

A large, artistic splash of white milk or cream serves as the background for the slide, creating a sense of freshness and movement.

# **ROLE OF DAIRY NUTRITION** **in** **NATIONAL NUTRITION MISSION**

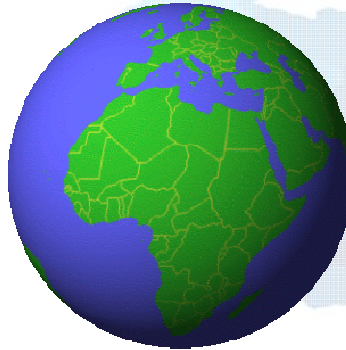
**Mani Misra**  
**Corporate Nutritionist**  
**Scientific Regulatory & Nutrition Affairs**  
**Mother Dairy Fruit & Vegetable Pvt. Ltd.**  
[mani.misra@motherdairy.com](mailto:mani.misra@motherdairy.com)

# Malnutrition Affects All Regions Worldwide



1.9 Billion Adults  
are Overweight

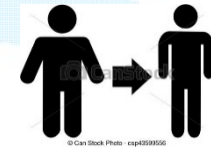
> 600 Million  
of these are Obese



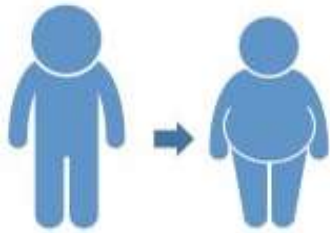
264 Million Women  
of reproductive age - Anaemic



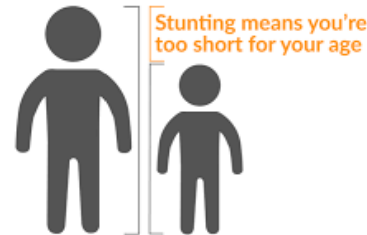
462 Million  
Adults - Underweight



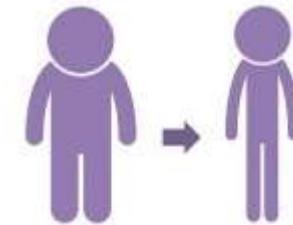
## Across Globe Children < 5 years



42 Million - Obese/ Overweight



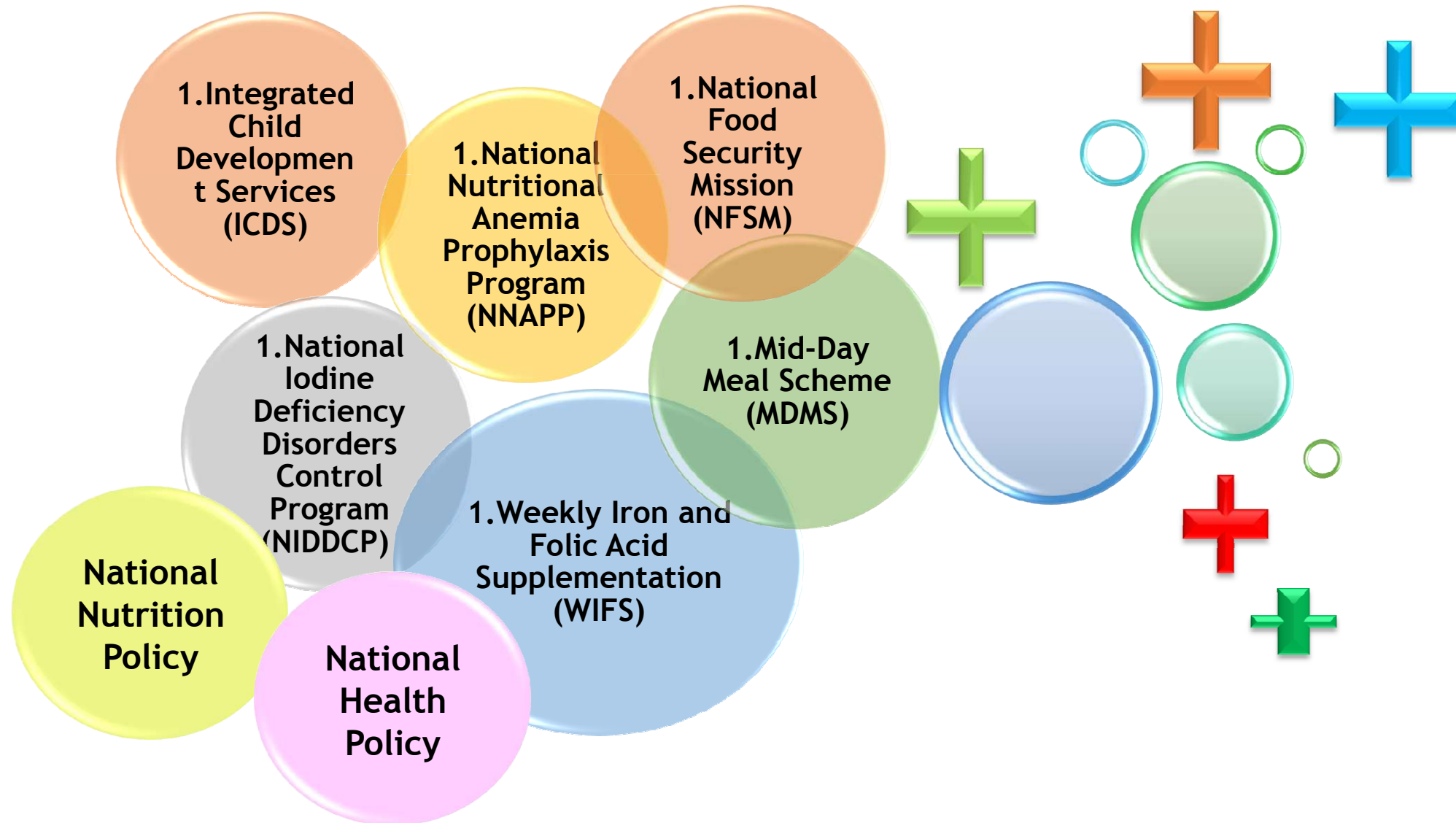
155 Million - Stunted  
(too short for age)



