

Nutrition Interventions in Sri Lanka



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1

Outline

1. What is "Nutrition"?
2. What is "Malnutrition", and causes ?
3. National Nutrition policy guide to interventions
4. **Nutrition Care Process**
5. **Nutrition Interventions in Sri Lanka**
6. Nutrition Intervention during disasters/emergencies
7. Multi-sector approach

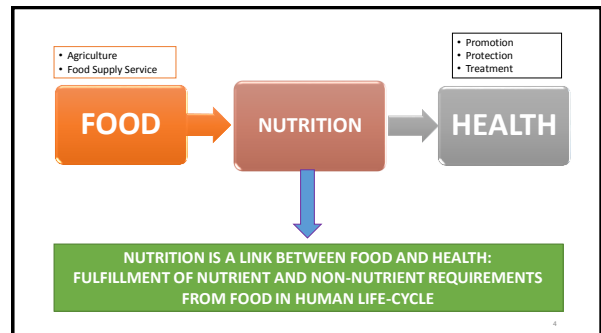
2

1. What is "Nutrition"?

- 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.

(WHO, 2018)

3



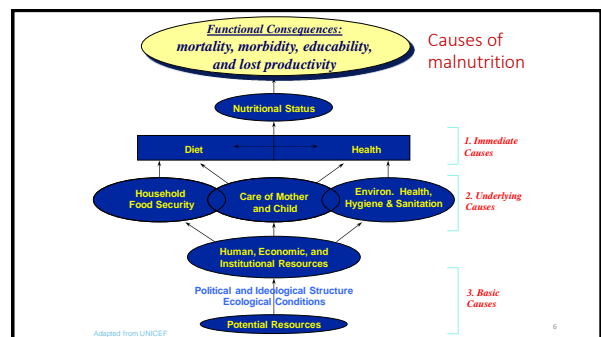
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2. WHAT IS "MALNUTRITION"?

- Conditions arising from either,
 - Deficiencies
 - Excess
 - Imbalance

of overall nutrition or specific nutrients

5



6

What is Double Burden?

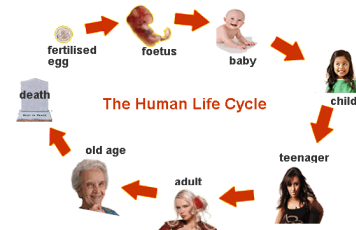
It refers to the co-existence of:

- under nutrition,
- micronutrient deficiencies,
- overweight/obesity and
- other nutrition-related chronic diseases

in the same countries,
in the same communities
and even in the same households.

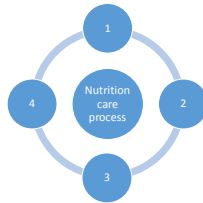
03. National Nutrition Policy 2010

- Objectives: 1. To ensure optimal nutrition throughout the life cycle.



04. Nutrition Care Process

1. Nutrition Assessment
2. Nutrition Diagnosis
3. **Nutrition Intervention**
4. Nutrition Monitoring and Evaluation



• ADA. *International Dietetics and Nutrition Terminology Reference Manual*; 2011.

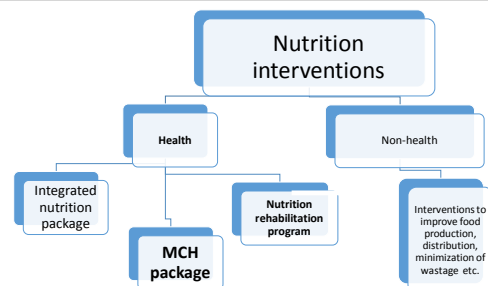
05. Nutrition Interventions

- Purposefully planned actions
- Those can be implemented at the levels of
**individual,
target group or
community as a whole.**

• (ADA. *International Dietetics and Nutrition Terminology Reference Manual*; 2011)

Nutrition Interventions.....

- Categorized by the WHO into:
 - Behavioral
 - Fortification
 - Health related actions
 - Regulatory
 - Situational Health Actions
 - Supplementation



Family Health Bureau (FHB).....

Broad areas of work related to nutrition:

- IYCF (Infant and young child feeding) (breastfeeding and complementary feeding)
- Growth monitoring and promotion
- Nutrient supplementation of children under the age of 5 years
- Managing nutritional problems of children under the age of 5 years
- Child (0-5 years) nutrition during emergency

Activities.....

- Monitoring, evaluation and supervision of above activities
 - Annual "Nutrition Month" activities

13

1. Integrated Nutrition Package (INP)

- defines a set of key evidence-based interventions, including

- Infant and Young Child Feeding (IYCF) practices;
- growth monitoring;
- treatment of acute malnutrition with therapeutic and supplementary feeding;
- pregnancy weight gain monitoring;
- micronutrient supplementation and home based food fortification; in order to improve the nutritional status of children under five years, adolescents, and pregnant and lactating women.

