

Diets are the great equaliser. Depending on who you are, where you live and the amount of resources at your disposal, diets can either hinder or promote human and environmental health. Overall, diets are changing for various reasons, particularly in rapidly transitioning low- and middle-income countries. If trends in these countries follow those in high-income contexts and countries, fragile health systems could be overwhelmed and burdened with a new host of complex diseases. How can low- and middle-income countries leapfrog over the mistakes made in high-income countries and ensure that dietary changes are moving in a direction benefiting both human and planetary health?

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What people choose to eat and the way they eat and interact with food looks different depending on who someone is, where someone is or where they come from. Despite these differences, food and diets are an essential part of who we are as humans and individuals. The importance of diets begins foundationally, for it is necessary for humans to survive, have energy and perform everyday tasks. Overall health and bodily functions that determine overall well-being are highly dependent on the composition of diets and their adequacy,

diversity and safety. But people's food choices are not solely influenced by health. Where individuals and their families originate from influences their culture, traditions and beliefs, which in turn bears on the way they choose, prepare and view food. Traditions and culture,



in turn, also shape the types of diets that people eat. A person's daily relationship with food is complex and depends on several factors, such as cost, time and availability. Diets are therefore not only a solitary concept, but are instead connected to many parts of life, and understanding those connections is the first step in understanding dietary habits.

Diets also have an interconnected relationship with the surrounding environment and societies. It is a two-way street: just as the environment influences food and dietary choices, the way societies produce, process, distribute and manipulate food affects the environment and natural resources. Landscapes, ecosystems and

surrounding environments play a role in the kind of crops and animals grown and raised. In turn, the functionality of supply chains, trade and markets influences the types of foods individuals have access to, and for many countries, this is a significant contributor to economic growth.

Why do people make certain choices about the diets they consume?

Every individual makes different choices for different reasons regarding food and diets, but some people have more options and more resources when making these choices. Some have a vast array of choices, while others have very few. From money to accessibility to values, people prioritise distinct things when deciding what to eat and the best way to interact with food. Part of understanding why people make certain diet choices therefore requires an understanding of the resources, constraints and aspirations that influence those choices, but also the immediate built and food environments where people live and purchase foods and their influence on food choice.

As people adapt to the environment they are surrounded by, they become limited to only certain food options for which the food supply bears. Ultimately, these choices will be a product of what is available and accessible to them. Accessibility, price, taste and convenience are all aspects of food that influence the diets different people consume. Brands, certifications, advertising and marketing also matter and can influence choice. Factors that influence diets are highly dependent on the incomes of households and the spectrum of development of countries. Rural diets can also be quite distinct and different from urban diets because the types of food vendors and food availability on hand change dramatically with geography. Countries with major cities have greater access to good food options, giving people a larger selection of dietary choices, but at the same time, more exposure to energy-dense foods with limited nutrients.

Customs and beliefs influence what people choose to eat as does knowledge of food and nutrition. Changing social norms and media can influence food purchases. These types of exposures show that people are not only a product of their own individual choice and beliefs in what they choose to eat but are impacted by society and cultural trends.

How are diets changing?

Over the last decades, diets in low- and middle-income countries (LMICs) have been changing in both positive and negative ways. On the positive side, diets are more diverse in the types of foods people consume that are available in the food supply. Dietary variety is associated with increased dietary quality because it broadens the sources of the vitamins, minerals and macronutrients that fuel and protect your body for optimal human health. There are other positive trends. The intake of trans fats, a type of industrialised fat that is deleterious for health, has declined in some regions of the world. One trend that has both positive and negative implications is that over the last



two decades, in many middle-income countries of Latin America for example, people are eating away from home, in more restaurants.

On the negative side, people are consuming more highly-processed packaged foods, such as cookies, chips, crackers and sweets, which tend to be high in added sugars, sodium and unhealthy fats and low in dietary fibre and nutrient density. These types of foods now comprise a significant share of many diets around the world because they are widely available, cheap and intensely marketed. In many upper-middle- and lower-middle-income countries of Asia and Africa, there has been a significant growth in sales of packaged foods over the last 20 years. In addition to foods, which beverages are consumed is also a health concern. While the number of kilocalories purchased from sugar-sweetened beverages is highest in high-income countries (HICs), many low- and low-middle income countries have had a significant increase in their sales over the last decade. These highly processed foods and sugary beverages have been associated with adverse health outcomes including overweight, obesity, type-2 diabetes and cardiovascular diseases.

