WHO/NMH/NHD/14.6

Global Nutrition Targets 2025

Childhood Overweight Policy Brief

TARGET:

No increase in childhood overweight

WHAT'S AT STAKE

In 2012, the World Health Assembly Resolution 65.6 endorsed a *Comprehensive implementation plan for maternal, infant and young child nutrition (1)*, which specified six global nutrition targets for 2025 *(2)*. This policy brief covers the fourth target: **no increase in childhood overweight**.[1] The purpose of this policy brief is to increase attention to, investment in, and action for a set of cost-effective interventions and policies that can help Member States and their partners prevent continued increases in overweight in children and ensure that the target is met.

There has been a dramatic rise in the numbers of children under 5 years of age who are overweight. According to the new 2013 United Nations Children's Fund (UNICEF), World Health Organization (WHO) and World Bank estimates *(4)*, between 2000 and 2013, the number of overweight children worldwide increased from 32 million to 42 million. The prevalence of childhood overweight is increasing in all regions of the world, particularly in Africa and Asia. Between 2000 and 2013, the prevalence of overweight in children under 5 years of age increased from 1% to 19% in southern Africa, and from 3% to 7% in south-east Asia. In terms of regional breakdowns in numbers of overweight children in 2013, there were an estimated 18 million overweight children under 5 years of age in Asia, 11 million in Africa and 4 million in Latin America and the Caribbean. Low levels of overweight in children under 5 years of age were observed in the regions of Latin America and the Caribbean, with little change over the last 13 years. Nevertheless, countries with large populations, such as Argentina, Brazil, Chile, Peru and the Plurinational State of Bolivia, observed levels of 7% and higher. If these increasing trends continue, it is estimated that the prevalence of overweight in children under 5 years of age will rise to 11% worldwide by 2025, up from 7% in 2012 *(5)*.

Children who are overweight or obese are at a higher risk of developing serious health problems, including type 2 diabetes, high blood pressure, asthma and other respiratory problems, sleep disorders and liver disease. They may also suffer from psychological effects, such as low self-esteem, depression and social isolation. Childhood overweight and obesity also increase the risk of obesity, noncommunicable diseases (NCDs), premature death and disability in adulthood. Finally, the economic costs of the escalating problem of childhood overweight and obesity are considerable, both in terms of the enormous financial strains it places on health-care systems and in terms of lost economic productivity.

[1] Overweight in children under 5 years of age is defined as weight-for-height >+2 standard deviations of the World Health Organization (WHO) child growth standards median *(3)*.

World Health Organization

1,000 DAYS

Overweight and obesity are complex and multifaceted problems. As a result, coherent and comprehensive strategies are needed to effectively and sustainably prevent and manage these conditions. In some countries, the epidemic of overweight and obesity exists alongside a continuing problem of undernutrition and micronutrient deficiencies, creating a "double burden" of nutrition-related health issues. Action to prevent and control childhood overweight and obesity, therefore, needs to go hand in hand with the actions to achieve other global nutrition targets of increasing the rate of exclusive breastfeeding and reducing stunting, anaemia in women of reproductive age, wasting and low birth weight.

Modernization and economic development have improved the standard of living and services available to people throughout the world. However, unfortunately, they have also had some negative consequences that have directly and indirectly led to poor dietary and physical activity patterns, which have contributed to the development of overweight and obesity, as well as diet-related NCDs.

There is increasing evidence indicating the importance of early life environment in mitigating the risk of obesity later in life. Intrauterine life, infancy and the preschool period have all been considered as critical periods during which the long-term regulation of energy balance may be programmed. Therefore, taking a life-course perspective (see Fig. 1) *(6)* has great potential for identifying the challenges, as well as opportunities, for taking action to address the increasing public health problem of overweight and obesity in children, with an emphasis on prevention in children under 5 years of age *(7)*.

There has been increasing recognition among the global public health community, as well as among national governments in many parts of the world, of the need to develop effective strategies for preventing and controlling childhood overweight and obesity. This led the World Health Assembly to set a target in 2012, aiming to achieve no increase in childhood overweight by 2025 *(1, 2)*. In May 2014, the Director-General of WHO also established a high-level Commission on Ending Childhood Obesity, to accelerate WHO's efforts in addressing the crisis of childhood overweight and obesity.

