Childhood obesity: Regional overview and recommended actions to end childhood obesity

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Malnutrition

- Malnutrition is not just about ‘undernutrition’
- Overweight / obesity is also a form of malnutrition

- Global commitments to end all forms of malnutrition
  - Global Nutrition Targets
  - Global NCD Targets
  - ICN2/ Rome Declaration on Nutrition
  - UN Decade of Action on Nutrition
  - SDGs (Targets 2.2 & 3.4)
Our world today is also characterized by new, unsustainable and distorted food and eating systems with easy access to calorie-rich and nutrient-poor food.
Nutrition situation
(children <5yrs; JME 2015)

SDG indicator: prevalence of malnutrition among children under 5
disaggregated by type: **wasting and overweight** (weight for height)
Proportion (%) of children under 5 who are overweight or obese

Urban/rural difference in childhood overweight (<5 yr)

Source: WHO Global Database on Child Growth and Malnutrition (2015); National Statistical Office of Mongolia (MICS 2010); Solomon Islands National Statistics Office (DHS 2006-07); Tonga Department of Statistics (DHS 2012)
Adolescent overweight (13-15 yr old)

Source: Global School Based Health Survey, percentage of students who were overweight (> +1 SD from median for BMI by age and sex)
Childhood overweight / obesity by wealth quintile

Prevalence of obesity among children 2–14 years of age according to neighbourhood deprivation and sex in New Zealand, 2012–2013

Prevalence of overweight or obesity in children under the age of 5 years from lowest to highest household wealth quintiles

Sources:
National Statistical Office of Mongolia
Viet Nam General Statistics Office
Consumption of soft drinks (children 13-15 years)
One or more/day (during past 30 days)

Source: Global School-based Health Survey (GSHS)
Grams sugar/capita/day
(package food & soft drinks in retail volume terms)
Source: EUROMONITOR 2015
Volume (kilograms/litres per capita) of processed foods and soft drink sales, 1998-2013 with projections to 2017

Carbonated soft drink is the “top product vector” for sugar consumption in Asia (Baker and Friel, 2014 Obesity Reviews).

Recommended actions

• Addressing “all forms of malnutrition” requires:
  
  – Life course approach
  
  – Food system approach
  (Policy options for healthy diets)
Global commitments

Voluntary Global Targets

1. 45% reduction in the number of children under 5 who are stunted
2. 50% reduction of anemia in women of reproductive age
3. 30% reduction in low birth weight
4. No increase in childhood overweight
5. Increase the rate of exclusive breastfeeding in the first 6 months up to at least 50%
6. Reduce and maintain childhood wasting to less than 5%

United Nations Decade of Action on Nutrition 2016-2025
Malnutrition

ICN2 outcomes

- Rome Declaration on Nutrition
  Political statement of 10 commitments for more effective and coordinated action to improve nutrition

- Framework for Action
  Voluntary technical guide of 60 recommendations for implementation of political commitments
**Target 2.2**

By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

**Target 3.4**

By 2030 reduce by one-third pre-mature mortality from non-communicable diseases (NCDs) through prevention and treatment, and promote mental health and well-being.
UNITED NATIONS DECADE OF ACTION ON NUTRITION
2016-2025

Recommendations included in the ICN2 Framework for Action:

- Sustainable food systems for healthy diets
- Aligned health systems providing universal coverage of essential nutrition actions
- Social protection and nutrition education
- Trade and investment for improved nutrition
- Enabling food and breastfeeding environments
- Review, strengthen and promote nutrition governance and accountability
The WHO Global Nutrition Targets 2025 and Global NCD Targets for 2025 provide concrete goals against which progress toward ending malnutrition in all its forms can be measured.

