



47th Nutrition Month

MALNUTRISYON PATULOY NA LABANAN

FIRST 1000 DAYS TUTUKAN!

#Laking1000
#2021NutritionMonth
#First1000Days



TALKING POINTS

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I. What is Nutrition Month?

Nutrition Month is an annual campaign held every July to create greater awareness among Filipinos on the importance of nutrition as provided under Presidential Decree 491, or the Nutrition Act of the Philippines. The law also mandates the National Nutrition Council (NNC) to lead and coordinate the nationwide campaign.

II. What is the theme of the 47th Nutrition Month?

The campaign is guided by a chosen theme that addresses current and predominant issues in nutrition. At its meeting on 05 March 2021, the NNC Technical Committee approved the theme "***Malnutrisyon patuloy na labanan, First 1000 days tutukan!***" The NNC TechCom noted that only 11% of respondents were aware of the First 1000 Days strategy based on the NNC-commissioned recall survey in January 2021. Continued promotion of the First 1000 Days through Nutrition Month would help Filipinos increase knowledge and understanding about this key strategy. At the same time, the theme calls for continued action to address malnutrition even during the pandemic.

Notwithstanding efforts to mitigate the pandemic and its consequences, the theme reaffirms the call for all members of society to pursue and continue efforts to address malnutrition guided by the Philippine Plan of Action for Nutrition 2017-2022 as the framework. The theme also emphasizes the need for scaling up interventions in the first 1000 days of life through the strengthened implementation of Republic Act 11148 (*Kalusugan at Nutrisyon ng Mag-Nanay Act*). The focus on the first 1000 days of life is one of the strategic thrusts of the PPAN 2017-2022.

III. What are the objectives of the campaign?

The campaign aims to raise awareness on the nutrition issue and encourage various stakeholders to participate and engage in activities to improve nutrition. The campaign aims to:

1. increase the understanding of the first 1000 days of life strategy and the Philippine Plan of Action for Nutrition (PPAN) as the overall framework (EDUCATE);
2. facilitate collaboration among various stakeholders for scaled-up interventions to fight malnutrition (ENCOURAGE); and
3. generate actions from stakeholders about nutrition (ENGAGE).

IV. What are the key messages?

The positioning statement of the campaign is:

The Nutrition Month campaign is an institutionalized campaign that offers various stakeholders an opportunity to inform about the most relevant nutrition issue in the Philippines. This year, the call to action is:

“By working together, we can end all forms of malnutrition. Let us scale up critical actions in the first 1000 days of life!”

The campaign wants to reach specific target groups whose behavior or actions can support nutrition improvement.

Priority Audience	Key Message
Pregnant women	<i>Kumain ng sapat, para tamang weight gain ang katapat.</i> The aim is to reduce the prevalence of pregnant women who are nutritionally at-risk and, in so doing, reduce the number of low-birth-weight babies being born and reduce the likelihood of child stunting.
Families	<i>Maging madiskarte sa pagpapakain kay baby.</i> The majority of children 6-23 months are not adequately fed, resulting in poor nutrition early in life. Families need to take care of children from 0 -23 months, or until they reach their second birthday by ensuring that they are breastfed in the first 6 months, and on their 6 th month, they are given appropriate, varied, and in the right amounts and frequency of complementary food with continued breastfeeding.
Local chief executives	<i>Nutrisyon ng aking bayan, aking pananagutan.</i> Local government units with local chief executives who support nutrition have been shown to have reduced malnutrition levels. Local chief executives are called upon to support nutrition by having local nutrition action plans budgeted, designation or appointment of full-time nutrition action officer and nutrition staff, and functional local nutrition committees to manage the local nutrition program aligned with the Philippine Plan of Action for Nutrition 2017-2022.
NGOs, civil society, academe, NGAs, and local government units	<i>Suportahan ang PPAN. Invest in the first 1000 days.</i> Addressing malnutrition requires a whole of society approach. Civil society organizations, non-government organizations, businesses, media, and academe need to work together with the government to scale up nutrition interventions and achieve synergy.

For better recall, the ABAKADA messages have been identified to support the campaign. The **ABAKA** messages focus on key actions in the first 1000 days of life while **DA** calls on all stakeholders to support “Malnutrisyon patuloy na labanan, first 1000 days tutukan!”

Alagaan ang buntis.

Breastfeeding kay baby.

Komplementary feeding na sapat.

Dapat lahat suportado ang PPAN.

V. What nutritional problems affect Filipinos?

1. Stunting

It is short or very short for age. Technically, the percentage of children whose height-for-age is more than 2 standard deviations (SD) below the WHO Child Growth Standards (WHO-CGS) median. It is caused by poor nutrition, repeated infection, and inadequate psychosocial stimulation, particularly in early life.

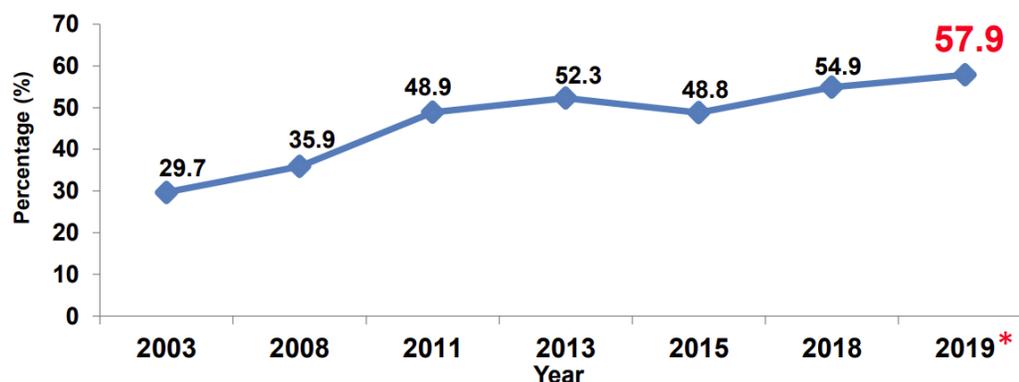
In 2019, the stunting rate of Filipino children ages 0 to 23 months old was 21.9% or 2 in every 1. Stunting is also common in older children ages 0-59 months old (28.8%), school-age children ages 5-10 years old (25.2%), and adolescents ages 10-19 years old (26.8%). (Source: DOST-FNRI. 2019 Expanded National Nutrition Survey.[1])

Child stunting is still a high-level public health problem [2]. It has adverse consequences, including poor cognition, language, sensory-motor capacities, poor school performance, low adult wages, lost productivity, and excessive weight gain later in childhood, leading to increased risk of non-communicable diseases in later life.

Infant and young child feeding (IYCF) composed of breastfeeding and complementary feeding make up most of the source of the baby’s nutrition in their early years. Poor feeding practices during this period could lead to malnutrition accompanied by severe illnesses, neurodevelopmental delays, and other irreversible consequences of stunted growth. The 2019 ENNS shows that timely breastfeeding initiation within 1 hour after delivery was practiced among 7 in every 10 (74.0%) infants, a significant increase from 2018 (69.2%) and 2015 (65.1%). Timely initiation of breastfeeding has been proven to result in exclusive

breastfeeding of infants aged 0 to 6 months old. This data reflects in the ENNS (as seen in Figure 3) that 57.9% of infants less than six months old were exclusively breastfed, a proportion with a significant increase since 2003.

Figure 1. Proportion of infants less than six months old exclusively breastfed at the time of the survey.



Source: 2019 ENNS, DOST-FNRI.

Beginning at 6 months of age, complementary food is introduced to infants and continued breastfeeding up to 2 years and beyond. One in every two infants (54.1%) were continuously breastfed up to 1 year old, while three in every 10 (34.2%) were continuously breastfed up to 2 years. Both percentages increased compared to the respective counterparts from previous years for continued breastfeeding at one year (50.6% in 2018; 53.2% in 2015) and 2 years (33.1% in 2018 and 32.7% in 2015).

Almost 90% of young children do not meet the required quality and quantity of complementary food. The minimum dietary diversity is when children 6-23 months of age receive foods from at least four food groups of the 7 food groups: (1) grains, roots, and tubers; (2) dairy products; (3) legumes and nuts; (4) flesh-meat; (5) eggs; (6) vitamin A-rich fruits and vegetables; and (7) other fruits and vegetables. In 2021, the global indicator for MDD was amended to meet at least 5 or more food groups out of the 8 food groups, in which breast milk was added recently [3].

2. Wasting

It is the condition of being very thin for height, often occurring in a short period, resulting in death if left without intervention. It is measured as below -2 standard deviations of the WHO-CGS for weight-for-height, <115 mm mid-upper arm circumference (MUAC), or bilateral pitting edema. It is caused by inadequate

quantity and quality of dietary intake and prolonged illnesses, usually associated with poverty and poor maternal and child health and nutrition.

The prevalence of wasting in children below two (2) years old is 7.0%, while 5.8% in children 0-59 months, 8.0% in school-age children 5-10 years old, and 11.7% in adolescents 10-19 years old. (Source: DOST-FNRI. 2019 Expanded National Nutrition Survey.)

