Chapter 1
WHAT ARE PEOPLE EATING IN SOUTH ASIA?

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KEY MESSAGES

- The limited data available on diets in South Asia show low consumption of fruits, vegetables, and animal-source foods, and high intake of snacks, sweet drinks, and fried foods.
- Diet patterns vary by factors such as age, gender, and wealth; adolescents and men tend to consume more unhealthy foods, while wealthier groups consume more healthy foods without reducing intake of unhealthy foods.
- Improving diets in South Asia requires multisectoral actions, including regulation of processed foods, school- and safety net-based interventions, and incentives for the food industry to provide healthier options.
- Better data and targeted policies are essential, using advanced and traditional diet assessments to inform context-specific strategies that promote nutritious, affordable diets across diverse South Asian populations.

Major shifts in dietary patterns have occurred over the past three to four decades across the world. These changes have coincided with demographic transitions toward lower fertility and mortality, as well as epidemiological shifts from a pattern of high infectious disease prevalence, associated malnutrition and famine, toward a high prevalence of chronic and degenerative diseases. They have also occurred in an increasingly urbanizing world where automation in daily lives is contributing to reduced physical activity and increased availability of processed foods is contributing to new dietary habits (Popkin and Ng 2022). In this chapter, we describe the current state of diets and diet quality in South Asia, with highlights from five recent surveys that collected dietary data from approximately 10,000 adolescents and adults living in rural areas across Bangladesh, India, and Nepal. We discuss how diets vary by factors including age, gender, wealth, and caste. We end by reflecting on research and policy efforts that may help promote healthy diets.

DIETARY TRANSITIONS IN A DEVELOPING WORLD

Globally, diets today are more energy-dense than they used to be. Processed foods have replaced high fiber foods; sweetened beverages have replaced water and milk; portion sizes have increased; and eating away from home and snacking have become increasingly common (Popkin 2011). In Asia, increases in income and urbanization have coincided with an increase in consumption of vegetables, fruits, animal proteins, pulses, and processed foods (Reardon et al. 2014). Access to money is facilitating consumption of diverse diets that are protective against noncommunicable diseases (NCDs), but also fueling consumption of soft drinks, sweet and salty snacks, and deep-fried foods that contribute to the risk of developing NCDs (Global Diet Quality Project 2022). Alongside the rising urban middle class, the spread of supermarkets and fast-food outlets (Pingali 2007), popularization of certain diets through media, and promotion of ultra-processed foods (Popkin and Ng 2022) have converged into increasingly Westernized dietary patterns and lifestyles in Asia (Pingali 2007). Sales data from 2006 to 2013 and projections to 2017 in most countries, including South Asia, indicate remarkably high sales growth in ultra-processed foods led by the soft drinks and oils and fats categories in most countries, including in South Asia (Baker and Friel 2016). Further, with women facing competing time demands as they enter the labor force in increasing numbers, time-saving prepared foods often present an attractive alternative to traditional meals prepared using raw ingredients at home (Popkin and Reardon 2018). Chapter 2 in this report has more details on ultra-processed food consumption in India.

