**Introduction**

Malnutrition is a condition in which a person’s intake of energy and/or nutrients is inadequate, excessive, or imbalanced that the diet causes health problems. Women and children are the most vulnerable subjects. Malnutrition has two subforms: undernutrition and overnutrition. Undernutrition includes wasting (low weight for height), stunting (low height for age), underweight (low weight for age), and micronutrient-related malnutrition (lack or excess of important vitamins and nutrients). Overnutrition consists overweight, obesity, and diet related non communicable diseases such as cardiovascular diseases, stroke, and diabetes.

In recent years, tremendous economic growth has drastically enhanced the standard of living in multiple Association of Southeast Asian (ASEAN) countries through the entry of multinational companies. Among the foreign investments, are also the international fast-food chains such as McDonalds which offer food cheaper and more delicious than conventional restaurants at the cost of extensive use of oil as well as fatty ingredients. Allured by the economical cost and luscious taste, the citizens of various age groups consume excessive amounts of fast-food leading to an increase in obesity. This causes all the member states to suffer the double burden of malnutrition in addition to the different forms of malnutritions that each has been suffering. Thailand and Indonesia have 11% and 12% of their children under five being overweight respectively. 18 million or 35% of children under 5 in ASEAN countries are stunted, with 12 million out of the 17 living in Indonesia and Philippines. Furthermore, Laos, Myanmar, and Cambodia are also highly prevalent to stunting. Currently, 5.4 million children suffer from severe wasting. Overall, one in every three children in ASEAN countries is malnourished.
Malnutrition poses threat to the health of the region in several aspects. The infants with undernutrition are prone to death up to nine times more than the healthy infants. Having undernutrition early in life hinders the children from reaching their physical and intellectual potential. Subsequently, they will have poor performances in school and are less-likely to have income-earning jobs. On a national level, undernutrition also affects the country Gross Domestic Product (GDP) due to little productivity caused by incapable workforce. For example, Laos and Cambodia lose 2.4% and 2.6% of their GDP, respectively, because of undernutrition. On the other hand, overnutrition causes non-communicable diseases such as cardiovascular diseases, cancers, and diabetes, which then lead to disabilities and deaths. Malnourished pregnant mothers give birth to infants with low birth weight. Those infants are more likely to become stunted. Stunting in early ages increase the chance of being obese in the adult years.

In addition, tackling malnutrition in ASEAN countries will ultimately contribute to reaching Sustainable Development Goals of 2030, specifically Goal 2 - Zero Hunger and Goal 3 - Good Health and Well Being. Combating malnutrition is necessary for the succeeding generations for them to be able to reach their full physical and cognitive potential.

**Definition of Key Terms**

**Overnutrition**

A person’s intake of nutrients is more than the amount required for normal growth, development, and metabolism.

**Undernutrition**

A person’s intake of nutrients is less than the amount required for normal growth development, and metabolism.

**Stunting**

Low height for age. A form of undernutrition associated with poor maternal health and nutrition, improper infant feeding and care, and frequent illness. It is also known as chronic malnutrition,
Wasting

Low weight for height. A form of undernutrition associated with recent and severe weight loss due to lack of food or an infectious disease. It is also known as acute malnutrition.

Underweight

Low weight for age. An underweight child may also be stunted, wasted, or both.

Micronutrients

Vitamins and minerals that are needed only in a small amount. They play a big role in growth and development as they enable the body to produce the needed enzymes and hormones. The most important ones to the pregnant mother and infants include iodine, iron, and Vitamin A.

Double burden of malnutrition

The coexistence of overnutrition and undernutrition. A population can have double burden of malnutrition if it has people who are overweight as well as people who are underweight. Over the lifetime, an individual can suffer from double burden of malnutrition if he or she is stunted as an infant but becomes obese in adult years. A person can be present with double burden of malnutrition if he or she is overweight but does not have enough essential nutrients such as irons.

Infant and young child feeding (IYCF)

Feedings of infants and young children. The optimal practice promotes to only breastfeed for the first six month and to continue breastfeeding for two years and over.

Complementary feeding (CF)

Solid or semi-solid food that are introduced to the infant after the age of six month while he or she is continued being breastfed. The food involved is safe and adequate in nutritions for a growing infant.

