The International Diabetes Federation (IDF) is the unique global voice of the diabetes community. IDF’s strength lies in the capacity of our 220 national Member Associations – who connect global advocacy to local reality and deliver vital diabetes prevention, treatment and care in over 170 countries worldwide. As a founding federation of the NCD Alliance, IDF fully supports and reinforces all comments made in the NCD Alliance response. In these comments, IDF provides the diabetes perspective on nutrition-enhancing food systems.

The world is facing a diabetes crisis. The numbers are bleak and are becoming worse: more than 371 million people are living with diabetes today, a number that is expected to rise to 552 million in less than 20 years. While previously considered a disease of the rich, evidence shows diabetes disproportionately impacts the poor and vulnerable. Today nearly two-thirds of people with diabetes live in low- and middle-income countries.

Diabetes and nutrition are closely linked; overweight and obesity are among the leading risk factors for diabetes, and undernutrition in early life has been shown to increase risk for diabetes later in life. Nutrition is a cornerstone in the fight against diabetes and obesity, and population nutrition is a function of the food system. The global food system supplies the world with food necessary to sustain life, but it is also responsible for an influx of highly processed foods full of saturated fats, sugars and salt, contributing to the global rise in diabetes and other noncommunicable diseases (NCDs).

We welcome the opportunity to contribute to the preparations for the Second International Conference on Nutrition (ICN2) and this discussion on Nutrition-sensitive agriculture. In particular, IDF acknowledges, welcomes and supports the Expert Paper contributed by Hawkes et al.: “Leveraging agriculture and food systems for healthier diets and noncommunicable disease prevention: The need for policy coherence”.

Key Messages

- Globalisation of the food system has enabled availability, affordability and acceptability of unhealthy eating patterns. This makes a significant negative contribution to diabetes and its metabolic and behavioural risk factors, including overweight and obesity.
- Today we face a triple burden of malnutrition: undernutrition, micronutrient deficiency and overnutrition/overconsumption, often in the same country, community or household.
- Both under- and over-nutrition are contributing to the spiralling rise of diabetes and other NCDs. Maternal undernutrition increases the risk of the child developing obesity and type 2 diabetes later in life. Overweight and obesity, including childhood obesity, promote insulin resistance and are major drivers of the global type 2 diabetes epidemic.
- Nutrition-enhancing agriculture and food systems provide part of the solution to malnutrition in all its forms, including poor quality diets associated with diabetes. Improvements should include actions at the local level, notably to promote the production and market movement of plant-based foods.
- IDF strongly supports the call by Hawkes et al. that food and agriculture systems operate through “policy coherence”, and that policies for NCD prevention “directly interface with agriculture and foods systems…”
- Nutrition policies for the prevention and control of diabetes must aim to increase fruit and vegetable consumption and decrease consumption of highly-processed foods which are high in salt, sugar, and saturated/trans fats. To achieve this, food and agricultural systems need to supply foods and
beverages consistent with these goals. In many countries this will require a dramatic change in the types of products grown, produced, marketed and sold – which can only be achieved through collaborative, forward-thinking policy initiatives at all levels from local to international.

- Diabetes and NCDs are multisectoral issues, which require multisectoral solutions, including policies on nutrition and agriculture. Active involvement of civil society will be a fundamental element of creating and sustaining nutrition-enhancing agricultural systems.
- More attention and efforts are needed from civil society and others to encourage policy coherence between agriculture policy and policies aimed at the nutritional risk factors for overweight/obesity and diabetes.

**Policy issues: What policies can make agriculture and food systems more nutrition-enhancing? What are the knowledge gaps in policies associated with nutrition-enhancing agriculture and food systems?**

**Unhealthy Diet and Diabetes**

Unhealthy diet and excessive energy intake are key risk factors for type 2 diabetes and obesity. While nutritional deficiencies have largely been eradicated in high-income countries, obesity and diabetes are now affecting a significant portion of the population in these countries. At the same time low- and middle-income countries are facing a double burden of disease, with infectious disease and malnutrition present alongside diseases related to overnutrition and unhealthy diet, such as diabetes.

Increasingly, healthy foods are inaccessible in terms of price, location, or other barriers. Dietary quality is an independent risk factor for diabetes and NCDs with diets that are high in fat, sugar and salt increasing the risk of these diseases. Diets around the world are insufficient in fruit and vegetable intake, which WHO estimates to cause 1.7 million deaths each year. Low-cost foods that are high in fats, sugars, and salt are dominating many markets; readily available and affordable; these products encourage unhealthy choices. Situations where financial resources are limited and the food supply is insecure support a market for these inexpensive yet unhealthy foods.

**Policies for diabetes and nutrition-enhancing food systems**

Nutrition policies for the prevention and control of diabetes must aim to increase fruit and vegetable consumption and decrease consumption of highly-processed foods which are high in salt, sugar, and saturated/trans fats. To achieve this, food and agricultural systems need to supply foods and beverages consistent with these goals, which in many countries would require a dramatic change in the types of products grown, produced, marketed and sold. IDF supports these systematic changes which would require collaborative, forward-thinking policy initiatives at all levels – from local to international.

