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Trending Malnutritional Escape Velocity in Nutritional Dynamics

Md. Abdul Hakim*

Department of Food Technology and Nutritional Science, Mawlana Bhashani Science and Technology University, Santosh, Tangail, Bangladesh

Abstract

Malnutrition is in great triumph on the helm of galore public health panic in the world. There are abundance of different shaping bid taken to curb malnourishment in different countries by means of different campaigning, discussions, pricessions and talk shows to focalize malnutrition bulk. There are different research to find out the overall malnourishment intensity at different topographic sites in the globe. The intent of the current study is to see the light of riding anchor in view of taking intervention to escape the ongoing malnutrition bulk worldwide. This study can reveal the open secret in choosing the set $(Ve)_m$ with the elements ${}_iLDC$ and ${}_iGAM$ in nutritional dynamics to combat massive threat to public health. An all out social planning and policies ahead of malnutrition rebuking movement as rule as the $(Ve)_m$ philosophy is in galore demand to carry the day.

Keywords

Escape Velocity, Lifecycle Dieting Curve, Global Acute Malnutrition, Nutritional Dynamics, Severe Acute Malnutrition

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1. Introduction

About 2 billion people in the world suffer from various degrees of malnutrition [1-3]. Malnutrition is an underlying cause of deaths of about 2.6 million children each year-athird of child deaths globally [4-6]. There are 73.9%, 63.3%and 57.9% overweight populations in North America, Oceania and Caribbean regions respectively [7-9] in the world.

One in every four of the world's children is stunted and indeveloping countries this is as high as one out ofthree [10-12] Undernutrition accounts for 11% of the global burden ofdiseases and is considered the body and soulrisk to health status [13-15] in nutritional epidemiology.

Childhood malnutrition leads to stunted growth andinflamed mortality and morbidity which are lowering thesurvival opportunities of adults in their later life span [16-18].Some 4 of every 5 malnourished children live in South-East-Asianregion accounting about 83% of their deaths to be liableto mild to moderate malnutrition intensity [19, 20]. These health giants are eating up the world's population day by dayand therefore initiatives are in galore need to evade these health problems [21-23]. Therefore, this study was conducted to propose a biosketching giving vent to fare and fury of malnutritional escape velocity in nutritional physics and in computational mathematics.

2. Research Methodology and Data Sources

The study was a cross-sectional study using secondary data analysismethod. Secondary data refers to data that was collected by some researchers in their studies. Secondary data analysis trick in biostatistics is in popular use to conduct a study aiming to attain the ultimate gaining in an anew study. The data was collected from the MAM, SAM, LDC in nutritional biochemistry; MMT project, SAE in biostatistics; escape velocity in astrophysics; food pyramid, modified

* Corresponding author
E-mail address: info.hakim.bd@gmail.com

pyramid, RDAs in human dietetics; logarithmic biophysical modulator, ideal body weight simulation and ideal body mass simulation for adult human samples in nutritional biophysics; set theory, law of equality of set, element in set in computational mathematics. These thematic and phylosophical instruments were used in different mathematical calculation and in different psychological ideas in nutritional biochemistry and in nutrition counseling for trending malnutritional escape velocity in nutritional physics.

3. Results and Discussions

Thereis a saying coined by the world famous English poet, literary critic, philosopher and theologianSamuel Taylor Coleridge in The Rime of the Ancient Mariner that [24, 25],

"Water, water, everywhere, Nor any drop to drink."

The countries in the world is not in contrast to the count on water purifier at the Taylor's prevailing condition [26-28] in the sea following suit a malnutrition purifier [29, 30] in today's engulfing nutritional giants. The malnutritional escape velocity i.e. escape velocity in malnutrition similarly takes the gesture of malnutrition purifier in nutritional dynamics [31, 32]. Malnutritional escape velocity is the bioculturalarrangements in nutrition and dietetics to escape malnutritionalinfluence in a malnourished biomass [33-36].

Global acute malnutrition (GAM) is the main threat to health soundness in the gobal population [37]. We have to play fair play in taking intervention to the existence ofthe GAM in day dream and the cock sure condition in sustaing the steady nutritional soundness while there the healthy condition prevailed.

