## Major Issues in Women's Nutrition

1. Inadequate weight and height

Chronic malnutrition

# The Intergenerational Cycle of Malnutrition



# Women's Malnutrition: A Life-Cycle Issue (1)

- Infancy and early childhood (0-24 months)
  - Suboptimal breastfeeding practices
  - Inadequate complementary foods
  - Infrequent feeding
  - Frequent infections
- Childhood (2-9 years)
  - Poor diets
  - Poor health care
  - Poor education

### Women's Malnutrition: A Life-Cycle Issue (2)

#### Adolescence (10-19 years)

- Increased nutritional demands
- Greater iron needs
- Early pregnancies

#### Pregnancy and lactation

- Higher nutritional requirements
- Increased micronutrient needs
- Closely-spaced reproductive cycles

# Women's Malnutrition: A Life-Cycle Issue (3)

#### Throughout life

- Food insecurity
- Inadequate diets
- Recurrent infections
- Multiple pregnancies
- Frequent parasites
- Poor health care
- Heavy workloads
- Gender inequities

# Consequences of Women's Chronic Energy Deficiency

- Infections
- Obstructed labor
- Maternal mortality
- Low birth weight
- Neonatal and infant mortality

## Major Issues in Women's Nutrition

2. Micronutrient deficiencies

Iron

Vitamin A

**lodine** 

## Consequences of Women's Anemia

- Maternal deaths
- Reduced transfer of iron to fetus
- Low birth weight
- Neonatal mortality
- Reduced physical capacity
- Impaired cognition

# Causes of Women's Vitamin A Deficiency

- Inadequate intake
- Recurrent infections

Reproductive cycles



### Consequences of Vitamin A Deficiency in Pregnancy (1)

### Increased risk of:

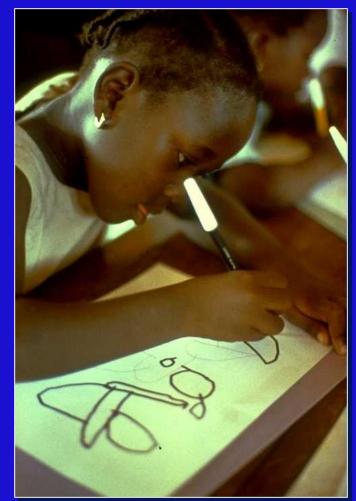
- Night blindness
- Maternal mortality
- Miscarriage
- Stillbirth
- Low birth weight
- Reduced transfer of vitamin A to fetus

### Pregnancy Outcomes of Iodine Deficient Women: Consequences of Iodine Deficiency on Intelligence

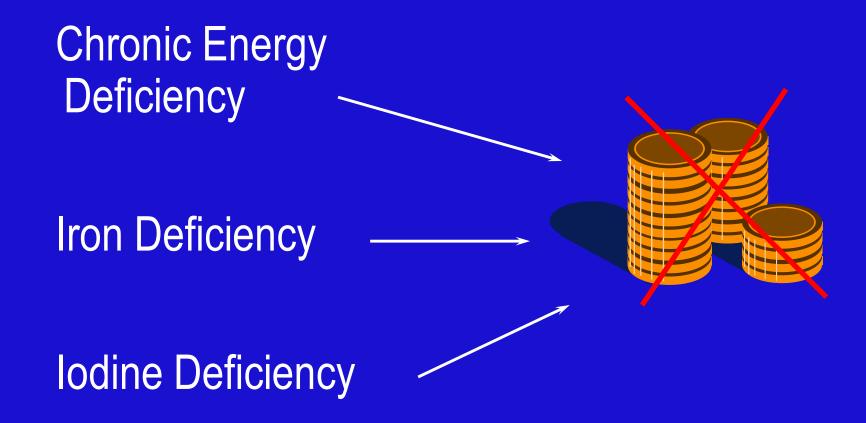


## Consequences of Iodine Deficiency on Education

- Educability
- Drop-out rates
- Under utilization of school facilities



### Consequences of Women's Malnutrition on Productivity



### Improving Women's Height

- Increase birth weight
- Enhance infant growth
- Improve adolescent growth
   Improving Women's Weight
- Increase caloric intake
- Reduce energy expenditure
- Reduce caloric depletion

# ENA to Improve Women's Nutrition

#### Pregnancy: (extra 200 kcal/day needed)

- Eat 1 additional meal a day; diverse diet
- Reduce workload

#### Lactation: (extra 650 kcal/day needed)

- Eat 2 additional meals per day; diverse diet
- Reduce workload

#### Recommendations to Improve Maternal Nutrition





. Adequate weight gain (12-14 kg) in regnancy

. Diverse diet: micronutrients and protein by onsuming 5 or more defined food groups

Daily iron and folic acid tablets for 180 days

5. Daily calcium tablets for 180 days

### Parasitic control...

#### Reduce parasite transmission

- Improve hygiene, sanitation, wearing shoes
- Increase access to treatments

#### Malaria:

- In malaria areas, seek anti-malaria treatment if high fever
- Sleep under mosquito net (ITN)

#### Worms:

Give one dose Mebendazole (500 mg) during 3<sup>rd</sup> trimester

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Money!
Time!
Talent!
Energy!