

LANDSCAPE ANALYSIS FOR CHILDHOOD OVERWEIGHT AND OBESITY: PHILIPPINES

MOVING OUR CHILDREN TO THE LIGHTER SIDE

A webinar in observance of World Obesity Day
March 4, 2021 via Zoom



OUTLINE OF THE PRESENTATION

- Introduction
- Childhood Overweight and Obesity
 - Overweight among children in the region
 - Extent of childhood overweight in the Philippines
 - Risk factors for overweight and obesity in children
 - Risk factors for overweight and obesity in later childhood
 - Systems and obesogenic environments in the Philippines
- Summary of gaps
- Recommendations

INTRODUCTION

OVERWEIGHT AND OBESITY IN CHILDHOOD

Children under 5 years old

OVERWEIGHT

when a child's **weight-for-height** is greater than 2 standard deviations above WHO Child Growth Standards median



OBESE

when a child's **weight-for-height** is greater than 3 standard deviations above the WHO Child Growth Standards median

Children and adolescents 5 to 19 years old

OVERWEIGHT

when a child's **BMI-for-age** is greater than 1 standard deviation above the WHO Growth Reference median



OBESE

when a child's **BMI-for-age** is greater than 2 standard deviations above the WHO Growth Reference median



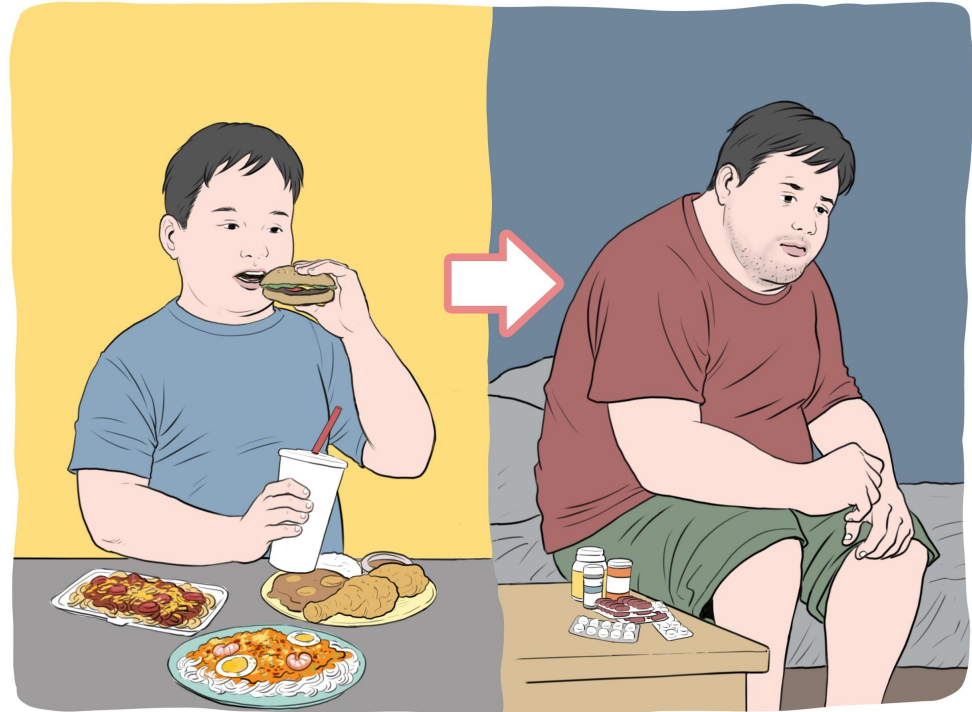
OVERWEIGHT AND OBESITY IN CHILDHOOD

IMMEDIATE HEALTH RISKS

- cardiovascular diseases
- diabetes
- breathing problems
- fatty liver disease
- musculoskeletal discomfort

OTHER HEALTH RISKS

- psychological problems
- low self-esteem
- Other social problems



SYSTEMS AND OBESOGENIC ENVIRONMENT

- **OBESOGENIC ENVIRONMENT** - “an environment that promotes gaining weight and one that is not conducive to weight loss” (Swinburn et al., 1999).
- *The obesogenic factors among Asian children and youth are the following:



FAMILIAL FACTORS

(parenting style/
improved socioeconomic
status)



FOOD RETAIL ENVIRONMENT



WESTERNIZATION



FOOD ADVERTISEMENT



**UNHEALTHY FOOD
CHOICES**

CHILDHOOD OVERWEIGHT AND OBESITY

OVERWEIGHT AND OBESE AMONG CHILDREN IN THE WESTERN PACIFIC REGION

In 2019, 6.2% of children **under 5 years old** were overweight.



