

## 154th SESSION OF THE EXECUTIVE COMMITTEE

Washington, D.C., USA, 16-20 June 2014

Provisional Agenda Item 4.7

CE154/16, Rev. 1\*

3 June 2014

Original: English

### PLAN OF ACTION FOR THE PREVENTION OF OBESITY IN CHILDREN AND ADOLESCENTS

#### Introduction

1. Obesity among children and adolescents has reached epidemic proportions in the Americas.<sup>1,2</sup> The causes and consequences of obesity are well known, as are the actions that must be undertaken to prevent it. Over the past decade, many countries have been putting some of those actions into place and it is now time for PAHO to take the leadership role by unifying these efforts and supporting Member States by launching a regional public health initiative.

2. This document provides Member States with the rationale and key strategic areas of action for comprehensive public health interventions to halt the progression of this epidemic in children and adolescents. To that end, this five-year plan sets a goal and proposes five areas of action, including objectives and indicators.

#### Background

3. Authoritative publications, particularly from the World Health Organization (WHO), the Food and Agriculture Organization (FAO), and the World Cancer Research Fund (1, 2) agree that the most important factors that promote weight gain and obesity, as

---

\* Modifications have been made to paragraphs 5 and 12. A few minor editorial changes have been made throughout the document and some references have been updated.

<sup>1</sup> Birth to age 4 (<http://www.who.int/childgrowth/en/>):

- Overweight: weight- for- age z-score  $\geq 2$  SD and  $< 3$  SD
- Obese: weight- for- age z-score  $\geq 3$  SD
- Overweight/obese combined: weight- for- age z-score  $\geq 2$  SD

Ages 5 to 19 ([http://www.who.int/growthref/growthref\\_who\\_bull.pdf](http://www.who.int/growthref/growthref_who_bull.pdf)):

- Overweight: BMI  $\geq 1$  SD and  $< 2$  above the WHO growth standard median
- Obese: body mass index (BMI)  $\geq 2$  SD above the WHO growth standard median
- Overweight/obese combined: body mass index (BMI)  $\geq 1$  above the WHO growth standard median

<sup>2</sup> The following WHO definition of children and adolescents is used in this Plan of Action: children: 0 to 9 years of age; adolescents: 10 to 19 years of age ([www.who.int/topics/adolescent\\_health/en/](http://www.who.int/topics/adolescent_health/en/)).

well as associated noncommunicable diseases (NCDs), are high intake of energy-dense nutrient-poor snack products (high in salt, sugar, and fat) and fast foods, routine intake of sugar-sweetened beverages, and insufficient physical activity. These are all part of an obesogenic environment.

4. Although physical activity plays an important role in the prevention of obesity, the levels needed to counteract excess energy intake are very high. Therefore, preventive efforts based mostly on physical activity, or even equally on physical activity and diet, are unlikely to be successful in environments where energy-dense snack products are easily available (3).

5. The effect of added sugars on health deserves particular attention, and it has been the subject of ample scientific scrutiny. Meta-analyses of longitudinal studies (4) and randomized controlled trials (5) have shown positive associations between the consumption of added sugar and weight gain. In addition, the consumption of sugar-sweetened beverages is strongly associated with cardiovascular disease (6), type 2 diabetes, and metabolic syndrome (7). The physiological mechanisms leading to these conditions include hyperinsulinemia, insulin resistance, arteriosclerosis, and hypertension (8, 9). It has been suggested that the sugar component causing these physiological changes is fructose (10).

6. However, even if reducing the consumption of added sugars is instrumental in preventing serious diet-related damage to the population's health, it is not enough in itself. For example, eliminating isolated nutrients (as in the case of salt and trans-fats) from the diet is unlikely to result in the emergence of a healthier dietary pattern in and of itself. A healthy diet should be based on the daily consumption of fruit and vegetables, unrefined grains, pulses, milk, fish, and vegetable oils, with low consumption of red and processed meats (11, 12). Such a diet requires strong and enabling agriculture and food systems (13, 14). Since fresh and whole foods are the mainstay of traditional cuisines in the Americas, these very traditions can be a valuable instrument for promoting healthy eating (15).

7. Identifying the drivers of the obesity epidemic is critical to informing and developing sound policies, actions, and health-related laws and regulations. From a dietary perspective, it is now recognized that the individual's food preferences, purchasing decisions, and eating behaviors are shaped by price, marketing, availability, and affordability. These factors are in turn influenced by upstream policies and regulations on trade and agriculture (16).

8. A salient current commercial trend associated with the obesity epidemic is the sale of energy-dense snack products, sugar-sweetened beverages, and fast foods in low- and middle-income countries. Consumption of energy-dense snack products is five times higher, and of sodas, nearly three times higher compared with developed countries, where consumption is currently reaching market saturation levels (17, 18). The portion sizes of soda and other marketed products have also risen dramatically over recent decades.

Advertising of energy-dense snack products and sugar-sweetened beverages to children and adolescents has increased in the Region, influencing their food preferences, purchase requests, and eating patterns (19).

9. Similarly, opportunities for physical activity have suffered from poor urban planning and growing violence as well as the perception thereof (20, 21). Compounding the situation, electronic entertainment has been increasingly replacing physical activity. Children's screen time, which is an opportunity for food consumption and exposure to food advertising, has now increased to three hours a day or more. In addition, schools have reduced the time allotted for physical education.

10. This Plan of Action focuses on children and adolescents for a number of reasons. Firstly, breastfeeding, both exclusive and overall, may reduce the prevalence of overweight and obesity by about 10% (22). Breastfeeding can also help mothers to lose weight postpartum more quickly. Secondly, the earlier a person becomes overweight or obese, the greater is his or her risk of remaining overweight or obese at older ages (23). Thirdly, obesity has adverse health consequences at early stages of life, as it increases the risk of asthma, type-2 diabetes, sleep apnea, and cardiovascular diseases (24, 25). These conditions, in turn, affect growth and psychosocial development during adolescence (26) and eventually compromise quality of life and longevity (27). Fourthly, since dietary habits are formed early in life, the promotion of energy-dense snack products, sugar-sweetened beverages, and fast foods in childhood interferes with the formation of healthy dietary habits (28, 29). Finally, children are uniquely vulnerable to the negative effects of food advertising. Since these promotional campaigns also bypass parental control, they constitute both an ethical and a human-rights concern.<sup>3</sup> A precedent for action has already been established in the International Code of Marketing of Breast-milk Substitutes (Code) (30).

