

## Healthy Diet in Children: Facts and Keys

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### Abstract

Consuming a healthy diet throughout the lifecourse helps prevent malnutrition in all its forms as well as a range of Non-communicable diseases (NCDs) and conditions. But the increased production of processed food, rapid urbanization and changing lifestyles have led to a shift in dietary patterns. People are now consuming more foods high in energy, fats, free sugars or salt/sodium, and many do not eat enough fruit, vegetables and dietary fibre such as whole grains. In the first 2 years of a child's life, optimal nutrition fosters healthy growth and improves cognitive development. It also reduces the risk of becoming overweight or obese and developing NCDs later in life. Nutrition for kids is based on the same principles as nutrition for adults. Everyone needs the same types of nutrients; such as vitamins, minerals, carbohydrates, protein and fat. Children, however, need different amounts of specific nutrients at different ages.

**Key Words:** Healthy diet, Children, Nutrition.

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## 1- Introduction



Healthy eating means consuming the right quantities of foods from all food groups in order to lead a healthy life. Diet is often referred to as some dietary regimen for losing weight. However, diet simply means what food we eat in the course of a 24-hour, one week, or one month, etc. period. A good diet is a nutritional lifestyle that promotes good health. A good diet must include several food groups because one single group cannot provide everything a human needs for good health.

A healthy diet is one that helps maintain or improve overall health. A healthy diet provides the body with essential nutrition: fluid, adequate essential amino acids from protein, essential fatty acids, vitamins, minerals, and adequate calories. The requirements for a healthy diet can be met from a variety of plant-based and animal-based foods. A healthy diet supports energy needs and provides for human nutrition without exposure to toxicity or excessive weight gain from consuming excessive amounts. Where lack of calories is not an issue, a properly balanced diet (in addition to exercise) is also thought to be important for lowering health risks, such as obesity, heart disease, type 2 diabetes, hypertension and cancer. The exact make-up of a diversified, balanced and healthy diet will vary depending on individual needs (e.g. age, gender, lifestyle, degree of physical activity), cultural context, locally available foods and dietary customs. But basic principles of what constitute a healthy diet remain the same. In the first 2

years of a child's life, optimal nutrition fosters healthy growth and improves cognitive development. It also reduces the risk of becoming overweight or obese and developing NCDs later in life (1-3).

Advice on a healthy diet for infants and children is similar to that for adults, but the following elements are also important.

- Infants should be breastfed exclusively during the first 6 months of life.
- Infants should be breastfed continuously until 2 years of age and beyond.
- From 6 months of age, breast milk should be complemented with a variety of adequate, safe and nutrient dense complementary foods. Salt and sugars should not be added to complementary foods (4).

### 1-1: Practical advice on maintaining a healthy diet



Fruit and vegetables are rich in vital vitamins, minerals and fiber

#### 1-1-1: Fruits and Vegetables

Eating at least 400 g, or 5 portions, of fruits and vegetables per day reduces the risk of NCDs, and helps ensure an adequate daily intake of dietary fibre (6). In order to improve fruit and vegetable consumption you can:

- always include vegetables in your meals

- eat fresh fruits and raw vegetables as snacks
- eat fresh fruits and vegetables in season
- eating a variety of choices of fruits and vegetables.



### 1-1-2: Fats

Reducing the amount of total fat intake to less than 30% of total energy intake helps prevent unhealthy weight gain in the adult population. Also, the risk of developing NCDs is lowered by reducing saturated fats to less than 10% of total energy intake, and trans fats to less than 1% of total energy intake, and replacing both with unsaturated fats (6-8).

*Fat intake can be reduced by:*

- changing how you cook – remove the fatty part of meat; use vegetable oil (not animal oil); and boil, steam or bake rather than fry;
- avoiding processed foods containing trans fats; and
- limiting the consumption of foods containing high amounts of saturated fats (e.g. cheese, ice cream, fatty meat).