50 Million - Wasted  
(too thin for height)



# Nutrition Intervention Programs in India



# National Nutrition Mission



↓ 2% p. a.

Stunted



↓ 2% p. a.

Undernutrition



↓ 2% p. a.

Low Weight Birth



↓ 3% p. a.

Reduce Anemia  
Among children



↓ 3% p. a.

Reduce Anemia  
Among Women &  
Adolescent girls

Targets by 2022 .....

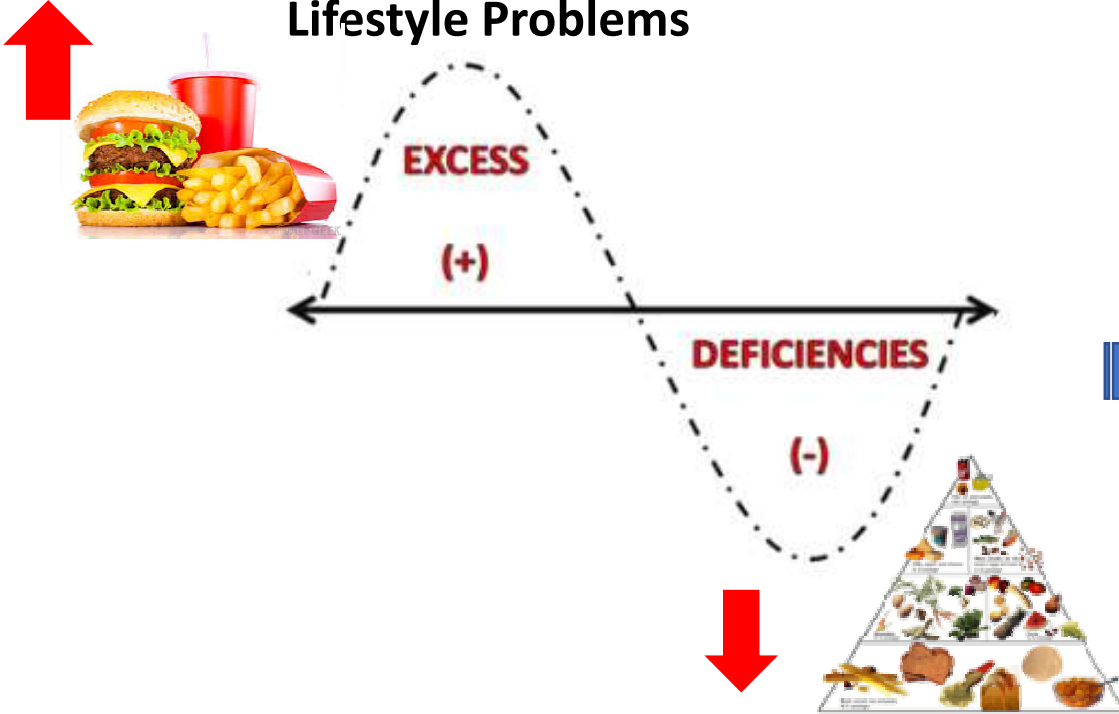
- ✓ Obesity/ Overweight - 19 % Men | 20.7 % Women
- ✓ Anaemia - 23 % Men | 53 % Women | Children 58 %
- ✓ High Blood Sugar - 8 % Men | 6 % Women
- ✓ Prevalence of MNM (Micronutrient Malnutrition)
  - Vitamin D - 50-94%
  - Vitamin A- 62 %
  - Iron - 40 %