11. A gender and equity approach is also warranted. In high-income countries, obesity tends to concentrate among the poor, whereas in low- and middle-income countries obesity is more prevalent in the affluent population. However, as GNP increases, obesity spreads out to all strata. This phenomenon is most likely explained by the current non-discerning obesogenic environment. Adding to the complexity of the issue, women are more affected by the obesity epidemic, especially in lower-economic strata (31, 32).

12. This Plan of Action aligns with: the Strategy and Plan of Action for Integrated Child Health (CSP28/10 [2012]); the Regional Strategy for Improving Adolescent and Youth Health (CD48/8 [2008]); the Regional Strategy and Plan of Action on Nutrition in Health and Development, 2006-2015 (CD47/18 [2006]); the Comprehensive Implementation Plan on Maternal, Infant, and Young Child Nutrition (A65/11 [2012]);

---

<sup>3</sup> The General Comment No. 15 of the UN Committee on the right of the child to the enjoyment of the highest attainable standard of health is available at:  
[http://www2.ohchr.org/english/bodies/crc/docs/GC/CRC-C-GC-15\\_en.doc](http://www2.ohchr.org/english/bodies/crc/docs/GC/CRC-C-GC-15_en.doc)

the Strategy for the Prevention and Control of Noncommunicable Diseases and the Plan of Action for the Prevention and Control of Noncommunicable Diseases (CSP28/9, Rev. 1 [2012] and CD52/7, Rev. 1 [2013] respectively); the WHO Global Strategy on Diet, Physical Activity, and Health (A57/9 [2004]); the Strategy and Plan of Action on Urban Health (CD51/5 [2011]); the Plan of Action on Road Safety (CD51/7, Rev. 1 [2011]), the report of the Commission on Social Determinants of Health (A62/9 [2009]); the United Nations Universal Declaration of Human Rights [1948]; and the United Nations Convention of the Rights of the Child [1989].<sup>4</sup>

### **Situation Analysis**

13. Worldwide obesity nearly doubled between 1980 and 2008. In comparison with other WHO Regions, the prevalence of overweight and obesity is highest in the Americas (62% for overweight in both sexes and 26% for obesity in adults over 20 years of age) (33). In three countries (Mexico, Chile and the United States) obesity and overweight now affect 7 of every 10 adults (34, 35, 36).

14. An increase in the prevalence of overweight and obesity has also been observed in the Region's children aged 0 to 5 years. For example, rates doubled in the Dominican Republic, from 2.2% in 1991 to 5.6% in 2007; rates rose from 1.5% in 1993 to 3% in 2008 in El Salvador; and they increased from 2.5% in 1992 to 3.2% in 2012 in Peru.<sup>5</sup> Similarly, a recent report from seven Eastern Caribbean countries shows that between 2000 and 2010 the rates of overweight and obesity in children aged 0 to 4 years doubled from 7.4% in 2000 to 14.8% (37).

15. In adolescents of both sexes (12 to 19 years), obesity rates in the United States increased 20%, from 17.4% in 2003 to 20.5% in 2012 (38). Among adolescent girls (15 to 20 years), overweight and obesity rates have risen steadily over the last two decades—for example: in Bolivia, from 21.1% to 42.7%; in Guatemala, from 19.6% to 29.4%; and in Peru, from 22% to 28.5%.<sup>6</sup>

16. This rapid increase is reflected in high prevalence rates in the Americas. Available data show that overall 20% to 25% of the children under 19 years old are affected (39). In Latin America, 7% of the children under 5 years of age (3.8 million) are estimated to be overweight or obese (39). Among school-age children (6 to 11 years old), rates of overweight and obesity range from 15% (Peru) (40) to 34.4% (Mexico) (41), and among adolescents (12 to 19 years old), from 17% (Colombia) (42) to 35% (Mexico) (41). In the United States, 33% of children aged 6 to 11 years and adolescents aged 12 to 19 years are overweight or obese (43), while in Canada 22% of the adolescents aged 12 to 17 years old are affected (44). However, recent data from the US point to a significant decrease in obesity among children aged 2 to 5 years, from 14% in 2003-2004

---

<sup>4</sup> Measures cited in Article 24 of the United Nations Convention on the Rights of the Child include adequate nutrition, breastfeeding, water and sanitation, among others.

<sup>5</sup> Source: PAHO calculations based on data from the Demographic and Health Surveys DHS (1992–2012).

<sup>6</sup> Source: PAHO calculations based on data from the Demographic and Health Surveys DHS (1992–2012).

to 8% in 2012-2013 (38). This decline might be attributed to such factors as increased breastfeeding rates and changes in food policies under the government's Supplemental Nutrition Program for Women, Infants, and Children (WIC).

17. In response to this epidemic, many countries in the Americas have adopted norms and regulations. Among them are:

- a) Legislation and national policies to promote breastfeeding as, for example, the Baby Friendly Hospital Initiative, implementation and monitoring of the Code, and protection of breastfeeding in the workplace have been introduced in many countries.
- b) Taxation on sugar-sweetened beverages and energy-dense snack products aimed at reducing consumption, in Mexico.<sup>7</sup>
- c) New policies to improve the school food environment, particularly foods sold in schools, as in Brazil, Chile, Colombia, Costa Rica,<sup>8</sup> Ecuador,<sup>9</sup> Mexico,<sup>10</sup> Peru, the United States, and Uruguay.
- d) Regulations on food marketing to children, as in Brazil, Chile<sup>11</sup>, and Peru.
- e) Improvements in National School Feeding Programs, as in the case of Brazil, Mexico, and others. Brazil now requires that at least 70% of food provided to students be natural or minimally processed and that a minimum of 30% of the school budget be used to buy foods from local family farmers.
- f) Front-of-package labeling that provides simple visual messages to connote various food characteristics, as in Ecuador.

18. Some of the laws have been challenged in the courts, while others are being regulated to enable their implementation. Often the development of these regulatory mechanisms is a lengthy process, and in some instances the final results have been at odds with the spirit of the laws, thus weakening their implementation.