Nutrition-enhancing agriculture and food systems are one part of the solution to malnutrition in all its forms, including poor quality diets associated with diabetes and other NCDs. IDF strongly supports the call by Hawkes et al that food and agriculture systems operate through “policy coherence”, and that policies for NCD prevention “directly interface with agriculture and foods systems…”

In this approach, as Hawkes et al describe, “agriculture and food systems are linked with policies to promote healthy diets through the food supply chain”. “Short” food supply chains can be used to make healthier foods more available, affordable and acceptable, such as through farm-to-school programmes and local production for local markets in rural and small island communities. “Long” food supply chains influence food availability, affordability and acceptability at the global level, and offer the greatest potential for change.

Policies which make fruits and vegetables more available, affordable and acceptable have a particularly high potential impact on diabetes risk factors, as well policies which influence substitutions between different types of fat and meat. Such policies would combine ‘environmental’ approaches to healthy food availability and affordability, and educational strategies designed to facilitate the acceptability of healthy food choices and other healthy lifestyle behaviours.
Combating the different faces of malnutrition requires adopting a life-course approach guaranteeing the right to adequate diets for all, and reforming agricultural and food policies, including taxation, in order to reshape food systems to promote sustainable diets. As part of creating nutrition-sensitive agri-food systems, policies are also needed to discourage high-calorie, nutrient-poor foods, such as fiscal policies and policies to significantly reduce the marketing of these foods to infants, young-children, adolescents and their caregivers.

Programme issues: What do nutrition-enhancing agriculture and food systems look like? What have been the success stories and lessons learned from programmes at country level? How can we monitor the impact of such programmes on food consumption and nutrition?

Policy coherence in approaching nutrition-enhancing agriculture and food systems can ensure that decreasing undernutrition does not increase the risk for overnutrition. Today we face a triple burden of malnutrition: undernutrition, micronutrient deficiency and overnutrition/overconsumption, often times in the same country, community or household. Increasing energy intake in food-insecure populations, communities and individuals is not sufficient – food systems must provide adequate nutrients and an overall healthy diet in order to correct the triple burden of malnutrition and prevent diet-related diseases. This should include actions at the local level, notably to promote the production and market movement of plant-based foods.

Strong government policies are essential if food systems are to reduce unhealthy diets as a risk factor for diabetes and other NCDs, as well as reducing hunger and undernutrition. While the role of government in tackling hunger and undernutrition is widely recognised, it remains the case that most governments assume that ‘individual responsibility’ takes precedence once food becomes abundant. Meanwhile, many processes in the marketplace encourage populations to make unhealthy choices, with affordable healthy choices limited for lower income populations. The policy options outlined in the 2004 Global Strategy on Diet and Nutrition, the 2011 UN Political Declaration on NCDs, and the WHO Global Action Plan for NCDs 2013–2020 provide a guide and political mandate for countries to take action on the triple burden of malnutrition.

Nutrition-enhancing food systems must include a focus on women and the rural poor. The importance of empowering women as critical agents for enhancing nutritional status cannot be underestimated. There is a particular need to improve access to credit and other financial services for small producers, women, indigenous peoples and people living in vulnerable situations.

Current initiatives do not adequately balance the need for immediate interventions with those aimed at achieving long-term impact. Nor have interventions balanced efforts on undernutrition with the need to improve diet quality more broadly. A single focus on undernutrition – the approach most common to date – is insufficient given the range of nutritional problems affecting every country in the world and the rising prevalence of diabetes and other NCDs linked to overweight/obesity.

Country level efforts in Brazil are demonstrating the feasibility of working on under- and overnutrition together. Efforts made since the 1990s in Brazil to improve nutrition focused on increasing food consumption through income interventions and school meals. Attention was not paid to the excess energy intake nor the nutritional quality of the calories consumed, and the health of Brazilians, even in low-income communities, has become increasingly indicative of an unhealthy diet. Recent actions in Brazil have attempted to reverse this focus on calories, for example by implementing nutrition standards for schools meals. The initiatives in Brazil could be strengthened further by the creation of nutrition-sensitive food and agriculture systems.

Partnerships: How can we work across sectors and build strong linkages between food and agriculture, social protection, employment, health, education and other key sectors? How can we create sustainable partnerships? How can we build effective governance for nutrition?
“Everyone is part of the solution. Governments need to lead; businesses need to identify how to improve nutrition through their business models and employment practice; civil society organizations need to help citizens to drive transparency and accountability; and the scientific community needs to keep us focused on evidence about what works.” -- Anna Taylor, Alan Dangour, and Srinath Reddy, Lancet Series on Maternal and Child Nutrition, 2013

Diabetes and NCDs are multisectoral issues, which require multisectoral solutions, including agriculture. As these diseases wind up in the health system, they are fuelled by rapid urbanization, globalization, economic development, and a global food system which does not protect human nor environmental health. IDF agrees with Hawkes et al that “[p]olicy is an essential component of this multisectoral approach.”

Civil society mobilisation is crucial to creating and sustaining nutrition-enhancing agricultural systems. To date, global civil society engagement around nutrition has largely focused on undernutrition. A stronger social movement around nutrition-enhancing agricultural systems – as part of the solution to all forms of nutrition – is needed to bridge gaps and cut across the health and development agendas. In particular, more attention and efforts are needed from civil society to encourage policy coherence between agriculture policy and policies aimed at the nutritional risk factors of overweight/obesity and diabetes.

The sheer scale and complexity of diabetes means that no single actor or sector can solve the epidemic alone. We will only be able to turn the tide when other sectors being to play a leading role in the prevention of diabetes and other NCDs – including agriculture, finance, education, and trade.

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