The demand for animal-source foods is also increasing in many places in the world, but the

types of animal foods and products in demand vary depending on the geography, the culture and religious beliefs, to name a few influencing factors. Consumption of processed meat (those types that are salted and cured) has also increased in all regions of the world. While animal-source foods are typically rich in essential nutrients that promote good health and nutrition, some of these foods are associated with increased risk of cardiovascular disease and cancer. In addition, production of some animal-source foods has detrimental impacts on the environment when consumed and produced at high levels.

Why are diets changing?

With growing urbanisation, globalisation and trade liberalisation, food systems have become more interconnected, with longer and increasingly complex food supply chains involving many diverse actors who engage across many different links of the chain. Connected food systems offer consumers the possibility to access a basket of diverse foods all year long, expanding their food choices and protecting them against seasonal shortages. Efficiency has been the motto for the global food system: the food supply has been increasing in terms of quantity and quality over the last 50

years, with most countries increasing the energy, protein, fat and food weight of their food supply. Yet in this period, the compositions of countries' food supplies have become more similar to one another and some of the more indigenous, local foods have since been neglected and marginalised.

Trade is and will continue to be important for the diversity of diets in that trade increases the availability of different types of foods, extends the number of days that food products are available and influences the affordability of foods. While trade has moved so many different types of foods around the world, it sometimes does so at the expense of local producers and traditional food systems. In addition, when food and beverage products such as sugar-sweetened beverages and highly-processed foods become cheaper, the consequences could be harmful to human health.

Globalisation shapes food environments – the physical, economic, political and socio-cultural surroundings, opportunities and conditions that create everyday prompts, shaping people's dietary preferences and choices – notably through the expansion of supermarkets and hypermarkets. The rapid spread of more supermarkets as well as fast food restaurant chains to every country in the world influences consumer be-





haviour and food consumption patterns. While the "supermarket revolution" offers consumers a wider range of products at a lower price than traditional retailers, it also can spur significant organisational changes across the whole food supply chain. Furthermore, the revolution is shifting the locus of power and decision-making from farmers and producers to traders and retailers, and from governments to the private sector and multi-national corporations.

Food prices dictate dietary shifts as well. Unpredictable changes in food prices have a significant impact on the poor because they spend a higher proportion – 50 to 80 per cent - of their entire income on food. Poor populations, particularly those living in deeply rural areas, often only have access to mainly cereal-, root- and tuber-based diets, while costly animal-sourced foods, fruits and vegetables are hardly affordable for them. With income growth, consumers are able to diversify and shift diets towards those less dominated by staples, to those that include more fruits, vegetables, animal-source foods and dairy as well as more oil and more processed and packaged foods. Consumer awareness can also generate demand for certain types of foods including certain brands, food safety standards and even higher quality foods that meet certain health and environmental criteria.

Why are changing diets necessary?

With diets now a top risk factor for morbidity and mortality globally, it is necessary to ensure that the world's population can access and afford a healthy diet. Future dietary transitions are projected to negatively impact human health. This will be felt most in lower-middle income countries, where diets are changing most rapidly. Increasing consumption of fruits, vegetables, nuts and seeds, legumes and whole grains would improve human health in most of the regions of the world.

At the same time, diets will need to be more environmentally sustainable if we are to tackle climate change in a serious way. By 2050, global greenhouse gas (GHG) emissions from food production are expected to increase by 50 to 80 per cent as a result of increases in population size and dietary shifts. Land used to grow food will need to expand to meet those dietary shifts of a growing human population, which will result in additional GHG emissions from deforestation and biodiversity loss, with potential additional stress in sub-Saharan Africa. From the diet perspective, reducing consumption of ruminant red meat in particular in regions where consumption of said foods is above the nutritional recommendations would most potentially provide significant health and environmental benefits.

Choices made by high-income countries in how they produce food and what foods consumers choose to eat will have more severe impacts on those people living in low-income countries who do not have the resources to adapt quickly to the rapid onset of environmental changes stemming from food systems. They are also limited in their options to access or afford healthy diets. In the next decade, we need all hands on deck for widespread, large-scale changes. Governments, business and civil society all have a responsibility to ensure that everyone has access to healthy, equitable foods that provide the greatest benefit for human and planetary health.

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