# The Cartagena Declaration and the Sustainable Development Goals

La Declaración de Cartagena y los Objetivos de Desarrollo Sostenible A Declaração de Cartagena e os Objetivos de Desenvolvimento Sustentável

### Diana Cardenas<sup>1\*</sup>

Received: September 1, 2019. Accepted: October 26, 2019. https://doi.org/10.35454/rncm.v2supl1.034

#### Summary

The Sustainable Development Goals (SDGs) seek to end all forms of hunger and malnutrition by 2030 and ensure the access of all people, especially children, to sufficient and nutritious food throughout the year. However, the goals of SDG 2 "Zero Hunger," and the other 16 SDGs do not include the problem of disease-related malnutrition. Malnutrition (underweight, overweight and obesity, micronutrient deficiencies) associated with socio-economic factors (poor diet, hunger and poverty) and disease-related malnutrition have different pathophysiological origins and mechanisms and therefore need different approaches. The Cartagena Declaration is an instrument where nutritional care is elevated for the first time as a human right and can be considered as a strategy to give visibility and draw the attention of public policy makers on the need to advance in this field. By including this type of malnutrition within the global approach to the problem of population malnutrition, we would be contributing to achieving the SDG targets and, in particular, to the sustainable development of countries.

**Keyword:** Sustainable Development Goals; Human Rights; Malnutrition.

#### Resumen

Los Objetivos de Desarrollo Sostenible (ODS) buscan terminar con todas las formas de hambre y desnutrición para 2030 y velar por el acceso de todas las personas, en especial los niños, a una alimentación suficiente y nutritiva durante todo el año. Sin embargo, las metas del ODS 2 "Hambre Cero", y de los otros 16 ODS no incluyen la problemática de la desnutrición asociada a la enfermedad. La malnutrición (bajo peso, sobrepeso y obesidad, carencia de nutrientes) asociada a factores socio económicos (mala alimentación, hambre y pobreza) y la desnutrición asociada a la enfermedad tienen orígenes y mecanismos fisiopatológicos distintos; y por lo tanto, necesitan abordajes diferentes. La Declaración de Cartagena es un instrumento en que, por primera vez, el cuidado nutricional es elevado a categoría de derecho humano y puede ser considerado como una estrategia para dar visibilidad y llamar la atención de los formuladores de políticas públicas sobre la necesidad de avanzar en este campo. Al incluir este tipo de desnutrición dentro del abordaje global del problema de la malnutrición de las poblaciones estaríamos contribuyendo a lograr las metas de los ODS y en concreto al desarrollo sostenible de los países.

**Palabras clave:** objetivos de desarrollo sostenible, derechos humanos, malnutrición.

#### Resumo

Os Objetivos de Desenvolvimento Sustentável (ODS) buscam acabar com todas as formas de fome e desnutrição até 2030 e garantir o acesso de todas as pessoas, especialmente crianças, a alimentos suficientes e nutritivos ao longo do ano. No entanto, os objetivos do ODS 2 "Fome Zero" e os outros 16 ODS não incluem o problema da desnutrição associado à doença. A desnutrição (baixo peso, sobrepeso e obesidade, carência de nutrientes) associada a fatores socioeconômicos (má alimentação, fome e pobreza) e a desnutrição associada à doença têm origens e mecanismos fisiopatológicos diferentes e, portanto, precisam de abordagens diferentes. A Declaração de Cartagena é um instrumento em que, pela primeira vez, o cuidado nutricional é elevado à categoria de direito humano e pode ser considerado uma estratégia para dar visibilidade e chamar a atenção dos formuladores de políticas públicas sobre a necessidade de avançar neste campo. Ao incluir esse tipo de desnutrição na abordagem global do problema da desnutrição populacional, estaríamos contribuindo para alcançar as metas dos ODS e, em particular, para o desenvolvimento sustentável dos países.

Palavras-chave: objetivos de desenvolvimento sustentável, direitos humanos, desnutrição.

<sup>1</sup> Instituto de Investigación en Nutrición, Genética y Metabolismo, Facultad de Medicina, Universidad El Bosque, Bogotá, D.C., Colombia.

\*Corresponding author: Diana Cardenas dianacardenasbraz@gmail.com

## INTRODUCTION

According to the United Nations, sustainable development is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development requires concerted efforts to build an inclusive, sustainable and resilient future for people and the planet"<sup>(1)</sup>. Sustainable development takes into account three basic elements: economic growth, social inclusion and environmental protection. These elements are interrelated and essential for the well-being of individuals and societies<sup>(1)</sup>. Extreme hunger and malnutrition remain a major obstacle to sustainable development. Hunger and malnutrition make people less productive and more prone to disease, so they are often unable to increase their incomes and improve their lives.