If not appropriately treated, wasting impairs the functioning of the immune system that increases the severity and susceptibility of infectious diseases like diarrhea, pneumonia, and measles, which later can lead to death.

3. **Obesity**

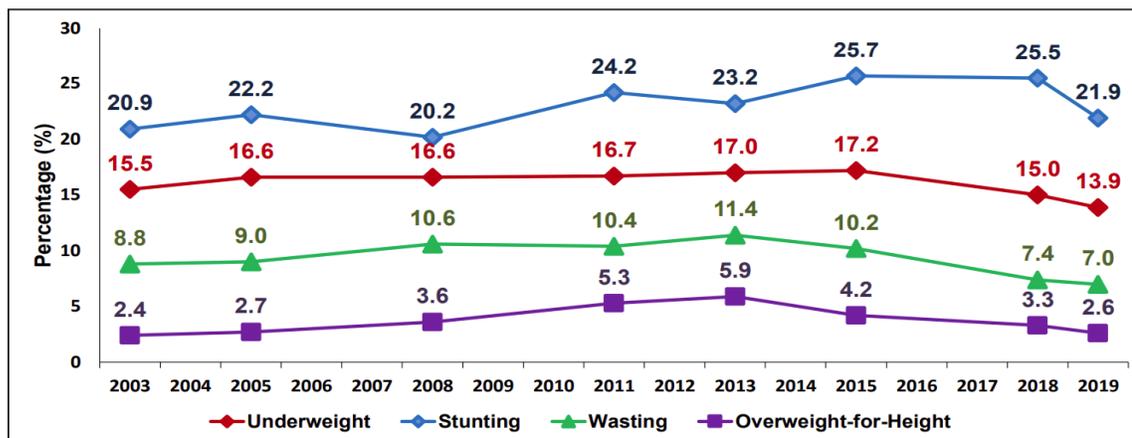
It is characterized when a person is too heavy for his or her age and height. Overnutrition is caused by excessive fat accumulation brought by increased food intake, especially energy-dense foods high in sugar and fat, and increased physical inactivity due to sedentary lifestyle, changing transportation, and rapid modernization.

The rate of obesity is a growing trend across vulnerable groups, affecting 2.6% of children under two (2) years old, 2.9% of children under 5 years old, 8.0% of school-age children, 9.8% of adolescents, 35.2% of non-pregnant/non-lactating women of reproductive age (15-49 years old), and 31.1% of lactating women. In adults ages 20-49 years old, 28.6% are overweight, while 9.0% are obese or about 1 in every 10. (Source: DOST-FNRI. 2019 Expanded National Nutrition Survey.)

Obesity is considered a significant risk factor for non-communicable diseases such as cardiovascular including stroke, diabetes, musculoskeletal disorders like osteoarthritis, and some cancers like endometrial, breast, ovarian, prostate, liver, gallbladder, kidney, and colon.

The 2019 ENNS results show a slight decline in malnutrition rates from 2018 to 2019 among children ages 0 to 23 months, as seen on the chart below. Underweight from 15.0% to 13.9%, stunting from 25.5% to 21.9%, wasting from 7.4% to 7.0% and overweight-for-height from 3.3% to 2.6%.

Figure 2. Trends in the prevalence of malnutrition among children less than 2 years old (0-23 months): Philippines, 2003-2019.



Source: 2019 ENNS, DOST-FNRI.

4. Micronutrient Deficiencies

These are characterized by a lack of essential vitamins and minerals needed for normal growth and development. Deficiencies in iron and Vitamin A, which are the critical nutrients in child survival, remain a public health concern among infants 6-11 months. Anemia affects 38% of infants 6-11 months and 26.2% of children 12-23 months old. On the other hand, iodine deficiency disorders (IDD) have not been eliminated among pregnant and lactating women. Iodine is critical in the brain development of the unborn and very young child. In 2019, the median urinary iodine concentration (UIC) of pregnant women was inadequate at 122 ug/L, and the proportion of the same group with UIC below 50 ug/L is at 21% [4].

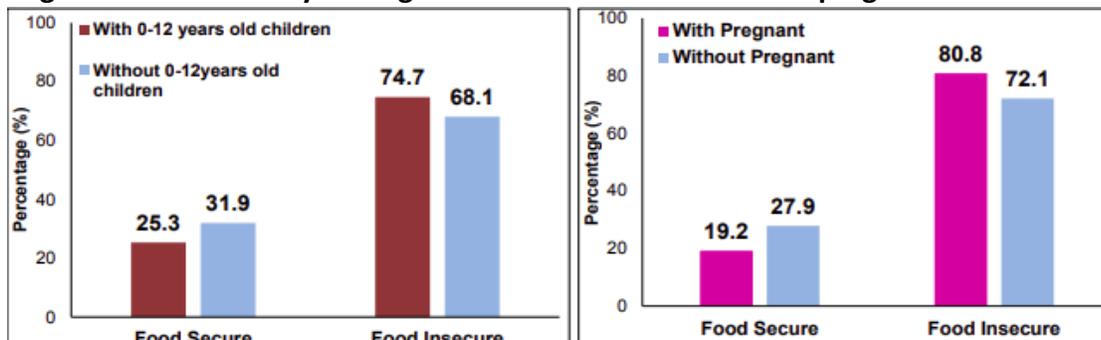
5. Hunger and food insecurity

Individuals' nutritional status depends on many factors, one of which is food security or access to safe and healthy food. Inability or lack of access to sufficient, safe, and nutritious food poses a threat of food insecurity in the family, which later may contribute to malnutrition, especially in nutritionally at-risk members such as pregnant women, lactating mothers, and young children.

According to the 2019 ENNS, 7 in every 10 (74.7%) families with children and 8 in every 10 (80.8%) families with pregnant women are food insecure. Further, the Social Weather Station survey on involuntary hunger in 2020 revealed that the average hunger rate among Filipino families is high at 21.1% [5].

Food insecurity was also found higher in rural areas, male-headed and poor households, households with heads with lower educational attainment, without financial assistance from abroad, and engaged in agriculture.

Figure 3. Food security among households with children and pregnant women.



Source: 2019 ENNS, DOST-FNRI.

VI. How does nutrition impact COVID-19?

In March 2020, the World Health Organization (WHO) declared COVID-19 disease as a global pandemic. The rapid spread of the illness shocked the world, resulting in global lockdowns and economic shutdowns. Anyone can be infected by COVID-19, with symptoms ranging from mild to severe. However, some people are at increased risk, like older persons and people with comorbidities.

During the COVID-19 pandemic, optimal nutrition is the body's defense against viral disease and infection. Nutrition plays a vital role in immune function. Nutritional status has been widely accepted as a critical factor in protecting against different infectious diseases and viral infections. It is affected by certain factors like diet and lifestyle, age, sex, physical activity, overall health status, and medications. The high consumption rate of diets high in saturated fats, sugars, and refined carbohydrates contributes to the prevalence of obesity and type 2 diabetes and could place the affected population at an increased risk for severe COVID-19 pathology and mortality. Consumption of fatty and sugary food items activates the innate immune system and impairs adaptive immunity, leading to chronic inflammation and impaired host defense against viruses [6,7].

Cena et al. suggest that to improve the efficiency of the immune system, it is recommended to include specific foods in the diet that are good sources of antioxidants like fresh fruit and vegetables, soy, nuts, and omega-3 fatty acids, all being low in saturated fats and trans fats.

The following micronutrients were found to support the immune system: vitamins A, B6, B12, C, D, E, folate, and trace elements like zinc, iron, selenium, magnesium, copper, and omega-3 fatty acids, eicosapentaenoic acid, and docosahexaenoic acid [8,9].

However, many studies supported that Vitamin C, Vitamin D, and zinc are the most crucial nutrients for a better immune system against the SARS-CoV2 virus.

VII. What is the impact of the pandemic on nutrition?

COVID-19 pandemic has implications on nutrition, food security, and food systems. The rapid spread of the disease led to strict community quarantine measures and imposed lockdowns resulting in a significant economic slowdown affecting food supply chains. The Rapid Nutrition Assessment Survey (RNAS) conducted in 2020 provided a snapshot of the country's food security situation, coping mechanisms, and nutrition services availed during the COVID-19 pandemic [10].

The RNAS reported that 6 in every 10 households experienced moderate to severe food insecurity. Food insecurity was reported highest during April and May 2020 where Luzon was under the Enhanced Community Quarantine (ECQ). The impact on food security was found to be highest in households with children (74.7%) and pregnant members (80.8%), consistent with 2019 ENNS findings. Access to food was due to no money to buy food, no or limited transportation, no money due to lost jobs, limited food stores in the area, no other members to buy food for the elderly. While the government and private groups worked together to provide food assistance to affected households through "*ayuda*" food packs, the food items were insufficient to meet Filipinos' recommended energy and nutrient intakes [11,12]. The food packs included rice and cereals, canned goods (sardines, canned tuna, corned beef, meatloaf), instant coffee, and milk and other dairy products (milk, yogurt, and cheese).