14

2. Nutrition Rehabilitation Programme (NRP)

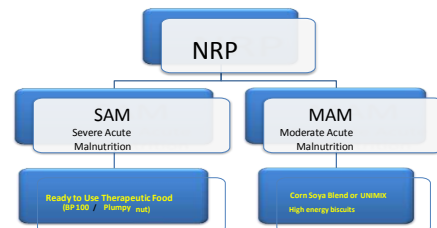
The NRP was implemented in Menik Farm to manage malnutrition in IDP camps.

It included;

- the establishment of 21 Nutrition Rehabilitation Centers;
- training of Ministry of Health and NGO staff;
- awareness raising and community mobilization;
- provision of services to manage moderate and severe acute malnourished children;
- and monitoring, evaluation and documentation.

15

Nutrition Rehabilitation Programme (NRP)
Is a component of INP



16

3. Maternal and Child Nutrition Program

Aims;

to **improve the status of MCH nutrition** through the Ministry of Health by developing and implementing the **Integrated Nutrition Programme (INP)** including management of severe acute under nutrition at community level.

17

TYPES OF INTERVENTIONS

1. Direct interventions (Nutrition specific)

- address **immediate causes**
 - I. dietary intake
 - Supplementation
 - Fortification
 - dietary diversification
 - II. disease
 - prevention
 - » Immunization
 - » Hygiene
 - » Deworming
 - treatment

18

TYPES OF INTERVENTIONS.....

2. Indirect interventions (nutrition related)

- address **underlying and basic causes**
- **multi sector involvement needed**
 - Increased nutritious food production at low cost
 - poverty reduction
 - Water and sanitation
 - women empowerment
 - education and increased awareness
 - social protection
 - regulating unhealthy food

19

Interventions to control malnutrition :

- 1. Pre-pregnancy
- 2. Pregnancy and Lactation
- 3. Care of lactating mother
- 4. Infant & young children
- 5. Pre-school
- 6. School & adolescents
- 7. Adult and elderly

20

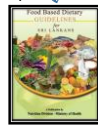
01. Pre-pregnancy interventions

Interventions to control malnutrition in Pre Pregnancy

- Through **pre pregnancy care package**
- Regulatory: **Registering with MOH at Eligible family register**

Activities:

- Nutrition counseling through **food based dietary guidelines**
- Intermittent iron and folic acid supplement in reproductive age women by PHM
- Pre-conception folic acid supplementation
- Pregnancy spacing-family planning when necessary by MOH and PHM
- Health screening for Non-Communicable Diseases (NCDs)
- Promotion of Hand washing and hygienic practices
- House hold water treatment and safe storage
- Community promotion of sanitation



21

2. Interventions to control malnutrition in Pregnancy and Lactation

Implemented through MCH services by MOH and team

Direct

- **Triphosha program** for all pregnant mothers.
- "Poshana malla"
- Iron folate supplementation to pregnant & lactating mothers.
- Calcium and vit D supplementation
- Vitamin A megadose within 4 weeks postpartum.

Indirect

- De-worming program
- **Nutrition counselling**
- Birth spacing
- Monitoring weight gain
- Ensure food security

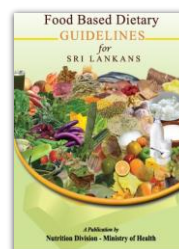
22

Triphosha Intervention Programme

1. All pregnant (antenatal) mothers throughout their pregnancy.
2. All lactating (postnatal) mothers for a period of six months after delivery

23

Food based dietary guidelines



Box 12 Recommended number of servings from each food group during pregnancy

- Rice, bread, other cereals and yams (7-11 servings).
- Fruits (3-4 servings).
- Vegetables (4-5 servings).
- Milk and dairy products (1-2 servings).
- Fish, pulses, meat and eggs (2-3 servings).
- Nuts & oil seeds (2-4 servings).

24

Average food intake - SL

Table 3 Comparison of the average food intake of Sri Lankan adults with national and international recommendations

Food group	Average intake of Sri Lankan adults (portions/d)	National recommendations ²¹ (portions/d)	US recommendations ¹⁰⁰ (portions/d)
Starch	14-1	6-11	6-11
Fruits	0-4	2-3	2-4
Vegetables	1-7	3-4	3-5
Fruits and vegetables	2-1	≥5	≥5
Meat and pulses	2-6	1-2	2-3
Dairy	0-4	1-2	2-3
Added sugars	3-6	Low	Sparsely

Jayawardena et al. Public Health Nutrition, 2012

25

Guidelines on weight gain in pregnancy

Pre-pregnancy weight	Recommended weight gain
Underweight (BMI <18.5 kg/m ²)	12.5 – 18.0 kg
Healthy weight (BMI 18.5 – 24.9 kg/m ²)	11.5 – 16 kg
Overweight (BMI 25 – 29.9 kg/m ²)	7.0 – 11.5 kg
Obese (BMI ≥ 30 kg/m ²)	6 kg (minimum)



Source: IOM 2009, Box 11 FBDG

26

Nutritional care of undernourished mothers

- Aim to achieve desirable weight at delivery
- Suggest cheap commonly available foods
- Increase meal frequency - snacks interspersed with meals
- Reduction of physical activity - extra rest
- Provide food supplements