In September 2015, more than 150 heads of state and governments met at the historic Summit on Sustainable Development, at which they approved the United Nations Agenda 2030. This Agenda contains 17 goals and 169 universally applicable targets that, from 1 January 2016, govern countries' efforts to achieve a sustainable world<sup>(1)</sup>. The Sustainable Development Goals (SDGs) replace the Millennium Development Goals (MDGs), and seek to achieve those targets that were not achieved. What is innovative about the SDG is that it calls on all countries, without distinction, to take a series of measures to promote development while protecting the planet. They recognize that efforts to address issues such as hunger must go hand in hand with strategies that support economic growth and address a range of social needs, including education, health, social protection and employment opportunities, while combating climate change and promoting environmental protection. SDGs are not legally binding, but countries set targets to be achieved through national actions and policies.

# **OBJECTIVE 2: HUNGER ZERO**

Ending hunger, achieving food security and improving nutrition, and promoting sustainable agriculture are the focus of Goal 2 "Zero Hunger". A world without hunger and in good nutritional status can have a positive impact on the economy, as well as on overall health, education, equality and social development. This Zero Hunger goal is a central point in building a better future for all countries. Hunger and malnutrition, by slowing human development, would prevent the achievement of the other Sustainable Development Goals, such as education, health and gender equality  $^{(2)}$  (Table 1, Figure 1).

# DISEASE RELATED MALNUTRITION AND SDG

Disease related malnutrition, a specific type of malnutrition caused by a concomitant disease, is highly prevalent in all countries of the world  $^{(3,4)}$ . In Latin America the prevalence of malnutrition at hospital admission is higher than in other regions of the world, according to a review of the literature is 40 % to 60 %<sup>(5)</sup>, and increases with the length of hospital stay. Disease related malnutrition is associated with a reduced quality of life for patients and an increase in infectious and non-infectious comorbidities, the length of stay and the costs which impose a considerable economic and health burden on these countries<sup>(6,7)</sup>.

The risk of malnutrition at the time of admission has been correlated with several factors including metabolic alterations, the impact of the disease on nutritional requirements, decreased food intake, organizational problems and lack of awareness and medical education. We believe that whatever the reason, the higher prevalence of disease-related malnutrition in Latin America could be influenced by the higher prevalence of hunger and malnutrition in the general population. This means that socio-economic conditions and public health conditions (access and health coverage) may influence the higher prevalence of hospital nutritional risk in the region.

The burden of malnutrition was investigated in Colombia in hospitalized patients with cardiovascular or pulmonary disease in a multicenter study by Ruiz et al <sup>(8)</sup>. This study showed that the risk of malnutrition detected with the Malnutrition Screening Tool (MST) was associated with a 1.6-day increase in the average length of hospital stay, with a relative increase of 30.13% in the average cost associated with hospitalization. It was also associated with an increased risk of mortality up to 30 days after discharge from hospital.

Numerous studies have shown that nutritional care can improve clinical outcomes and reduce health care costs in different areas of the disease, such as critically ill patients <sup>(9,10)</sup>, pancreatitis <sup>(11)</sup>, older adults <sup>(12)</sup>, patients with dysphagia <sup>(13)</sup>, and patients with chronic obstructive disease <sup>(14)</sup>.

Despite this evidence, disease related malnutrition is not often detected and, therefore, is not treated in hospitals, alerts are not generated, and there is no concern among policy-makers. Few countries have legislation and public policies on this issue. In addition, none of

#### Table 1. Goal 2 Targets: Zero Hunger

2.1 By 2030, end hunger and ensure access for all people, in particular the poor and vulnerable, including infants, to healthy, nutritious and adequate food throughout the year

2.2 By 2030, end all forms of malnutrition, even by achieving, by 2025, the internationally agreed goals on growth stunting and emaciation of children under five years of age, and address the nutritional needs of adolescents, pregnant and lactating women and older persons

2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fisherfolk, including through secure and equitable access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value-added generation and non-agricultural employment

2.4 By 2030, ensure the sustainability of food production systems and implement resilient agricultural practices that increase productivity and production, contribute to the maintenance of ecosystems, strengthen resilience to climate change, extreme weather events, droughts, floods and other disasters, and progressively improve soil and land quality.

2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farm and domesticated animals and their related wild species, including through the sound management and diversification of seed and plant banks at the national, regional and international levels, and promote access to the benefits arising from the utilization of genetic resources and traditional knowledge and their fair and equitable sharing, as agreed internationally.