COVID-19 pandemic did not drastically affect breastfeeding practices, either exclusive or any form of breastfeeding (60.8% and 59.7%), respectively. However, 19.0% of children 0-23 months old stopped breastfeeding during the COVID-19 pandemic due to mothers deciding not to breastfeed, mothers returning to work, the child not wanting to breastfeed, or the mother not being able to go home. Complementary feeding practices were not affected, with 93.3% of young children meeting the minimum meal frequency. Breastmilk substitutes (BMS) were included in the donations for families with babies less than two years old. Donations of milk formula during disasters, calamities, emergencies, and public health crises, including pandemics, are prohibited under Executive Order 51 or the Philippine Milk Code.

Due to lockdowns and limited resources, programs such as *Operation Timbang* (OPT) Plus, supplementary feeding, micronutrient supplementation, and deworming were interrupted. The RNAS reported that 48.9% of children were not weighed nor measured for height. Non-participation in OPT Plus was due to the closure of health centers during the lockdown, the health and nutrition workers did not visit house-to-house, and that some households do not know that the program exists. Maternal health services were also greatly affected by imposed lockdowns. In fact, 15.5% of pregnant women were not

able to have their prenatal check-ups. Some expressed their fear of going to a health facility or were not aware of their current pregnancy.

Closure of schools resulted in delays in delivering nutrition-related services. UNICEF reported a 30 percent reduction of nutrition services in schools in low- and middle-income countries, especially those that imposed total lockdown like the Philippines [13]. The school-based feeding program of DepED was tweaked for blended, home-based learning [14]. Instead of hot meals, schoolchildren are now given nutritious food products delivered to their households or picked up by parents in schools. The dietary supplementation program was also shortened to 60 days for the regular component and 50 days for the milk component.

Staying at home limited the movement of people, thus their physical activity too. Reduced physical activity combined with unhealthy behaviors may increase the risk of becoming overweight and developing non-communicable diseases such as cardiovascular disease and type 2 diabetes mellitus, increasing the risk of morbidity and mortality, especially among older individuals.

VIII. **What is the First 1,000 days of life?**

The first 1000 days of life is from conception up to the child's second birthday. It is considered the "golden window of opportunity" where health, nutrition, and development foundations are established. Good nutrition can help maximize a child's ability to grow, learn, and develop, which profoundly affects his/her health, well-being, and success later on in adulthood. The quality of nutrition during the First 1000 Days can significantly impact national and global development goals. The first 1000 days consist of 3 essential parts: 270 days of conception and pregnancy, 365 days for the first year, and another 365 days for the second year of life. What happens to the mother and child during this stage in life has a lifelong impact on health and well-being of the individual and overall the country.

1. **The First 1,000 days of life is a period of pregnancy (270 days) up to the first two years of the child (730 days).**

Conception, pregnancy, and birth (270 days)

The First 1000 days of life begin at conception. The growing fetus is dependent on the mother for nutrition to achieve optimal growth and development. To provide the necessary nutrients for the baby, the mother should consume an adequate and balanced diet with essential nutrients (iron, folic acid, and iodine). These micronutrients are needed for normal cognitive and motor development and social skills that have lifelong effects on the child.

Brain development begins at birth. At 4 weeks, the brain has an estimated 10,000 cells, rapidly increasing to 10 billion by 24 weeks. During pregnancy, the child's metabolism, immune system, and organ functioning begin to develop. New evidence suggests that non-communicable diseases like diabetes, hypertension and stroke have origins as early as pregnancy. Food preferences that influence lifelong eating habits are predicted in the womb.

Before conception, a woman should maintain a normal weight to give birth to a child with normal weight. A pregnant woman should also have healthy weight gain throughout her pregnancy, about 1-1.5 kilograms for the first trimester and 0.5 kilograms per week during the rest of the pregnancy.

First 6 months of life (180 days or 0-5 months)

Pregnant women should give birth in a birthing facility with the help of a trained health professional to ensure that the protocol in giving birth is followed and possible maternal complications are managed. The Department of Health issued the Essential Newborn Care Protocol (*Unang Yakap*) in 2009 that includes four key elements which aim to reduce neonatal mortality and morbidity:

- 1) immediate and thorough drying of the newborn for 30-60 seconds to warm the newborn and stimulate breathing;
- 2) early skin-to-skin contact between the newborn and the mother and delayed washing for at least 6 hours to prevent infection, hypothermia, and hypoglycemia;
- 3) properly timed clamping and cutting of umbilical cord after 1 to 3 minutes to avoid anemia; and
- 4) non-separation of the newborn from the mother for early initiation of breastfeeding and protection from infections.

Starting from the first hour after giving birth, it is best for the mother to exclusively breastfeed her baby for the first 6 months of life. It means that the infant should receive only breastmilk from the mother or a wet nurse or expressed breastmilk and should be given no other solids or liquids, except **doctor-prescribed** oral rehydration solution, drops, or syrups consisting of vitamins, mineral supplements, or medicines. Breastmilk contains various essential nutrients, antibodies, growth factors, and hormones that breastmilk substitutes cannot replicate. Breastfed babies are found to perform better in school and have higher IQs compared to their non-breastfed counterparts. Breastfeeding also contributes to sensory and emotional circuitry for normal cognitive and socioemotional development.

6 to 23 months of life (181 to 550 days)

At 6 months, the baby should start receiving appropriate complementary food while continuing breastfeeding to meet his/her nutritional requirements for growth and development. Six months to 2 years of age is a critical period of a child's life because deficiencies and illnesses during this period can contribute significantly to undernutrition, particularly stunting. Appropriate complementary feeding is a proven intervention to reduce stunting during the first two years of life substantially. Proper complementary feeding has the following components, with the DDULLA acronym:

- 1) Frequency and Amount (*Dalas at Dami*) - introduction of complementary foods should only begin at six months, not too early and not too late. The baby's digestive system is ready to receive additional food other than breast milk at this age. The infant shall receive an adequate amount of food in the prescribed frequency to provide sufficient energy, protein, vitamins, and minerals for growth and development.
- 2) Variety (*Uri*) - A variety of foods should be given to infants to provide an adequate diet. The minimum acceptable diet is when an infant receives at least 5 of these 8 groups daily with the prescribed feeding frequency:
 - a) grains, roots, and tubers;
 - b) legumes and nuts;
 - c) milk and other dairy products;
 - d) meat, fish, poultry, liver/organ meats;
 - e) eggs;
 - f) vitamin A-rich fruits and vegetables;
 - g) other fruits and vegetables; and
 - h) breast milk
- 3) Texture (*Lapot*) - During the first introduction, complementary food should be soft, easy to digest, thick, and nutrient-dense because the baby's stomach is small, and every meal needs to be dense with nutrients. *Lugaw* (rice porridge) given to 6-month-old babies is considered thick if it does not flow easily and stick when scooped by a spoon. Viscous complementary foods are attributed to high nutrient density. As the baby grows older, the texture of complementary food progresses with the introduction of other food groups in the baby's diet. Aside from nutrient adequacy, varying textures in food allow the baby to explore his/her senses and develop motor skills.
- 4) Safety (*Ligtas*) - Food safety and sanitation should be appropriately observed when preparing complementary food, including all utensils and ingredients.

Observe the correct cooking method to ensure that food is cooked evenly at the right time and temperature. During feeding, both hands of the baby and the person feeding him/her should be washed clean. The container and other feeding paraphernalia should be clean. Leftover food should not be given to the baby to prevent the risk of foodborne illnesses.

- 5) **Active feeding** - Complementary feeding should be a fun and learning activity for both the caregiver and child. The caregiver should observe hunger cues and satiety signals when feeding the baby. The baby should be fed slowly, patiently, and without distractions or toys. Feeding time is different from playtime. The caregiver should actively interact with the baby by talking and early education like introducing shapes and colors. Feeding should not be a form of fear or punishment, instead a time of love.

2. This period is when poor nutrition can result in irreversible effects on the physical and mental development of the child, with consequences that can be felt way into adulthood.

It is during the First 1000 Days of life when growth faltering happens. Studies have shown a link between undernutrition, especially stunting, early years of life and overnutrition in the child's later years, and consequent non-communicable diseases. Stunting is an irreversible outcome of poor nutrition and repeated bouts of infection during the First 1000 Days. Children who are stunted have diminished cognitive and physical development, reduced productive capacity, and poor health.

What are the consequences of inadequate nutrition during the first 1000 days period?