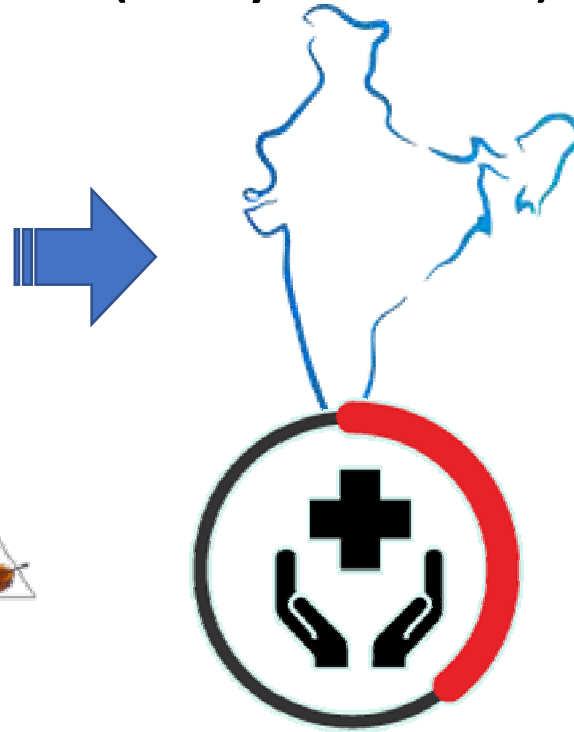
# Global Hidden Hunger Map

# Changing Scenario of Indian Dietary Pattern

**Reasons for 98%  
Lifestyle Problems**



**India spends 4.2 %GDP  
On Healthcare  
(Lifestyles Diseases)**



**India spends 4.2 %GDP  
On Healthcare**

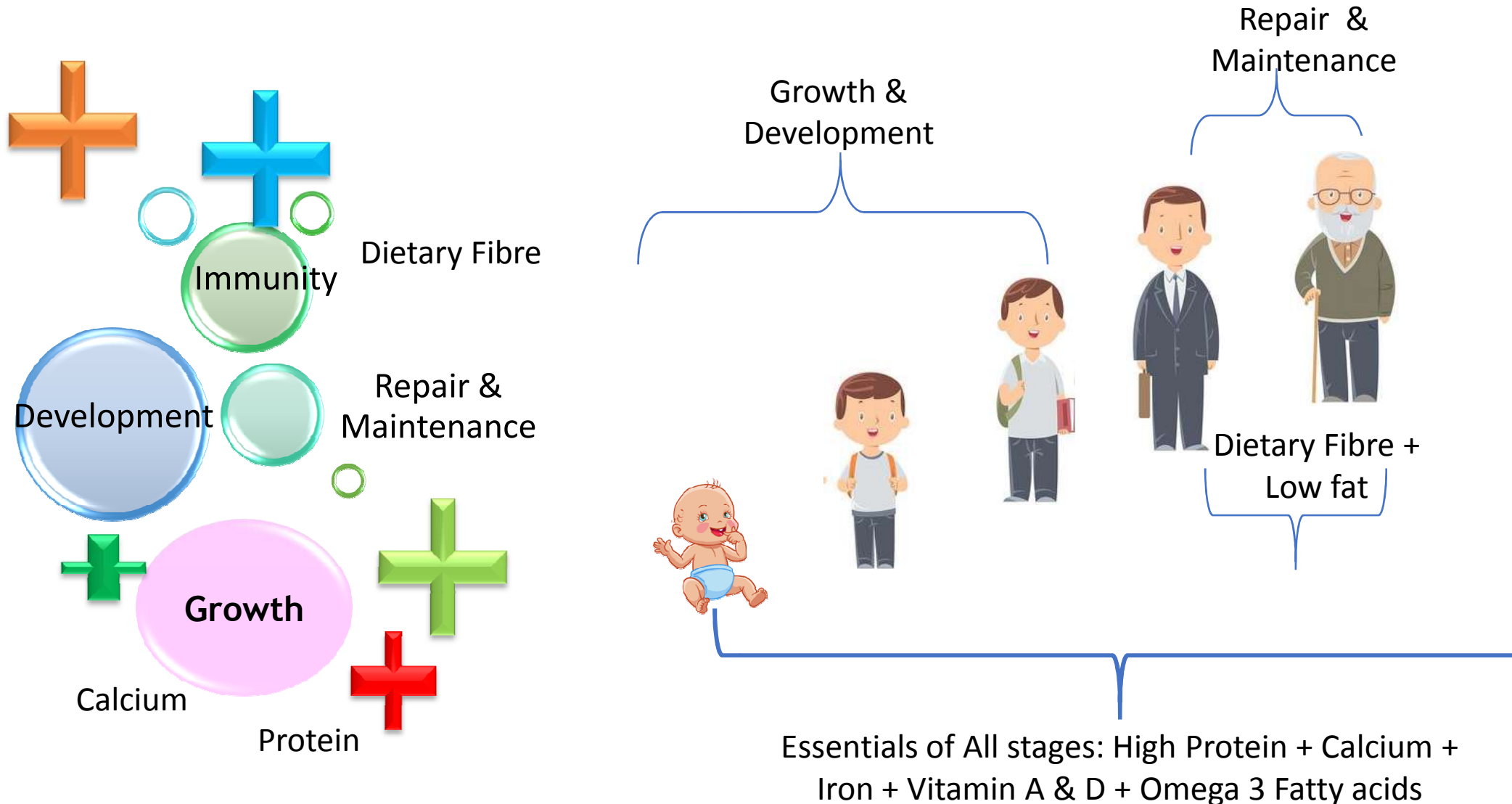
**Shift towards Health &  
Wellness**



**Emerging Nutraceutical  
Market**

**Earlier: Food what we ate is as good as Medicine  
Today: Food what we eat is as Slow Poison**