19. Several cities and states in the United States, and most recently the U.S. Federal Government, have successfully modified the school food environment in the past 6 to 10 years by eliminating energy-dense snack products and sugar-sweetened beverages from sales and vending machines and improving the quality of cafeteria food. Such changes may have helped to halt the rise of overweight and obesity rates in several states and may even have led to a small decrease in some cities (45). Moreover, improvements in the WIC have been associated with reduced obesity rates among children in 18 states (46).

---

<sup>7</sup> Source: <http://www.diputados.gob.mx/LeyesBiblio/pdf/78.pdf>

<sup>8</sup> Source: <http://www.paho.org/nutricionydesarrollo/wp-content/uploads/2012/07/Costa-Rica-Regulaciones-venta-alimentos-en-sodas-estudiantiles.pdf>

<sup>9</sup> Source: <http://www.fedecguayas.org/uploads/reglamento-bares-escolares.pdf>

<sup>10</sup> Source: [http://promocion.salud.gob.mx/dgps/descargas1/estrategia/Estrategia\\_con\\_portada.pdf](http://promocion.salud.gob.mx/dgps/descargas1/estrategia/Estrategia_con_portada.pdf)

<sup>11</sup> Source: <http://www.bcn.cl/leyfacil/recurso/etiquetado-de-alimentos>

## **Proposed Plan of Action**

### **Goal**

20. The overall goal of this five-year public health Plan of Action is to halt the rise of the rapidly growing obesity epidemic in children and adolescents, so that there is no increase in current country prevalence rates. This goal requires a multisectoral life-course approach that is based on the social-ecological model (47) and focuses on transforming the current obesogenic environment into opportunities for increased intake of nutritious foods and improved physical activity. This will be accomplished by implementing a set of effective policies, laws, regulations, and interventions in the following strategic areas of action:

- a) Protection, promotion, and support of optimal breastfeeding and complementary feeding practices.
- b) Improvement of preschool and school nutrition and physical activity environments.
- c) Fiscal policies and regulation of food marketing.
- d) Intersectoral actions for health promotion.
- e) Surveillance, research, and evaluation.

21. To this end, PAHO will provide: *a)* support for the adoption of indicators of obesity; *b)* regional guidelines for content of salt, sugar, and fats in foods and beverages; *c)* regional guidelines for preschool and school feeding programs, and foods and beverages sold in schools; *d)* protocols and guidelines for national policies, norms, and interventions; and *d)* training materials. It will also maintain an updated database on nutritional trends and monitor activities related with the implementation of policies, laws, and programs in the Region.

### **Strategic Area of Action 1: Protection, promotion, and support of optimal breastfeeding and complementary feeding practices**

22. Among its many other benefits, longer breastfeeding, both exclusive and overall, may reduce the prevalence of overweight and obesity by about 10% (22). Exclusive breastfeeding also helps mothers to lose weight postpartum more quickly. However, a large proportion of the Region's children do not benefit of optimal breastfeeding and complementary feeding practices. For example, in Latin America the prevalence of exclusive breastfeeding in infants under 6 months old is only 44%, and only 71% of children less than 2 years of age receive the minimum dietary diversity recommended by WHO (48). Improving this situation will require countries to renew their commitment to fully implement the Code, the Baby Friendly Hospital Initiative (BFHI), and the Global Strategy for Infant and Young Child Feeding.

**Objective 1.1:** To reinforce efforts to implement the Global Strategy for Infant and Young Child Feeding.

*Indicators:*

- 1.1.1: Number of countries that regularly (at least every three years) publish their results of monitoring of the Code's implementation.  
(Baseline: 5, target: 15)
- 1.1.2: Number of countries that have at least 50% of maternity health services BFHI-certified.  
(Baseline: 0, target: 5)
- 1.1.3: Number of countries that have policies in place and a dedicated source of funding to promote optimal child feeding practices as recommended by the Global Strategy for Infant and Young Child Feeding.  
(Baseline: 5, target: 10)

**Strategic Area of Action 2: Improvement of preschool and school nutrition and physical activity environments**

23. Current scientific evidence establishes the effectiveness of school-based interventions to change eating behavior and prevent overweight and obesity (49, 50). For such programs to be successful, they need to be implemented using an approach that is both comprehensive and consistent with nutrition and food safety standards. In addition, the marketing and sale of energy-dense snack products and sugar-sweetened beverages in schools needs to be regulated, and physical activity should be incorporated into school daily activities.

**Objective 2.1:** To implement national preschool and school feeding programs in line with the guidelines proposed by PAHO.

*Indicator:*

- 2.1.1: Number of countries that have national preschool and school feeding programs in line with the guidelines proposed by PAHO.  
(Baseline: 3, target: 21)

**Objective 2.2:** To adopt norms and/or regulations on the sale of foods and beverages in schools in line with the guidelines proposed by PAHO.

*Indicator:*

- 2.2.1: Number of countries in which foods and beverages sold in at least 70% of their schools are in line with the guidelines proposed by PAHO.  
(Baseline: 6, target: 21)

*Indicator:*

2.2.2: Number of countries that have ensured access to safe drinking water in at least 70% of their preschools and schools.  
(Baseline: 3, target: 21)

**Objective 2.3:** To have educational strategies to support the new school food policies.

*Indicator:*

2.3.1: Number of countries that have introduced healthy food and nutrition into the school curriculum.  
(Baseline: 3, target: 10)

**Objective 2.4:** To include daily physical activity in school activities.

*Indicator:*

2.4.1: Number of countries that have at least 70% of schools with a program that includes at least 30 minutes a day of moderate to intense (aerobic) physical activity.  
(Baseline: 0, target: 10)

**Strategic Area of Action 3: Fiscal policies and regulation of food marketing**

24. Fiscal policies and marketing regulations are known to be instrumental in reducing the consumption of tobacco (51) and alcohol. Similar results have been observed with sugar-sweetened beverages in France and Hungary. In the case of foods and beverages, Mexico has enacted taxation legislation for sugar-sweetened beverages and energy-dense snack products. Chile and Brazil have launched initiatives to regulate food marketing. Because of children's greater vulnerability to the persuasive power of marketing messages (for example, television and internet commercials, celebrity endorsements, in-store marketing, and toy co-branding), WHO (52) and PAHO (19) have published recommendations to regulate food marketing to children and adolescents with a view to reducing consumption of energy-dense snack products, fast foods, and sugar-sweetened beverages. In order to protect children's right to health and other related human rights, governments are urged to establish fiscal policies and regulatory mechanisms, since voluntary approaches have not been successful (53, 54).