Consequences of inadequate nutrition during pregnancy

- 1) Obtaining normal nutritional status is an essential indicator of a healthy pregnancy. Women who were underweight before and during pregnancy are at greater risk of having a preterm birth or delivering a small for gestational age or low-birthweight baby. On the other hand, overweight or obese women before and during pregnancy are at increased risk of developing pregnancy-related complications such as gestational diabetes, pre-eclampsia, fetal macrosomia (large for gestational age baby), or worse, fetal loss (miscarriage).
- 2) Poor diet during pregnancy due to lack of food or resources to have food or poor food choices can affect the baby's health. Inadequate food intake, low macronutrients, particularly protein, and micronutrient deficiencies are associated with developing complications to the child. These include

increased cholesterol and blood sugar levels, obesity, and poor developmental outcomes like low cognitive functioning, attention deficit, and disruptive behavior problems.

- 3) Micronutrient deficiency poses a threat to the overall health and life of both the pregnant mother and her child. Iron deficiency anemia can also cause tiredness, breathing difficulty, palpitation, sleep problems, bleeding, reduced milk production, and postnatal depression. A baby delivered by an anemic mother may have low iron stores resulting in iron deficiency anemia of the newborn, affecting energy metabolism and brain function. Other adverse perinatal outcomes that may be developed are infection, intrauterine growth retardation, prematurity, and low birth weight, which are all mortality risks.
- 4) Folate deficiency during pregnancy is associated with abnormalities like anemia and peripheral neuropathy in the mother and congenital abnormalities in the fetus. *Spina bifida*, or when the spine and spinal cord do not form properly during pregnancy, and anencephaly, or the absence of a significant portion of the brain, skull, and scalp, are the two most common neural tube defects associated with folate deficiency.
- 5) Iodine deficiency can lead to maternal and fetal hypothyroidism, congenital anomalies, decreased intelligence, and maternal and fetal goiter. The most severe consequence of iodine deficiency is cretinism, characterized by profound mental retardation.

Consequences of non-exclusive breastfeeding during the first 6 months

Newborns should be breastfed within 1 hour after birth to initiate exclusive breastfeeding. Failure to breastfeed has negative consequences and an increased risk of diseases.

- 1) For mothers, failure to breastfeed is associated with developing premenopausal breast cancer, ovarian cancer, retained gestational weight gain, obesity, type 2 diabetes, myocardial infarction (heart attack), metabolic syndrome, osteoporosis, rheumatoid arthritis, and postpartum depression.
- 2) Infants who are not breastfed are at an increased risk of developing infectious diseases, including acute ear infection (otitis media), eczema (atopic dermatitis), diarrhea and vomiting (gastrointestinal infection), asthma, gastroenteritis, and pneumonia. These infants have a high risk of childhood obesity, type 1 and type 2 diabetes, leukemia, and sudden infant death syndrome.

- 3) Formula-fed infants are shown to have lower IQs compared to breastfed infants and may experience iron-deficiency anemia, which is also related to impaired cognitive development.
- 4) In premature infants, not receiving breast milk is linked with an increased risk of necrotizing enterocolitis, an infection, and inflammation of the intestinal wall that can ultimately destroy the intestine.
- 5) Mixed feeding, or combined breastfeeding and formula-feeding, can decrease breastmilk production since breastmilk supply is driven by frequent and effective breastfeeding in response to the baby's feeding cues. In addition, the baby may prefer bottle-feeding over breastfeeding. Feeding bottles release the milk formula without stopping until these are empty, whereas, in breastfeeding, the baby has to continue suckling until milk is let down.

Consequences of inadequate nutrition during 6 to 23 months of life

- 1) Poor complementary feeding practices and inadequate quality and quantity of complementary foods are associated with the weak immune system, stunted growth, and compromised intelligence.
- 2) Too early introduction of complementary food (earlier than 6 months) can replace breastmilk and shortening the duration of exclusive breastfeeding. It can also increase the risk of microbial contamination in foods and fluids given to the baby.
- 3) The late introduction of complementary food beyond 6 months of age can affect the baby's growth and development of their eating behavior because the period of readiness for semi-solid/solid foods was missed. It also increases the risk of developing nutritional deficiencies.
- 4) Consumption of unsafe and contaminated complementary food and water and poor hygiene and sanitation increase the risk for infections and diarrhea that can significantly affect the nutritional status of children.

3. What is the impact of the First 1,000 Days on the youth and community? To the country?

Optimal nutrition in the first 1,000 days has a substantial impact on growth and development. Long-term health outcomes from proper care and nutrition in the first 1000 days are:

- 1) Better performance in school. Children with adequate nutrition in the first 1000 days perform better in school and get higher grades in reading, mathematics, working memory, and motor function.
- 2) Higher income. Children stimulated in the early childhood years were more likely employed in high-skilled jobs and earn higher by as much as 25 percent in the future - equivalent to wealthier households [15].
- 3) Better health. Children who were provided with adequate nutrition and early childhood care and stimulation during the first 1000 days were less likely to be malnourished as they grow older. Well-nourished children grow with better health and physical performance and lower risk of developing non-communicable diseases and infectious diseases because of their more robust immune systems.

In the country, the impact of the first 1000 days is reflected in the economy as evidenced by the gross domestic product (GDP). It is estimated that in 2013, the combined losses due to child undernutrition amounted to a total of Php328 billion, equivalent to 2.84% of the country's GDP that same year [16]. These losses are associated with education, labor and productivity, and healthcare.

A more recent report by UNICEF, DOH, NNC, and PLCPD revealed that although the Philippines has among the highest economic growth rates in Southeast Asia, the nation's nutrition indicators continue to lag, creating a drain of US\$4.5 billion (approximately Php220 billion) per year from the national economy [17], which is equivalent to a 1.5% loss in GDP in 2015 due to effects of undernutrition, including stunting, anemia, and iodine deficiency.

IX. What are the gaps that need to be addressed?

1. Limited investment in nutrition

There is still a need to invest more in nutrition. To support this, the DILG issued **Memorandum Circular 2018-42** dated 26 March 2018 on the Adoption and Implementation of PPAN 2017-2022. The MC encourages LGUs to formulate local nutrition action plans (LNAPs) in their local development plans and annual investment programs in line with the PPAN agenda. Supplementing this issuance is the DILG-DOH Joint Memorandum Circular 2019-0001 or the Guidelines for integration of PAPs from the PPAN to the local development plans, investment programs and budget of LGUs.

To complement the DILG MC, DBM issued **National Budget Memorandum No. 130** dated 13 April 2018: *Budget Priorities Framework for the Preparation of the FY 2019*

Budget Proposals under Tier 2 to guide LGUs in the preparation and intensifying delivery of nutrition services through the PPAN 2017-2022. The DBM has later on issued Local Budget Memorandum Nos. 77 S. 2018, 80 S. 2020 and 82 S. 2021 as guide for LGUs on the annual LGU budget preparation that includes preparation of local nutrition action plans along the PPAN.

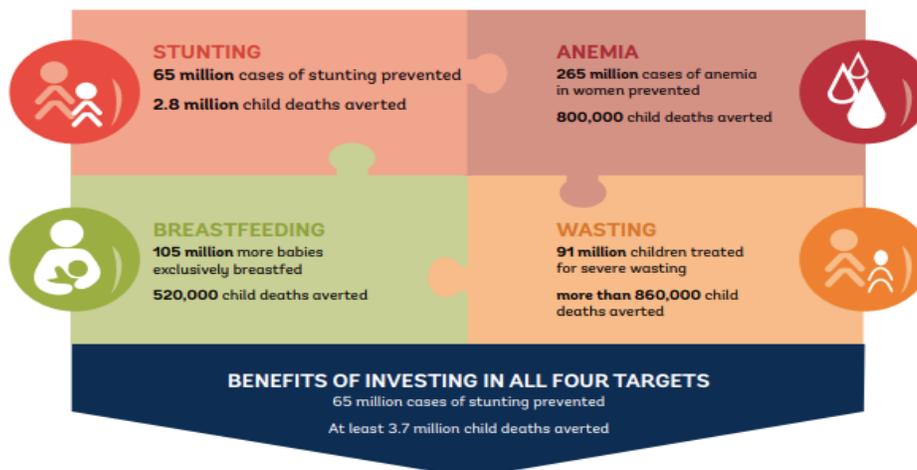
Efforts to support the PPAN 2017-2022 shall be observed from the national to the LGU level. To do this, the NNC enjoins LGUs to support nutrition by investing in the following critical nutrition programs that yield nutrition outcomes. ***Evidence suggests that specific multisectoral, nutrition-specific evidence-based interventions could reduce child stunting by 20%, if scaled to 90% coverage.***

- 1) First 1000 Days program to reduce and prevent stunting among children;
 - Ensuring that pregnant women have at least four prenatal visits (1 in the first trimester, 1 in the second trimester and 2 in the third trimester)
 - Pregnant women receive and consume iron-folate supplements for 180 days to prevent anemia
 - Pregnant women have balanced protein-energy dietary supplementation to prevent low-birth weight babies
 - Babies are exclusively breastfeed for the first 6 months of life
 - Starting 6 months, babies are given age-appropriate complementary feeding with continued breastfeeding; micronutrient powder and micronutrient supplements particularly Vitamin A
- 2) Philippine Integrated Management of Acute Malnutrition to treat and rehabilitate severely undernourished children;
- 3) Food production, sustainable livelihood, employment generation programs to ensure household food security; and
- 4) Enabling programs to strengthen governance, capacity, and institutions for effective nutrition programs.