From 2010 to 2019, there is a 0.6% annual growth rate, considered **moderate growth**.

In 2016, 9.8% of children and adolescents aged **5 to 19 years old** were considered obese.



From 2006 to 2016, there is a 10.2% annual growth rate, considered **very rapid growth**.

EXTENT OF CHILDHOOD OVERWEIGHT IN THE PHILIPPINES

Indicators	Prevalence ¹	Rating Scale ²	Compound Annual Growth Rate (CAGR)
Infants and children under age 5 years classified overweight	2.9%	Low	-1.7% No growth (2008 to 2019)
Children (5 to 10 y/o) classified with obesity	9.1%	Medium	2.10% Rapid Growth (2005 to 2019)
Older children and adolescents (10.08 to 19 y/o) classified with obesity	9.8%	Medium	3.44% Very Rapid Growth (2005 to 2019)

¹DOST-FNRI. (2020) Expanded National Nutrition Survey: 2019 Results

²De Onis, M. et al. (2018) Prevalence thresholds for wasting, overweight and stunting in children under 5 years.

EXTENT OF CHILDHOOD OVERWEIGHT IN THE PHILIPPINES



There are **more male** overweight/obese children than female.



There are more overweight/obese children in **urban areas** than in rural areas.



There is a higher rate of overweight and obese children among families who belong to a **higher socioeconomic status** than in lower socioeconomic status.

EXTENT OF CHILDHOOD OVERWEIGHT IN THE PHILIPPINES

Regions with a **MEDIUM PREVALENCE** (>5% rate) of childhood overweight/obesity:

- NCR (0 to 19 years old)
- Central Luzon (0 to 10 years old)
- CALABARZON (0 to 5 years old)

All other regions have either **LOW** (2.5% to <5%) or **VERY LOW** (<2.5%) prevalence of childhood overweight/obesity.



PROGRESS AND RISK LEVEL OF OVERWEIGHT AND OBESITY IN CHILDREN

Indicators	Level	Rating Scale
Likelihood of meeting the target for overweight among infants and children under 5y ¹	3.9%	Off-Course: No Progress
Likelihood of meeting the target for obesity in children and adolescents 5-19y ²	2%	Poor chance
Overall childhood obesity country risk level ²	45.5%	High risk

¹Global Nutrition Report: Philippines overview (2018).

²Atlas of Childhood Obesity (2019).

RISK FACTORS FOR OVERWEIGHT AND OBESITY IN EARLY CHILDHOOD

- Maternal nutrition
- Pre/Postnatal care
- Infant and Young Child Feeding
- Low/High Birth weight
- Stunting



Indicator	Data	Rating Scale
Maternal Nutrition		
Women of reproductive age (15-49 y/o) with obesity ¹	35.2%	High
Lactating women with BMI >24.9 kg/m ² ¹	31.1%	High
Annualised growth rate of women classified with obesity (20 y/o and above) from 2003 to 2019 ¹	2.68%	Rapid Growth
Postnatal		
Births with a reported birth weight below 2.5 kg among 0 to 71 months old ²	14%	High
Births with a reported birth weight above 3.5 kg ³	11.2%	High

Indicator	Data	Rating Scale
Infant and Young Child Feeding		
0 to 23 months who were initiated to breastfeed within one hour after delivery ¹	74%	High
Infants 0 to 5 months fed exclusively with breastmilk ¹	57.9%	Moderate
Children fed in part with breastmilk at 1 year ¹	54.1%	Moderate
Children fed in part with breastmilk at 2 years ¹	34.2%	Low
Annual sales of milk formula (kg/capita of children under five years) per year ²	5.2 kg/capita/year	High
Trends in consumption of milk formula: sales data (volume per capita) ²	2.04%	Rapid growth
Stunting		
Stunting in children under 5 years old ¹	28.8%	High
Stunting: annualised growth rate from 2008 to 2019 ¹	0.29%	Low Growth

UNDER 5 STUNTING



3 out of 10 males and females under 5 years old are stunted.