# Dietary Requirements at Different Life Stages



**Great Opportunity in Dairy to Cater at all Ages**



# Dairy Innovation Offerings..



Immunity &  
Digestive  
Wellness



Functional  
Foods



Infant Foods



Protein  
Enriched  
Dairy



Enriched with  
micronutrients  
(Omega 3), Iron  
etc



Mid Cal  
Products





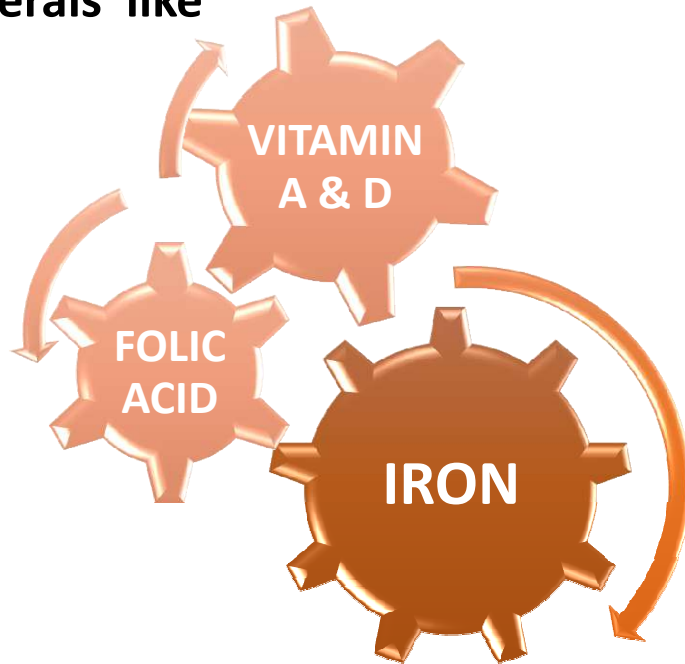
# Complementary Solutions to Control MNM