The 2018 UNICEF-DOH-NNC-PLCPD joint report revealed that every \$1 investment to address malnutrition, there is a return of \$12.

A World Bank report estimates that investment in nutrition has enormous impacts. (Figure 5)

Figure 5. Global Impacts of Investment in Nutrition.



Source: *An Investment Framework in Nutrition*, World Bank Group (2017). [18]

2. Geographical disparities

While malnutrition is high in some provinces, some areas are unintentionally more vulnerable to malnutrition because of the lack of availability and access to essential health and nutrition services. In response to Republic Act 11223 or Universal Health Care Act aiming to provide equitable health services and benefits for the entire nation, the DOH issued AO. No. 2020-0023 provides guidelines for identifying geographically isolated and disadvantaged areas (GIDA) to support the development of local health systems, improve the availability of and access to health resources and services, and ensure culturally sensitive health services for indigenous peoples (IPs). Aside from IPs, GIDA also includes vulnerable and hard-to-reach areas, such as islands, mountainous regions, internally displaced persons, and conflict-affected areas.

As evidenced by a study in 2019, there are deficiencies in public health facilities, health and nutrition services, and human health resources in GIDAs [19]. This study is further supported by the 2019 FHSIS describing that the ratio of rural and urban health units in the Philippines is 50,383 per health center, which is still far from the Philippine Health Agenda 2016-2022 target of 1 health center per 20,000 population [20]. In GIDAs, the population is high, but access to health facilities is deficient and poverty, is directly linked to malnutrition.

A vital relationship exists between nutritional status, human capital, and economic standing. The burden of malnutrition affects individuals' physiological and mental capacity, which in turn hampers productivity levels, making them more susceptible to poverty [21].

People living in poverty face financial constraints, which hinder their ability to access safe, adequate, and nutritious food to supply the body's needs. Without good nutritional intake, the body will have a lower potential for normal growth and development, especially for age groups in the rapid developing stage like children and adolescents. A weak immune system is also associated with poor nutritional status brought by inadequate food intake, leading to developing diseases that can hamper capacity and productivity. Low capacity to learn and achieve results in low income or unemployment, making it more difficult to access food. This is the cycle involving malnutrition and poverty.

X. How can focusing on the first 1,000 days help eliminate the burden of malnutrition?

1. Many countries face the overlapping "triple burden" of malnutrition: undernutrition, overnutrition, and hidden hunger.

The face of malnutrition is rapidly changing. Globally, 1.9 billion adults are overweight and obese, while 462 million are underweight. Forty-seven (47) million children under the age of 5 are waste, 14.3 million are severely wasted, and 144 million are stunted, while 38.3 million are overweight or obese. Among children under 5 years old, about 45% of deaths are linked to undernutrition, commonly in low- and middle-income countries. At the same time, rates of overnutrition are rapidly rising.

While everybody is at risk of malnutrition, women, infants, young children, and adolescents are more at risk. The latest report on the state of the world's children revealed that at least 1 in every 3 children under 5 years of age is not growing well because of malnutrition, as evidenced in its more visible forms: stunting, wasting, and overweight; while 1 in 2 suffers from hidden hunger due to micronutrient deficiencies [22]. This compromises the capacity of our children to grow and develop to their full potential.

When these children grow to be adolescents, they face more nutritional challenges ahead. Among adolescents, malnutrition is common, but high body dissatisfaction levels were reported [23]. Many adolescents would wish to have a thinner body shape in girls and a broader body shape in boys. Despite this body shape desire, the majority of adolescents were still classified as underweight. The nutritional status of adolescents can be associated with inadequate dietary intake, as evidenced by high consumption of ultra-processed foods and animal meat and low amounts of fruits and vegetables. Adolescents perceive nutrition as a priority, important for mental health, intelligence, and school achievement associated with success. Despite the understanding that healthy eating is "good", many adolescents worldwide still have limited nutritional knowledge and skills in preparing nutritious food.

In the first 1000 days, pregnant mothers' diets were not optimal, did not meet dietary requirements, and lacked variety due to varying reasons: financial constraints, low availability, others' negative influence, and lack of support [24]. Parents and caregivers bear the responsibility of feeding their children, which they found to be the biggest challenge in raising children. In a scan of mothers' experience on nutrition around the world, mothers were able to breastfeed their children and introduce complementary food; however, almost half of the babies were fed breastmilk substitutes because of their false perception. Worldwide, children aged 6 to 23 months consumed a poor-quality diet. On average, there was low consumption of fruits, vegetables, and animal and plant proteins, especially in the Philippines, where only 1 out of 10 (12%) animal protein daily.

Looking at the state of food security and nutrition globally, nearly 690 million people in the world of 8.9% of the world's total population are hungry. An estimated 2 billion people did not have regular access to safe, nutritious, and adequate food [25]. The world is not on track to meet the SDG 2 Zero Hunger by 2030. If this trend continues, about 830 million people will be hungry by 2030. Combined with the health and socio-economic impacts of the COVID-19 pandemic, the burden of malnutrition in all its forms remains a global challenge. Food security can worsen diet quality, which later may contribute to malnutrition. Therefore, actions towards nutrition-sensitive interventions must be adopted to reduce food insecurity for a world free of malnutrition.

2. Malnutrition can be prevented, particularly during the critical first 1,000 days of life.

The first 1000 days of life has a critical role in combating malnutrition. Recent evidence by the 2021 *Lancet* series finds interventions to address maternal and child malnutrition, especially in low- and middle-income countries [26]. In summary, the following interventions in the first 1000 days have been found effective to combat malnutrition and therefore should be strengthened and integrated into national and local nutrition programs:

- 1) Antenatal multiple micronutrient supplementation (MMS) reduces the risk of stillbirths, low birth weight, and small-for-gestational-age babies (*Note: MMS is currently not being distributed in the Philippines.*)
- 2) Provision of supplementary food in food-insecure settings;
- 3) Use of locally produced, ready to use supplementary and therapeutic food to manage acute malnourished children;
- 4) Preventive small-quantity lipid-based nutrient supplementation for children aged 6 to 23 months for positive effects in child growth;
- 5) Integrated interventions including diet, exercise, and behavior therapy for prevention and management of childhood obesity;

- 6) Nutrition-sensitive programs that yield nutritional benefits including malaria prevention, preconception care, and water, sanitation, and hygiene (WASH) promotion; and
- 7) Improved coverage of interventions to reach the most vulnerable groups.

XI. What are the current efforts to address malnutrition?

Action toward eliminating malnutrition is guided by the Philippine Plan of Action for Nutrition (PPAN) as the overall framework. Driven by its objectives to reduce levels of all forms of malnutrition (undernutrition, overnutrition, and micronutrient deficiency), the PPAN targets the entire population, especially nutritionally vulnerable groups who are all covered by the first 1000 of life: pregnant women, lactating mothers, and infants and young children ages 0-23 months old. The PPAN, too, gives priority to nutritionally affected (already malnourished) individuals coming from low-income families and communities with less access to resources and health, nutrition, social, and other essential services. These focus areas include the top provinces with the highest poverty incidence, highest prevalence of stunting and teenage pregnancy, priority provinces identified by the Human Development and Poverty Reduction Cluster (HDPRC), geographically isolated and disadvantaged areas (GIDAs), communities of indigenous peoples, urban poor and resettlement areas.

The PPAN 2017-2022 features nutrition-specific programs addressing immediate causes of malnutrition; nutrition-sensitive programs addressed underlying and basic causes by global recommendations and enabled programs that indirectly promote positive nutrition outcomes.

The first 1000 days of life strategy is one of the strategic thrusts of PPAN 2017-2022. The NNC is implementing the Early Childhood Care and Development in the First 1000 Days Intervention Package (ECCD-F1K) Program. It is a comprehensive package of interventions to achieve key nutrition indicators and complete child development. The ECCD-F1K program aims to reduce child mortality and ensure the improved quality of the country's human resource base through positive behaviors. Other non-government organizations support local government units to implement the first 1000 days intervention. There are also local government units that initiated their own first 1000 days program.

Republic Act 11148 or the *Kalusugan at Nutrisyon ng Mag-Nanay Act* aims to strengthen the implementation of already existing interventions targeting groups within the First 1000 Days of life. The law mandates provision of interventions and services focused on the first 1,000 days of life to break the intergenerational cycle of malnutrition.

For example, to promote and encourage the practice of breastfeeding throughout the country, the **Republic Act 10028** or the Expanded Breastfeeding Promotion Act of 2009 requires all health and non-health facilities, establishments, or institutions, including public spaces to establish lactation stations, especially in the workplace and provide lactation breaks in addition to meal breaks to its lactating employees to allow them to express breastmilk. This is evidenced by Ocampo-Guirindola et al., who revealed that the use of lactation stations was positively associated with longer breastfeeding duration that is beneficial to both mother and child [27].