**Objective 3.1:** To tax sugar-sweetened beverages and energy-dense snack products and, when possible, earmark revenues for health promotion interventions.

*Indicator:*

3.1.1: Number of countries that have passed legislation to tax sugar-sweetened beverages and energy-dense snack products and dedicate the revenue to health promotion interventions (HPI).  
(Baseline: 1, target: 10)

**Objective 3.2:** To enact regulations to protect children and adolescents from the marketing of sugar-sweetened beverages, energy-dense snack products, and fast foods.

*Indicator:*

3.2.1: Number of countries that have implemented regulations to protect children and adolescents from the marketing of sugar-sweetened beverages, energy-dense snack products, and fast foods in line with the Recommendations from a Pan American Health Organization Expert Consultation on the Marketing of Food and Non-Alcoholic Beverages to Children in the Americas.  
(Baseline: 1, target: 15)

**Objective 3.3:** To develop and implement norms for front-of-package labeling that allow for quick and easy identification of unhealthy foods.

*Indicator:*

3.3.1: Number of countries that have norms in place for front-of-package labeling that allow for quick and easy identification of energy-dense snack products and sugar-sweetened beverages.  
(Baseline: 1, target: 15)

#### **Strategic Area of Action 4: Intersectoral actions for health promotion**

25. The provision of community resources that enable all persons and communities to engage in physical activities such as walking, exercising, and bike-riding has a beneficial effect in the control of obesity (20). The creation of spaces such as parks and recreational areas, as well as the construction and expansion of pedestrian areas and safe bike paths, accompanied by appropriate promotional campaigns, has been associated with an increase in physical activity in many cities around the world. Social marketing techniques to provide parents with strategies and practical information on nutrition, diet, and physical activity are critical components of sustainable interventions to prevent obesity. A multisectoral approach that facilitates the contribution of different agents provides multiple platforms for addressing the epidemic.

**Objective 4.1:** To engage multisectoral stakeholders and partners, led by governments, to support the implementation of this Plan of Action.

*Indicator:*

4.1.1: Number of countries in which implementation of this Plan of Action, including communication strategies, is being supported by multisectoral stakeholders and partners, led by governments.  
(Baseline: 0, target: 15)

**Objective 4.2:** To create incentives at national level to support family farming.

*Indicator:*

4.2.1: Number of countries that have created incentives at national level to support family farming.  
(Baseline: 5, target: 21)

**Objective 4.3:** To improve access to efficient mass transportation and safe streets for walking and biking.

*Indicators:*

4.3.1: Number of countries in which the population has access to safe environments for walking and biking in at least 50% of their urban centers.  
(Baseline: 5, target: 15)

4.3.2: Number of countries that have improved or implemented efficient mass transit systems in at least half the urban centers with populations over 1,000,000.  
(Baseline: 8, target: 15)

### **Strategic Area of Action 5: Surveillance, research, and evaluation**

26. Surveillance information systems are crucial to informing national and regional policy-making, and data disaggregation is equally important to make these policies sensitive to equity concerns (55). Before a new system is designed, it is useful to assess the country's current capabilities and available data. Some countries have already adapted systems used internationally, such as the World Health Organization's Global School-based Student Health Survey (GSHS) and Household Expenditure Surveys, while others have developed their own, like the Behavioral Risk Factors Surveillance System (BRFSS) in the United States and Brazil's telephone survey for the surveillance of risk factors and chronic disease protection, *Vigilância de Fatores de Risco e Proteção para Doenças Crônicas por Inquérito Telefônico* (VIGITEL), among others. It is critical to integrate the different information systems, as well as to build partnerships and networks with academic and scientific institutions in order to establish comprehensive surveillance systems.

**Objective 5.1:** To strengthen country information systems so that trends and determinants of obesity, disaggregated by age, sex, education, place of residence, and socioeconomic status, are routinely available for policy decision-making.

*Indicator:*

5.1.1: Number of countries with a system in place for publishing reports on malnutrition that include the subject of overweight and obesity in school-aged children and adolescents disaggregated by at least two equity stratifiers.  
(Baseline: 10, target: 21)

**Objective 5.2:** To produce evidence of the effectiveness of policies and interventions to guide national and subregional policy-making.

*Indicator:*

5.2.1: Number of countries that have conducted studies to assess the effectiveness of national policies and interventions to prevent childhood obesity which capture socioeconomic differences.  
(Baseline: 3, target: 10)

### **Monitoring and Evaluation**

27. Meeting the goal and objectives in this Plan of Action is largely contingent on having reliable and timely information available from surveillance programs, and on ensuring that the information is accompanied by accurate analysis and interpretations, in order to arrive at evidence-based policy recommendations. Data collection to monitor implementation of this Plan of Action will be included as part of the monitoring system for the PAHO Strategic Plan 2014-2019. Accordingly, progress will be evaluated every two years. A baseline survey will be needed in order to establish several of the indicators. For this purpose, PAHO will establish a data collection system to monitor activities and evaluate progress towards achieving the overall goal. The system will be based on the indicators proposed for each area of action.

### **Financial Implications**

28. It is estimated that the total expenditure, including both activities and current and additional PAHO Secretariat staff, will be US\$ 3,080,000.<sup>12</sup> The cost of current staff (\$1,710,000) is covered under the PAHO regular budget. Resources will be mobilized to cover the cost of additional staff (\$600,000) and PAHO activities (\$770,000). Activities undertaken by the countries and partners should be funded by multisectoral efforts at the local level.

### **Action by the Executive Committee**

29. The Executive Committee is invited to review the Plan of Action for the Prevention of Obesity in Children and Adolescents and consider the possibility of approving the proposed resolution included in Annex A.

Annexes

---

<sup>12</sup> Unless otherwise indicated, all monetary figures in this report are expressed in United States dollars.