### 1-1-3: Salt, sodium and potassium

Most people consume too much sodium through salt (corresponding to an average of 9–12 g of salt per day) and not enough potassium. High salt consumption and insufficient potassium intake (less than 3.5 g) contribute to high blood pressure, which

in turn increases the risk of heart disease and stroke. 1.7 million deaths could be prevented each year if people's salt consumption were reduced to the recommended level of less than 5 g per day (9-11).

People are often unaware of the amount of salt they consume. In many countries, most salt comes from processed foods (e.g. ready meals; processed meats; cheese and salty snacks) or from food consumed frequently in large amounts (e.g. bread). Salt is also added to food during cooking (e.g. bouillon, stock cubes, soy sauce and fish sauce).

*You can reduce salt consumption by:*

- not adding salt, soy sauce or fish sauce during the preparation of food
- not having salt on the table
- limiting the consumption of salty snacks
- choosing products with lower sodium content.

Some food manufacturers are reformulating recipes to reduce the salt content of their products, and it is helpful to check food labels to see how much sodium is in a product before purchasing or consuming it. Potassium, which can mitigate the negative effects of elevated sodium consumption on blood pressure, can be increased with consumption of fresh fruits and vegetables.

### 1-1-4: Sugars

The intake of free sugars should be reduced throughout the life course (5). Evidence indicates that in both adults and children, the intake of free sugars should be reduced to less than 10% of total energy intake, and that a reduction to less than 5% of total energy intake provides additional health benefits (6, 12, 13). Free sugars are all sugars added to foods or drinks by the

manufacturer, cook or consumer, as well as sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates.

Consuming free sugars increases the risk of dental caries (tooth decay). Excess calories from foods and drinks high in free sugars also contribute to unhealthy weight gain, which can lead to overweight and obesity.

*Sugars intake can be reduced by:*

- limiting the consumption of foods and drinks containing high amounts of sugars (e.g. sugar-sweetened beverages, sugary snacks and candies); and
- eating fresh fruits and raw vegetables as snacks instead of sugary snacks.

## 2- Materials and Methods

The current study is a review survey which was conducted to evaluate of current status of children healthy diet by studying WHO website, Centers for Disease Control and Prevention (CDC), United Nations Children's Fund (UNICEF) and United Nations (UN) websites. To evaluate the texts and websites, the singular or combination forms of the following keywords were used: "Healthy Diet", "Children", "Nutrition" and "Worldwide".

## 3- Results

- A healthy diet helps protect against malnutrition in all its forms, as well as noncommunicable diseases (NCDs), including diabetes, heart disease, stroke and cancer.
- Unhealthy diet and lack of physical activity are leading global risks to health.

- Healthy dietary practices start early in life – breastfeeding fosters healthy growth and improves cognitive development, and may have longer-term health benefits, like reducing the risk of becoming overweight or obese and developing NCDs later in life.
- Energy intake (calories) should be in balance with energy expenditure. Evidence indicates that total fat should not exceed 30% of total energy intake to avoid unhealthy weight gain, with a shift in fat consumption away from saturated fats to unsaturated fats, and towards the elimination of industrial trans fats.
- Limiting intake of free sugars to less than 10% of total energy intake is part of a healthy diet. A further reduction to less than 5% of total energy intake is suggested for additional health benefits.
- Keeping salt intake to less than 5 g per day helps prevent hypertension and reduces the risk of heart disease and stroke in the adult population.
- WHO Member States have agreed to reduce the global population's intake of salt by 30% and halt the rise in diabetes and obesity in adults and adolescents as well as in childhood overweight by 2025 (6-17).

### 3-1: Global Nutrition Targets 2025: Infographics

An infographic (information graphic) is a representation of information in a graphic format designed to make the data easily understandable at a glance. The infographics (Figures 1-6) help present ideas on how nutrition effects your health in a clear and concise way.

