

# Healthy Diets and Sustainable Development Goals

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## ABSTRACT

Populations throughout the world are facing immense challenges caused by a global rise in non-communicable diseases and ongoing economic crises. Non-communicable diseases impose a large financial burden on many populations, but there continues to be an underinvestment in factors that negatively affect health. One of the targets of the Sustainable Development Goal 3 is to reduce non-communicable diseases by one third. Evidence shows that diet-related non-communicable diseases are the leading cause of death and morbidity, and that their burden is likely to increase if urgent remedial actions are not initiated on a large scale. Successful implementation and execution of diet-related health promoting policies are required to promote sustainable human development. Control measures and improved understanding of the benefits of healthy diets, as well as changes in population attitudes and practices towards healthier diets are required to reduce the prevalence of diet-related non-communicable diseases successfully. Programs that are currently implemented have not reduced the burden of diseases significantly due to narrow goals and their limited rates of implementation.

**Key words:** Sustainable Development Goals, Non-communicable diseases, Diet, Health promotion, Low-and-middle income countries.

## INTRODUCTION

Diet-related non-communicable diseases (NCDs) are increasing rapidly in low- and middle-income countries (LMICs) and are one of the leading causes of morbidity and mortality. Although the World Health Organization (WHO)'s *Global Action Plan* has been in place for many years, the progress in national policy development in LMICs has been disproportionate.<sup>1</sup> Transformations in food systems are rapidly increasing in most low and middle income countries. Modern food systems evolved after World War II to meet a very different set of nutritional and food requirements, and this evolution has continued through the 1990s in response to globalization.<sup>2</sup> Globally, calories obtained from meat, diets rich in sugar, oil, salt and fats have increased during recent years, while, conversely, those from fibre-rich foods, such as whole grains, fruits and vegetables, have declined. Consumption of processed foods continues to rise rapidly in LMICs, and this nutrition transition is affecting dietary

patterns and nutrient intake, which in turn influences the risk of developing NCDs.<sup>3</sup> The rapid increase in globalization has also contributed largely to diet-related NCDs as it is followed by urbanization, population growth, and trends towards unhealthy lifestyles, which include unhealthy diets.<sup>4</sup>

This article focuses on the impact of healthy diets in relation to the burden of NCDs in LMICs. It will address the benefits of a healthy diet on the heart, which in turn may aid in reducing diet-related non-communicable diseases and their prevalence, as well as to identify sustainable initiatives that may work towards fulfilling Sustainable Development Goal 3.

## DIET AND NON-COMMUNICABLE DISEASES

Nutritional epidemiology has revealed links between specific foods and nutrients or overall dietary patterns with can-

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cers, cardiovascular diseases, and with intermediate consequences such as weight gain, raised blood pressure, insulin resistance and hyperglycaemia.<sup>5</sup> Low dietary intakes of fruits, vegetables and whole grains, or a high dietary intake of salt, are individually responsible for 1.5% to more than 4% of the global disease burden.<sup>6</sup> The poorest households in LMICs are affected the most, as evidence proves that these NCDs have largely contributed to poverty due to increasing catastrophic health expenditures.<sup>7</sup>

Obesity and overweight are risk factors that contribute to diet-related NCDs. These conditions are not only risk factors for NCDs, but major causes of illness themselves. Diet and nutritional status, including overweight and obesity, are associated with NCDs such as hypertension and diabetes.<sup>8</sup> Diabetes and cardiovascular diseases (CVDs) are chief causes of global deaths and disability, and are largely attributable to unhealthy diets and physical inactivity. Although most CVDs could be prevented by addressing lifestyle risk factors such as unhealthy diets and physical inactivity, they remain the leading global causes of death. As highlighted by the WHO, out of the 16 million deaths under the age of 70 due to NCDs, 82% occur in LMICs and 37% are caused by CVDs.<sup>7</sup> The global prevalence of diabetes has also risen from 4.7% to 8.5% between the years 1980 and 2014.<sup>9</sup>

