't spike blood sugar levels

Used for energy

Low Glycemic

Help you lose fat

Simple

Digest immediately

Don't burn many calories being

digested

Makes you hungry - sooner

Makes you crash

Caused sugar cravings (it's addictive!)

Processed + Added sugars

Spikes blood sugar fast

Converts into fat easily

Can cause other 'good' nutrients to be

stored as fat

High Glycemic

Helps you store fat

Yes

No

#### **SOURCES OF COMPLEX AND SIMPLE CARBS**

Sweet Potato Carrots Whole Grain Bread Whole Grain Pasta **Brown Rice** Quinoa Oats Beans Fruit Vegetables Natural Sugar

**Potato Chips** French Fries White rice White Bread Most Granola Bars Sugary Cereal Cake, Cookies, Candy Soda **High Fructose** Corn Syrup **Added Sugar** 

#### **COMPLEX CARBS**

- Whole wheat, beans
- Buckwheat
- Oats
- Quinoa



Millets – Pearl millet, Kodu, little millet, foxtail millet, Sorghum (Jowar),
 Ragi, etc.



#### PROTEIN – OUR BUILDING BLOCKS

## The Importance Of Protein

- Build, Maintain and Repair All your Body's Cells..!
- Supports Healthy Bones, Muscles
   & Skin Growth..!
- Supports Healthy Eyes & Vision..!

 Supports A Strong Immune System..!



## WHY DO WE NEED FATS

#### **Functional**

- Lipids are concentrated sources of energy (9 kcal/g)
- Storage form of energy
- Structural components of biomembranes
- Building blocks of glycolipids and phospholipids
- Helps in absorption of fat soluble vitamins



- Satiety value
- Palatability taste enhancer
- Texture Crunch, creaminess, mouth feel
- Aids Preservation

## **SOURCES IN DIET**

## **Dietary fat**

## Visible

Fats used at the table or during cooking (vegetable oils, ghee, butter, vanaspati)

## Invisible

Fats present as an integral component of various foods (cereals, pulses, dairy, meat)



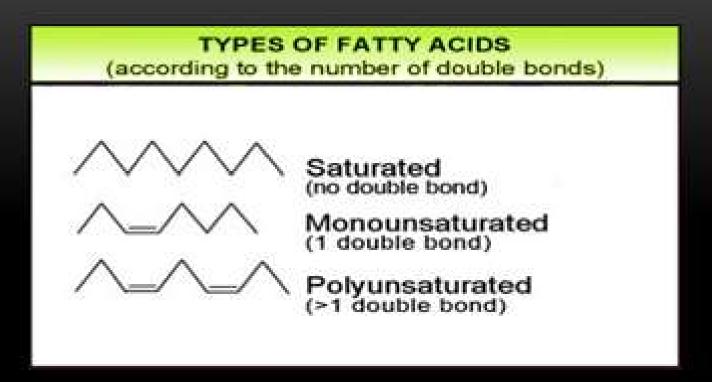












#### **Essential Fatty Acids:**

Human body is capable of producing all the fatty acids it needs, except for two:

- Linoleic acid (LA) an omega-6 fatty acid,
- Alpha-linolenic acid (ALA) an omega-3 fatty acid.

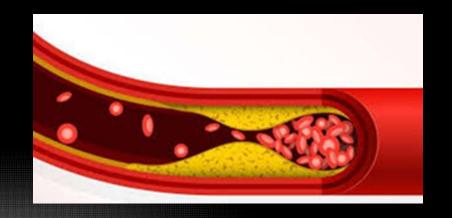
#### **IMPORTANCE OF OMEGA 3 AND OMEGA 6 FATTY ACIDS**

- Linoleic acid (ω-6) decreases plasma cholesterol levels
- α- Linolenic Acid (ω-3) increases insulin sensitivity, increase
  peripheral glucose utilization and decreases adiposity. It is also
  beneficial for prevention of inflammation and accumulation of fatty
  material in blood vessels (atherosclerosis) and clotting of blood
  (thrombosis).

#### **Ideal Ratio of**

 $\omega - 6 : \omega - 3$ 

5-10:1





# GOOD FATS VS.

## BAD FATS



#### **GOOD FATS**

 Oils rich in mono and poly unsaturated fats – mustard oil, sesame seed oil, groundnut oil, oilve oil, coconut oil, Ghee, fish oil and nuts & oilseeds

 These boost the body's metabolism and provide energy and protection

#### **BAD FATS**

- Fats rich in saturated or trans fats are considered unhealthy in large quantities - most animal fats like butter, lard, tallow.
- Trans fats in processed foods and bakery items
- These pose a risk for atherosclerosis that results in narrowing of the blood vessels leading to heart diseases.

## **HEALTHY SOURCES OF FATS & OILS**









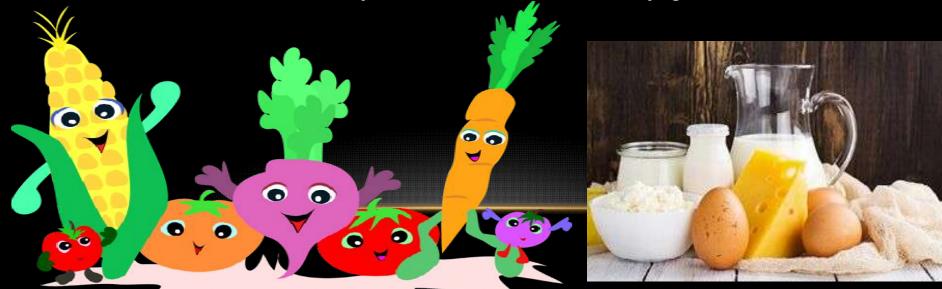


#### **COCONUT OIL – AN AGE OLD HEALTHY TRADITION**

- Coconut oil has been used in our traditional cooking since historical times and is presently consumed by over a billion people
- Besides being a healthy cooking medium, it has been a valuable component of cosmetic products, even used for medicinal purposes in Ayurveda.
- Due to its Lauric acid and capric acid content it is an instant source of energy and has shown to increase HDL levels on regular usage
- Some recent propaganda by poorly researched people tried to put down coconut oil as an unhealthy fat
- This was vehemently opposed by the Asian Pacific Coconut Community (APCC) that has evidence based research to back their claims that coconut oil is one of the healthiest cooking oils