There are more stunted children in **rural areas** than in urban areas.



There is a higher rate of stunted children among families who belong to a **lower socioeconomic status** than in higher socioeconomic status.

Exclusively breastfed infants (0 to 5 months old)



There are more exclusively breastfed infants (0 to 5 months old) children in **rural areas** than in urban areas



There is a higher rate of exclusively breastfed infants (0 to 5 months old) children among families who belong to a **lower socioeconomic status** than in higher socioeconomic status

Regions with **HIGH PREVALENCE (>70% rate)** of exclusively breastfed infants:

- MIMAROPA
- CAR

All other regions have **MEDIUM PREVALENCE (30% to 70% rate)** of exclusively breastfed infants

RISK FACTORS FOR OVERWEIGHT AND OBESITY IN LATER CHILDHOOD

DIETARY INTAKE

- Moderate proportion (37.0%) of students aged 13 to 17 years old usually drank **carbonated soft drinks** one or more times per day (WHO, 2015)
- There was a high mean one-day (47g/day) household intake of **sugars and syrups** in all populations and a **very rapid growth** from 2014 to 2019 (DOST-FNRI, 2016).
- There was a **rapid growth** in the annual **sales of soft drinks** from 2014 to 2019 in all populations (Euromonitor data).



PHYSICAL ACTIVITY

- 93.4% Filipino children aged 11 to 17 years old **do not meet** WHO recommendations on Physical Activity for Health, i.e. doing less than 60 minutes of moderate- to vigorous-intensity physical activity daily (WHO, 2016).
- There is **moderate growth** of children doing **sedentary behaviours** from 2003 to 2015 (Global School-based Student Health Survey Philippines, 2015)
- Only 52% of schools in West Pacific Region have physical education included in the school curriculum



SYSTEMS AND OBESOGENIC ENVIRONMENTS IN THE PHILIPPINES

SUPPORTIVE ENVIRONMENT AND POLICIES THAT INFLUENCE RISK FACTORS FOR OVERWEIGHT AND OBESITY

	Existing
National Policy	<ul style="list-style-type: none">- PPAN 2017-2022: targets no increase in childhood overweight and a reduction of overweight among adolescents and adults- NCD Strategic Plan identifies overweight/obesity as a risk factor for NCDs, but only targets adolescents and adults
Food Based Dietary Guidelines and Nutrient Profiling Schemes	<ul style="list-style-type: none">-2012 Nutritional Guidelines for Filipinos-Daily Nutritional Guide Pyramid-Healthy food plate for Filipinos (Pinggang Pinoy)-DepEd Order No. 13 s. 2017: Policy and Guidelines on Healthy Food and Beverage Choices in Schools and DepEd Offices and similar local ordinances

SUPPORTIVE ENVIRONMENT AND POLICIES THAT INFLUENCE RISK FACTORS FOR OVERWEIGHT AND OBESITY

	Existing
Food Labelling and Marketing	<ul style="list-style-type: none">-Local ordinances (i.e.San Juan City's Ordinance No. 10, Series of 2015 requiring all restaurants and fast foods, establishments, catering services, and school canteens to indicate in their menu and beverages the nutrient content per serving of the food they are offering to the public)
Media Food Advertising	<ul style="list-style-type: none">-Advertising in the Philippines is self-regulated and led by the Ad Standards Council (ASC).- Philippine Responsible Advertising to Children (RAC) Pledge, which is voluntary, but no monitoring on compliance

SUPPORTIVE ENVIRONMENT AND POLICIES THAT INFLUENCE RISK FACTORS FOR OVERWEIGHT AND OBESITY

	Existing
Food reformulation, taxation, subsidy, importation, and research	<ul style="list-style-type: none">-HB # 7200 and HB # 7202 aim to regulate the manufacture, importation, distribution and sale of food products with high trans-fatty acids content.- Taxation of sugar sweetened beverages

SUPPORTIVE ENVIRONMENTS AND POLICIES THAT INFLUENCE RISK FACTORS FOR OVERWEIGHT AND OBESITY

	Existing
Environmental and cultural factors	DILG Memorandum Circular 2020-100 “Guidelines for the Establishment of a Network of Cycling Lanes and Walking Paths to Support People's Mobility”