Assuming $(Ve)_m$ as the malnutritional escape velosity i.e. the intervention to choke the malnutrition in a specific area searched out by using MMT project at spatialmicrosimulation modeling approach on SAE in nutritional biostatistics [38-43], we get the set to gain the day of nutritional soundnessas follows:

$(Ve)_m = \{{}_iGAM, {}_iLDC\}$

Again, there is a question on the GAM. What is it? Are we not in huh?The simple solution of this doubt is that the GAMisthe combined action of moderate acute malnutrition (MAM) and severe acute malnutrition (SAM) in nutritional biochemistry [44-46].

So, we get $\{{}_iGAM\} = \{{}_iMAM, {}_iSAM\}$ by dint of the set theory in health science [47-50].

So, We get obeying the law of equality of set,

$$(Ve)_m = \{{}_iMAM, {}_iSAM, {}_iLDC\}$$

So, the element theory in set [51] reveals that,

$${}_iMAM \in (Ve)_m;\ {}_iSAM \in (Ve)_m;\ {}_iLDC \in (Ve)_m$$

Now, let us have a look on the three elements of $(Ve)_m$ i.e. ${}_iMAM$, ${}_iSAM$ and ${}_iLDC$ as the sheet anchor to nip the bud of malnutrition creating giants in dietetics and nutritional physiology [52-55].

A. *Intervention in global acute malnutrition (${}_iGAM$):* SAM and MAM are significant public health concerns and disproportionately affect populations in low-and middle-income countries (LMICs) [56].

*a) Intervention in moderate acute malnutrition (${}_iMAM$):*MAM affects 32.8 million children worldwide, 31.8 million of whom reside in LMICs [57]. The key interventions to prevent the development of MAM include approapriate breastfeeding and complementary feeding practices in nutrition counseling [58-62].

b) Intervention in severe acute malnutrition (${}_iSAM$): Severe acute malnutrition is a major cause of death under 5 (estimated 16 million children are SAM affected across the globe) and its prevention and treatment are critical to child survival and development. SAM is exacerbated during emergencies, drought, femine or conflict. Indication i.e. household food consumption, harvest yield, and staple food prices are early warning signs of imminent food insecurity, followed by increases in the incidence of SAM [63-65]. SAM affects 18.7 million children worldwide; 18.5 million of those children reside in LMICs [57]. Children with acute malnutrition have severely disturbed psychology and metabolism and need to be treated with caution. Simple refeeding can lead to highrates of mortality, and cases can be especially difficult to manage if additional medical complications are present. The increasing the risk of death due to infectious illness, wasting increases a child's susceptibility to infectionsand the severity of illness [66-68]. The relationship between malnutrition and infection is often described as a vicious cycle that begins with infections, especially diarrhea and progresses to undernourishment. The undernourishment, in turn, increases the risk of prolonged illness and the susceptibility to additional infection, the HIV virus infection excerbates the risk of wasting as well as mortality due to wasting [69-71]. The key intervention to prevene of development of SAM is to reffering the child to the hospital to take necessary treatment along with supplementary feeding practices in nutrition counseling [72-79].

B. *Introducing lifecycle dieting curve (${}_iLDC$):* The ${}_iLDC$ (Figure 1) is the new approach in nutrition counseling with the deliberate selection of foods to be consumed to control nutrients intake throughout the human lifecycle in nutritional physiology [80-86] stealing into he ongoing health status assessed using logarithmic biophysical modulator and body

required dietary energy in bioenergetics in cell biology [87-90]. There are four phases of this LDC naming as follows:

a) Lag dieting: The dieting at the infant i. e. the first 28 days after birth of a very young offspring is known as lag dieting. Breastfeeding is the one and the only diet for the offspring [91, 92].

b) Log dieting: The dieting at the child i. e. at the stage between birth and puberty is called log dieting. The child is to obey the diet counnseling as rule as the ideal body weight simulating nexus in nutritional physics. The child is in need of extra demand of nutrients as rule as the food pyramid (Figure 2) and the concept of RDAs in nutritional biochemistry [93-97].

c) Stationary dieting: The dieting at the adulthood stage is called the stationary dieting. The adult is in need of nutrients proceeding with the food pyramid (Figure 2) and the concept of RDAs in nutritional biochemistrystaring at the ideal body mass simulation in computational nutrition [98-100].

d) Geriatric dieting: The dieting at the geriatric stage of human lifecycle is known as geriatric dieting. The geriatric is on demand of nutrients relating to the modified pyramid starting from the ideal body mass simulation in computational physics [101-108].