**TARGETS**

Children 0-5yrs

**INDICATOR**

Prevalence of weight for height $\geq 2$SD in children under five
Global targets and indicators

**TARGETS**

- Halt the increase in diabetes and obesity (Adolescents)
- A 10% relative reduction in prevalence of insufficient physical activity (Adolescents)

**INDICATOR**

- Prevalence of overweight and obesity in adolescents (defined according to the WHO growth reference for school-aged children and adolescents. Overweight: 1SD BMI for age and sex; Obese: 2D BMI for age and sex)
- Prevalence of insufficiently physically active adolescents, defined as less than 60 minutes of moderate to vigorous intensity activity daily
6 recommended actions in 3 strategic objectives
Strategic objective 1:
Tackle the obesogenic environment and norms
Implement comprehensive programmes that promote the intake of healthy foods and reduce the intake of unhealthy foods and sugar-sweetened beverages by children and adolescents
1.1 Ensure that appropriate & context specific nutrition information & guidelines are developed in a simple, understandable & accessible manner to all (nutrition literacy)
1.2 Restrict marketing of unhealthy FNABs to reduce the exposure of children to the marketing of unhealthy foods
1.3 Develop nutrient profiles to identify unhealthy foods and beverages

What’s unhealthy and should NOT be marketed to children?!

Nutrient profiling is “the science of classifying or ranking foods according to their nutritional composition for reasons related to preventing disease and promoting health”
1.4 Implement interpretive back & front of pack labelling

NRV-NCD (Codex update 2013)
- Total fat
- Sugars
- Salt

Each 1/2 pack serving contains

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<thead>
<tr>
<th></th>
<th>Calories</th>
<th>Sugar</th>
<th>Fat</th>
<th>Sat Fat</th>
<th>Salt</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED</td>
<td>353</td>
<td>0.9g</td>
<td>20.3g</td>
<td>10.8g</td>
<td>1.1g</td>
</tr>
<tr>
<td>LOW</td>
<td></td>
<td>1%</td>
<td></td>
<td>29%</td>
<td>18%</td>
</tr>
<tr>
<td>MED</td>
<td></td>
<td>18%</td>
<td></td>
<td>54%</td>
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<tr>
<td>HIGH</td>
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<td>MED</td>
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</table>

Source: Food Standards Agency
1.5 Implement an effective tax on sugar-sweetened beverages.
Evidence shows:

- Appropriately designed fiscal policies have considerable potential for promoting healthier diets, improving weight outcomes, and reducing health and economic burden of NCDs.

- Taxes that raise the prices of sugar sweetened beverages by 20 % or more could lead to more than proportional reductions in SSB consumption and net reductions in caloric intake.
1.6 Require settings such as schools, child-care settings, children’s sports facilities and events to create healthy food environments
Implement comprehensive programmes that promote physical activity and reduce sedentary behaviours in children and adolescents

Recommendation 2
2.1 Provide guidance to children, adolescents, parents, caregivers, teachers & health professionals on healthy body size, physical activity, sleep behaviours & appropriate use of screen-based entertainment

2.2 Ensure adequate facilities are available on school premises and in public spaces for physical activity during recreational time for all children

WHO recommends that children aged 5–17 should accumulate at least 60 minutes of moderate to vigorous intensity physical activity daily.
Physical activity for early years (birth – 5 years)
Active children are healthy, happy, school ready and sleep better
- Builds relationships & social skills
- Improves sleep
- Maintains health & weight
- Develops muscles & bones
- Encourages movement & co-ordination

Every movement counts
Aim for at least 3 Hours across everyday

Move more. Sit less. Play together

Physical activity for children and young people (5 – 18 Years)
- Builds confidence & social skills
- Develops co-ordination
- Improves concentration & learning
- Strengthens muscles & bones
- Improves health & fitness
- Makes you feel good

Be physically active
- Aim for at least 60 minutes everyday
  - Spread activity throughout the day
  - Include muscle and bone strengthening activities 3 times per week
  - All activities should make you breathe faster & feel warmer

Sit less
- Find ways to help all children and young people accumulate at least 60 minutes of physical activity everyday

Move more

UK Chief Medical Officers’ Guidelines 2011 Start Active, Stay Active: www.bnf.org/startactive
Strategic objective 2:
Reduce the risk of obesity by addressing critical elements in the life-course
Life course approach

... with a focus on the first 1000 days and adolescents

Pre-pregnancy, including adolescence

Conception to birth: 280 days  
Birth to 2 years: 720 days

The 1000 Days
Integrate and strengthen guidance for NCD prevention with current guidance for preconception and antenatal care, to reduce the risk of childhood obesity