POLICIES THAT ADDRESS RISK FACTORS FOR CHILDHOOD OVERWEIGHT AND OBESITY

	Existing	Needs improvement
National Support	<ul style="list-style-type: none">- Philippine Plan of Action for Nutrition (PPAN) 2017-2022.- Local Ordinances and Issuances on nutrition programs and policies- Public health management includes integrated public health program strategies for: Women, Men, and Children's Health Development Programs as stated in the Budget Briefer of DOH	<ul style="list-style-type: none">- "Health for All Agenda 2016-2022" guaranteed interventions towards cancer, diabetes, heart disease, and risk factors - obesity, smoking, diet, sedentary lifestyle, and malnutrition. However, the identified risk factors pertain more to adults than children- political commitment from the government regarding actions on childhood obesity.- inter-agency multi-sectoral group to lead actions to address overweight and obesity- allocation of funds for research on obesity prevention- monitoring reports of food company activities on HFSS food promotion

POLICIES AND PROGRAMS THAT ADDRESS RISK FACTORS FOR CHILDHOOD OVERWEIGHT AND OBESITY (Maternal Health and Nutrition)

	Existing
Health System: During Pregnancy	<ul style="list-style-type: none">-Adolescent and maternal nutrition programs included in PPAN 2017-2022-Dietary Supplementation Guidelines for pregnant and lactating women.-DOH Administrative Orders 2008-0029, 2016-0035, and Department Memorandum 2020-0092 (Nutritional Guidelines for WRA)-RA 11148

POLICIES AND PROGRAMS THAT ADDRESS RISK FACTORS FOR CHILDHOOD OVERWEIGHT AND OBESITY (IYCN)

	Existing
Health and Social Support systems: During infancy and young childhood	<ul style="list-style-type: none">-EO 51, or the “Philippine Milk Code”-RA 10028 - Expanded Breastfeeding Promotion Act of 2009,-Mother-Baby Friendly Hospital Initiative" (MBFI, 1992)-The Philippine IYCF 2030 Strategic Planning (DOH< UNICEF, 2019)-RA 11148-Training of Trainers on infant and young child feeding (IYCF) and Pabasa sa Nutrisyon, Lactation Management for hospital-based implementers/clinicians-New Training Regulations (TR) for barangay health workers (TESDA)

POLICIES AND PROGRAMS THAT ADDRESS RISK FACTORS FOR CHILDHOOD OVERWEIGHT AND OBESITY (Diet and Physical Activity)

	Existing
Education System	<ul style="list-style-type: none">-The Early Childhood Care and Development Law (Republic Act 8980)-DSWD's supplemental feeding program (DSWD A.O. No. 04, Series of 2016)-Policy and Guidelines on Healthy Food and Beverage Choices in Schools and DepEd Offices (Department Order No. 13, Series of 2017)-School-Based Feeding Program for School Years 2017-2022 (Department Order 39, Series of 2017)-"WASH in Schools: Three stars approach"-DepEd's Educational Facilities Manual-DepEd Order No. 034, Series of 2019 or the "Revised Physical Fitness Test Manual"

RESULTS OF KEY INFORMANT INTERVIEWS

KEY INFORMANT INTERVIEWS (KII)

- **11 key informant interviews** with different stakeholders with a range of interests and positions were conducted remotely via Zoom.
- Interviewees included representatives from national and regional government departments and professional organizations.
- Four themes emerged from the interviews:
 - 1) **No specific policy addressing childhood overweight and obesity**
 - 2) **Governance is an important facet in policy making and implementation**
 - 3) **Family is key to promoting health and nutrition.**
 - 4) **Adequate nutrition education is needed**



SUMMARY OF GAPS

GOVERNANCE

- No written national government policy specific for childhood overweight and obesity.
- There is limited visible support from the national government for action on childhood obesity.



POLICIES AND PROGRAMS

- No care package for childhood overweight and obesity.
- Limited implementation of and support to the Food-Based Dietary Guidelines.
- Limited policies or programs to promote and support active transport and physical activity and protect safe travels and outdoor activities.
- No government-endorsed nutrient profiling scheme (NPS).



