



# Dietary Quality Questionnaire (DQQ)

**Measuring What Africa Eats** 

## What is the tool and why is it needed?

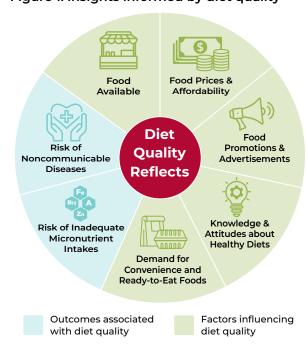
The foods that people consume affect their nutrition and health and are influenced by the foods available around them as they conduct their daily activities as well as the desirability, prices, and convenience of these foods.

Understanding what people eat (their diet), and whether their diets are healthy, is important for understanding the causes of malnutrition and disease and identifying challenges in the food environment that may be limiting access to and consumption of healthy diets.

Figure 1 shares key factors that influence an individual's diet quality, as well as outcomes associated with diet quality. The diet quality questionnaire (DQQ) is a standardized tool that was developed to facilitate the understanding of what people eat. The DQQ can be administered in five minutes and provides information about 1) whether people are adhering to healthy diet recommendations; 2) risks of inadequate micronutrient intakes; and 3) risks of noncommunicable diseases (NCDs) such as heart disease and diabetes.

A country-adapted DQQ is available for more than 140 countries globally, including 52 of the 55 Member States in the African Union (AU). Country tools are available for infants and young children (6-23 months old) and youth/adults (people  $\geq$ 15 years old).

Figure 1. Insights informed by diet quality



# **ISER TIPS**

Data collected using the DQQ can help policymakers and other food systems stakeholders to:

- Understand dietary challenges that contribute to micronutrient deficiencies, other forms of malnutrition, and risks of noncommunicable diseases.
- Observe differences in diet quality between men and women, with implications for gender equality.
- Track new Sustainable Development Goal (SDG) indicators minimum dietary diversity for women and children.
- Assess progress towards the achievement of food systems transformation and global nutrition goals.

Find the full set of briefs The Food Systems Countdown to 2030 Initiative The Food Systems Dashboard

Diet Quality Questionnaire Diagnosing
Food
Systems
Policy
Coherence

Initiative on Climate Action and Nutrition (I-CAN)

The
Political
Economy
Decision

Innovative
Finance for
Food Systems
Transformation

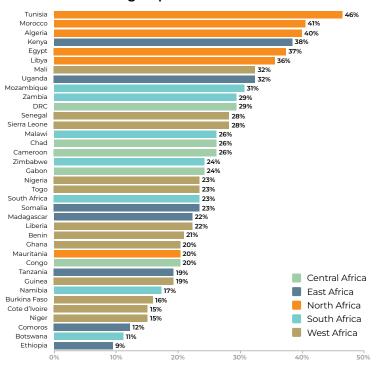
# Africa's Diet Quality Measured by the DQQ

DQQ data was collected between 2021 and 2024 in 37 African countries, creating an opportunity to compare dietary patterns across the region. The findings highlight similarities in diets and common challenges, such as low dietary diversity and high consumption of unhealthy foods. The findings further provide entry points to improve nutrition through food system and policy interventions.

# Adhering to Healthy Diet Recommendations

Healthy diet guidelines globally recommend that at least one food item from each of five food groups (fruits; vegetables; pulses, nuts or seeds; animal-source foods; and starchy staples) be consumed daily. People who achieve this recommendation are described as having met All-5. In Africa, the prevalence of people meeting All-5 was quite low across all countries assessed, ranging from 9% in Ethiopia to 46% in Tunisia (**Figure 2**).

Figure 2. Percent of adults who ate at least 1 item from each of five food groups

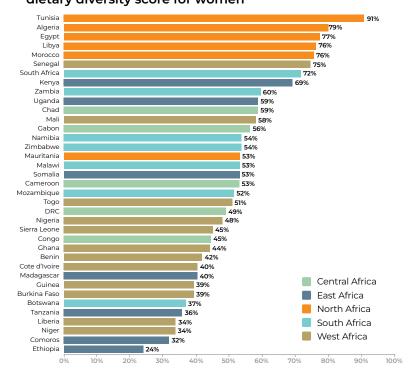


# Dietary Diversity and Likelihood of Adequate Micronutrient Intakes

Achieving the minimum dietary diversity score for women (MDD-W) of five out of ten defined food groups¹ has been validated to reflect a likelihood of adequate micronutrient intakes among women. Earlier in 2025, MDD-W has been adopted as an SDG monitoring indicator, signalling a global recognition of the importance of assessing dietary diversity to track progress in food systems.

The percent of women who achieved MDD-W was less than 50% in nearly half of the countries surveyed, ranging from 24% in Ethiopia to 91% in Tunisia (Figure 3). These results indicate that many African women have inadequate micronutrient intakes, which could explain the high rates of micronutrient deficiencies and the attendant health consequences among African women.

Figure 3. Percent of women who achieved minimum dietary diversity score for women



Although there were similarities in inadequately consumed foods groups, there were variations in the percent of women that consumed each food group across countries.