To address the common concern that some mothers stop breastfeeding because of the need to go back to work, **Republic Act 11210** grants 105 days of maternity leave with full pay to women who underwent live childbirth and 15 additional days of maternity leave for single parents, pursuant of RA 8972 (Solo Parent Act of 2000). The benefits of the 105-day paid leave are extending for 30 more days with or without pay, depending on their employer. The law provides more time and resources to mothers after pregnancy to encourage them to practice exclusive breastfeeding.

Executive Order 51 or the Philippine Milk Code of 1986 and its Revised Implementing Rules and Regulations aim to provide safe and adequate nutrition for infants and young children by protecting and promoting breastfeeding and regulating breastmilk substitutes' marketing breastmilk supplements, and other related products. The Department of Health bureaus and offices and the Food and Drug Administration work collaboratively to implement and enforce the law and monitoring violations reported through the Mother-Baby Friendly Philippines (MBFP) initiative of DOH.

Provisions of the law state that milk formula shall only be stocked in the hospital in a closed cabinet out of sight by the public for emergency use only and issued upon issuance of a physician's prescription. These provisions also extend to the use of teats and pacifiers, donation of milk formula samples, and promotion of infant formula in hospitals related to EO 51.

Micronutrient supplementation and food fortification

Several programs and policies are being implemented nationwide for different age groups to address the growing problem of "hidden hunger" or micronutrient deficiency. Food fortification is one of the nutrition-specific interventions identified by PPAN 2017-2022. Salt was the first food item fortified with iodine through **Republic Act 8172** or An Act for Salt Iodization Nationwide (ASIN) in response to the rising prevalence of iodine deficiency disorders. Furthermore, **Republic Act 8976** or the Food Fortification Law provides standards for the mandatory fortification of the following staple food items: rice (with iron), refined sugar (with vitamin A and iron), cooking oil (with vitamin A), wheat flour (with vitamin A and iron) and salt (with iodine) as well as voluntary fortification of other food products.

Aside from food fortification, there are also current efforts on micronutrient supplementation for nutritionally vulnerable different age groups. For example, the DOH through **DM 2020-0092** provides supplementation to pregnant and lactating adolescent females and pregnant women, and non-pregnant and non-lactating adolescent females and other pregnant women of reproductive age. Appropriate micronutrient supplementation is provided, particularly iron-folic acid supplement, multiple micronutrient supplements, iodized oil capsule, and calcium carbonate. For children 0-59 months old, DOH's *Garantisadong Pambata Program* delivers health services to children under 5 years old bi-annually, including vitamin A and iron supplementation, routine immunization, deworming, and growth monitoring.

National Dietary Supplementation Program

Consistent with global recommendations, the Lancet shows evidence that providing supplementary food in food-insecure settings can help prevent malnutrition and help manage acute malnutrition in children (Keats et al., 2021). One of PPAN's interventions is the National Dietary Supplementation Program. To support its implementation, the NNC has launched the *Tutok Kainan* Supplementation Program, which provides nutritious food targeting nutritionally-at-risk pregnant women and stunted and wasted children between 6 to 23 months old in from Human Development and Poverty Reduction Cluster (HDPRC) priority provinces and typhoon-stricken areas, as well as non-PPAN areas.

To further combat hunger and undernutrition among Filipino children, the **Republic Act 11037** or *Masustansyang Pagkain para sa Batang Pilipino Act* provides supplementary food to undernourished children in daycare centers and public preschool and elementary school. The law incorporates DA's Milk Feeding Program, *Gulayan sa Paaralan* program, and other positive health and nutrition outcomes such as micronutrient supplementation, deworming and vaccination, water, sanitation, and hygiene (WASH), and integrated nutrition education.

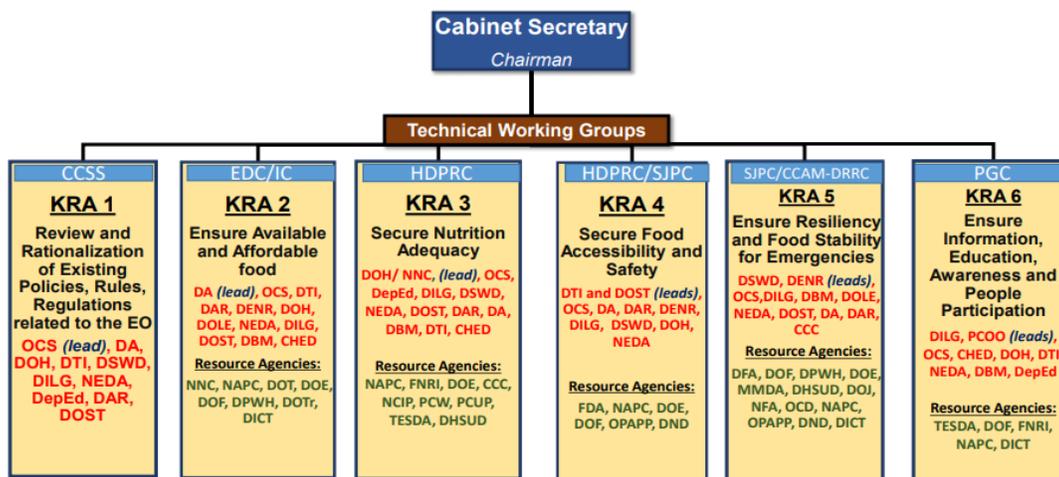
The holistic approach to nutrition

Republic Act 10410 or Early Years Act (EYA) of 2013 supports the National Early Childhood Care and Development (ECCD) Program to ensure that all services covering health, nutrition, early education, and social services for children ages 0 to 8 years old are delivered. The ECCD Council serves as the lead coordinating body to ensure quality ECCD programs, including child development centers and child-minding centers to serve as teaching-learning resources for young children.

In response to the nation's commitment to ending hunger and malnutrition, the **Inter-Agency Task Force on Zero Hunger (IATF-ZH)**, under the leadership of the Office of the

Cabinet Secretary, launched a National Food Policy (NFP). The NFP, as the roadmap towards zero hunger, aims to involve all stakeholders in a whole-of-nation approach in eradicating hunger, achieving food security, improving the nutrition situation, and promoting sustainable agriculture where food is expected to become more accessible affordable to the people. The NFP has 6 major key result areas (as seen in Figure 6).

Figure 6. Key result areas of Task Force Zero Hunger's National Food Policy and implementers.



Source: Inter-Agency Task Force on Zero Hunger from the 6th National Conference of Nutrition Action Officers Webinar Series NAOs: PPANalo sa New Normal; National Nutrition Council (2020).

The IATF-ZH initiated the *Pilipinas Kontra Gutom* (PKG), a national and multisectoral anti-hunger movement with support from the private sector, non-government organizations and foundations, civil society groups, digitals and media partners, and national government agencies. With the slogan "*Lahat kasali, Lahat kasalo*", PKG aims to organize sustainable initiatives to address challenges in food availability and accessibility, adequate nutrition, and crisis assistance. Some of the initial projects of PKG are:

1. Farmer assistance to increase farmers' income by as much as 20 percent within the year and double farmer activity by 2025 through expansion of value chain projects and logistics improvements;
2. Sustainable nutrition programs involving campaigns on proper IYCF practices, address malnutrition, and roll out of nutritious meals in Filipino households to achieve zero undernourished Filipino children across all households by 2030;
3. Disaster response to streamline efforts to facilitate prepared and synchronized action flow for food security in emergencies through private sectors in partnership with national agencies and local government units; and

4. Food banking distributes food to those in need initiated by food surplus assessments among food manufacturers, restaurants, supermarkets, and public markets.

Scaling Up Nutrition is a global movement of 63 countries committed to transforming stakeholders' behavior to align global nutrition targets. Members of the SUN come from different sectors, called the SUN Network: United Nations, donors, civil societies, businesses, academe, and government. The Executive Director of the NNC serves as the focal point of SUN Philippines, who shall convene all sectors for implementing actions for scaling up nutrition.

In response to the problem of hunger brought by the pandemic, the Department of Budget and Management (DBM), through the **Bayanihan to Heal as One Act of 2020**, has released a Php199.975 billion budget to DSWD to fund its Social Amelioration (SAP) Program that shall provide cash assistance to affected families amounting to a minimum of Php5,000 and maximum of Php8,000 a month for 2 months to provide for basic food, medicine, and toiletries. Priority is given to the 4.4 million households who are already beneficiaries of the DSWD's Expanded *Pantawid Pamilyang Pilipino Program* (4Ps).

Another program assists in food production through DA's Plant, Plant, Plant Program or *Ahon Lahat, Pagkaing Sapat* (ALPAS) *Laban sa COVID-19*, and the Integrated Community Food Production Program of the National Anti-Poverty Commission (NAPC). Both programs aim to improve the food adequacy of Filipinos through increased production of food commodities such as rice, crops, livestock, poultry, and fish to end malnutrition and mitigate hunger in the country. However, the RNAS reported that 87.5% of households did not receive assistance for food production from the government.