REGULATION AND ENFORCEMENT

- Limited regulation of marketing of food products to children
- Data on enforcement of related policies such as the Philippine Milk Code are also not publicly accessible.



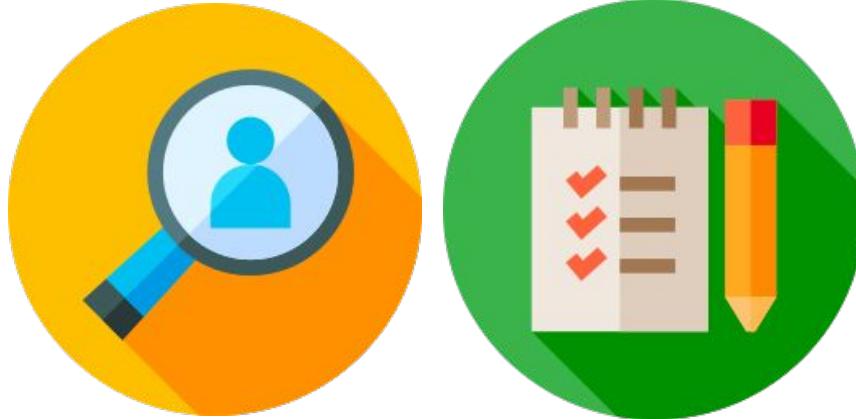
FINANCE

- Research on childhood obesity plays an important role in discovering new information, new treatments, and new strategies or interventions. However, limited information is still known and there is limited funding for research on childhood obesity prevention.