Low birth weight (LBW)
A birth weight less than 2500 g (5.5 lbs). An infant with LBW is twenty times more susceptible to death than infants without LBW. The infant may also develop stunting and chronic diseases later in life.

Anemia

A condition in which the blood is deficient in red blood cells, and thus it ability to carry oxygen. It is caused by inadequate intake or absorption of iron, Vitamin B12, and other nutrients. Pregnant women, pregnant teen, and young children are the most susceptible because iron is needed for growth; the need increases while pregnant.

History

Malnutrition in ASEAN

Malnutrition in ASEAN might have its roots in the 1970s when a daily energy intake of a person in ASEAN member states of Myanmar, Laos, Indonesia, Philippines, and Vietnam was less than 2200 kcal per day. It is regarded that at least 2200 kcal of daily energy intake is needed to prevent malnutrition. Now, all the member countries have more than 2300 kcal of energy intake per day. Yet, the availability of food does not guarantee the nutritional quality of it. 2007/2008 Global Food crisis also had an effect on the diet of the ASEAN countries, especially Myanmar and Philippines where the farming of primary staple food - rice - was destroyed, and a few years of food shortages were predicted.

In 2016, a joint nutritional report by UNICEF, WHO, and ASEAN brought light to the 18 million stunted children in ASEAN and showed deep concerns in some member states which beginning to suffer the double burden of malnutrition.

Timeline of Relevant Resolutions, Treaties and Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Description of event</th>
</tr>
</thead>
</table>

Chair Report | Page 4 of 14
Asia Congress of Nutrition

In Singapore, Global Alliance of Improved Nutrition (GAIN), along with World Food Programme (WFP), held a symposium for the Ministry of Health of each ASEAN countries and leaders of relevant NGOs to discuss about the issues of malnutrition in ASEAN countries.

Joint Report on the malnutrition in ASEAN

A joint report of UNICEF/ASEAN/WHO on the malnutrition conditions in each ASEAN state is published.

31st Asean Summit

ASEAN member states adopted the declaration for political commitment in ending malnutrition and all its form.

Action Plan

Philippines will draft an action plan for the ASEAN to enact the declaration.

Key Issues

Causes according to the ASEAN/ UNICEF/ WHO

Adapting to the conceptual framework of UNICEF, ASEAN/ UNICEF/ WHO have listed the important and interconnected causes for different types of malnutrition in various levels. Addressing all of them - immediate causes, underlying causes at household/family level,
basic causes at social level - is necessary for combating malnutrition.

The conceptual framework is shown as above:

*Caption #1: Conceptual Framework of malnutrition in ASEAN according to the joint report of ASEAN/UNICEF/WHO*

**Incorrect feeding practices and inappropriate care**

Optimal infant and young child feeding (IYCF) practices include early initiation of breastfeeding within the first hour of delivery, exclusive breastfeeding to the age of six months, and continued breastfeeding to the age of two years. Complementary feeding (CF) is to be introduced only after six months. According to a report published by UNICEF in 2016, out of all the ASEAN member states, Cambodia has the highest exclusive breastfeeding rate at 65%. Other countries have much lower exclusive breastfeeding rate, with the lowest being Thailand at 12%. Exclusive breastfeeding lowers the rate of the malnutrition and deaths in infants. Inappropriate maternal and child care are given due to the lack of proper knowledge in caregivers. The caregivers may not have access to education, medical services, technology. They may also rely
heavily on traditional, but not necessarily correct, ways of caregiving and feeding the pregnant mother and infants.

**Sedentary Lifestyle and behaviors**

Sedentary lifestyle is a lifestyle characterized by the lack of or minimal physical activity done by a person during the day. People who have adopted the sedentary lifestyle spends their day engaging in activities such as watching television, playing video games, and using electronic devices at work or home. What economic growth has brought about is the influx of foreign investments leading to more office job opportunities and the improvements in infrastructure; for instance, the mobile networks and internet connections. Such developments have influenced the people to occupy most of their time sitting down and encourage them to spend their time interacting virtually on social networking sites due to the faster internet speeds rather than actively going out to meet people or exercise. With positive or no change in their food intake and a decrease in the physical activity, the surplus of calories from the meals build up in their bodies leading to gradual weight gain and ultimately lead to obesity.