2.a Increase investments, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technological development and gene banks of plants and livestock in order to improve agricultural production capacity in developing countries, in particular in the least developed countries.

2.b To correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.

2.c. Take measures to ensure the proper functioning of markets for food commodities and their derivatives and facilitate timely access to market information, particularly on food stocks, in order to help limit extreme food price volatility.

Source: https://www.un.org/sustainabledevelopment/es/.

the targets of Goal 2, nor of any of the other 16 SDGs, mentions malnutrition associated with disease (Table 1). This means that governments will focus on addressing undernutrition and food security without taking into account this specific type of disease-related malnutrition.

# GOAL 2 "ZERO HUNGER" AND THE CARTAGENA DECLARATION

In order to include the problem of disease related malnutrition in the national and international political agenda and to increase the probability of formulating policies to combat this problem, particularly in the hospital setting, it is necessary as a first step to give visibility to the problem and generate awareness of its importance. The Cartagena Declaration is an instrument where, for the first time, nutritional care is elevated to the category of a human right. Although this Declaration commits only societies to work in its defense, it is a first step towards giving visibility and attracting the attention of public policy makers. Raising nutritional care to the rank of human right will serve as a strategy so that when evaluating and seeking solutions to the problem of malnutrition of the population, disease-related malnutrition will also be considered. This is essential if we bear in mind that malnutrition (underweight, overweight and obesity) associated with socioeconomic factors (poor nutrition, hunger and poverty) and disease-related malnutrition have different origins and physiopathological mechanisms, and therefore, need a different approach (Figure 2).

In this way, by making the problem visible and fighting for nutritional care for all patients, we would be contributing to the sustainable development of countries.

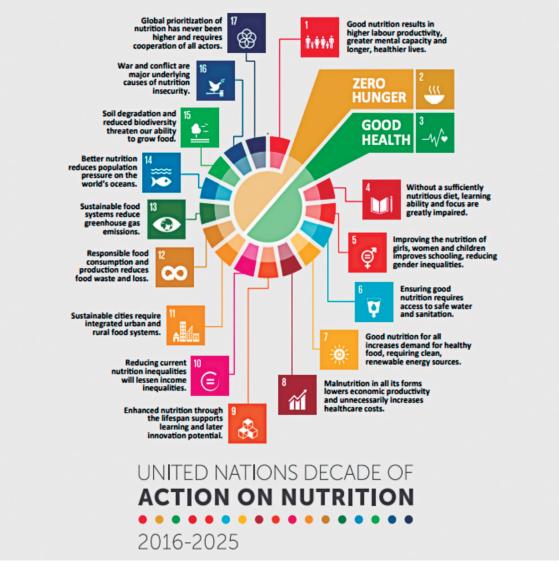
# CONCLUSION

When scientific societies and health professionals assume the defense of the right to nutritional care, they promote the visibility of this issue. The objective is to ensure that disease-related malnutrition is included in

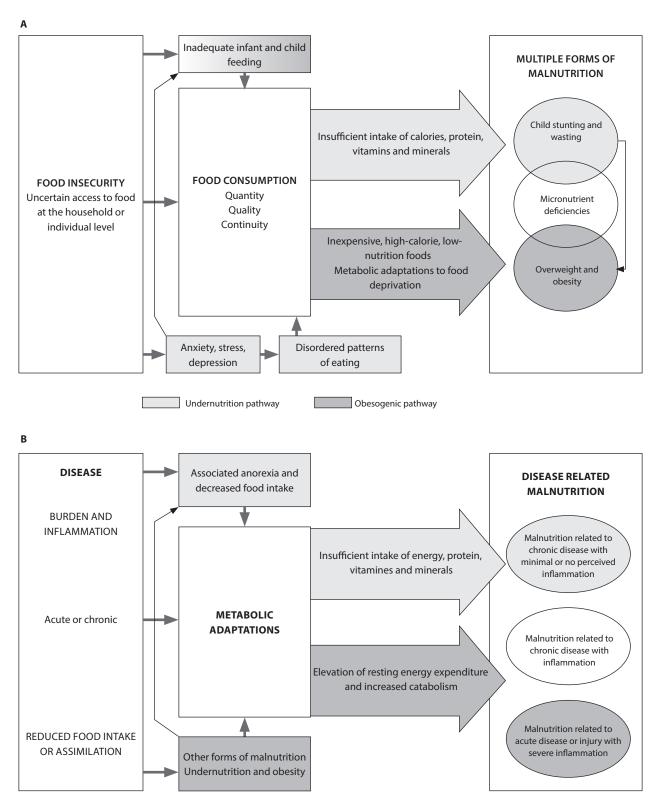


# END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

# NUTRITION AND THE SDGs CENTRAL TO THE 2030 AGENDA



**Figure 1.** Including disease-related malnutrition and promoting nutritional care in the clinical setting would contribute to the sustainable development of countries. From: https://www.un.org/sustainabledevelopment/es/.