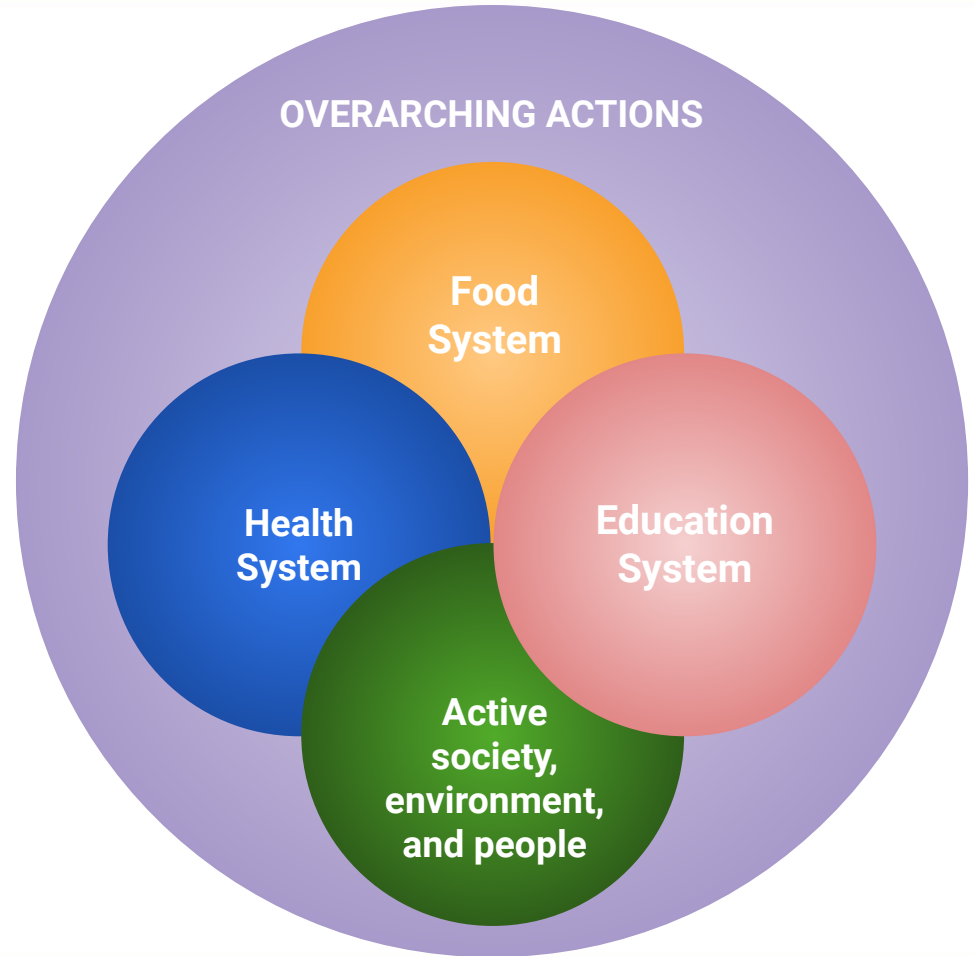
MONITORING AND SURVEILLANCE

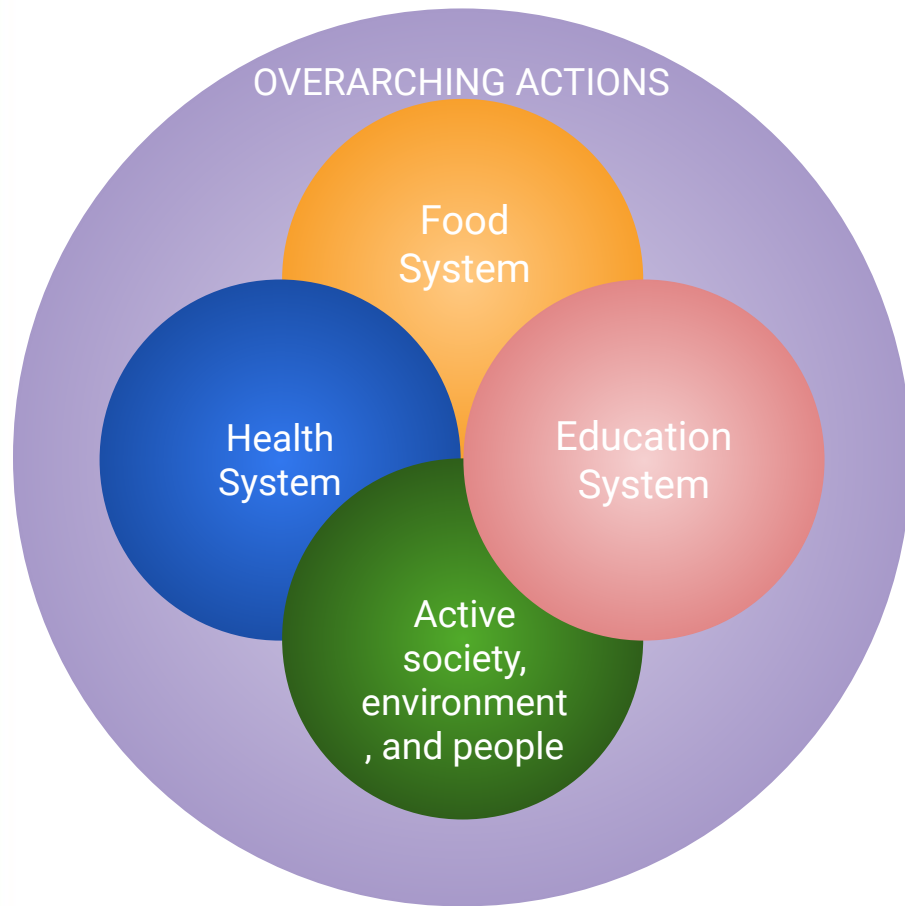
- No available monitoring reports on Health Impact Assessments
- No publicly accessible monitoring reports on other supportive environments



