

On the Prevention of Obesity and a Philosophy for Healthy Living

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ABSTRACT

Overweight and obesity have now reached historical, maximal peak values, with nearly one-third of world population suffering from these conditions. We are now witnessing the impact of this epidemic upon the global health status, with non-communicable diseases on the rise. We have also witnessed the shortcomings and failures of past actions taken when obesity is already present. In this essay the author reviews efforts made in the past regarding identification and treatment of obesity, and propose that actions should be taken before the onset of this disease, by motivating people to make intelligent, healthy choices when it comes to food and physical activity. A philosophy for healthy living should become central to the intervention actions, for them to be successful and sustained. Prevention of obesity should involve all those concerned irregardless of their position in society and curricular training, in order to create a multi-lateral, multi-national effort that will protect our families and our children from the consequences of this epidemic.

Keywords: Obesity; Metabolic Syndrome; Prevention; Sedentariness

1. Introduction

Regarding the prevention of obesity it can be said that there are still limitations on the design, planning and conduction of specifically oriented campaigns [1], but also that important advances have been made thanks to the concerns and efforts of scientists, scholars and politicians, to name a few of the actors involved. Valuable data can be extracted from both situations if work furthering the aforementioned goal is to be improved.

Efforts in the prevention of obesity have not been backed enough due to a perceived lack of knowledge about causes and features of the determinants of this epidemic [2,3]. Lack of knowledge by health professionals intended to act against overweight and obesity, as well as society as a whole, has led both to fail to realize that obesity is in itself a disease. Lest it is accepted that obesity limits not only quality of life, but also the mere existence of it. Training of professionals in food, nutrition, and physical activity is not sufficient; scientific research endorsing prevention of obesity in order to respond to different and various situations in which overweight and obesity present and develop in our populations is lacking; and available methods for educating the general population on issues of healthy food and physical activity that would serve to revert the influence of publicity surrounding unhealthy foods and sedentary lifestyles are deficient. Although scientific journals and pub-

lications clearly signal the alarming increase in childhood obesity, this health problem is not acknowledged enough. Implications of this behavior are not identified at the required level to fully understand the size of the problem. Although epidemiological data shows the indeclinably upwardly trend in already increased costs of obesity [4], realization that excess of weight represents an important factor limiting the development of mankind in view of the associated economical and social overtones is not generalized yet. Absence of consequent action when abundant knowledge about the causes and consequences of overweight and obesity exist also limits the effectiveness of campaigns aimed to prevent these diseases.

It has been known for quite some time that obesity is the result of a chronically maintained positive energy balance. However, most of the times it is pretended to approach this problem merely by indicating improvements in food habits, or prescribing modest changes in physical activity. Regarding comprehensive efforts to prevent obesity, even though the intention is nonetheless correct, major blunders are committed when the generalization “guaranteeing healthy food and persons to be active” is intended to be enforced. Modification of lifestyles by incorporating healthy food habits and diminishment of sedentary behavior are heart-lightly advised, without realizing how hard is to put these recommendations into practice. Changing habits without considering

their onsets and strengths is a task meeting scarce chances for success. This observation is reinforced after witnessing numerous failures accumulated after decades and decades trying to stop an epidemic that has become global.

Obesity affects the wealthy as well as the poor, men and women alike, adults, adolescents and children, and people irregardless of ethnic origin [5,6]. The prevalence of obesity is already higher than 50% in today's adults in the majority of our countries! But behavior of this disease across these variables is far from being homogenous. Hence, these differences should be taken into account when dealing with obesity prevention. On the other hand, differences arising from places of living, instruction levels, and social as well as cultural aspects, among others, should also be considered in every effort to counter obesity. Regarding this latter issue, it is to be noticed that urbanization rate is now reaching 80% of the population worldwide, and this circumstance, coupled with ease of access to motor transportation, implies low levels of energy expenditure by individuals without intense (lest to say moderate) physical activities as part of their schooling or work chores (that also includes travels between their homes and school- and work-places). In a study involving 315 subjects from both sexes, living in North America, Central America, South America and the Caribbean, with college education, and knowledge about health implications of obesity, more than half of them were sedentary and did not follow a health diet regularly [3]. This result is in agreement with reports from other scientific journals describing population groups in which more than 40% of their members exhibited sedentary habits in spite of a level of instruction higher than junior high grade. It is not necessary to resort to complex mathematical models to forecast how obesity will increase if we are not to act urgent but properly against this epidemic [5].

