

## Dairy and Non-Communicable Diseases (NCDs)

The Global Dairy Sector can Contribute to the United Nation's Goal of Reducing NCDs by One-Third Globally by 2030



Global sustainable development is challenged by non-communicable diseases (NCDs), which include **cardiovascular disease, cancer, diabetes, and chronic lung diseases.**



This paper explains how dairy is part of the solution.



## Sobering Statistics<sup>1,2</sup>

Poverty fuels NCDs. Socially disadvantaged people tend to die sooner than people of means, often because of sub-optimal lifestyle choices and limited access to health services. The exorbitant costs of NCDs, including often lengthy and expensive treatments and the loss of family earning potential force millions of people

into poverty annually and stifles development. It has been estimated that the cumulative cost of NCDs to the global economy could reach \$47 trillion by the year 2030 if current projections remain unchanged<sup>3</sup>.



**70%** of all deaths annually worldwide are attributed to NCDs

<p><b>15 million</b> annual NCD-related deaths are people between the ages of 30 and 69 years</p> 	<p><b>85%</b> of "premature" deaths due to NCDs occur in low- and middle-income countries</p> 	<p><b>7.2 million</b> deaths every year are attributed to Tobacco usage (including the effects of exposure to second-hand smoke)</p> 
<p><b>4.1 million</b> annual deaths have been attributed to excess salt/sodium intake</p> 	<p><b>More than half</b> of the 3.3 million annual deaths attributable to alcohol use are from NCDs, including cancer</p> 	<p><b>1.6 million</b> deaths annually can be attributed to insufficient physical activity</p> 

*Modifiable risk factors (tobacco, physical inactivity, unhealthy diet, harmful use of alcohol) increase risk of NCDs.*

## Multi-Stakeholder Engagement is Needed to Drive Change

A broad food systems approach (one that encompasses health, economics, social issues, and the environment), involving stakeholders throughout the food value chain will be required to impact global NCD risk. Addressing one or two factors will not be enough to take on such a broad, multi-factorial issue.

**Multiple stakeholders and sectors are required** to align sustainable food systems research with the UN Sustainable Development Goals.<sup>7,8</sup>



**The dairy community is an active partner in developing sustainable food systems knowledge and applications** that can be scaled, including the Chicago Consensus on Food Systems Science, which was created to identify and assess factors necessary for creating and maintaining a global sustainable food system.<sup>9</sup>



## Dairy, Diet and Impact on NCDs



**Milk intake may be a marker** for diet quality because of its high nutrient content.<sup>10</sup>

### A systematic review of literature

found an inverse association between intake of dairy products and hypertension and stroke.<sup>11</sup>



**Scientific evidence consistently shows an inverse relationship** between dairy intake and type 2 diabetes risk.<sup>13</sup>

### A meta-analysis of prospective studies

indicated that milk intake is not associated with total mortality and may be inversely associated with overall cardiovascular disease risk.<sup>12</sup>



**In low- and middle-income populations that consume mostly plant-based diets, nutrient deficiencies include iron, calcium, zinc, and vitamin B12.** In addition, low- and middle-income countries depend on dairy, meat, poultry, and/or fish as primary sources of high-quality protein.<sup>9</sup>

**Recent research conducted in 18 countries suggests that high-carbohydrate diets are associated with higher mortality,** while total fat and types of fat were not associated with cardiovascular disease, myocardial infarction, or cardiovascular disease mortality, and saturated fat intake had an inverse association with stroke.<sup>14</sup>



## Dairy is an Untapped Multisectoral Partner

In addition to providing excellent nutrition, the dairy industry can contribute to the goal of reducing NCDs in various social and economic ways:

**Dairying contributes a regular source of food and income** and puts farmers in a better position to feed their families, send their children to school, provide for their family's health, and invest in their future.<sup>4</sup>



**Women empowered by dairy farming** have increased income and influence over household expenditures, which boosts their social and economic capital.<sup>2</sup>



**Across all household-level studies,** dairy cow ownership and/or improvement of production consistently has a positive impact on a range of welfare indicators.<sup>2</sup>



**Dairy farming results in substantial employment generation** and value beyond the farm gate, which in turn spurs development and poverty reduction in the local community.<sup>5,6</sup>



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## Conclusion

The dairy sector can be a key player in helping reduce NCDs by one-third by 2030. In addition to the well-documented health/nutrition benefits of dairy consumption across all ages, dairy development positively impacts numerous

economic and social factors associated with reduced poverty. Sustainable food systems that integrate health, economic, societal and environmental solutions are integral to reducing NCD risk in the vulnerable, poor, and all levels of economic status.



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## Reference

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