RECOMMENDATIONS

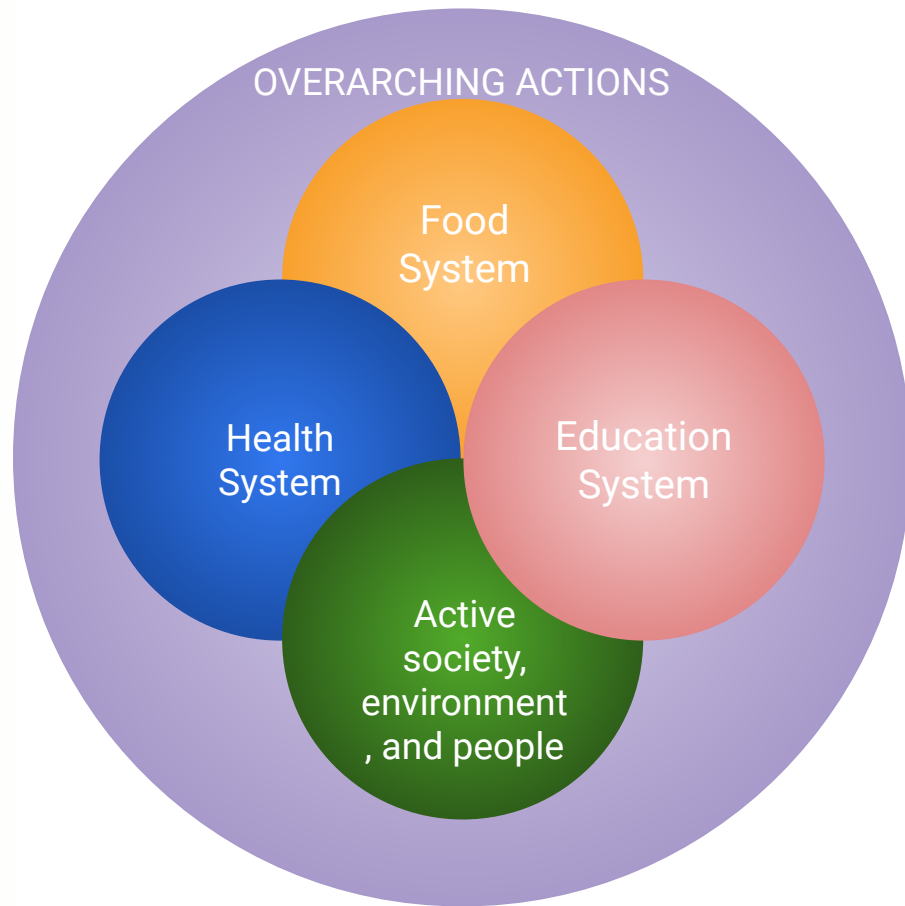
FRAMEWORK FOR ACTION





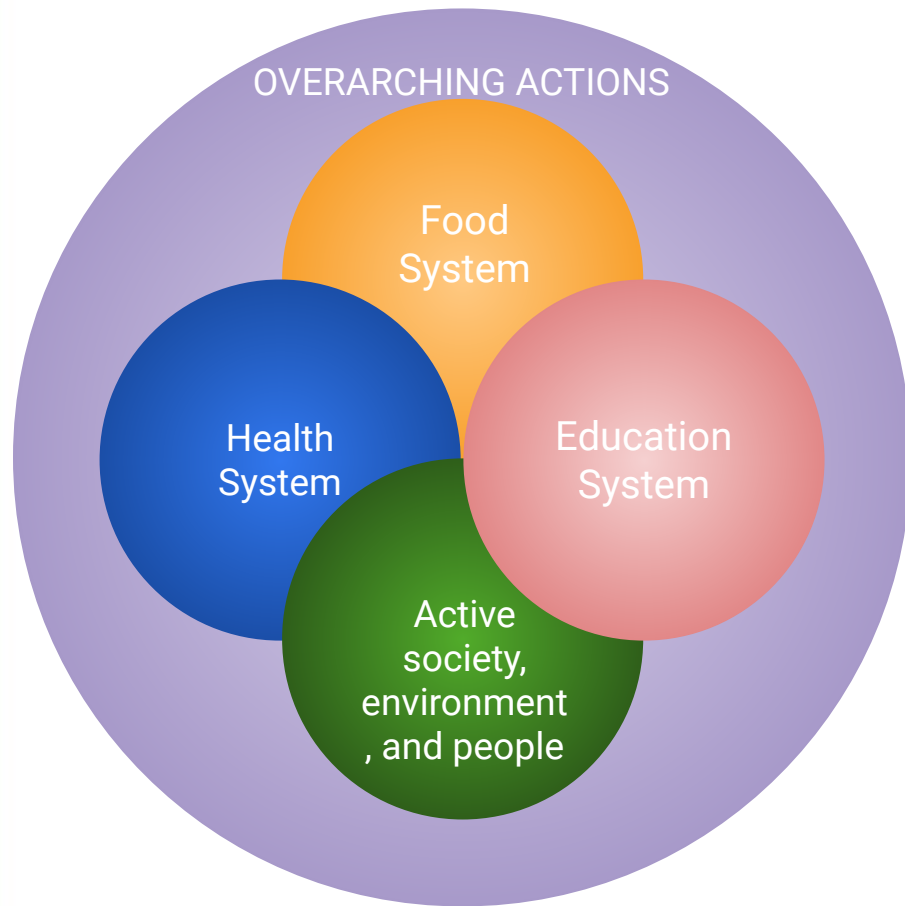
OVERARCHING ACTIONS

- Clear leadership structure for overweight and obesity (TWG, whole society approach)
- SBCC targeted to families/caregiver
- Monitoring and evaluation of impact of policies and programs
- Funding allocation specific for research on childhood obesity