3.1 Diagnose and manage hyperglycemia and gestational hypertension

3.2 Monitor and manage appropriate gestational weight gain

3.3 Nutrition guidance (for fathers and mothers)
Recommendation 4

Provide guidance on and support for healthy diet, sleep and physical activity in early childhood to ensure children grow appropriately and develop healthy habits

4.1 Enforce regulatory measures such as the International Code of Marketing of Breast Milk Substitutes

4.2 Develop regulations on the marketing of complimentary foods & beverages

4.3 Promote the benefits of breastfeeding for mother & child through broad based education to parents and community at large
Provide guidance on and support for healthy diet, sleep and physical activity in early childhood to ensure children grow appropriately and develop healthy habits (cont..)

4.4 Ensure all maternity facilities fully practice the 10 steps to successful breastfeeding

4.5 Support mothers to breastfeed, through regulatory measures, such as maternity leave, facilities and time for breastfeeding at the workplace

4.6 Ensure only healthy foods, beverages & snacks are served in formal child-care settings or institutions

4.7 Ensure food education are incorporated into the curriculum in formal child-care settings or institutions
Provide guidance on and support for healthy diet, sleep and physical activity in early childhood to ensure children grow appropriately and develop healthy habits (cont..)

4.8 Ensure physical activity is incorporated into the daily routine & curriculum in formal child-care settings or institutions

4.9 Engage the whole-of-the-community to promote healthy lifestyles for young children

4.10 Provide guidance on appropriate sleep time, sedentary or screen time and physical activity or active play for the 2-5 years of age group
Implement comprehensive programmes that promote healthy school environments, health, nutrition literacy and physical activity among school-aged children and adolescents

5.1 Establish standards for meals provided in schools or foods & beverages sold in schools, that meet healthy nutrition guidelines

5.2 Eliminate the provision or sale of unhealthy foods such as SSBs

5.3 Require inclusion of nutrition & health education within the core curriculum
Implement comprehensive programmes that promote healthy school environments, health, nutrition literacy and physical activity among school-aged children and adolescents.

5.4 Improve the nutrition literacy & skills of parents & caregivers

5.5 Make food preparation classes available to children, parents & caregivers

5.6 Include quality physical education in curriculum and provide adequate & appropriate staff & facilities
Schools are also settings in which children are exposed to marketing

“As a technique for marketing food to children, in-school marketing is probably second to television advertising in terms of the amount of debate and controversy it has attracted in recent years. Schools are seen as the ideal place for spreading advertising messages targeted at children”

(WHO, 2004: Marketing Food to Children: the Global Regulatory Environment)
Australia

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**Guidelines for healthy foods and drinks supplied in school canteens**

<table>
<thead>
<tr>
<th>ALWAYS ON THE MENU</th>
<th>The GREEN category*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELECT CAREFULLY</td>
<td>The AMBER category*</td>
</tr>
<tr>
<td>NOT RECOMMENDED ON THE CANTHEM MENU</td>
<td>The RED category*</td>
</tr>
</tbody>
</table>
Encourage and promote these foods and drinks.

**Always on the Canteen Menu**
- Are the best choices for a healthy school canteen.
- Should be available every day and be the main choices on the canteen menu.
- Contain a wide range of nutrients.
- Are generally low in saturated fat and/or sugar and/or sodium (salt).

**Select Carefully**

Do not let these foods and drinks take over the menu and keep serve sizes small.

These foods and drinks:
- Contain some valuable nutrients.
- Contain moderate amounts of saturated fat and/or sugar and/or sodium (salt).
- If eaten in large amounts, may increase the amount of energy (kilojoules) being consumed.

**Not Recommended on the Canteen Menu**

These foods and drinks should not be sold in a healthy school canteen.