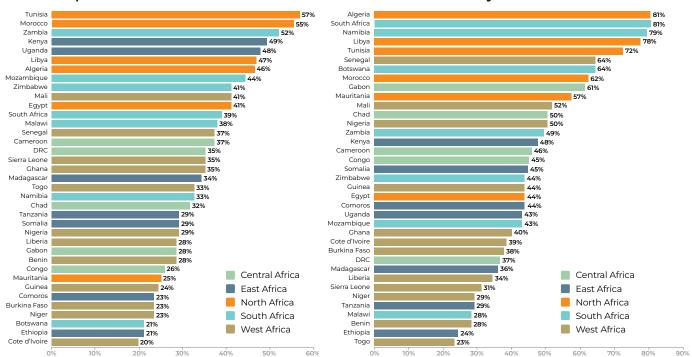
<sup>1</sup> The ten food groups are (1) grains, white roots and tubers, and plantains; (2) pulses (beans, peas and lentils); (3) nuts and seeds; (4) dairy; (5) meat, poultry and fish; (6) eggs; (7) dark green leafy vegetables; (8) other vitamin A-rich fruits and vegetables; (9) other vegetables; (10) other fruits.

#### Risks of Noncommunicable Diseases

The DQQ assesses the risk of NCDs using two indicators – consumption of protective foods and unhealthy foods. Protective foods include a diversity of fruits and vegetables, whole grains, pulses, nuts, and seeds. The DQQ survey of African countries found that the consumption of protective foods was generally inadequate—less than 40% in 26 of the countries (**Figure 4**).

Figure 4. Percent of adults who consumed protective foods

Figure 5. Percent of adults who consumed unhealthy foods



On the other hand, the consumption of unhealthy foods was considerable, greater than 40% in 24 of the 37 countries (Figure 5). Unhealthy foods include foods high in added sugar, salt, or saturated fat, ultraprocessed foods, as well as processed meat. The most commonly consumed unhealthy foods were fried snacks, sweet foods, soft drinks, and instant noodles.

## **Implications of Findings**

Although some countries performed comparatively well for some indicators (for example 91% of women in Tunisia achieved MDD-W), all countries had challenges with diet quality that need to be addressed. There were no consistent subregional patterns (except for the prevalence of All-5 and MDD-W that was relatively high in 5 of 6 North Africa countries surveyed).

There were some similarities in dietary patterns across the 37 surveyed countries in Africa, reflected in inadequate consumption of fruits, vegetables, pulses, nuts, and seeds, and high consumption of unhealthy foods. The similarities in consumption patterns provide opportunities for regional and sub-regional action that will facilitate exchanges of resources across countries and synergize country level efforts.

Differences also existed in consumption patterns across countries, evidenced by differences in the particular fruit or vegetable food group that is inadequately consumed, or the unhealthy foods that are commonly consumed. These differences highlight a need for countries to carefully consider data about diet quality in the context of other food systems data, to ensure that interventions are contextually appropriate and have the greatest potential to transform food systems and improve diets.

# Use of DQQ Data to Inform Food Systems Transformation

Some African countries are beginning to use the DQQ to collect subnational level data, to better understand dietary patterns and tailor solutions to decentralized levels.

In a multi-country study including cities in Kenya, Morocco, Tunisia, and Tanzania, findings from a DQQ survey and study of economic behavioural patterns were used to segment consumers to facilitate customized nutrition recommendations.

In Nigeria, the DQQ is being integrated in national surveys including other food systems indicators. In one assessment of three Nigerian states, DQQ data were collected with food environment data that explored physical access to food markets, fruits and vegetables, and vendors of unhealthy foods. Data was collected for men and women and in rural and urban areas. This Nigeria assessment found gender differences in interactions with food environments and associated differences in diet quality. The assessment also found that dietary patterns largely converged across rural and urban areas, and eating out of home was very prevalent, reframing perceptions about how people acquire their food and dietary patterns in rural areas. These findings are being used for further study and to inform policy actions to address food environments in a 2025 review of the National Policy on Food and Nutrition. DQQ data are also now being compared with production and diet cost data at subnational levels to identify food groups that are inadequately supplied in food systems and how food supply chains can be improved to increase physical and financial access to healthy diets.

## Summary

DQQ data facilitate insights into food consumption patterns and health risks associated with diets. Such data can enable an understanding of food systems factors that contribute to unhealthy dietary patterns and can inform strategies that promote more diverse, healthier diets aligned with national nutrition priorities and regional development goals.

Country-adapted DQQ data collection tools for African countries as well as tools for analysing DQQ data can be found on the Global Diet Quality Project website (<a href="https://www.dietquality.org/">https://www.dietquality.org/</a>) and can be integrated into national surveys to increase data availability for food systems decision making.

### References

Global Diet Quality Project. 2022. *Measuring what the world eats: Insights from a new approach*. Geneva: Global Alliance for Improved Nutrition (GAIN); Boston, MA: Harvard T.H. Chan School of Public Health, Department of Global Health and Population. https://doi.org/10.36072/dqq2022

Adeyemi, O., Otunla, A., Nnabugwu, C.D., Ohaegbulam, A.F., Phorbee, O., Onabolu, A. and Beal, T. (2024). There are significant food environment interactions and gender differences but few urban-rural differences in diet quality in northern Nigeria. *Current Developments in Nutrition* 8(Suppl. 2): 102829. https://doi.org/10.1016/j.cdnut.2024.102829

Marini Govigli, V., Alboni, F., Mulazzani, L., Mwanri, A., Suleiman, R., Chimoita, E., Kogi-Makau, W. and Setti, M. (2025). From plate to policy: segmenting consumers' food behaviours to tailor nutritional recommendations in African cities. *Agricultural and Food Economics*, 13(1),8.