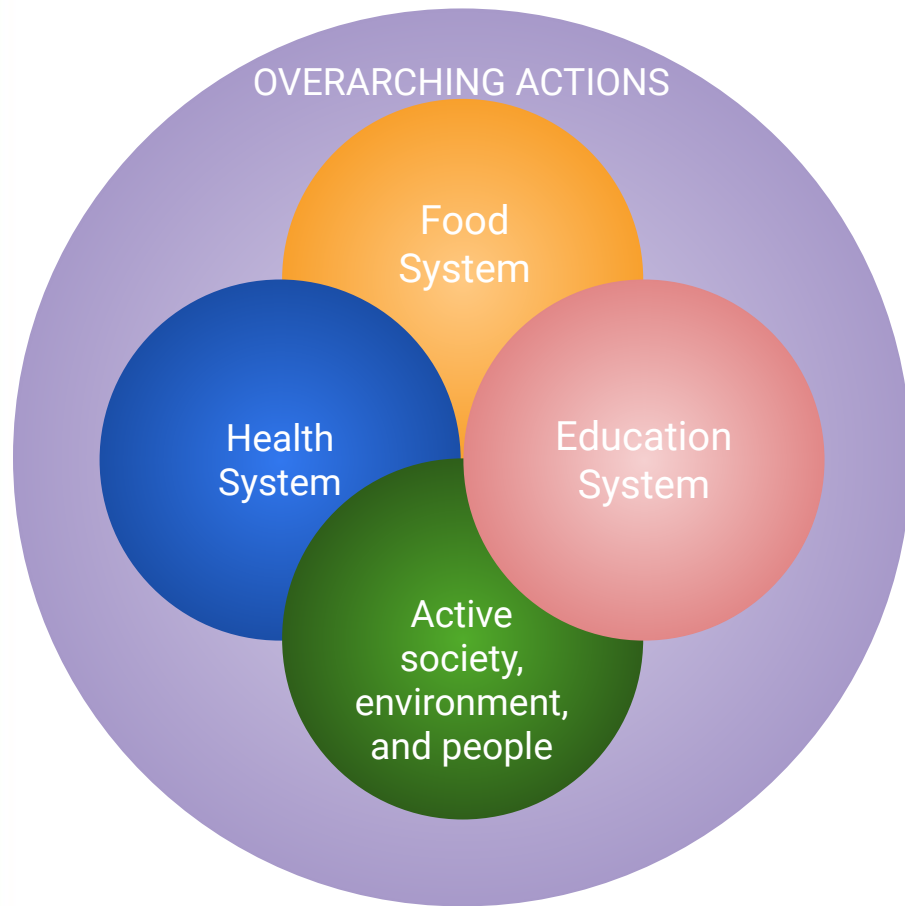
HEALTH SYSTEM

- Maternal nutrition and IYCF programs
- Screening, early identification and referral systems for overweight/obese children
- Individualized care for overweight/obese children, including a Nutrition Care Package for out-patients
- Prevention of complications of childhood overweight and obesity
- Capacity building of healthcare workers



EDUCATION SYSTEM

- Regulation of school food environments, including accessibility of safe water and nutritious foods
- Standards for the amount of sedentary time, or screen time, for children at school.
- Specific policy to give access to school and municipal sport and play facilities outside of school hours
- Monitoring of SFP in day care centers and elementary schools



ACTIVE SOCIETY, ENVIRONMENT, AND PEOPLE

- Active transport (enforce and monitor implementation of policies to encourage active travel)
- Code of conduct for media companies/journalists on reporting on obesity and avoiding stigma or victim-blaming
- Specific national guidance for screen-time and sleep-in child-care settings.

END

Thank you!

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