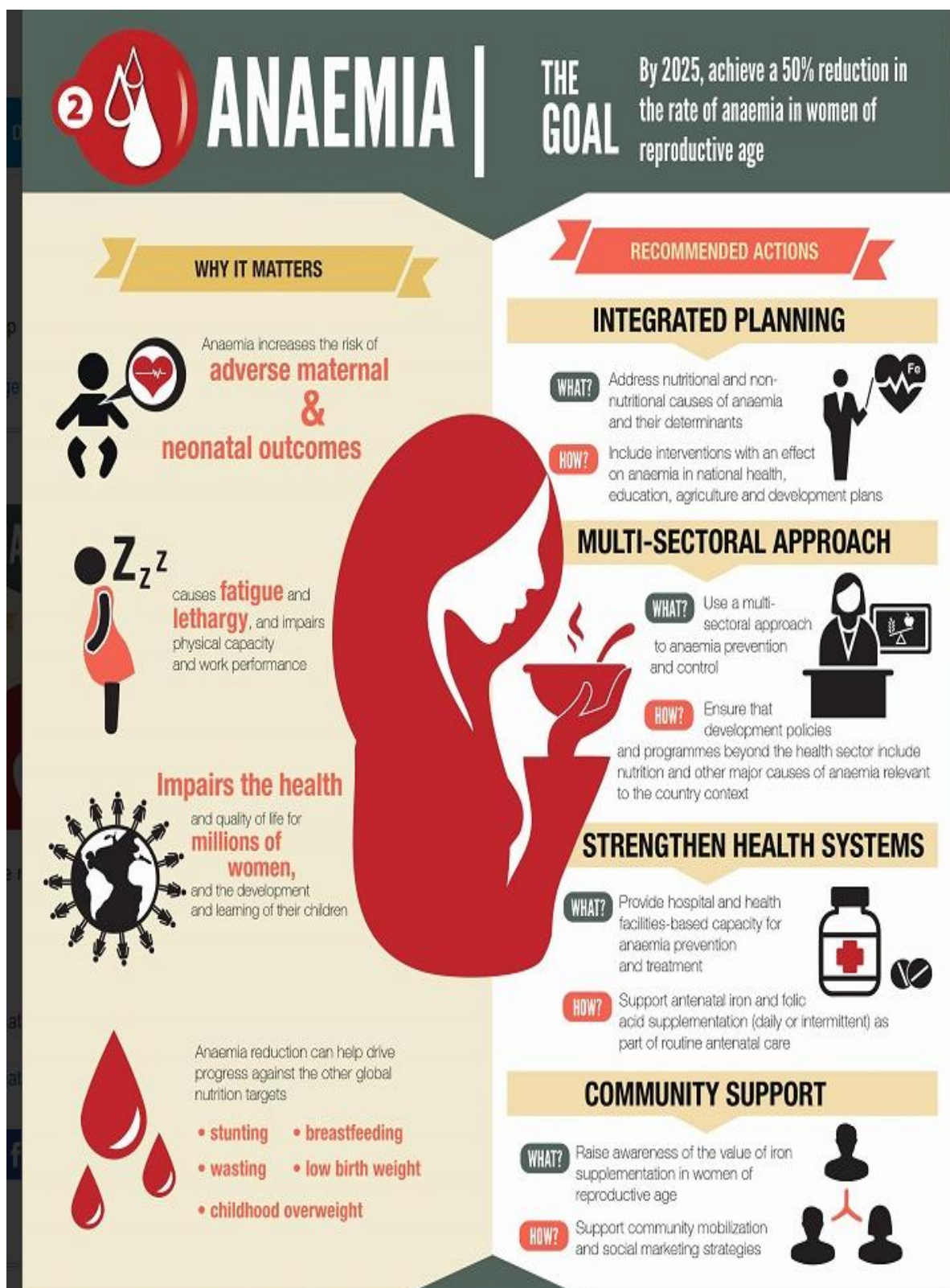


Fig.1: Anaemia infographic

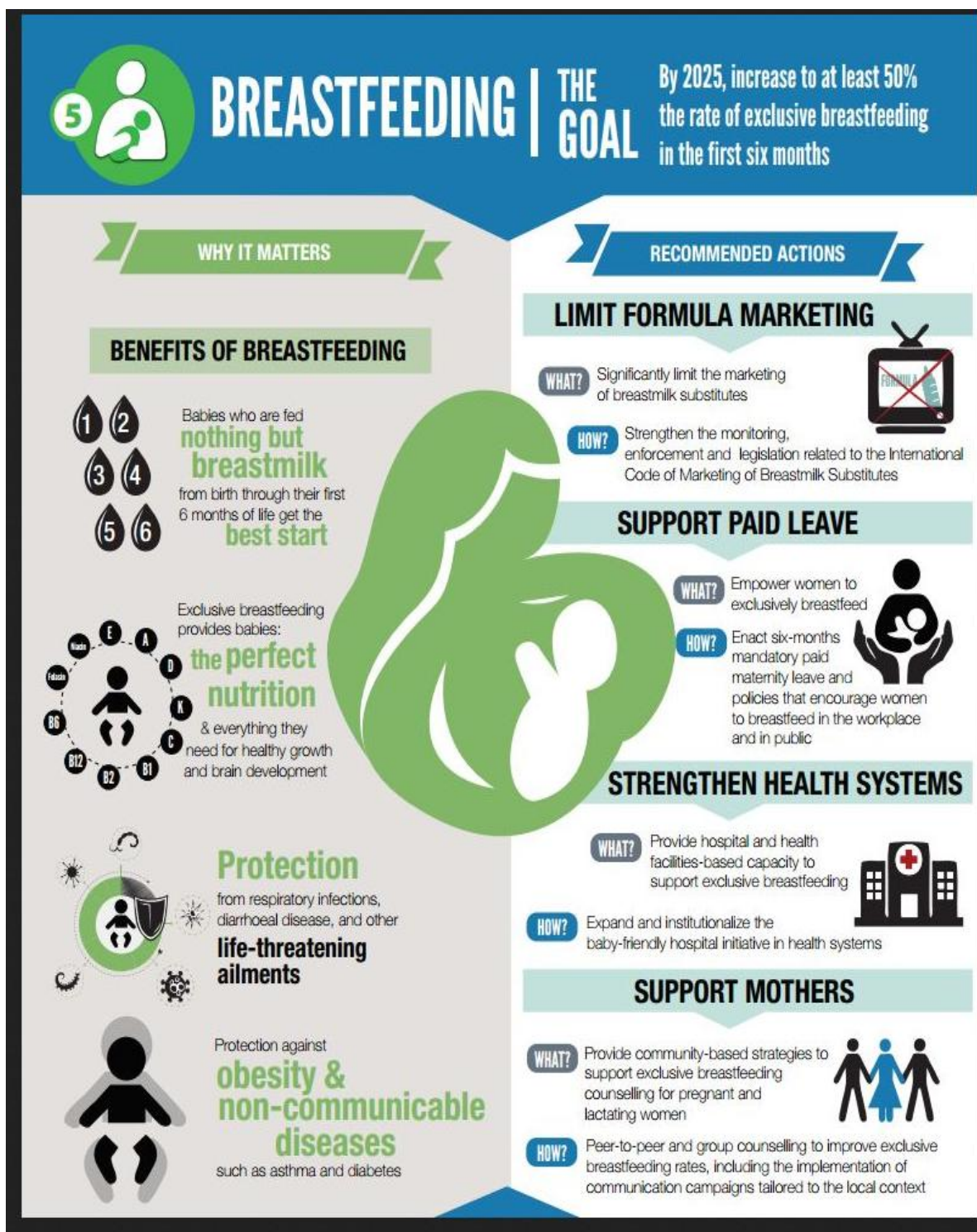


Fig.2: Breastfeeding infographic

Exclusive breastfeeding provides babies the perfect nutrition.