## References

1. World Health Organization. Diet, nutrition and the prevention of chronic diseases. Report of a joint WHO/FAO expert consultation [Internet]. Geneva: WHO; 2003 (WHO Technical Report Series; 916) [cited 2014 Feb 26]. Available from: [http://whqlibdoc.who.int/trs/WHO\\_TRS\\_916.pdf](http://whqlibdoc.who.int/trs/WHO_TRS_916.pdf)
2. World Cancer Research Fund/American Institute for Cancer Research. Food, nutrition, physical activity, and the prevention of cancer: a global perspective [Internet]. Washington (DC): AICR; 2007 [cited 2014 Feb 26]. Available from: [http://www.aicr.org/assets/docs/pdf/reports/Second\\_Expert\\_Report.pdf](http://www.aicr.org/assets/docs/pdf/reports/Second_Expert_Report.pdf)
3. Ebbeling CB, Pawlak DB, Ludwig DS. Childhood obesity: public-health crisis, common sense cure [online]. *The Lancet* 2002 Aug 10; 360 (Issue 9331): 473–482 [cited 2014 Feb 26]. Available from: <http://www.sciencedirect.com/science/article/pii/S0140673602096782>
4. Vartanian LR, Schwartz MB, Brownell KD. Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. *Am J Pub Health* 2007 Apr; 97(4):667-675.
5. Morenga LT, Mallard S, Mann J. Dietary sugars and body weight: systematic review and meta-analysis of randomised controlled trials and cohort studies [online]. *BMJ* 2013;346:e7492 [cited 2014 Feb 26]. Available from: <http://www.bmj.com/content/346/bmj.e7492>
6. Fung TT, Malik V, Rexrode KM, et al. Sweetened beverage consumption and risk of coronary heart disease in women. *Am J Clin Nutr* 2009;89(4):1037-1042. doi: 10.3945/ajcn.2008.27140.
7. Malik VS, Popkin BM, Bray G, Despres J-P, et al. Sugar sweetened beverages and risk of metabolic syndrome and type-2 diabetes: a meta-analysis [published online 2010 Aug 6]. *Diabetes Care* 2010; 3(11):2477-2484 [cited 2014 Feb 26]. Available from: <http://care.diabetesjournals.org/content/33/11/2477>
8. Bremer AA, Mietus-Snyder M, Lustig R. Toward a unifying hypothesis of metabolic syndrome [published online 2012 Feb 20]. *Pediatrics* 2012 Mar 1; 129(3): 557-570 [cited 2014 Feb 26]. Available from: <http://pediatrics.aappublications.org/content/129/3/557.long>
9. Lyssiotis CA, Cantley LC. Metabolic syndrome: F stands for fructose and fat [online]. *Nature* 2013 Oct 10; 502:181-182 [cited 2014 Feb 26]. Available from: <http://www.nature.com/nature/journal/v502/n7470/full/502181a.html>

10. Stanhope KL, Schwarz JM, Keim NL, Griffen SC, Bremer AA, Graham JL, Hatcher B, Cox CL, Dyachenko A, Zhang W, et al. Consuming fructose-sweetened, not glucose-sweetened, beverages increases visceral adiposity and lipids and decreases insulin sensitivity in overweight/obese humans [Internet]. *J. Clin. Invest* 2009 May;119(5):1322–1334 [cited 2014 Apr 28]. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/19381015>
11. Mozaffarian D, Ludwig DS. Dietary guidelines in the 21st century—a time for food (commentary). *J Am Med Assoc* 2010;304(6):681-682.
12. World Health Organization. Preparation and use of food-based dietary guidelines: report of a joint WHO/FAO consultation [Internet]. Geneva: WHO; 1998 (WHO technical report series; 880) [cited 2014 Feb 26]. Available from: [http://whqlibdoc.who.int/trs/WHO\\_TRS\\_880.pdf](http://whqlibdoc.who.int/trs/WHO_TRS_880.pdf)
13. Food and Agriculture Organization. The state of food and agriculture: food systems for better nutrition [Internet]. Rome: FAO; 2013 [cited 2014 Feb 26]. Available from: <http://www.fao.org/docrep/018/i3300e/i3300e.pdf>
14. Simopoulos AP, Bourne PG, Faergeman O. Bellagio Report on Healthy Agriculture, Healthy Nutrition, Healthy People. *Rev Panam Salud Publica*. 2013;33(3):230–6. [cited Apr 28 2014]. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/23698143>
15. Jacoby E. The best food on earth. Peru: As good as it gets (Commentary) [online]. *World Nutrition* 2012 Jul; 3(7):294-306 [cited 2014 Feb 26]. Available from: <http://www.wphna.org/htdocs/downloads/july2012/12-07%20WN3%20Peru%20food%20pdf.pdf>
16. World Health Organization. Global strategy on diet, physical activity and health [Internet]. Geneva: WHO; 2004 [cited 2014 Feb 26]. Available from: [http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy\\_english\\_web.pdf](http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf)
17. Moodie R, Stuckler D, Monteiro C, Sheron N, Neal B, Thamarangsi T et al. Profits and pandemics: prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries [Internet]. *The Lancet* 2013 Feb 23-Mar 1; Vol. 381, Issue 9867:670-679 [cited 2014 Feb 26].. Available from: [http://dx.doi.org/10.1016/S0140-6736\(12\)62089-3](http://dx.doi.org/10.1016/S0140-6736(12)62089-3)
18. Monteiro C, Moubarac JC, Cannon G, Ng SW, Popkin B. Ultra-processed products are becoming dominant in the global food system. *Obes Rev* 2013 Nov;14(Suppl. S2): 21-28.
19. Pan American Health Organization. Recommendations from a Pan American Health Organization Expert Consultation on the Marketing of Food and Non-Alcoholic