**Figure 2. A:** Pathways from inadequate food access to multiple forms of malnutrition (Except disease related malnutrition) According to the FAO, 2018<sup>(15)</sup>; **B:** Pathways from disease to malnutrition. Figure according to the classifications and definitions of ESPEN<sup>(4)</sup>.

the global approach to the problem of population malnutrition. In this way, the science of clinical nutrition is contributing to the achievement of the goals of the United Nations Agenda 2030 and in particular to the sustainable development of the countries.

## **Funding sources**

This article was not financed.

# **Conflict of interests**

Authors declare that they have no conflict of interest.

## References

- 1. Naciones Unidas. Objetivos de Desarrollo Sostenible. [Internet]. [consultado el 29 ocubre 2015]. Disponible en: https://www.un.org/sustainabledevelopment/es/.
- Naciones Unidas. Objetivos de Desarrollo Sostenible. ODS
  Hambre Cero. [Internet]. [consultado el 29 ocubre 2015]. Disponible en https://www.un.org/sustainabledevelopment/ es/wpcontent/uploads/sites/3/2016/10/2\_Spanish\_Why\_ it\_Matters.pdf.
- Sobotka L. Editor. Basics in clinical nutrition. 4th ed. Galen , Prague, 2012.
- Cederholm CT, Barazzoni R, Austin P, Ballmer P, Biolo G, Bischoff SC, et al. ESPEN guidelines on definitions and terminology of clinical nutrition. Clin Nutr. 2017;36(1):49-64. doi: 10.1016/j.clnu.2016.09.004.
- Correia MITD, Perman MI, Waitzberg DL. Hospital malnutrition in Latin America: A systematic review. Clin Nutr. 2017;36:958-67.
- Norman K, Pichard C, Lochs H, Pirlich M. Prognostic impact of disease-related malnutrition. Clin Nutr. 2008;27:5-15.

- Rodriguez-Manas, Abizanda P, Barcons N, Lizán L. Malnutrition in Institutionalized and Community-Dwelling Older Adults in Spain: Estimates of Its Costs To the National Health System. Value Health. 2014;17(7):A507.
- Ruiz AJ, Buitrago G, Rodríguez N, Gómez G, Sulo S, Gómez C, Partridge J, Misas J, Dennis R, Alba MJ, Chaves-Santiago W, Araque C. Clinical and economic outcomes associated with malnutrition in hospitalized patients. Clin Nutr. 2019;38(3):1310-6 doi: 10.1016/j.clnu.2018.05.016
- Doig GS, Heighes PT, Simpson F, Sweetman EA, Davies AR. Early enteral nutrition, provided within 24 h of injury or intensive care unit admission, significantly reduces mortality in critically ill patients: a meta-analysis of randomised controlled trials. Intensive Care Med. 2009;35(12):2018–27.
- Visser J, Labadarios D, Blaauw R. Micronutrient supplementation for critically ill adults: a systematic review and metaanalysis. Nutrition. 2011;27(7–8):745–58.
- McClave SA, Chang WK, Dhaliwal R, Heyland DK. Nutrition support in acute pancreatitis: a systematic review of the literature. JPEN J Parenter Enteral Nutr. 2006;30(2):143–56.
- Deutz NE, Matheson EM, Matarese LE, Luo M, Baggs GE, Nelson JL, et al. Readmission and mortality in malnourished, older, hospitalized adults treated with a specialized oral nutritional supplement: a randomized clinical trial. Clin Nutr. 2016;35(1):18-26.
- Cook IJ. Treatment of oropharyngeal dysphagia. Curr Treat Options Gastroenterol. 2003;6(4):273–81.
- Snider JT, Jena AB, Linthicum MT, Hegazi RA, Partridge JS, LaVallee C, et al. Effect of hospital use of oral nutritional supplementation on length of stay, hospital cost, and 30-day readmissions among medicare patients with COPD. Chest. 2015;147(6):1477-84.
- Food and Agriculture Organization of the United Nations. The state of food security and nutrition in the world. [Internet]. Roma 2018. (Consultado el :5 september 2019). Disponible en: http://www.fao.org/3/I9553ES/i9553es.pdf.