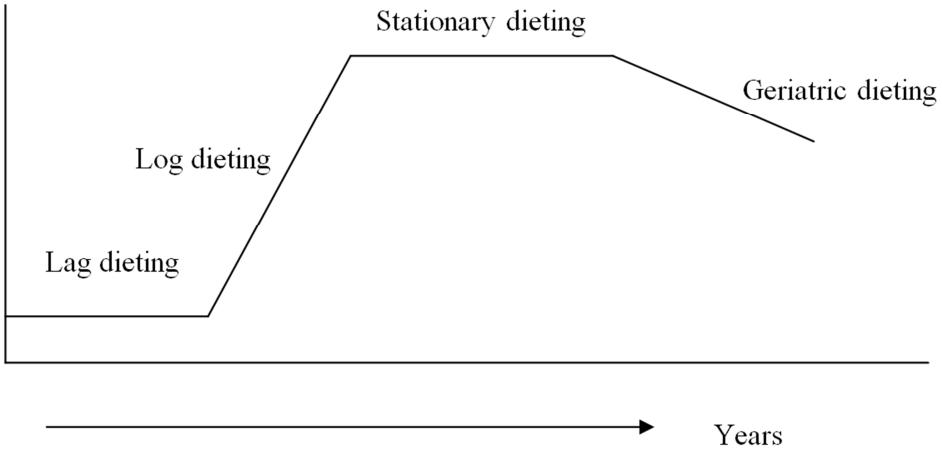

Figure 1. Lifecycle dieting curve (LDC).

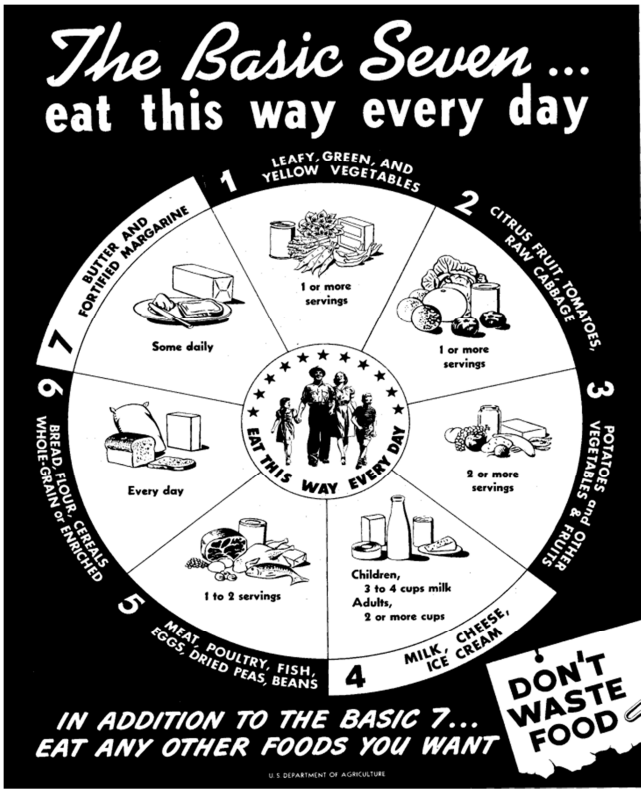

Figure 2. Food pyramid [96].

4. Conclusions

Malnutrition is one of the gravest threat in public health in both the developing and developed countries in the world. The current study findings can take a serious turn to laugh at the worldwide malnutrition intensity. This study rendering $(Ve)_m$ should be taking into action in designing planning and policies for a healthy community development. So the health and nutritional VIPs should bear the testimony in focalizing $(Ve)_m$ as a part of effecting policy designing approach to bear up against the malnutrition across the globe. Future research should adopt this cozy modeling to explore a new road in health pedagogy for taking intervention in policy designing, analysis and checking spatial effects for health and nutrition condition upgrading bid in the worldwide nutritional epidemiology.

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