Interventions to tackle diet-related NCDs by improving diets have the potential to reduce their incidence.<sup>10</sup> The Millennium Development Goals focused primarily on the reduction of poverty, hunger and infectious diseases. The Sustainable Development Goals (SDGs) among other health targets, aim to reduce premature deaths from NCDs by one third and to end malnutrition in all of its forms. Diet-related NCDs remain at the juncture between malnutrition and NCDs.<sup>2</sup>

Increasing globalisation, urbanisation and food industry marketing tactics have brought about a nutritional transition that has resulted in a change in diets and food choices encouraging the consumption of unhealthy processed foods, especially in developing countries.<sup>11</sup> With an increased female participation in the workforce, increasing income, and lifestyle changes, processed foods are perceived as time and money savers.<sup>12,13</sup> Thus processed foods experience a growing acceptance by the population, while diet-related NCDs and other diseases continue to be on the rise.<sup>10</sup>

## BEENEFITS OF A HEALTHY DIET

Although it is difficult to motivate people to eat healthily and to change life-long dietary habits, there are several benefits that come with a healthy diet.<sup>14</sup> Eating healthily includes having a balanced diet that is high in vegetables,

fruits and whole grains, and reducing foods that are high in fat, salt and sugar.<sup>15</sup> Healthy eating allows one to maintain or reduce their weight to a healthy weight, which in turn reduces one's risk of NCDs such as hypertension and diabetes. Healthy eating may be achieved by taking measures to read food labels, eliminating heavily processed foods and takeaways, and by starting vegetable gardens from which fresh vegetables may be acquired.<sup>16</sup> Diet modifications may also boost the immune system, increase bone strength and brain health, as well as increase the body's functional energy levels.<sup>17</sup> There is, therefore need for a transformation of food systems in favour of a healthier and more sustainable diet that will facilitate the achievement of other SDGs too.<sup>2</sup> Adoption of a new lifestyle and maintenance of these changes beyond a certain time frame is a huge challenge, especially if larger contextual issues that promote unhealthy behaviours or inhibit new behaviours remain uncurbed.<sup>18</sup>

## INTERVENTIONS INVOLVING NON-COMMUNICABLE DISEASES

There have been significant efforts with regards to policies and practices that aim to reduce NCDs, but these policies suffer from numerous shortcomings. Although many policies are planned, only a handful of them are actually implemented.<sup>19</sup> Among other weaknesses, there is a lack of funding for NCD-related initiatives. There is a lack of global advocacy and limited community participation with the current policies compared to HIV/AIDS related initiatives.<sup>20</sup> NCDs have been neglected in developing countries partly due to a more urgent focus on infectious diseases.<sup>21</sup> An emphasis on health promotion initiatives with the specific aim of improving NCD prevention and control, such as those which concentrate on health promotion at homes, communities and workplaces, therefore needs to be advanced.<sup>22</sup>

In a recent attempt to accelerate national efforts to address NCDs, several member States, including LMICs, have adopted the WHO specified time-bound commitments to promote healthy diet. These member States agreed to work towards the goals set for 2016. The se were to reduce both the risk factors for and the underlying social determinants of NCDs, through the implementation of interventions and policies to create health promoting environments.<sup>23</sup> The indicators that were set as measures to reduce unhealthy diets included: adopting national policies to reduce the population's salt consumption; adopting national policies that limit saturated fatty acids and eliminate industrially produced trans fatty acids in the food; eliminating marketing of foods and non-alcoholic beverages to children; and implement-

ing at least one recent national public awareness programme on diet.<sup>24</sup>

The ultimate goal is to strengthen health systems to address NCDs through people-centred health promotion initiatives and universal health coverage.<sup>25</sup> A review of government policies outlines actions in LMICs that address salt consumption, fat consumption, fruit and vegetable intake, or physical activity, revealed that NCD strategies were found in 47% (54 out of 116) of the LMICs reviewed. However, a smaller number of these countries had plans of action to promote healthier diets and physical activity, and only 12% of the reviewed countries proposed a policy to address all four risk factors, while 25% addressed only one of the risk factors reviewed.<sup>1</sup>