Fig.3: Stunting infographic

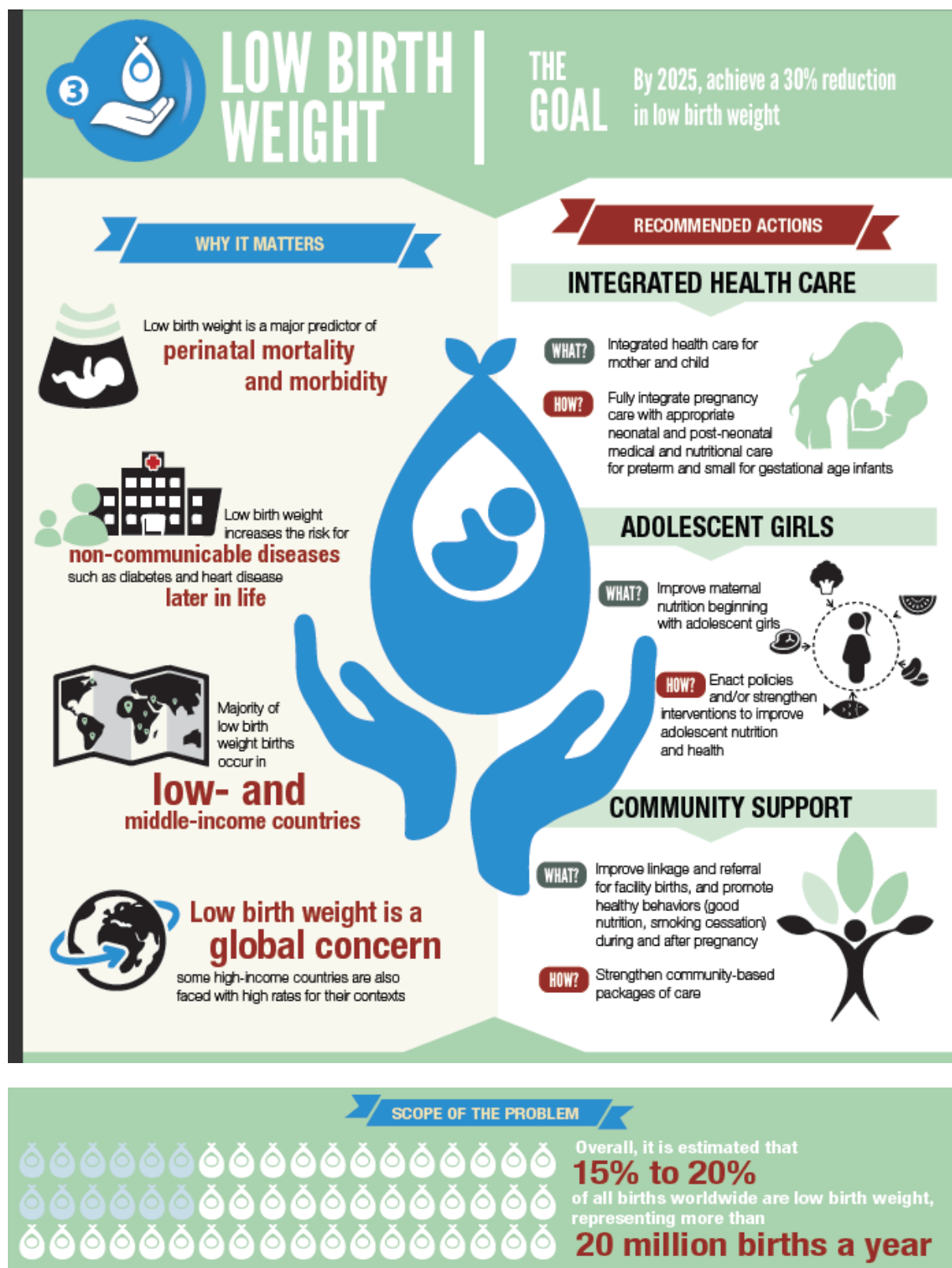


Fig.4: Low birth weight infographic



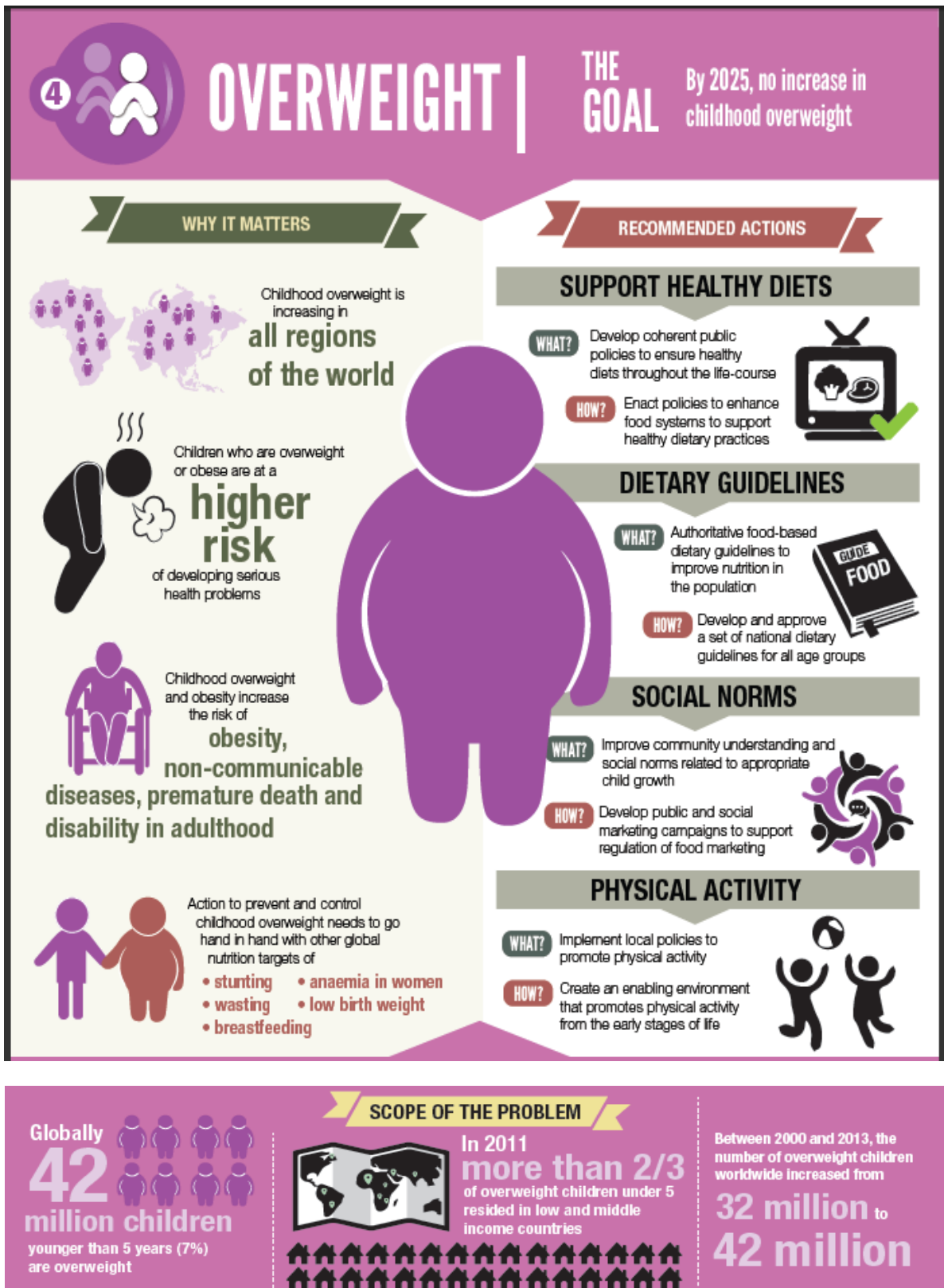


Fig.5: Overweight infographic



Fig.6: Wasting infographic

## 4- Conclusion

### 4-1: How to promote healthy diets

Diet evolves over time, being influenced by many factors and complex interactions. Income, food prices (which will affect the availability and affordability of healthy foods), individual preferences and beliefs, cultural traditions, as well as geographical, environmental, social and economic factors all interact in a complex manner to shape individual dietary patterns. Therefore, promoting a healthy food environment, including food systems which promote a diversified, balanced and healthy diet, requires involvement across multiple sectors and stakeholders, including government, and the public and private sector.

Governments have a central role in creating a healthy food environment that enables people to adopt and maintain healthy dietary practices.

Effective actions by policy-makers to create a healthy food environment include:

- ❖ Creating coherence in national policies and investment plans, including trade, food and agricultural policies, to promote a healthy diet and protect public health:
  - increase incentives for producers and retailers to grow, use and sell fresh fruits and vegetables;
  - reduce incentives for the food industry to continue or increase production of processed foods with saturated fats and free sugars;