The global target on childhood overweight implies that the global prevalence of 7% in 2012 should not rise to 11% in 2025 as current trends would predict *(5)*. In addition, the number of overweight children under 5 years of age should not increase from the estimated 44 million in 2012 to 70 million in 2025 as forecasted *(5)*. It should also be highlighted that the target on childhood overweight is interlinked with other global nutrition targets. For example, suboptimum growth indicative of wasting has been shown to increase the risk of overweight and NCDs after the age of 2 years. Additionally, breastfeeding and good maternal health and nutrition are also shown to reduce the risk of children becoming overweight later in childhood and adolescence. Policy-makers should, therefore, consider prioritizing the following actions in order to ensure that there is no increase in the rate of overweight in children under 5 years of age:

- developing coherent public policies from production to consumption and across relevant sectors, through forming a cross-governmental task force, to oversee the development and/or strengthening of policies to ensure healthy diets throughout the life-course;

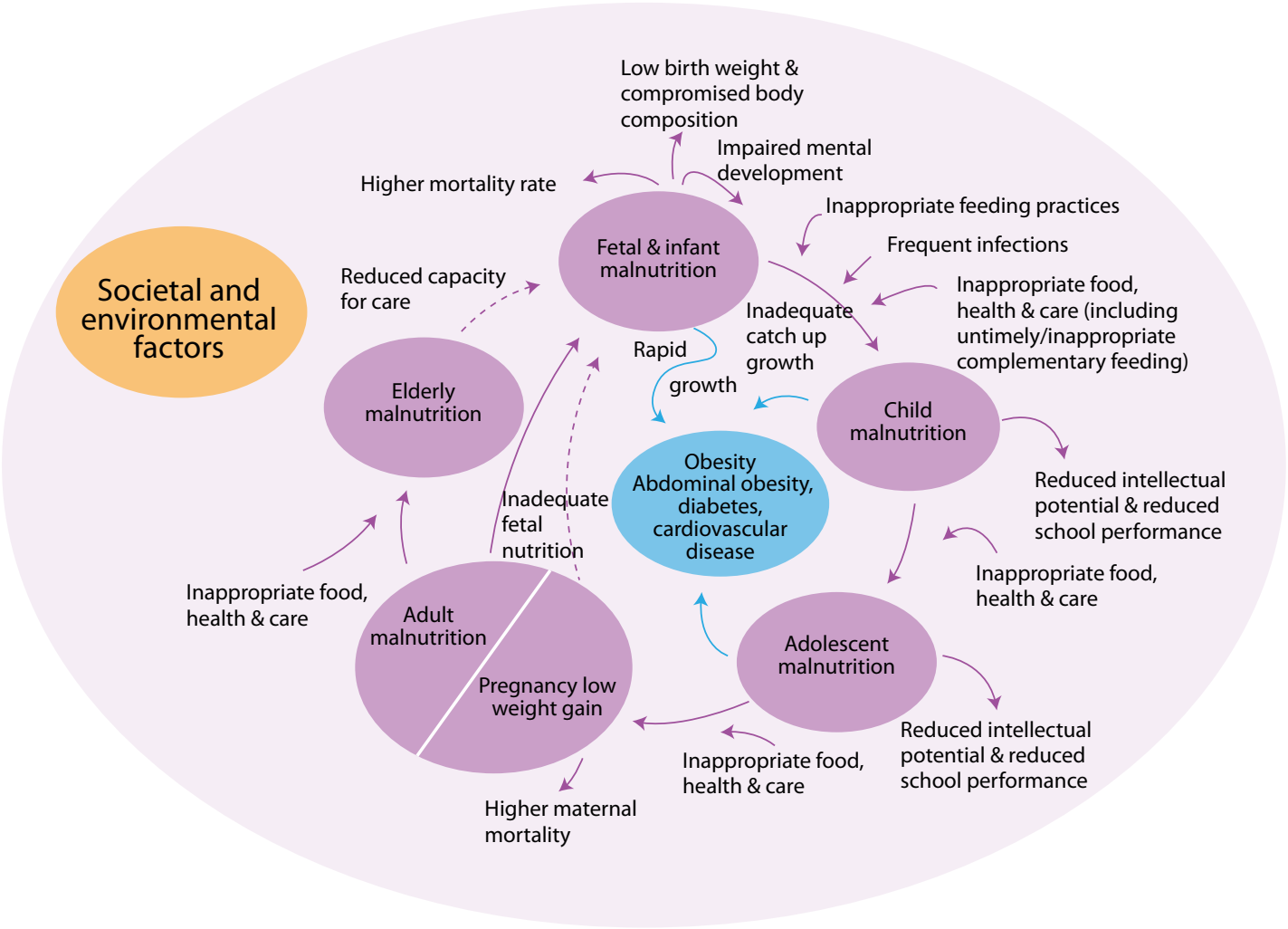
- ensuring that there is a set of nationally approved, authoritative food-based dietary guidelines for all age groups, which can underpin actions to improve nutrition in the population;