### POSSIBLE SETTINGS TO ADDRESS UNHEALTHY DIET

The adoption of public health measures to increase awareness of heart healthy diets and reduce the consumption of unhealthy foods are perhaps appropriate attempts to reduce the obesity epidemic and the resultant risk of diabetes and CVDs, but it needs to form part of more complex interventions to alter dietary habits and lifestyles.<sup>26</sup> In LMICs, hardly any connection is observed between the burden of NCDs and national policy response, suggesting the urgent need to develop inclusive policies involving all the stakeholders to improve dietary quality and physical activity.<sup>1</sup>

The WHO has recognised the workplace as a priority setting for health promotion. Workplaces directly influence the physical, mental, economic and social well-being of employees and, in turn, affect the health of these employees' families, communities and societies.<sup>27</sup> They offer ideal settings and infrastructures to support the promotion of health of a large group of people.<sup>28</sup> Workplaces may therefore be used as health promotion settings to increase awareness of heart healthy diets.

The Health Promoting Universities (HPUs) initiative is becoming increasingly popular around the world since 1995, since the University of Central Lancashire was launched as the first HPU. It is aimed at maximising integrative and synergistic action for sustainable public health, promoting healthy workplaces, and establishing and improving primary health care as well as encouraging wider academic interest and developments in health promotion.<sup>29</sup> Universities that become involved in health promoting activities may obtain several benefits, including the improvement of their public image and of the university's profile, and the welfare of staff, students and the surrounding community,<sup>30</sup> thus contributing to the fulfilment of Goal 3 of the SDGs.

Food choices are largely influenced by pricing.<sup>2</sup> Food pricing strategies have been proposed to encourage healthy eating habits, which may in turn help to reduce the global increase in NCDs. Based on studies, declaration of taxes on carbonated drinks and foods containing saturated fat, and subsidising the prices of fruits and vegetables, would be associated with beneficial dietary change, with great potential to improve health.<sup>31</sup>

### HEALTH PROMOTION APPROACHES THAT MAY BE USED

**Settings based:** This approach acknowledges the inter-relationship between the environment and humans, for example in schools and workplaces. A settings based approach is a holistic and multi-disciplinary method which integrates action. It aims to maximize disease prevention via a "whole system" approach guided by key principles which include community participation, partnership, empowerment and equity.<sup>32</sup> Long-term sustainability of initiatives may be achieved through integrating programs with pre-existing partnerships.<sup>33</sup>

**Population based:** This approach addresses the needs of diverse population groups, for instance children, women, the elderly, workers or communities. Reducing the prevalence of NCDs at population level requires that a large proportion of the population be reached with effective strategies to prevent health-related NCDs.<sup>34</sup> For instance, a population-based approach for the prevention of childhood obesity may include initiatives that are started in schools. Results may easily be assessed, and the outcomes may also be monitored and evaluated easily due to its focused nature.<sup>35</sup>

**Issues based:** This approach targets a wide range of determinants of health or risk factors, such as isolating diet-related risk factors and focusing on them. An example of this approach is the WHO time-bound commitments, where indicator checklists are assigned to each measure, ensuring that progress is only measured by the successful implementation of each indicator.<sup>24</sup>

### CONCLUSION

At present, diet-related NCDs are only explicitly mentioned in 1 of the 169 SDG targets, despite the many contributions improved diets would make to their attainment. To address diet-related NCDs, it is advisable that interventions tackle the root causes of poor and unbalanced diets as well as educate the population on the effects of unhealthy eating habits. Scaling up healthy diet promoting programs may be vital to reducing NCD prevalence and for sustainable human development.

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## CONFLICT OF INTEREST

The author declare no conflict of interest.

## ABBREVIATIONS USED

**CVD:** Cardiovascular disease; **HIV/AIDS:** Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome; **LMIC:** Low-and-medium income countries; **NCD:** Non-communicable disease; **SGD:** Sustainable Development Goal; **WHO:** World Health Organisation.

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