- Beverages to Children in the Americas [Internet]. Washington DC: PAHO; 2011 [cited 2014 Apr 2]. Available from:  
<http://bvs.minsa.gob.pe/local/minsa/1734.pdf>
20. Dora C, Hosking J, Mudu P, Fletcher ER. Urban transport and health. Module 5g. Sustainable transport: a sourcebook for policy-makers in developing cities [Internet]. Geneva: WHO/GIZ; 2011 [cited 2014 Feb 26]. Available from:  
[http://www.who.int/hia/green\\_economy/giz\\_transport.pdf](http://www.who.int/hia/green_economy/giz_transport.pdf)
21. Cohen L, Davis R, Lee V, Valdovinos E. Addressing the intersection: preventing violence and promoting healthy eating and active living. Oakland (CA): Prevention Institute; 2010.
22. Horta BL, Victora CG. Long-term effects of breastfeeding: a systematic [Internet]. Geneva: WHO; 2013 [cited 2014 Feb 26]. Available from:  
[http://apps.who.int/iris/bitstream/10665/79198/1/9789241505307\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/79198/1/9789241505307_eng.pdf)
23. Cunningham SA, Kramer MR, Venkat Narayan KM. Incidence of childhood obesity in the United States [online]. *N Engl J Med* 2014; 370(5):403-411 [cited 2014 Feb 26]. Available from:  
<http://www.nejm.org/doi/abstract/10.1056/NEJMoa1309753>
24. Daniels SR, Arnett DK, Eckel RH, Gidding SS, Hayman LL, Kumanyika S, et al. Overweight in children and adolescents: pathophysiology, consequences, prevention, and treatment [online]. *Circulation* 2005;111:1999-2012 (AHA Scientific Statement) [cited 2014 Feb 26]. Available from:  
<http://circ.ahajournals.org/content/111/15/1999.full>
25. Whitaker RC, Wright JA, Pepe MS, Seidel KD, Dietz WH. Predicting obesity in young adulthood from childhood and parental obesity [online]. *N Engl J Med* 1997;337:869-873 [cited 2014 Feb 26]. Available from:  
<http://www.nejm.org/doi/full/10.1056/NEJM199709253371301>
26. Michaud P-A, Suris JC, Viner R. The adolescent with a chronic condition: epidemiology, developmental issues and health care provision [Internet]. Geneva: WHO; 2007 (WHO discussion papers on adolescence) [cited 2014 Feb 26]. Available from:  
[http://whqlibdoc.who.int/publications/2007/9789241595704\\_eng.pdf](http://whqlibdoc.who.int/publications/2007/9789241595704_eng.pdf)
27. Olshansky SJ, Passaro DJ, Hershow RC, Layden J, Carnes BA, Brody J, et al. A potential decline in life expectancy in the United States in the 21st century [online]. *N Engl J Med* 2005; 352:1138-1145 [cited 2014 Feb 26]. Available from:  
<http://www.nejm.org/doi/full/10.1056/NEJMsr043743>

28. National Research Council. Preventing Childhood Obesity: Health in the Balance. Washington (DC): The National Academies Press; 2005.
29. Birch LL and Doub AE. Learning to eat: birth to age 2 [online]. *Am J Clin Nutr* 2014 Mar; 99(3):723S-8S. [Epub ahead of print] [cited 2014 Feb 26]. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24452235>
30. World Health Organization. International code of marketing of breast-milk substitutes [Internet]. Geneva: WHO; 1981 [cited 2014 Feb 26]. Available from: [http://www.who.int/nutrition/publications/code\\_english.pdf](http://www.who.int/nutrition/publications/code_english.pdf)
31. McLaren L. Socioeconomic Status and obesity [online]. *Epidemiol Rev* 2007; 29(1):29-48 [cited 2014 Feb 26]. Available from: <http://epirev.oxfordjournals.org/content/29/1/29.long>
32. Monteiro CA, Moura EC, Conde WL, Popkin B. Socioeconomic status and obesity in adult populations of developing countries: a review [online] *Bull World Health Organ*. 2004 Dec; 82(12): 940–946 [cited 2014 Feb 26]. Available from: [http://www.scielo.org/scielo.php?script=sci\\_arttext&pid=S0042-96862004001200011&lng=en&nrm=iso&tlng=en](http://www.scielo.org/scielo.php?script=sci_arttext&pid=S0042-96862004001200011&lng=en&nrm=iso&tlng=en)
33. World Health Organization. Global status report on noncommunicable diseases 2010. [Internet]. Geneva: WHO; 2011 [cited 2014 Feb 26]. Available from: [http://www.who.int/nmh/publications/ncd\\_report\\_full\\_en.pdf](http://www.who.int/nmh/publications/ncd_report_full_en.pdf)
34. Rivera J, Avila M, Salinas C et al. Obesidad en México. Recomendaciones para una política de estado. Mexico City: Universidad Nacional Autónoma de México, Grupo Multidisciplinario sobre la Obesidad de la Academia Nacional de Medicina; 2013.
35. Ministerio de Salud de Chile [Ministry of Health of Chile]. Encuesta Nacional de Salud 2010 [Internet]. Santiago: Subsecretaría de Salud Pública, Departamento de Epidemiología [cited 2014 Feb 26]. Available from: <http://epi.minsal.cl/estudios-y-encuestas-poblacionales/encuestas-poblacionales/descarga-ens/>
36. National Center for Health Statistics. Health, United States, 2012: With special feature on emergency care [Internet]. Hyattsville (MD): CDC NCHS; 2013 [cited 2014 Feb 26]. Available from: <http://www.cdc.gov/nchs/data/hus/hus12.pdf>
37. Caribbean Food and Nutrition Institute. Report on the anthropometry of children 0 to 4 years old in the Caribbean. Kingston: CFNI; 2012.

38. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011-2012 [online]. *JAMA*. 2014;311(8):806-814 [cited 2014 Feb 26]. Available from: <http://jama.jamanetwork.com/article.aspx?articleid=1832542>
39. Rivera JA, González de Cossio T, Pedraza LS, Aburto TC, Sánchez TG, Martorell R. Childhood and adolescent overweight and obesity in Latin America: a systematic review [online]. *The Lancet Diabetes-Endocrinology* 2013; Vol. 2, Issue 4, 2014 Apr p. 321-332 [cited 2014 Feb 26]. Available from: [http://dx.doi.org/10.1016/S2213-8587\(13\)70173-6](http://dx.doi.org/10.1016/S2213-8587(13)70173-6)
40. Instituto Nacional de Estadística e Informática. Encuesta Nacional de Hogares, 2008 [Internet]. Lima: INEI, 2008 [cited 2014 Feb 26]. Available from: <http://www.inei.gob.pe/biblioteca-virtual/boletines/condiciones-de-vida/3/>
41. Instituto Nacional de Salud Pública. Encuesta nacional de salud y nutrición (ENSANUT) [Internet]. Guernavaca (Mexico): INSP; 2012 [cited 2014 Feb 26]. Available from: <http://ensanut.insp.mx/>
42. Instituto Colombiano de Bienestar Familiar. ENSIN - Encuesta nacional de situación nutricional en Colombia [Internet]. Bogota: ICBF; 2010 [cited 2014 Feb 26]. Available from: <http://www.icbf.gov.co/portal/page/portal/PortalICBF/NormatividadC/ENSIN1>
43. Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index among US children and adolescents, 2007-2008 [online]. *JAMA* 2010 Jan 20;303(3):275-276 [cited 2014 Feb 26]. Available from: <http://jama.jamanetwork.com/article.aspx?articleid=185233>
44. Employment and Social Development Canada. Indicators of well-being in Canada [Internet]. Canada: Human Resources and Skills Development Canada (HRSDC); 2013 [cited 2013 Dec 20]. Available from: <http://www4.hrsdc.gc.ca/d.4m.1.3n@-eng.jsp?did=3>
45. Robert Wood Johnson Foundation. Health Policy Snapshot. Childhood Obesity. [Internet]. Princeton (NJ): RWJF c2012 (Issue Brief 2012 Sep) [cited 2014 Feb 26]. Available from: [http://www.rwjf.org/content/dam/farm/reports/issue\\_briefs/2012/rwjf401163](http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2012/rwjf401163).
46. Centers for Disease Control and Prevention. Mortality and Morbidity Weekly Report (MMWR). Vital signs: obesity among low-income, preschool-aged children — United States, 2008–2011 [Internet]. Atlanta (GA): CDC; 2013 Aug 9; 62(31);629-634 [cited 2014 Feb 26]. Available from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6231a4.htm>

47. Pérez-Escamilla R and Kac G. Childhood obesity prevention: a life-course framework. *International Journal of Obesity Supplements* (2013) 3:S3–S5.
48. Lutter CK, Lutter R. Fetal and early childhood undernutrition, mortality and lifelong health [online]. *Science* 2012;337:1495-1499 [cited 2014 Feb 26]. Available from: <http://www.sciencemag.org/content/337/6101/1495>
49. Lobelo F, Garcia de Quevedo I, Holub CK, Nagle BJ, Arredondo EM, Barquera S, et al. School-based programs aimed at the prevention and treatment of obesity: evidence-based interventions for youth in Latin America. *J Sch Health* 2013;83(9):668-7.
50. Verstraeten R, Roberfroid D, Lachat C, Leroy JL, Holdsworth M, Maes L, et al. Effectiveness of preventive school-based obesity interventions in low- and middle-income countries: a systematic review. *Am J Clin Nutr* 2012 Aug;96(2): 415-38.
51. World Health Organization. WHO framework convention on tobacco control [Internet]. Geneva: WHO; 2003 [cited 2014 Feb 26]. Available from: <http://whqlibdoc.who.int/publications/2003/9241591013.pdf>.
52. World Health Organization. A framework for implementing the set of recommendations on the marketing of foods and non-alcoholic beverages to children [Internet]. Geneva: WHO; 2012 [cited 2014 Feb 26]. Available from: <http://www.who.int/dietphysicalactivity/MarketingFramework2012.pdf>
53. Galbraith-Emami S, Lobstein T. The impact of initiatives to limit the advertising of food and beverage products to children: a systematic review. *Obes Rev* 2013;14(12):960-974.
54. Hawkes C, Harris JL. An analysis of the content of food industry pledges on marketing to children. *Public Health Nutr* 2011;14(8):1403-14.
55. World Health Organization. Handbook on health inequality monitoring, with special focus on low- and middle-income countries [Internet]. Geneva: WHO; 2013 [cited 2014 Feb 28]. Available from: [http://apps.who.int/iris/bitstream/10665/85345/1/9789241548632\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/85345/1/9789241548632_eng.pdf)

## 154th SESSION OF THE EXECUTIVE COMMITTEE

Washington, D.C., USA, 16-20 June 2014

---

CE154/16, Rev. 1  
Annex A  
Original: English

### ***PROPOSED RESOLUTION***

#### **PLAN OF ACTION FOR THE PREVENTION OF OBESITY IN CHILDREN AND ADOLESCENTS**

##### ***THE 154th SESSION OF THE EXECUTIVE COMMITTEE,***

Having reviewed the proposed *Plan of Action for the Prevention of Obesity in Children and Adolescents* for 2014-2019 (Document CE154/16, Rev. 1),

##### ***RESOLVES:***

To recommend that the 53rd Directing Council adopt a resolution along the following lines:

#### **PLAN OF ACTION FOR THE PREVENTION OF OBESITY IN CHILDREN AND ADOLESCENTS**

##### ***THE 53rd DIRECTING COUNCIL,***

Having reviewed the *Plan of Action for the Prevention of Obesity in Children and Adolescents* for 2014-2019 (Document CD53/\_\_);

Recalling the right of children to the enjoyment of the highest attainable standard of health, as set forth in the Constitution of the World Health Organization, the United Nations Convention on the Rights of the Child, and other international and regional human rights instruments;

Mindful that overweight and obesity have reached epidemic proportions among children and adolescents in the Americas and that the problem is already prompting diverse control efforts at the local as well as national levels by Member States;

---

Recognizing that the scientific and public health knowledge about the mechanisms involved in the current obesity epidemic and the public action required to control it is vast and robust;

Cognizant that the present Plan of Action aligns with international mandates emerging from the World Health Assembly, in particular the WHO Global Strategy on Diet, Physical Activity, and Health (WHA57.17 [2004]) and the Comprehensive Implementation Plan on Maternal, Infant, and Young Child Nutrition (WHA65.6 [2012]), in addition to mandates by PAHO Governing Bodies, including the Strategy and Plan of Action for Integrated Child Health (CSP28/10 [2012]), the Regional Strategy for Improving Adolescent and Youth Health (CD48.R5 [2008]), the Regional Strategy and Plan of Action on Nutrition in Health and Development, 2006-2015 (CD47/18 [2006]), the Strategy for the Prevention and Control of Noncommunicable Diseases and the Plan of Action for the Prevention and Control of Noncommunicable Diseases (CSP28/9, Rev. 1 [2012] and CD52/7, Rev. 1 [2013]), as well as with the United Nations Declaration of Human Rights (1948), and the United Nations Convention of the Rights of the Child (1989),