**Micronutrient Deficiencies**

Providing supplementations to the infants, children, and pregnant mother is a solution to micronutrient deficiencies, however they are not sufficiently covered in ASEAN countries. An example would be providing vitamin A supplementation for children under the age of 5 or preschooler. Some ASEAN member states, such as Myanmar which supplementations only covers 56% of its preschoolers, are still failing to provide the supplementation on a satisfying level. As of 2016, World Health Organization (WHO) considers Myanmar, Laos, Cambodia, and Indonesia to have severe public health problem because more than 20% of their preschoolers show indications of lack of Vitamin A in diet. The most well-known side effect of Vitamin A deficiencies is night blindness. Other micronutrients that are important yet not sufficiently supplemented in ASEAN countries include iron and folic acid.

**Current Issues**

ASEAN countries also need to be prepared to deal with the past situations and future disasters which may worsen malnutrition. A study in 2016 publishes that Khmer Rouge is
the cause of growing rates of diabetes in Cambodia. Most Cambodians with Type 2 diabetes now have parents who experienced starvation in the 1970s Khmer Rouge. In November of 2017, Typhoon Damrey struck Vietnam in areas that already had pre-existing malnutrition concerns. The typhoon put 150,000 children under 5 and 80,000 pregnant mothers at the risk of malnutrition. Relief efforts are being made but not on a sufficient scale.

Diverse groups

Alarming disparities in malnutrition related to ethnic groups are present within the ASEAN countries and are needed to be addressed. In Laos, Chinese Tibetans and Hmong-Miens have almost twice percentage of stunted children compared to Lao-Thai ethnic, with 61% and 33% respectively. In Vietnam, 65% of the H'mong children are stunted while other ethnic groups have much lower rates.

Major Parties Involved and Their Views

ASEAN countries

The ten leaders of ASEAN countries are determined in tackling malnutrition and all its form. In 31st ASEAN Summit in November 2017, ASEAN leaders adopted a declaration of committing in solving malnutrition with multi-sectoral collaboration with relevant sectors such as agriculture and public health. Minister of Department of Health (DOH) will be monitoring the progress, and in March 2018, Philippines will be drafting an action plan to enact the declaration.

Myanmar

Myanmar has an overwhelming 35% of children under the age of five who are stunted as a result of malnutrition, incorrect practices of breastfeeding, and disaster-affected food supply. The World Food Programme (WFP) has created nutrition programmes and relief programmes to “food-insecure” people with the Myanmar government implementing these programmes through providing rations to children in the northern part of Myanmar, mainly Shan State and Chin State. Despite their best efforts, interracial conflicts and its resulting atrocities such as the Rohingya conflict thwart this progress from its original track as access to food gets restricted in those areas.
Concerning the incorrect breastfeeding practices, UNICEF is collaborating with WHO and the local government to increase awareness of the proper diet the infants should receive to encourage optimal IYCF feeding practices such as exclusive breastfeeding through posters, billboards, and training courses. Furthermore, the government is also taking measures by revising the previously drafted IYCF National Strategy and Action Plan, expanding maternity leaves, and giving out paternity leaves.

**Singapore**

Singapore, being one of the most economically developed countries in the ASEAN region, mainly faces the challenge of creeping obesity rates and prevalence of overweight among its student population. In the aspect of policy change, Singapore’s Health Promotion Board (HPB) has restricted advertisements of unhealthy food to children of age 12 and below. It also introduced the Holistic Health Framework in every school that promotes a healthy lifestyle for the students’ well-being. The Healthier Child, Brighter Future initiative is currently employed in hospitals to empower future parents with the necessary knowledge to have safe pregnancies and to influence healthy traits in their newborn children. The HPB has also altered the environment from the child-care centers ensuring the meals to be balanced and healthy, the vending machines to have healthier choices of soft drinks not exceeding the quota of sugar content, and several water dispensers to be placed for students’ ease of access to encourage water consumption. As for the obese students, the Singapore Ministry of Education (MOE) works closely with each of them to medically examine them, counsels them for a healthier lifestyle, offers them physical activities to reduce their weight, and regularly monitors their progress.