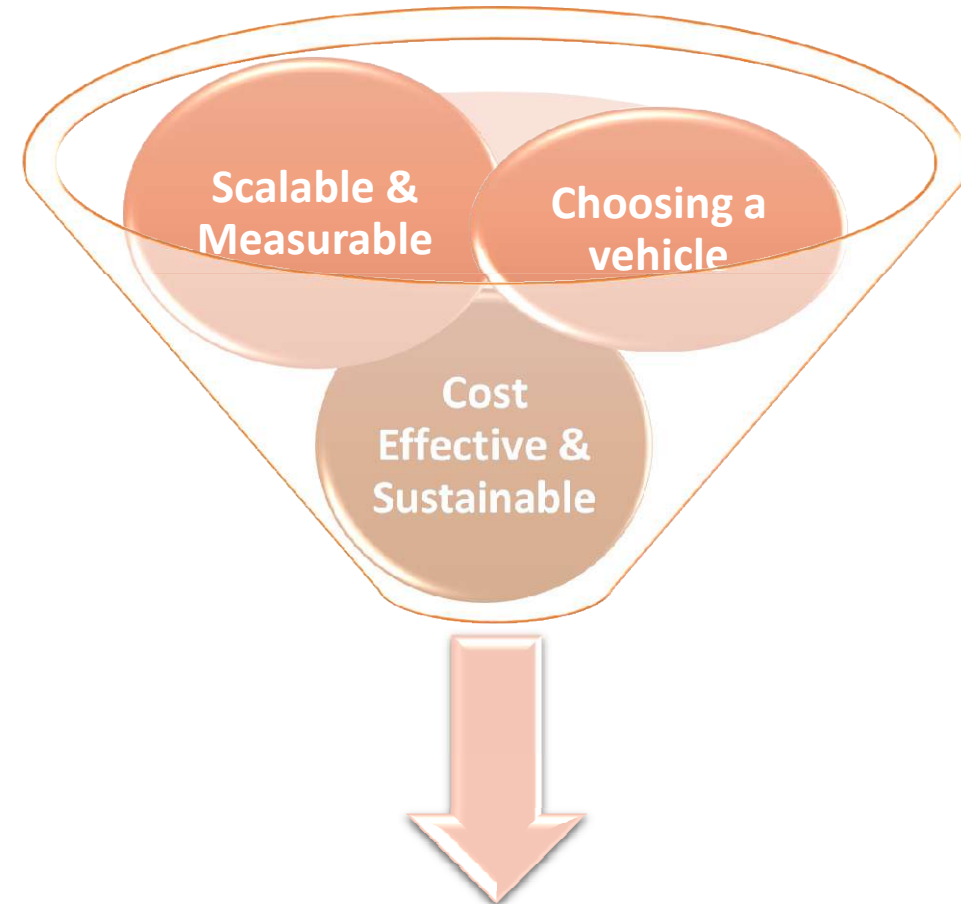
FOOD FORTIFICATION

# Food Fortification ....

**Food Fortification is a practice of adding essential Vitamins & Minerals like**



**to staple foods to improve their nutritional content**



**Critical factors for success**

**..... proven long term strategy**

# Global Evidences of Food Fortification



## Iodine

- Switzerland 1923
- USA 1930
- India 1964

## Vitamin D

- Denmark 1918, India 1953
- Indonesia 1996, New Zealand 2007
- Mexico 2002

## Vitamin A

- USA, UK 1923, Malaysia 1985, Thailand 1993, Mexico 2002
- India 1953, Chile 1997, Mexico 1974
- Central America 1974, Philippines 2000

## Iron, B1, B2, Niacin, Folic Acid

- Canada 1933, USA 1941
- Chile 1954 | Australia 2009
- Costa Rica 1991, Philippines 2001