- taking measures to address early life exposures, to improve nutritional status and growth patterns, including: improvement of community understanding and social norms related to appropriate child growth and development; enhancement of the food system to support healthy dietary practices throughout the life-course; regulation of the marketing of food and non-alcoholic beverages to children; and regulation of the marketing of complementary foods;

- supporting research into the root causes of overweight and obesity, including changes in the food system in the past 30–40 years, and research on the availability of healthy foods, methods and strategies to ensure the provision of year-round access to food that meets people's nutritional needs and promotes safe and diversified healthy diets;

- creating an enabling environment that promotes physical activity, in order to address sedentary lifestyle from the early stages of life

FIG. 1. **LIFE-COURSE: THE PROPOSED CAUSAL LINKS** *(6)*



FRAMEWORK FOR ACTION

Achievement of the target to halt the increase in overweight in children under 5 years of age is possible through the right mix of policies and actions. These policies and actions must be aimed at improving maternal health and nutritional status and infant and young child feeding practices, focusing on the first 1000 days from a woman's pregnancy to her child's second birthday. These policies and actions to improve children's health and nutrition and prevent childhood overweight require considerable political will, along with investment of resources and the participation of a wide variety of sectors and stakeholders.

Policies for preventing childhood overweight can be informed by several types of evidence, including evidence of the main behavioural and social risk factors leading to unhealthy weight gain in children; evidence of policies that have helped to reduce the influence of these risk factors; and evidence from direct intervention trials among parents, infants, children and youth, aimed at changing behaviours.

Experience in several countries has shown that successful behaviour change during childhood can be achieved through a combination of population-based measures, implemented both at the national level and as part of local school- and community-based programmes *(8)*. Population-based prevention requires that governments take responsibility for policy development and implementation, acknowledging the wider social and economic factors that contribute to disease risk. Although local intervention allows action to be tailored to meet the specific context and nature of a problem, national leadership (and funding) can ensure the effectiveness and sustainability of action at a population level, through changes in social and behavioural norms.

Table 1 shows examples of a range of potential actions that have a strong rationale and evidence base *(9)*. In selecting actions for implementation, their likely impact, reach and sustainability, as well as their feasibility and effects on reducing health inequalities, should be taken into consideration. In many of the suggested actions, the beneficiaries will include other age groups in addition to children under 5 years of age.