**WHO**

As a component of the SDG 2 to combat all malnutrition, WHO sees this issue at hand as the preliminary step to eradicate malnutrition as a whole. Collaborating with the Food and Agriculture Organization of the United Nations (FAO), WHO has drafted The United Nations Decade of Action on Nutrition resolution in the UN General Assembly in 2016 aiming for sustainable yet healthy diets, advanced health services, awareness of nutrition, nutrition-friendly businesses, nutrition-friendly environment and strengthened government’s commitment to nutrition. The implementation of this resolution and its policies has commenced in 2016 in each
respective member countries and will conclude in 2025. Emphasizing on the ASEAN nations, it has created the Strategic Action Plan to reduce the double burden of malnutrition in the South-East Asia Region 2016-2025 that advises the member states on different comprehensive approaches to undertake in order to effectively solve the issue at hand.

**UNICEF**

Although UNICEF has not made any strategies or plans specific to the ASEAN nations, it has made several contributions to play the role of a major stakeholder in combating malnutrition at the global scale. It has paired up with WHO to publish two volumes of Regional Report on Nutrition Security in ASEAN which consists of the current situation in the ASEAN countries of the hardships the victims of malnutrition face and mentions the feasible solutions. It also produced the Global Nutrition Report: From Promise to Impact Ending Malnutrition by 2030 in 2016 consisting of the statistics related to malnutrition such as overweight, underweight, or anemia and calls to actions for each aspect of the issue. Its Nutrition Strategy in 2015 emphasizes on the aspect of malnutrition in mothers and their newborn children to adolescents. UNICEF is one of the implementing partners of the project, The Power of Nutrition, that raises funds dedicated to programs promoting nutrition in some but not all of the ASEAN countries.

**Evaluation of Previous Attempts to Resolve the Issue**

In the past, ASEAN had not worked to combat the issue of malnutrition as a whole but member states of ASEAN had worked individually. They have dealt with different aspects of the issue of malnutrition. Countries such as Indonesia, Malaysia, Myanmar, Singapore and Thailand have been working together with the international organizations to develop individual, unique approaches to combat malnutrition and all its forms.

An evaluation of Myanmar’s attempt to solve one aspect of malnutrition is as followed. Looking at Myanmar’s methods to encourage optimal IYCF practices, they have been making some strides on this front. According to the statistics, the percentage of children suffering from chronic malnutrition has been reduced from a figure of 33.9% in 2000 to an all-time low of 29.2% in 2015 reported in the 2015-2016 Demographic and Health Survey of Myanmar.
However, it is not effective in the respect that it has not been able to totally combat chronic malnutrition and takes time to see the improvements in the results.

Outside of ASEAN, in the field of solving food crisis after natural disasters, Ethiopia is a leading country. In collaboration with the World Food Programme (WFP) and the World’s Bank, the government develops a program called Productive Safety Net Programme in which food insecure people work in the public works of rehabilitating societies, such as by working in reconstructions of roads and schools, and receive cash or food in return. It has reached 1.1 million people of insecure food in Ethiopia.

Possible Solutions

Governments would need to implement a multi-sectoral approach to tackle the multi-sectoral nature of malnutrition. It is important that relevant sectors such as agriculture, education, public health and social welfare will each develop nutrition-sensitive interventions and all work in a coordinative way.

Given that cultural norms tend to have influence on a person’s unhealthy diet, it is important that all individuals in the communities are provided with adequate information on the correct nutrition, through education or via communication forms such as radios. Food industry would also need to provide clear nutrition information of food to customers.

Having maternity protection for the population - extending maternity leaves, having mother-baby friendly work areas - will also be effective as it increases the optimal IYCF practices, especially early initiation of breastfeeding.

Questions a Resolution Should Answer

1. How will the the issue of alarming disparities in vulnerability to different forms of malnutrition existing among different ethnicities be addressed?
2. How will the issue of limited access of relief assistance to disaster-stricken areas be resolved? What preparations and relief efforts relating to food should the stakeholders make for natural disasters?

3. In what ways will the resolution increase public awareness on the appropriate nutrition knowledge, which is being challenged by the heavy influences of cultural norms and mythical beliefs?

4. How will the caregivers and pregnant mothers be informed about correct feeding and caring practices?

5. How will the increasing sedentary lifestyle in economically developed states be tackled?

6. How will micronutrient deficiency in preschool children and pregnant mothers caused by some governments failing to supplement micronutrients on a sufficient scale be addressed?
Bibliography