Reduction of sedentariness, on an individual as well as population level, is a complex task, and procedures to achieve this goal in a stable and sustainable way are not fully documented. It is now known that our boys and girls do not spend as much energy as we, the adults of today, did when playing and performing outdoor activities in our not that distant childhood [7]. Moderate to intense physical activity should be incorporated into one person's lifestyle in a voluntary and attractive manner, after seeing that sedentariness can be non-volitionally reduced as much as 50% in a population because of economical hardships and crisis. But when these events subside, sedentariness returns at rates higher than those observed when economical conditions dictate daily, extenuating life activities such as long walks to workplaces, or bicycle riding for long stretches. Energy food intake in excess of energy expenditure can also be dramatically reduced due to economic reasons on both individual and

population levels; but again when causes for food shortages disappear a rebound-effect occurs with food consumption levels surpassing even those recorded before the imposed change, thus facilitating higher rates of overweight. So, it is now easy to understand why several researchers state that practices of moderate/intense physical activity and healthy food should be welcome and enjoyed by the subject for him/her to obey and uphold them.

In spite of all that has been said in the preceding paragraphs, an augmented perception of obesity as a health problem has led to a situation never seen before: more and more researchers from dissimilar fields and disciplines are working together on this subject; an important number of political effectors are worried about obesity; and opinion leaders are starting to spread messages that might help to prevent obesity, among other favorable changes. This is a strength we should all profit from it, and to empower it by facilitating local as well as national actions through international collaboration.

2. On the Prevention of Obesity

Prevention of obesity, as any other disease, has a direct relationship with the stages of natural history of pathological processes. Building upon this ground, and given the difficulties arising from reverting obesity when presented, the strategy of prioritizing primordial as well as primary prevention is fostered [8,9]. Obesity prevention should also reach all levels and sectors that could keep excess of weight from presenting and developing.

Primordial prevention is defined as prevention of the onset and development of patterns of social, economic and cultural life known to contribute to increase the risk of this disease, such as unhealthy food and/or sedentariness. Actions can be taken as part of primordial prevention efforts such as drafting and enforcing goal-oriented laws and regulations, as well as other ones imposing limits on those factors that would facilitate the onset of the disease. This level of prevention acquires particular relevance when regarding actions aimed to prevent obesity because it is aimed to create environments where individuals as well as populations are enabled (and encouraged) to embrace healthy habits. Education of individuals and populations alike in training and development of these habits also constitute primordial prevention actions.

Primary prevention is the whole set of measures applied in the management of the health-illness process before the subject gets sick. These actions are aimed to prevent the onset of the illness and to maintain health, and their objective is to limit the appearance of new patients by controlling risk factors and causes of the disease. As part of the primary prevention, actions are taken reaching the whole population (known as "population

strategy”), as well as groups at risk (“group strategy”). Boys and girls constitute population groups at risk of obesity, and thus they are among those targeted for intervention.

Secondary prevention corresponds with actions oriented to early detection, and timely treatment, of the disease; and includes measures for recovering health lost due to illness. Given the increased number of obese people, conduction of these secondary prevention actions is of utmost importance, although it is emphasized that primordial and primary preventions are more effective when it comes to stopping the epidemic of obesity. With these thoughts in mind, the practicing physician should consider the use of appetite-suppressing drugs to keep the current situation from getting out of course, and to sustain the beneficial effect expected from other measures taken such as bariatric surgery (to name a few).