TABLE 1. EXAMPLES OF INTERVENTIONS FOR REDUCING THE RISK OF UNHEALTHY WEIGHT GAIN IN CHILDHOOD

Area for intervention: addressing early life exposures to improve nutritional status and growth patterns	
Actions	**Implementation platform**
Counselling in pre-pregnancy and pregnancy and providing support in the postnatal period for exclusive breastfeeding during the first 6 months and continued breastfeeding until 2 years of age and beyond with appropriate complementary feeding	Health services, community health workers, bilateral/international agencies
Targeted subsidies for nutritious foods or provision of foods for disadvantaged, vulnerable women: • during pre-pregnancy and the pregnancy period, as required • mothers with infants (0–6 months) and young children 6-23 months of age	Health services, social services, local government, NGOs, bilateral/international agencies
Implementing Baby-friendly Hospital Initiatives[a]	Health services, consumer demand
Providing breastfeeding facilities in out-of-home environments	Local government, retailers and community facility providers
Supporting breastfeeding for working women through paid maternity leave and provision of breastfeeding facilities in the workplace	Employers, including government offices
Regulating the marketing of breast-milk substitutes and inappropriate complementary foods, through implementation of the *International code of marketing of breast-milk substitutes (11)*	National regulatory bodies
Regulating the marketing of food and non-alcoholic beverages to children and addressing early life exposures to food marketing	National regulatory bodies
Reviewing supplementary feeding programmes that encourage rapid weight gain without linear growth in infants and young children	National government, NGOs, bilateral/international agencies
Area for intervention: improving community understanding and social norms	
Actions	**Implementation platform**
Developing and disseminating government-endorsed food-based dietary guidelines, including for infants and children, and nutrient profiling to classify food products as promoting or undermining the guidelines, as well as marketing	National government, international agencies
Setting standards and guidelines for the provision of food at preschools/nurseries, including private early-childhood development centres, schools and hospitals, with support for licensing and inspection[b]	National and local government services
Developing public campaigns to disseminate information on healthy diet *(14)*	Health services, NGOs (including consumer organizations), bilateral/international agencies, in collaboration with social communications and advertising firms
Using social marketing campaigns to support regulation of food marketing and for improving standards for the provision of foods at preschools, nurseries and schools	Government information services, NGOs, bilateral/ international agencies
Reviewing TV programmes for messages about infant feeding and child weight, as well as height and physical activity, to ensure consistency with appropriate national and international guidelines	Government communications and/or media regulatory agencies
Providing outlets for fresh drinking water, wherever children and others gather (i.e. in preschools, nurseries and schools, play areas, parks, leisure facilities, primary health-care centres and hospitals)	National and local government, local communities, schools, service providers, NGOs, bilateral agencies
Implementing local policies for childhood activity and promotion of physical activity	National and local governments and local communities

Area for intervention: addressing exposure of children to marketing of foods	
Actions	**Implementation platform**
Developing government-led criteria (i.e. through developing a nutrient profile model) or agreed regional standards for restricting children's exposure, including cross-border media exposure, and a timetable for implementing regulation for marketing food and non-alcoholic beverages to children, including setting up and monitoring the implementation[c]	National government, government and/or regional communications and/or media regulators
Imposing taxes (or removing tax exemptions) on advertising for foods high in saturated fats, trans-fats, free sugars or salt/sodium, as well as sugar-sweetened beverages[d]	Government taxation authority
Removing incentives for unhealthy dietary practices, such as provision of vending machines in schools and unhealthy meals, beverages and snacks in the classroom (including preschools and nurseries) and access to fast-food caterers near preschools, nurseries and schools[e]	National and local government
Removing incentives to unhealthy impulse purchases of foods high in saturated fats, trans-fats, free sugars or salt/sodium (i.e. snacks, confectionery) at shop checkouts, and investing in promotion of fresh fruits and vegetables (and in accessible locations)	Retailers
Improving consumer information with improved nutrition labelling that follows the guideline of the *Codex Alimentarius (20)*	Government food standard agencies and authorities
Area for intervention: influencing the food system and food environment	
Actions	**Implementation platform**
Exploring and implementing regulatory and voluntary instruments – such as labelling policies, economic incentives (i.e. subsidies) or disincentives (i.e. sales taxes) – to create a food environment conducive to healthy diets	National and local government taxation authority, contracting and purchasing departments of national and local public catering service providers
Establishing food- or nutrient-based standards to make healthy diets and safe drinking water accessible in public facilities, such as childcare facilities, including preschools, nurseries and schools	National and local government, national regulatory bodies
Supporting small shops selling perishable foods in disadvantaged communities (e.g. freezer units for frozen fish, vegetables)[f]	National and local government, NGOs
Area for intervention: improving nutrition in neighbourhoods	
Actions	**Implementation platform**
Ensuring planning and regulations to limit the availability of fast-food outlets near preschools, nurseries and schools	Local and national planning authorities

[a] This initiative of WHO and UNICEF aims to improve uptake of breastfeeding and has been implemented in many countries. Extensive advice and guidance can be found in reference *(10)*.

[b] The use of government purchasing power as a lever to encourage producers to improve standards and to promote markets for certain products has been recognized for several purposes. Using procurement standards as an incentive for improving nutrition has been described extensively in a publication from the United States Centers for Disease Control and Prevention included in reference *(12).* See also the guidance document from Public Health Law and Policy in reference *(13)*.