***RESOLVES:***

1. To endorse the *Plan of Action for the Prevention of Obesity in Children and Adolescents* for 2014-2019.
2. To urge Member States to:
  - a) give priority and advocate at the highest levels for the implementation of this Plan of Action;
  - b) promote coordination between ministries and public institutions, primarily in the sectors of education, agriculture, transportation, and urban planning, as well as with local city authorities, to achieve national consensus and synergize actions to halt progression of the obesity epidemic among children;
  - c) support and lead joint efforts between the public and private sectors and civil society organizations around the Plan of Action;
  - d) develop mass communication plans and programs to disseminate the Plan of Action and educate the public on matters of food, healthy eating, and the value of local culinary traditions;
  - e) establish an integrated monitoring, evaluation, and accountability system for policies, plans, programs, legislation, and interventions that will make it possible to determine the impact of implementing the Plan of Action;

- f) ensure that processes are established to hold external reviews and analyses of the Plan's implementation based on national priorities, needs, and capabilities.
3. To request the Director to:
- a) provide support to the Member States in collaboration with other international agencies, such as FAO, IICA, UNICEF, WFP, the United Nations Committee on the Rights of the Child, and national sectors, to work collectively on the Plan of Action, particularly its activities at the subregional and country levels;
  - b) promote implementation and coordination of the Plan of Action to ensure that activities cross-cut the Organization's various program areas and different regional and subregional contexts;
  - c) promote and consolidate cooperation with and among countries, with sharing of the experiences and lessons learned;
  - d) report periodically to the Governing Bodies on progress and constraints in execution of the Plan of Action, as well as on its adaptation to new contexts and needs.

## Report on the Financial and Administrative Implications of the Proposed Resolution for PASB

**1. Agenda item:** Item 4.7 - Plan of Action for the Prevention of Obesity in Children and Adolescents

**2. Linkage to Program and Budget 2014-2015:**

- a) **Categories:** 2 - Noncommunicable Diseases and Risk Factors
- b) **Program areas and objectives:** Noncommunicable Diseases/Nutrition.  
Objective: Halting the percentage of children less than 5 years of age who are overweight.

**3. Financial implications:**

- a) **Total estimated cost for implementation over the lifecycle of the resolution (estimated to the nearest US\$ 10,000, including staff and activities):**

It was estimated that the total expenditure with PAHO current and additional staff, and activities would be US\$ 3,080,000.

- b) **Estimated cost for the 2014-2015 biennium (estimated to the nearest US\$ 10,000, including staff and activities):**

The estimated cost for the 2014-2015 biennium is US\$ 992,000.

- c) **Of the estimated cost noted in b), what can be subsumed under existing programmed activities?**

The cost of current staff (US\$ 1,710,000) is covered through PAHO's regular budget. Resources mobilization will be required for additional staff (US\$ 600,000) and activities by PAHO (US\$ 770,000). Activities by countries and partners should be funded by multisectoral efforts at local level.

**4. Administrative implications**

- a) **Indicate the levels of the Organization at which the work will be undertaken:**

This Plan of Action will be implemented at regional, sub-regional and country levels.

- b) **Additional staffing requirements (indicate additional required staff full-time equivalents, noting necessary skills profile):**

Additional staff recruitment would be needed (one P3-level staff at the regional office) to complete specific activities to support the implementation and evaluation of this Plan.

**c) Time frames (indicate broad time frames for the implementation and evaluation):**

*First year:* Dissemination, advocacy and mobilization of resources for implementation of the Plan at regional, sub-regional and national levels.

*Second year:* Conduct technical consultations to develop food standards, models to implement harmonized legislative and regulatory framework and guidelines to implement and evaluate evidence based programs and interventions (feasibility of a framework convention on healthy eating, regulation of marketing, development of school based policies, monitoring and evaluation).

*Third year:* Capacity building to apply legislative and regulative models and guidelines to implement and evaluate programs and interventions at national level.

*Fourth year:* Technical cooperation and monitoring for the implementation of the Plan of Action.

*Fifth year:* Technical cooperation, evaluation, and reporting of the plan of action achievements.

## ANALYTICAL FORM TO LINK AGENDA ITEM WITH ORGANIZATIONAL MANDATES

1. **Agenda item:** 4.7 - Plan of Action for the Prevention of Obesity in Children and Adolescents
2. **Responsible unit:** Department of Family, Gender and Life Course; Unit of Healthy Life Course (FGL)
3. **Preparing officer:** Dr. Chessa Lutter, Dr. Enrique Jacoby and members of the inter-programmatic Working Group on Childhood Obesity
4. **List of collaborating centers and national institutions linked to this Agenda item:** Ministries of Health, Education and Agriculture; Institute of Nutrition of Central America and Panama Instituto de Nutrición de Centroamérica y Panamá (INCAP); Instituto de Nutrición y Tecnología de los Alimentos (INTA), Chile; Instituto Nacional de Salud Publica (INSP), Mexico; EMBARQ (USA); the Centers for Disease Control and Prevention (CDC), USA; Universidade de Sao Paulo (USP), Brazil; and the Caribbean Public Health Agency (CARPHA).
5. **Link between Agenda item and Health Agenda for the Americas 2008-2017:** This Plan of Action is linked to the Health Agenda for the Americas 2008-2017 since its proposed actions will strengthen the National Health Authorities, tackle the health determinants, reduce health inequalities, harness knowledge, science and technology, and reduce the burden of diseases associated with nutrition and non-communicable diseases.
6. **Link between Agenda item and the PAHO Strategic Plan 2014-2019:** This Plan of Action will contribute to achieve objectives of Category 2 - Non Communicable Diseases and Risk Factors: "Reducing the burden of noncommunicable diseases, including cardiovascular diseases, cancers, chronic lung diseases, diabetes, and mental health disorders, as well as disabilities, violence, and injuries, through health promotion and risk reduction, prevention, treatment, and monitoring of noncommunicable diseases and risk factors." Specifically, this Plan will contribute to reach global and regional targets by halting the obesity epidemic among children.

Furthermore, this Plan is in full alignment with Category 3 - Determinants of Health and Promoting Health throughout the Life Course goals: "Promoting good health at key stages of life, taking into account the need to address the social determinants of health (societal conditions in which people are born, grow, live, work, and age), and implementing approaches based on gender equality, ethnicity, equity, and human rights."