XII. **What can be done to support nutrition during emergencies and pandemics?**

In times of disasters, emergencies, and pandemics, nutrition should remain the top priority, alongside other essential services for nutritionally vulnerable members of society.

Under a declaration of a national or local state of calamity or occurrence of other emergencies, the delivery of essential services should be ensured to marginalized and vulnerable groups especially orphaned, separated, and unaccompanied children, pregnant and lactating mothers, newborn babies, children under 5 years old and children with special needs, and support for their immediate recovery, as supported by **Republic Act 10821** or Children's Emergency Relief Act.

It features the following components to be implemented at the national and local levels:

1. Establishment of safe, inclusive, gender-sensitive, child-friendly, and responsive evacuation centers;
2. Establishment of mother and child-friendly transitional centers, including gender-specific emergency toilets, bathing cubicles, lactation spaces, and handwashing facilities;
3. Referral mechanism for orphaned, unaccompanied, and separated children;
4. Delivery of immediate necessities including food and water, medicine, clothing, sanitary and hygiene kits, and other emergency needs such as blankets, mosquito nets, cooking equipment, and flashlights;
5. Ensured safety and security of affected children against any form or case of violence, abuse, and exploitation;
6. Provision of health, medical, nutrition, and psychosocial services for children at different developmental stages;
7. Plan of action for prompt resumption of educational services for children;
8. Establishment of child-friendly spaces in evacuation centers and transitional shelters, with teaching-learning resources; and
9. Promotion of children's rights during disasters and emergencies.

Women, especially pregnant and lactating women, belong to nutritionally-at-risk groups in times of emergency. In response to the effects of displacement and vulnerability of women in crises, a wide range of services addressing the specific needs of women shall be delivered. The **DSWD MC 116, s. 2015** covers all internally displaced women as primary beneficiaries, but men are also included and encouraged to avail the services, including:

1. Reproductive health and medical mission for pregnant and lactating women
2. Provision of food and non-food items
3. Psychosocial support interventions
4. Sustainable livelihood support
5. Essential business management/entrepreneurial skills enhancement
6. Gender awareness education
7. Information sessions, with topics on self-enhancement and self-care, maternal and child care health and nutrition, early childhood illnesses, environmental sanitation, parent effectiveness service, parenting the adolescents, and disaster preparedness

Considering the declaration of a public health emergency due to the outbreak of COVID-19 cases, the DOH provided guidelines (**DOH DM 2020-0231**) to regulate and ensure the proper use of breastmilk substitutes, breastmilk supplements, complementary foods, and other products covered by EO 51. The guidelines clarify that donation of products covered by the scope of EO 51 shall not be accepted, which includes infant formula, breastmilk supplements, complementary food, and paraphernalia. LGUs are required to

deny acceptance of any form of donation of items covered by EO 51, unless in the form of cash or equipment but with conditions.

LGUs shall ensure proper infant and young child feeding practices to be consistently observed, despite the state of a national public health emergency. The following practices are encouraged:

1. Exclusive breastfeeding, if not possible then -
2. Promote wet nursing/cross-nursing, and if not possible: relactation, or
3. Provide expressed breastmilk through cup feeding or spoon-feeding, or
4. Provide donated pasteurized breastmilk from human milk banks through cup feeding or spoon-feeding.
5. For children 6 months old and above: complementary feeding must be emphasized; consumption of hot, nutritious food eaten by the rest of the family, but still observing proper complementary feeding practices, with less reliance on artificial milk.
6. Only after these have been exhausted must artificial feeding be considered. However, distribution, preparation, and use of breastmilk substitutes **MUST** be done under the supervision of health and nutrition workers, and LGUs must procure their supply instead of accepting donations.

To prevent and control the transmission of COVID-19 in suspected, probable, and confirmed cases of women, newborns, infants, and young children in health facilities, the DOH issued guidelines (**DOH DM 2020-0319**) on COVID-19 management of pregnant women, birth, and delivery. In summary, essential preventive measures (physical distancing and hand and respiratory hygiene) must be observed at all times, whether inpatient or outpatient care for prenatal, postpartum, and postnatal visits.

For women about to give birth, usual care shall be given to those with no exposure to COVID-19. However, contact/suspect/probable/confirmed COVID-19 cases should be admitted in isolation rooms. After the delivery of the baby, EINC "*Unang Yakap*" protocol shall be observed. Both maternal (hemorrhage, elevated blood pressure, difficulty of breathing, edema, and signs of infection related to COVID-19) and fetal (vital signs, possible respiratory distress, neonatal sepsis, pneumonia) status shall be monitored. RT-PCR swab test can be performed if feasible.

Appropriate psychosocial/mental health support, lactation and maternal nutrition counseling, practical infant feeding support, especially those that need to be separated from the newborn, and family planning and reproductive health counseling and services shall be provided.

The NNC, as the lead of the Nutrition Cluster, issued guidelines for local governments, NGOs, business sectors, and other civic organizations in response to the COVID-19

pandemic. **NNC Nutrition Cluster Advisory No. 1 and No. 2** provided guidelines to LGUs and partners in providing food packs during a public health emergency. Some of the policies include strict EO 51, wherein no breastmilk substitutes of any kind shall not be accepted as donations. Guidelines also state that LGUs shall provide age- and culturally appropriate, clean, and diversified nutritious food items. Aside from its lower price and accessibility, fresh produce items directly procured from small farmers, fisherfolks, and cooperatives are highly encouraged to be included in family food packs.

Foods high in fats, sugar, and/or salt are to be avoided. Instead, FDA-approved fortified food items bearing the *Sangkap Pinoy* Seal are much better to be included in family food packs for distribution. LGUs must also consider that some recipients are pregnant and lactating mothers, infants, and young children. Family food packs may contain complementary foods approved by FDA and NNC. Overall, healthy and nutritious foods that help boost the body's immunity and provide essential nutrients are encouraged to be consumed by the public.

XIII. What are the roles of stakeholders to address malnutrition?

1. National government agencies

- 1) Commit to actions toward eliminating malnutrition, with the first 1000 days of life strategy as the primary focus;
- 2) Develop and strengthen policies and programs on scaling up nutrition interventions;
- 3) Invest in nutrition through the inclusion of nutrition programs in the national annual budget, operational plans, and human resources;
- 4) Establish more nutrition-sensitive programs to address fundamental and underlying causes of malnutrition; and
- 5) Prioritize nutritionally vulnerable groups as beneficiaries in nutrition-specific and nutrition-sensitive government programs.

2. Local government units

- 1) Adopt the PPAN in local program planning and annual investment plan;
- 2) Increase support to nutrition programs and their implementation, with a focus on the First 1000 days with adolescents, pregnant and lactating women, and infants and young children as primary beneficiaries;
- 3) Ensure delivery of essential health and nutrition programs in the first 1000 days, as mandated by RA 11148;
- 4) Coordinate with national government agencies through the regional offices in capacity building and technical assistance for implementation of programs on health and nutrition;

- 5) Invest in local nutrition programs, especially in the ECCD First 1000 Days and food and nutrition security; and
- 6) Improve access to health and nutrition programs in far-flung areas, geographically isolated and disadvantaged areas, urban poor, and resettlement areas.

3. Private sector

- 1) Create an enabling work environment for women and children;
- 2) Ensure protection of women in the labor industry by establishing lactation stations and provision of breastfeeding breaks;
- 3) Provide and allow expanded maternity leave to encourage proper postpartum care and exclusive breastfeeding;
- 4) Tweak budget and plans for nutrition-related activities and services to employees and clientele; and
- 5) Comply with EO 51 for manufacturers of breastmilk substitutes and other nutrition laws.

4. Media

- 1) Develop materials for information, education, and communication of nutrition messages to the public;
- 2) Disseminate factual information on good nutrition through print, television, radio, digital media, and other media;
- 3) Promote good and healthy nutrition practices in commonly consumed media like film and television, as well as digital media; and
- 4) Encourage the public to participate in national and local health and nutrition programs.

5. Civil society

- 1) Advocate for increased attention to nutrition in the first 1000 days and more investment in it;
- 2) Empower communities to support programs for the prevention of malnutrition in the first 1000 days;
- 3) Work with the government in strengthening efforts to address malnutrition;
- 4) Widen the reach of nutrition programs to areas with less access to health and nutrition programs; and
- 5) Join the Scaling Up Nutrition Civil Society Alliance.

6. **Academe**

- 1) Conduct webinars, online fora, and other activities to increase awareness on malnutrition prevention;
- 2) Involve school and university constituents in participation in malnutrition reduction programs;
- 3) Include extension programs that promote good nutrition to the public;
- 4) Improve information dissemination on nutrition in the curricula;
- 5) Generate newer evidence about the impact of the first 1000 days on current and future generations and practical approach in implementing it;
- 6) Mobilize school-based groups and student organizations in their initiatives on the promotion of good nutrition;
- 7) Engage in research related to malnutrition prevention and reduction with a focus on the first 1000 days; and
- 8) Join the Scaling Up Nutrition Academe Network.