Realization of the existence of determinants of obesity such as educational, cultural, social, and economic events; the non-stopping increase in urbanization rates, reduction of physical activity accompanying daily life, augmented and consumption of foods with higher amounts of saturated fats and refined sugars (without exhausting the list), indicates that solutions to the challenges posed by obesity require a multi-sector participation. Multi-sector work in the prevention of obesity means active involvement of all those sectors that can act, direct or indirectly, to facilitate creation and development of healthy environments, in addition to the elimination of “obesogenic” ones. Coordination of all the strategies and actions aimed to stop obesity epidemic into a single policy is important for the multi-sector work to be successful, and the health sector is responsible for providing health statistics allowing identification of the behavior of the disease and their determinants. Multi-level work for preventing obesity also implies local, national and also international efforts, because it is impossible to confront this epidemic without considering determinants existing in those same levels. Considerations about local and national conditions are fundamental for success of this class of prevention.

Prevention of obesity is a task involving individuals, families, communities, and governments alike, not to mention other important actors. It is not enough to create healthy environments if people do not know how to use them, and it is impossible to prevent obesity without healthy environments. All the efforts put into preventing obesity should be targeted to the different stages of the subject’s lifespan, but special emphasis has to be placed on those factors related with the pre-conceptual period, the first ages of life, the schooling period, workplaces, and community as a whole.

To prevent the rise in obesity-related morbidity and mortality large-scale interventions programs at the community level are required that should be aimed to in-

crease physical activity, along with sustainable options for consuming healthy foods, especially in children [10, 11]. Caring for the children can become the needed catalyst for prevention of obesity to be effective, and also to help obese children to overcome this disease, although more refined procedures are required. Embodying children with the development of habits and behaviors leading them to choose the pleasure for being active and the taste for a healthier food could mean a lifestyle totally different from the one prevailing in the majority of our countries, where today’s values have crowned sedentari-ness and unbalanced diets.

3. Towards a Philosophy for Living Healthy

When writing this essay, a question struck my mind: is it possible when discussing obesity that we are putting aside fundamental issues such as bodies of mental and cultural constructs and philosophies built into individuals as well as populations? The same philosophies that have made people today to revere sedentariness and unbalanced, unhealthy diets as top values in (post)modern societies; these same philosophical foundations that have led individuals to engage into behaviors leading to the onset and development of overweight and obesity: from denial of obesity as a disease and an event limiting development of the society to disregard for caring the most precious treasure of any country: the child population. These same philosophical foundations that have evolved from misconceptions associating obesity with economic wealth; and excess of weight as a health status when opposed to low weight due to malnutrition and poverty [12]. Hence, prevention of obesity should imply embracing lifestyles that would latter be embodied into a philosophy for our daily lives incorporating search for welfare, good quality of life, and adding years to life by enjoying moderate to intense physical activity and preferring a healthy diet. That is: a philosophy for living healthy.

The foundations of the philosophy for healthy living lie in achieving a balance between energy intake and energy expenditure, thus prompting us to ask ourselves what should be the best diet for our bodies and what level of physical activity we should practice. These foundations can be traced back up to breastfeeding, which supplies the child with all the essential nutrients during the first months of life; and are incorporated by those individuals who pursue how to exercise their muscles in a natural way. But in order to sustain a healthy diet and also to be active knowledge, perceptions and subjective as well as objective decisions, among other resources, corresponding with this philosophy for a healthy living are required.

Diet should be in accordance with nutritional requirements, and an active condition facilitates that muscles

and joints preserve their physiological capacity as part of the individual's normal performance. As we all know now, considerations about diet should include, among other factors, type and quantity of foods, ways of preparation and cooking, frequency of consumption, place and company during meals, and also ways and time we dedicate to the mere act of consuming our meals. As for physical activity, similar considerations have to be made, regarding type, ways, duration and frequency of its execution, as well as the place and company during exercising.