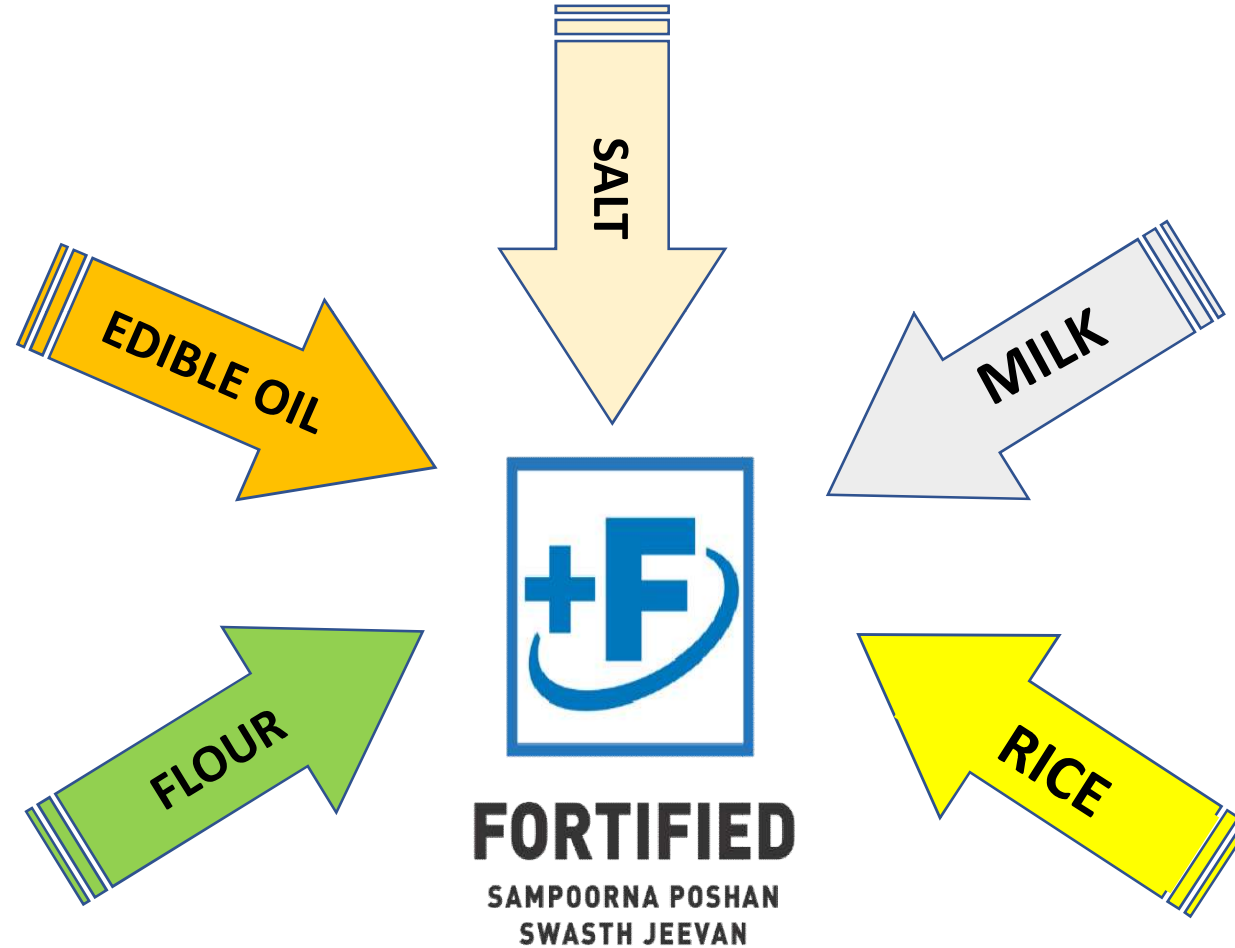
## Zinc

- Indonesia, 1998
- Costa Rica, 1991



**Fortification is not new – it's a century old technology**

# FSSAI Food Fortification Regulation



Quality Assurance is very critical states -

- every manufacturer of fortified food shall give undertaking on QA twice a year
- Certification by FSSAI notified Food Lab ,up to date record etc



# Fortification Journey At Mother Dairy

1984



Bulk Vended Milk  
Vitamin A - @2000  
IU/LTR

2006



DHARA - Oil  
Vitamin A- 25 IU  
Vitamin D- 2.0 IU  
Per gm

Nov' 2016



Bulk Vended Milk  
Vitamin A - 770 IU  
Vitamin D - 550 IU  
Per LTR

Jan' 2017



Poly Pouch Milk  
Vit A - 770 IU  
VitD - 550 IU  
PER LTR

Jan' 2017



DHARA - Oil  
Vitamin A- 25 IU  
Vitamin D- 4.5 IU  
Per gm

As per New Regulation

Dec' 2018



Bulk Vended Milk  
Vitamin A - 1200 IU  
Vitamin D - 250 IU  
Per LTR

Total Production : Fortified Milk - 30 Lakh Ltrs per day | Fortified Oil - 1500 MT/ month

# Collaboration at ALL Levels....

- ❑ Dairy Industry needs to be committed & vocal Food Fortification
- ❑ Responsibility lies with Top brands to set the example
- ❑ Create new market and Stimulate innovation
- ❑ Build positive brands : Health & Nutrition
- ❑ Awareness campaign on fortification
- ❑ Partnership with Govt. , FSSAI
- ❑ Contribute to national development



THANK YOU