These foods and drinks:
- May contain excess energy (kilojoules) and/or saturated fat and/or sodium (salt) and/or sugar are low in nutritional value.
Strategic objective 3: **Treat** children who are overweight or obese to improve their current and future health

Recommendation 6

Develop and support appropriate weight management services for children & adolescents who are overweight or obese that are family-based, multicomponent (includes nutrition, physical activity & psychosocial support) and delivered by multi-professional teams with appropriate training & resources, as part of UHC.
Implementation / enforcement is a challenge

Build stronger enforcement systems and national capacity
Explore opportunities to link with other enforcement mechanisms (e.g. food safety, tobacco control, etc.)
Electronic Library of Essential Nutrition Actions

http://www.who.int/ena/en/index.html
Report of the Commission on Ending Childhood Obesity: implementation plan

Report by the Secretariat

1. The prevalence of infant and young child obesity is increasing in all countries, with the most rapid rises occurring in low- and middle-income countries. The number of overweight or obese young children globally increased from 31 million in 1990 to 42 million in 2013. In the African Region alone over the same period, the number of overweight or obese children under 5 years of age increased from 4 million to 10 million. Childhood obesity is associated with several health complications, premature onset of illnesses such as diabetes and heart disease, continued obesity into adulthood and an increased risk of noncommunicable diseases.

2. In an effort to provide a comprehensive response to childhood obesity, the Director-General established in 2014 a high-level Commission on Ending Childhood Obesity, comprising 15 accomplished and eminent individuals from a variety of relevant backgrounds. The Commission was tasked with preparing a report specifying the approaches and combinations of interventions that are likely to be most effective in tackling childhood and adolescent obesity in different country contexts around the world. It reviewed the scientific evidence, consulted more than 100 Member States and considered nearly 180 online comments before submitting its report to the Director-General in January 2016.

3. In decision WHA69(12) (2016), the Sixty-ninth World Health Assembly decided to request the Director-General to develop, in consultation with Member States and relevant stakeholders, an implementation plan guiding further action on the recommendations included in the Report of the Commission on Ending Childhood Obesity to be submitted, through the Executive Board at its 140th session, for consideration by the Seventieth World Health Assembly.

ANNEX

DRAFT IMPLEMENTATION PLAN TO GUIDE FURTHER ACTION ON THE RECOMMENDATIONS INCLUDED IN THE REPORT OF THE COMMISSION ON ENDING CHILDHOOD OBESITY

1. The Sustainable Development Goals, adopted by the United Nations General Assembly in 2015, identify prevention and control of noncommunicable diseases as one of the health challenges in the 2030 Agenda for Sustainable Development. Among the risk factors for noncommunicable disease, overweight and obesity are particularly concerning and have the potential to negate many of the health benefits that have contributed to increased life expectancy. The global action plan for the prevention and control of noncommunicable diseases 2013–2020 calls for a halt in the rise in obesity among adolescents, and the comprehensive implementation plan on maternal, infant and young child nutrition sets a target of no increase in childhood overweight by 2025. Yet the prevalence of obesity in infants, children and adolescents is rising around the world and many children who are not yet obese are overweight and on the pathway to obesity. Renewed action is therefore urgently needed if these targets are to be met.

2. Almost three quarters of the 42 million children under 5 years of age who are overweight and obese live in Asia and Africa. In countries where prevalence of overweight and obesity is plateauing, there are growing economic and health inequities, and rates of obesity continue to increase among people with low socioeconomic status and minority ethnic groups. Obesity can affect a child's immediate health, educational attainment and quality of life. Children with obesity are very likely to remain as adults and are at risk of developing serious noncommunicable diseases. Despite the rising global prevalence of overweight and obesity, awareness of the magnitude and consequences of childhood obesity is still lacking in many settings, particularly in countries where undernutrition is common and prevention of childhood obesity may not be seen as a public health priority. As countries undergo rapid socioeconomic and/or nutrition transitions, they face a double burden, in which inadequate nutrition and excessive weight gain may coexist, in the same household and even in the same individuals. Children who have been undernourished, either in utero or in early childhood, are at particular risk of becoming overweight and obese if then faced with an obesogenic environment, that

2 Endorsed by the Health Assembly in resolution WHA66.10 (2013) on Follow-up to the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases; see document WHA66/2013/REC1, Annex 4 for the text of the action plan.
3 Endorsed by the Health Assembly in resolution WHA65.6 (2012) on Comprehensive implementation plan on maternal, infant and young child nutrition; see document WHA65/2012/REC1, Annex 2 for the text of the implementation plan.
4 The Convention on the Rights of the Child defines children as those below the age of 18 years. WHO defines...
Thank you
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