In the philosophy for healthy living might lie the way to find a viable solution to the problem posed by obesity because it encompasses all of their causes in a comprehensive and holistic manner. In keeping with these integrated and interrelated causes, this philosophy should also indicate how to find ways to prevent (or at least revert) them by identifying that knowledge which might be of help in this purpose, as well as providing the need for better scientific information on more effective actions against obesity. This philosophy for a healthy living should influence politics, sciences, culture, and any other factor affecting society, including our concepts about beauty and welfare; and incorporate mottos such as: "once one is gifted with life, health becomes the most important value" and "in order to preserve health it is required to avoid the condition of overweight or obesity, because obesity is incompatible with health". Thus, the philosophy for healthy living should convince individuals that any expression of sedentariness accompanied with an unbalanced diet would negatively affect their health, and so, persons should choose to avoid harmful foods in favor of tastes and preferences for healthier ones, on the grounds of information, education and motivation; as well as to enjoy the effects of moderate to intense physical activity [13]. As with a healthy diet, preference for being active should respond to the satisfaction of the true and identified interests of the individual, where his/her motivation should be enough to act in a sustained way corresponding with his/her decision to lead a healthy life.

Practical examples of the philosophy for a healthy living can be built into social and family spheres, such as preference for talking while walking or jogging instead of long conversations between people seated; swimming instead of lying on the beach sand; serving foods to our guests without our goodwill hosting gestures being equaled with an abundant portion; educating children and adolescents on individual acting; as well as to stimulate voluntary reduction of body weight excess. In order for the general population to embrace this philosophy for living healthy then it is required to inform, educate, research, and train; but also to empower collaboration between all concerned through specified projects at local, regional and national levels. Among these projects we can men-

tion those aimed to diagnose and act against obesity, research on the impact of healthy diet and physical activity, the passing of laws supporting prevention of obesity, education of the general population, along with creation and promotion of human resources; and reduction of "obesogenic" environments coupled with the opening new "obese-free" ones and enhancing those already existing.

4. Conclusion

Preventing the rise, development and expansion of the epidemic of obesity represents a formidable task for present and future generations. Prevention efforts should be aimed to identify and treat risk factors for this disease, as well as stimulating people to voluntarily reduce excess of body weight, choose healthy diets and practice moderate to intense physical activity. But preventing obesity should also include the advancement of a philosophy for healthy living which empowers people to freely and knowingly choose healthy ways of life, and thus enjoying being active and well fed. Evolution of the human race towards its own demise by attempting against its life and development because of overweight and obesity responds to philosophical foundations that are incompatible with human intelligence; and so it is expected that our intelligence will be able to overcome the challenges posed by this global epidemic. These philosophies, which have led people to lose their health to sedentariness and unhealthy diet, can and should be eliminated with the commitment of all concerned, because we all are affected by this problem, and with all and for the sake of all the philosophy for healthy living should be promoted.

REFERENCES

- [1] J. Bhattacharya and N. Sood, "Who Pays for Obesity?" *The Journal of Economic Perspectives*, Vol. 25, No. 1, 2011, pp. 139-158. [doi:10.1257/jep.25.1.139](https://doi.org/10.1257/jep.25.1.139)
- [2] M. Uusitupa, J. Tuomilehto and P. Puska, "Are We Really Active in the Prevention of Obesity and Type 2 Diabetes at the Community Level?" *Nutrition, Metabolism & Cardiovascular Disease*, Vol. 21, No. 5, 2011, pp. 380-389.
- [3] D. Cuevas, R. Mehta, J. De La Luz, R. Castañeda, E. García and C. A. Salinas, "Awareness of Abdominal Adiposity as a Cardiometabolic Risk Factor (The 5A Study): Mexico," *Diabetes, Metabolic Syndrome and Obesity*, Vol. 4, 2011, pp. 107-117.
- [4] E. A. Finkelstein, J. G. Trogdon, J. W. Cohen and W. Dietz, "Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates," *Health Affairs (Millwood)*, Vol. 28, No. 5, 2009, pp. w822-w831. [doi:10.1377/hlthaff.28.5.w822](https://doi.org/10.1377/hlthaff.28.5.w822)
- [5] Y. Wang, M. A. Beydoun, L. Liang, B. Caballero and S. K. Kumanyika, "Will All Americans Become Overweight or Obese? Estimating the Progression and Cost of the US