27

Nutritional care of obese mothers

- Monitor weight gain: Achieve weight gain of 0.7-1 kg/month in 2nd & 3rd Tr
- Total weight gain 5-7 kg
- Avoid junk foods, empty calories
- Ensure adequate intake of vegetables & fruits
- Undertake regular moderate physical activity

28

3. Care of lactating mother



- Vit A Mega dose
- Educate on diet
 - Extra servings of starch based foods at each meal
 - Consume extra piece of fish/egg/dried fish, extra servings of pulses, vegetables and green leaves daily
- Postpartum visits
 - Screening for complications with Nutrition education
 - Support for breast feeding
- Provision of micronutrients (iron, Vit C, & Ca) for lactating mothers – 6/12
- Promote family planning to space pregnancy

29

4. Infant & young children



- Code for breast feeding
- Baby friendly hospital initiative
- Lactation management centers
- Exclusive breast feeding for completion of 6 months & continue up to 2 years
- Complimentary feeding programs
- Growth monitoring & promotion
- Vit A mega dose, Thripasha/CSB, immunization
- ECCD

30

5. Pre school children

Growth monitoring & promotion

- ECCD
- Thriposha
- Food demonstrations



31

6. School children & adolescents

Evidence based package of interventions for School children

- Nutritional related services through ;

School medical inspection

- Immunization
- Iron, folic acid and vitamin c supplements in school children
- Vitamin A supplementation
- Growth monitoring
- Nutrition counseling through food based dietary guide
- Dental care
- Hand washing and hygienic practices

School health clubs

School feeding programmes (milk, mid-day meal)
Implementation of the canteen policy
School exercise programme



32

School Health package Direct Interventions

- **Behavioral** : Health Promoting School Concept
- **Fortification**: WFP survey in North & east (Comprehensive food security survey – CFSS 2014 by World food program)
- **Regulatory**:
Canteen Policy circular,
Mid- day meal program,
WIFS circular.
- **Situational Health Actions** : Nutrition month activities
- **Supplementation**: Weekly Iron Folate Supplementation (WIFS)



33

7. Nutritional Interventions in Adults & Elderly

Types

- Direct nutrition specific programmes
- Indirect nutrition(nutrition related) programmes

34

Direct nutrition specific services

1. Food fortification programme

- Salt iodization programme
problem identified in 1986
Since 1995
coverage 94% by 2005
goiter rate 18.2% in 1986 to 3.8% in 2005 (IDD News letter, 2006)
- Wheat flour fortification-not at programme level

2. Fortified rice for vulnerable populations

35

Direct nutrition specific services.....

- Nutrition promotion programmes
- Nutrition advocacy & awareness programmes to increase fish consumption
- Activities to improve health and nutrition services among plantations
- Nutrition promotion programme for the elderly
- National communication campaign to increase consumption of fruits, vegetables and pulses
- Programmes to manage nutrition during emergencies



Indirect nutrition (nutrition related) programs

1. Food subsidies and poverty alleviation programs
 - I. The "Samurdhi" Subsidy program
 - II. "Divi Neguma" economic development program
2. Food security programs- Home gardening programme – "Api wawamu rata nagamu"
3. Fertilizer subsidy program
4. National program on Alcohol and Tobacco reduction
5. Provision of three wheelers to dairy farmers/collectors and provision of harvesting machines
6. Programmes for household cash management-in nutritionally vulnerable areas



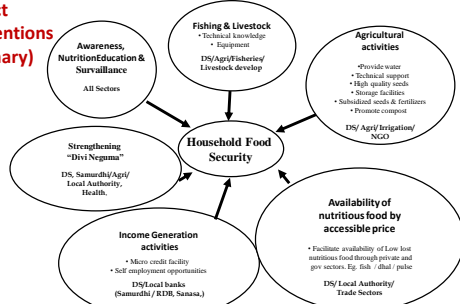
37

Indirect nutrition programs.....

7. Nutrition promotion programs & physical fitness programs for employers & employees - Govt. workers are given half an hour for physical exercises at the work place
8. Advocacy programs for plantation managers, staff & owners
9. Poverty allowance for elderly & people with chronic diseases
 - Differ according to age >70 years 2000/=
 - Disable/CKD 3000/month
10. Pension scheme for govt. workers and the EPF and ETF in private workers
11. Healthy Life Centers (HLC) 35-65 years

38

Indirect interventions (summary)



39

06. Nutrition response in emergencies

• Typical responses to nutritional emergencies

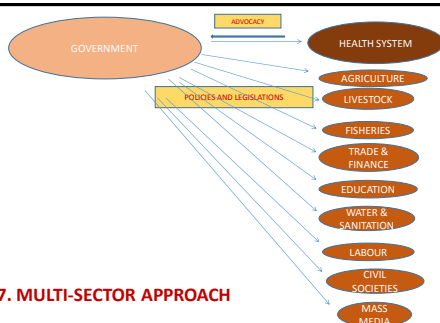
- Food aid
- The general ration
- Food for work
- Emergency school feeding
- Supplementary feeding
- Therapeutic care

• Non-food interventions

- Livelihood support
- Infant and young child feeding
- Health interventions

40

07. MULTI-SECTOR APPROACH



41



Thank
You!!!

42