  - encourage reformulation of food products to reduce the contents of salt, fats (i.e. saturated fats and trans fats) and free sugars;
  - establish standards to foster healthy dietary practices through ensuring the availability of healthy, safe and affordable food in pre-schools, schools,

other public institutions, and in the workplace;

- explore regulatory and voluntary instruments, such as marketing and food labelling policies, economic incentives or disincentives (i.e. taxation, subsidies), to promote a healthy diet; and
- encourage transnational, national and local food services and catering outlets to improve the nutritional quality of their food, ensure the availability and affordability of healthy choices, and review portion size and price.
- ❖ Encouraging consumer demand for healthy foods and meals:
  - promote consumer awareness of a healthy diet,
  - develop school policies and programmes that encourage children to adopt and maintain a healthy diet;
  - educate children, adolescents and adults about nutrition and healthy dietary practices;
  - encourage culinary skills, including in schools;
  - support point-of-sale information, including through food labelling that ensures accurate, standardized and comprehensible information on nutrient contents in food in line with the Codex Alimentarius Commission guidelines; and
  - provide nutrition and dietary counselling at primary health care facilities.
- ❖ Promoting appropriate infant and young child feeding practices:
  - implement the International Code of Marketing of Breast-milk Substitutes and subsequent relevant World Health Assembly resolutions;
  - implement policies and practices to promote protection of working mothers; and
  - promote, protect and support breastfeeding in health services and the community, including through the Baby-friendly Hospital Initiative.

## 4-2: World Health Organization

The World Health Organization (WHO) makes the following 5 recommendations with respect to both populations and individuals:

- Eat roughly the same amount of calories that your body is using. A healthy weight is a balance between energy consumed and energy that is 'burnt off'.
- Limit intake of fats, and prefer less unhealthy unsaturated fats to saturated fats and trans fats.
- Increase consumption of plant foods, particularly fruits, vegetables, legumes, whole grains and nuts.
- Limit the intake of sugar. A 2003 report recommends less than 10% simple sugars.
- Limit salt / sodium consumption from all sources and ensure that salt is iodized (2, 3).

*Other recommendations include:*

- Essential micronutrients such as vitamins and certain minerals.
- Avoiding directly poisonous (e.g. heavy metals) and carcinogenic (e.g. benzene) substances.
- Avoiding foods contaminated by human pathogens (e.g. *E. coli*, tapeworm eggs).

**5- Conflict of Interest:** None.

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