- Obesity Epidemic,” *Obesity (Silver Spring)*, Vol. 16, No. 10, 2008, pp. 2323-2330. [doi:10.1038/oby.2008.351](https://doi.org/10.1038/oby.2008.351)
- [6] R. Kelishadi, “Childhood Overweight, Obesity, and the Metabolic Syndrome in Developing Countries,” *Epidemiological Reviews*, Vol. 29, 2007, pp. 62-76. [doi:10.1093/epirev/mxm003](https://doi.org/10.1093/epirev/mxm003)
- [7] G. Nyberg, E. Sundblom, A. Norman and L. S. Elinder, “A Healthy School Start-Parental Support to Promote Healthy Dietary Habits and Physical Activity in Children: Design and Evaluation of a Cluster-Randomised Intervention,” *BMC Public Health*, Vol. 11, 2011, p. 185. [doi:10.1186/1471-2458-11-185](https://doi.org/10.1186/1471-2458-11-185)
- [8] T. Psaltopoulou, I. Ilias and M. Alevizaki, “The Role of Diet and Lifestyle in Primary, Secondary, and Tertiary Diabetes Prevention: A Review of Meta-Analyses,” *The Review Diabetic Studies*, Vol. 7, No. 1, 2010, pp. 26-35. [doi:10.1900/RDS.2010.7.26](https://doi.org/10.1900/RDS.2010.7.26)
- [9] R. Kones, “Is Prevention a Fantasy, or the Future of Medicine? A Panoramic View of Recent Data, Status, and Direction in Cardiovascular Prevention,” *Therapeutic Advances in Cardiovascular Disease*, Vol. 5, No. 1, 2011, pp. 61-81. [doi:10.1177/1753944710391350](https://doi.org/10.1177/1753944710391350)
- [10] H. Kitzman-Ulrich, D. K. Wilson, S. M. St. George, H. Lawman, M. Segal and A. Fairchild, “The Integration of a Family Systems Approach for Understanding Youth Obesity, Physical Activity, and Dietary Programs,” *Clinical Child and Family Psychology Review*, Vol. 13, No. 3, 2010, pp. 231-253. [doi:10.1007/s10567-010-0073-0](https://doi.org/10.1007/s10567-010-0073-0)
- [11] M. Moodie, M. M. Haby, B. Swinburn and R. Carter, “Assessing Cost-Effectiveness in Obesity: Active Transport Program for Primary School Children-TravelSmart Schools Curriculum Program,” *Journal of Physical Activity & Health*, Vol. 8, No. 4, 2011, pp. 503-515.
- [12] J. M. Spahn, R. S. Reeves, K. S. Keim, I. Laquatra, M. Kellogg, B. Jortberg and N. A. Clark, “State of the Evidence Regarding Behavior Change Theories and Strategies in Nutrition Counseling to Facilitate Health and Food Behavior Change,” *Journal of the American Dietetic Association*, Vol. 110, No. 6, 2010, pp. 879-891. [doi:10.1016/j.jada.2010.03.021](https://doi.org/10.1016/j.jada.2010.03.021)
- [13] R. K. Martins and D. W. McNeil, “Review of Motivational Interviewing in Promoting Health Behaviors,” *Clinical Psychology Review*, Vol. 29, No. 4, 2009, pp. 283-293. [doi:10.1016/j.cpr.2009.02.001](https://doi.org/10.1016/j.cpr.2009.02.001)