XIV. **What are suggested activities to support the 2021 Nutrition Month campaign?**

The Nutrition Month campaign is a whole society approach to promote good nutrition and disseminate information in the prevention and reduction of malnutrition. With the regulated movement due to the COVID-19 pandemic under the "new normal", the following activities are encouraged:

1. Review organization plans and budget and tweak to include nutrition-related activities and services;
2. Disseminate information about Nutrition Month through streamers, websites, and social media;
3. Participate in Nutrition Month activities of the NNC and other agencies;
4. Conduct webinars and online fora for the general public recognizing the importance of the first 1000 days in preventing malnutrition;
5. Provide services to address malnutrition, mainly services in the first 1000 days; and
6. Conduct Nutrition Month activities related to the theme, such as activities for the first 1000 days and healthy lifestyle promotion for all age groups.

References:

- [1] Department of Science and Technology - Food and Nutrition Research Institute. (2020). *2019 Expanded National Nutrition Survey Presentations*. [Internet] Accessed from <http://enutrition.fnri.dost.gov.ph/site/presentation.php?year=2019>
- [2] de Onis M., Borghi E., Arimond M, et al. Prevalence thresholds for wasting, overweight and stunting in children under 5 years. *Public Health Nutr.* 2019;22(1):175-179. doi:10.1017/S1368980018002434
- [3] World Health Organization and United Nations Children's Fund. (2021). *Indicators for assessing infant and young child feeding practices: definitions and methods*. Geneva. Licence: CC BYNC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>.
- [4] Department of Science and Technology - Food and Nutrition Research Institute. (2021). *Iodine Status of Selected Population Groups and Iodine Content of Household Salt in the Philippines: ENNS 2018-2019*. [Internet] Accessed from <http://enutrition.fnri.dost.gov.ph/site/uploads/2019%20ENNS%20Dietary%20Dissemination%20-%20IODINE.pdf>
- [5] Social Weather Stations. (2020). *SWS September 17-20, 2020 National Mobile Phone Survey - Report No. 2: Hunger at new record high 30.7% of families*. Available from <https://www.sws.org.ph/swsmain/artcldisppage/?artcsyscode=ART-20200927135430&fbclid=IwAR1ue6qNtV89apgxfaTw15F4PMM3snOEJ5BrGhtpfBiSjSyqgbwLznlawa4>
- [6] Moscatelli, F., Sessa, F., Valenzano, A., et al. (2021). COVID-19: Role of Nutrition and Supplementation. *Nutrients*. 2021;13(3):976. doi:10.3390/nu13030976
- [7] Butler, M.J. & Barrientos, R.M. (2020). The impact of nutrition on COVID-19 susceptibility and long-term consequences. *Brain Behav Immun*; 87:53-54. doi: 10.1016/j.bbi.2020.04.040. Epub 2020 Apr 18. PMID: 32311498; PMCID: PMC7165103. - 7683
- [8] Wierdsma, N. J. et al. (2021). Poor nutritional status, risk of sarcopenia and nutrition related complaints are prevalent in COVID-19 patients during and after hospital admission. *Clinical Nutrition ESPEN*. DOI:<https://doi.org/10.1016/j.clnesp.2021.03.021>
- [9] Calder, P. C., Carr, A. C., Gombart, A. F., and Eggersdorfer, M. (2020). Optimal Nutritional Status for a Well-Functioning Immune System Is an Important Factor to Protect against Viral Infections. *Nutrients* [Internet];12:1181. Available from: <https://www.mdpi.com/2072-6643/12/4/1181>.

- [10] Department of Science and Technology - Food and Nutrition Research Institute. (2021). *2020 Rapid Nutrition Assessment Survey Virtual Dissemination to Partners*. Accessed from <http://enutrition.fnri.dost.gov.ph/site/uploads/RNAS%20Virtual%20Dissemination%20to%20Partners.pdf>
- [11] Gomez, K. G., & Ignacio, M. S. E. (2020). Adequacy of Food Aid Packs Provided during Natural Disasters: A Provincial Case Study. *Acta Medica Philippina*. 54 (5). DOI: <https://doi.org/10.47895/amp.v54i5.2218>
- [12] Ong, M. M., Ong, R. M., Reyes, G. K., & Sumpaico-Tanchanco, L. B. (2020). Addressing the COVID-19 Nutrition Crisis in Vulnerable Communities: Applying a Primary Care Perspective. *Journal of Primary Care & Community Health*, 11, 2150132720946951. <https://doi.org/10.1177/2150132720946951>
- [12] Pago, A. C. (9 October 2020). *Milk Code confusion cripples LGUs response for infants*. Philippine Center for Investigative Journalism. Accessed from <https://pcij.org/article/4350/milk-and-the-pandemic-milk-code-confusion-cripples-lgus-response-for-infants>
- [13] Borkowski, A., Ortiz-Correa, J. S., Bundy, D. A. P., Burbano, C., Hayashi, C., Lloyd-Evans, E., Neitzel, J., and Reuge, N., (2021), *COVID-19: Missing More Than a Classroom. The impact of school closures on children's nutrition*. Innocenti Working Paper 2021-01. Florence: UNICEF Office of Research – Innocenti.
- [14] Parrocha, A. (8 October 2020). *Feeding program for students to continue amid pandemic*. Philippine News Agency. Accessed from <https://www.pna.gov.ph/articles/1117971>
- [15] World Bank Group. (2021). Early Childhood Development. [Internet] Accessed from <https://www.worldbank.org/en/topic/earlychildhooddevelopment#1>
- [16] Save the Children Philippines (2016). *Cost of Hunger: Philippines. The Economic Impact of Child Undernutrition on Education and Productivity in the Philippines*. Save the Children Philippines. Makati, Philippines.
- [17] United Nations Children's Fund, Department of Health, National Nutrition Council, & Philippine Legislators' Committee on Population and Development. (2018). *The Economic Consequences of Undernutrition in the Philippines: A Damage Assessment Report (DAR)*. UNICEF. Mandaluyong City.
- [18] Shekar, M., Kakietek, J., Dayton Eberwein, J., Walters, D. (2017). *An Investment Framework for Nutrition: Reaching the Global Targets for Stunting, Anemia, Breastfeeding, and Wasting*. Directions in Development--Human Development. Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/26069> License: CC BY 3.0 IGO.

- [19] Collado, Z. C. (2019). Challenges in public health facilities and services: evidence from a geographically isolated and disadvantaged area in the Philippines. *Journal of Global Health Reports*;3:e2019059. doi:10.29392/joghr.3.e2019059
- [20] Department of Health. (2021) *Field Health Services Information System 2019 Annual Report*. Epidemiology Bureau, Department of Health, Sta. Cruz, Manila. Accessed from https://doh.gov.ph/sites/default/files/publications/FHSIS_2019_AnnualReport_09_30_2020_si_gned.pdf
- [21] Siddiqui, F., Salam, R.A., Lassi, ZS, & Das, J.K. (2020) The Intertwined Relationship Between Malnutrition and Poverty. *Front. Public Health* 8:453. doi: 10.3389/fpubh.2020.00453
- [22] United Nations Children's Fund (2019). *The State of the World's Children 2019. Children, Food and Nutrition: Growing well in a changing world*. UNICEF, New York.
- [23] Fleming, C. A. K. et al. (2020). *Food and Me. How adolescents experience nutrition across the world. A Companion Report to The State of the World's Children 2019*. Sydney: Western Sydney University and United Nations Children's Fund (UNICEF). DOI: <https://doi.org/10.26183/26f6-ec12>
- [24] Schmied, V. et al. (2020). *Feeding My Child: How mothers experience nutrition across the world. A Companion Report to The State of the World's Children 2019*. Sydney: Western Sydney University and United Nations Children's Fund (UNICEF). DOI: 10.26183/5597-mw05 (<https://doi.org/10.26183/5597-mw05>)
- [25] Food and Agriculture Organization of the United Nations, International Fund for Agricultural Development, United Nations Children's Fund, & World Health Organization. (2020). *The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets*. Rome, FAO. <https://doi.org/10.4060/ca9692en>
- [26] Keats, E. C., Das, J. K., Salam, R. A., Lassi, Z. S., Imdad, A., Black, R. E., & Bhutta, Z. A. (2021). Effective interventions to address maternal and child nutrition: an update of the evidence. 1 May 2021. *The Lancet Child & Adolescent Health*, Volume 5, Issue 5, 367-384.
- [27] Ocampo-Guirindola, M.L., Valdeabella-Maniego, M.L.M., & Gaya, K.F.M. (2018). Utilization of Lactation Station and Lactation Breaks and Its Association With the Duration of Breastfeeding Among Filipino Mothers With Children Aged 0-23 Months. *Philippine Journal of Science*. 147 (2): 317-325. ISSN 0031

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