#### **VITAMINS & MINERALS**

- Major source of Vitamins & Minerals
- Help to maintain the body's immunity and fight infections
- Healthy bones & teeth Calcium, Vit D & Phosphorus
- Eyes, skin & hair Vitamin A
- Vitamin B Skin, nerves, metabolism
- Vitamin C Immunity, antioxidant & healthy gums



## **IRON**

- Major mineral for Blood haemoglobin
- Anaemia is rampant, especially in women of child bearing age

Fatigue and Tiredness







Restless Leg Syndrome

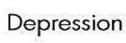


Shortness of Breath



Frequent Headaches







To explore more, visit





Increased Sensitivity to Cold



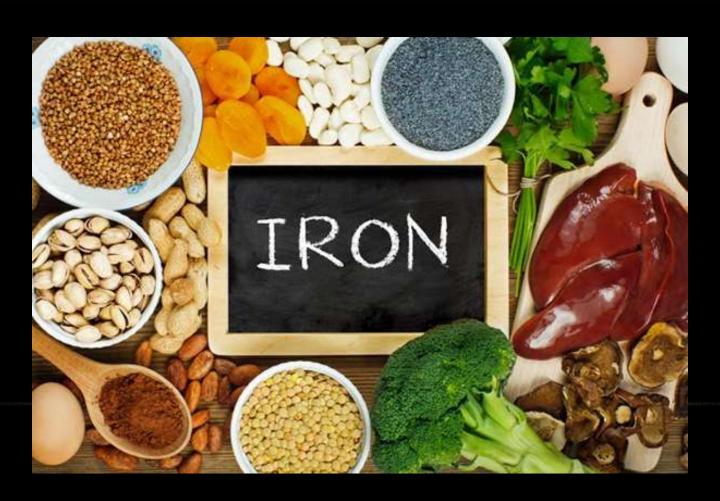
Hair Loss



## **IRON**

Green leafy vegs, meat products - liver, jaggery, nuts & oil seeds, Rajma, dates and raisins, etc

Combine it with adequate proteins, Vitamin C rich foods and Vit B<sub>12</sub>



## WHAT DO WE CHOOSE TO SNACK ON?



















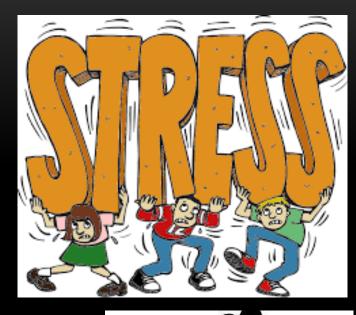


## **Making Healthier Choices**



#### Other essentials for a better life

- Staying hydrated
- **Regular Exercise**
- Adequate sound sleep
- **Managing stress effectively**
- **Being socially active**



#### These are some tell-tale signs of dehydration:







irritability







## **Poor Sleep Patterns**

**Most common Night time Routine.....** 





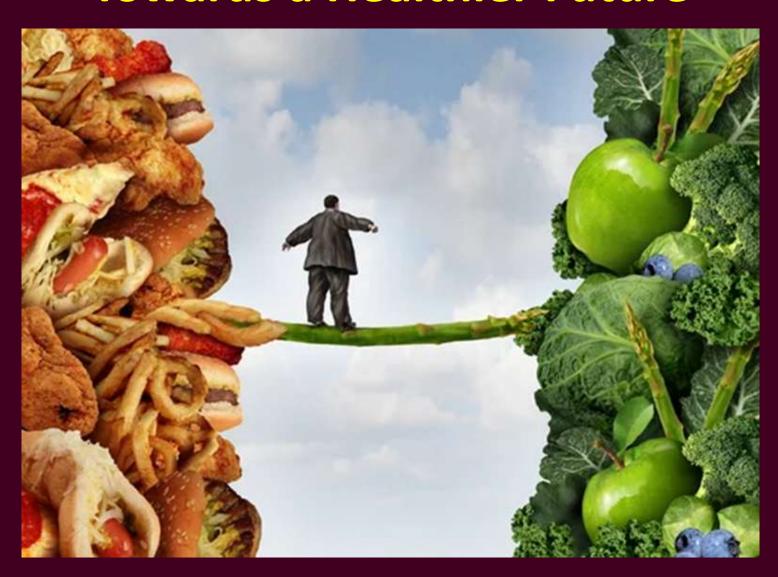
Next day at College/ Office.....





- Stay well hydrated
- Eat Fat, salt and sugar in moderation
- Choose your food & snacks consciously
- > Replace bad fat with healthy fat
- > Replace simple carbs with complex carbs
- Get adequate good quality sleep
- Invest in good health NOW ...... for a Healthy Life in the FUTURE

## Take that first step..... Towards a Healthier Future



## **ANY QUESTIONS??**