[c] General restrictions on marketing directly to children are in place in some countries today, including Canada and Sweden; specific restrictions designed to limit children's exposure to the marketing of certain food and non-alcoholic beverage products are in place in several countries, including Ireland, South Korea and the United Kingdom of Great Britain and Northern Ireland (UK). Guidance is available in reference *(15)*.

[d] Taxes have been imposed on foods or nutrients (e.g. trans-fats), with the stated or implied aim of improving dietary choices, in many countries, including Denmark, France, Hungary, Iceland, Mexico and the United States of America (USA). See material collated in references *(16, 17)*.

[e] Where national or local authorities are responsible for the food provided in educational establishments, nutritional standards and inspection reports can improve the students' diets. Examples are the USA where the Healthy, Hunger-Free Kids Act of 2010 specifies standards for foods sold in schools *(18)*, and Scotland in the UK *(19)*.

[f] National and local authorities can provide support for the promotion of healthier, more nourishing products through retailer incentives. Examples include Scotland's The Healthy Living Programme, jointly funded by the Scottish Government and Scottish Grocers Federation, which provides shops with display facilities to promote "fresh, healthy produce"; information can be found in reference *(21)*.

ACTIONS TO DRIVE PROGRESS IN ENSURING NO INCREASE IN CHILDHOOD OBESITY

Childhood overweight is interlinked with the five other global nutrition targets of increasing the rate of exclusive breastfeeding and reducing stunting, anaemia in women of reproductive age, wasting and low birth weight. This presents opportunities for synergistic policy and programmatic approaches to address multiple targets simultaneously, using multisectoral platforms that are being established in a growing number of countries to improve maternal, infant and young child nutrition.

To achieve the target of no increase in overweight in children under 5 years of age, national authorities will need to undertake regular monitoring of the nutritional status of children. They should also invest in monitoring of the status of mothers in pregnancy and children in infancy, with attention to relevant indicators for the interventions they are including in their portfolio of initiatives for preventing unhealthy weight gain in childhood. Several of these indicators will also serve to support monitoring of the drivers of adolescent and adult obesity and help support policies for meeting the target to halt the rise in adolescent and adult obesity by 2025 *(22)*. Countries will have access to data of varying depth and completeness and will have to make practical decisions about the feasibility of collecting adequate data and the frequency of obtaining those data in order to monitor trends.

National authorities will also need to decide on their priority interventions, taking into consideration the costs and sustainability of implementation. In some cases, such as controls on marketing food to children or implementation of nutrition labelling, a sustained intervention can be enforced through regulation, with relatively low costs to both government and private companies. In other cases, such as support for breastfeeding through better maternity leave, the costs to employers and for social support payments to be paid by private companies may

National government authorities need to assess the best interventions for maximizing the nutrition security of their population, taking into account any existing problems of undernutrition, as well as childhood overweight and obesity, especially among low-income households or in areas with inadequate supplies of foods that contribute to healthy diet. Infant feeding programmes need special attention, especially those providing guidance on the most appropriate forms of complementary feeding. Supplementary feeding programmes also need to ensure that the programmes and the foods supplied take full account of the need to avoid unhealthy weight gain and ensure adequate linear growth in the first 2–3 years of life. Energy-dense foods may not be the most appropriate if they encourage weight gain without ensuring linear growth and age-appropriate height-for-weight.

Tackling childhood overweight is an investment that will reap considerable rewards over the long term. Working to halt the rise in childhood overweight and obesity will require political will and investment to ensure adequate regulatory oversight and accountability of commercial interests, as well as institutional investment to strengthen capacities and change social norms. However, these investments will reduce the future financial burden on already taxed health systems and ensure optimal growth for a healthy and productive population.

SUGGESTED POLICY ACTIONS

The target of no increase in childhood overweight may appear modest because it implies acceptance of the existing high levels of overweight and obesity. However, the drivers of childhood overweight and obesity – over-consumption of an unhealthy diet and low physical activity – continue to expand worldwide and will continue to increase the risk of childhood overweight and obesity.

Commercial interests that contribute to the expansion of overweight and obesity need to be regulated, while