CONSUMPTION OF HEALTHY AND UNHEALTHY FOODS IN SOUTH ASIA

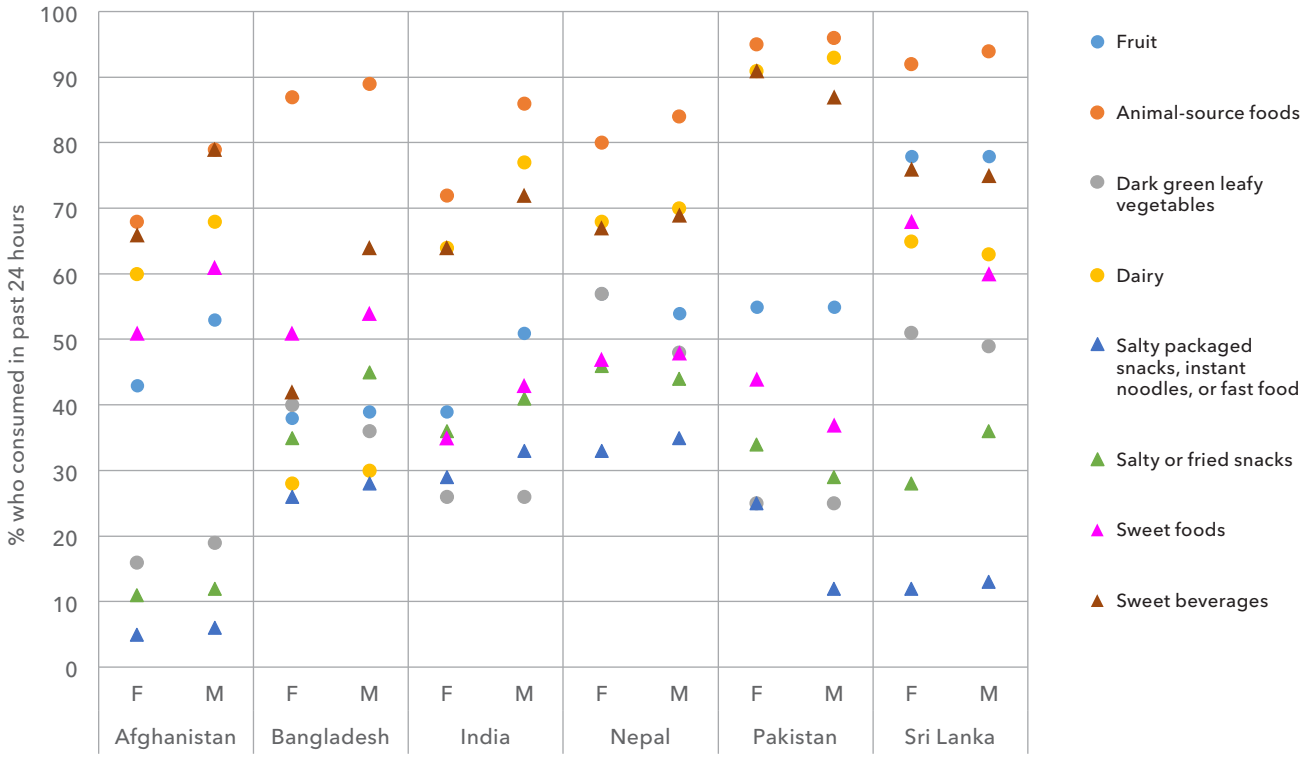
Dietary data from large-scale national surveys in South Asia are limited (Scott et al. 2022), due in part to the complexity of dietary assessment and the lack of simple tools to measure dietary intake. However, the Global Diet Quality Project (dietquality.org) in 2016 and subsequent creation of the Diet Quality Questionnaire to rapidly assess consumption of 29 food groups within existing population-based surveys (Gallup polls) has broadened our understanding of what foods (but not how much of them) are consumed around the world. Data collected between 2021 and 2023 reveal that consumption of unhealthy foods by adults is common in South Asia (Figure 1.1).

Sweet beverages and foods were consumed by most individuals, with a higher proportion of men than women consuming these types of foods in four of six countries. Salty or fried snacks were also consumed by between 10 percent (Afghanistan) and 45 percent (Nepal) of adults, again with consumption more widespread among men than women. Healthy foods such as fruit and dark green leafy vegetables were consumed in the past day by less than 60 percent of the population, except fruits in Sri Lanka (78 percent). Consumption of dark green leafy vegetables was particularly low in Afghanistan, India, and

Pakistan, and only about 30 percent of individuals consumed dairy products in Bangladesh. Women in all countries, but especially in Afghanistan and India, were less likely to consume animal-source foods than men. These data also show that the diets of adults living in urban and rural areas are not starkly different (not shown in Figure 1.1), although unhealthy foods have a slightly greater reach in urban areas.

Surveys conducted in 2023 in rural areas by the CGIAR Research Initiative on Transforming Agrifood Systems in South Asia (TAFSSA) allow for a more detailed look at what adults are consuming. The district agrifood systems assessments were conducted in five districts across Bangladesh (Rajshahi and Rangpur), India (Nalanda, in the northern state of Bihar), and Nepal (Banke and Surkhet) (Gupta et al. 2022). These surveys captured consumption of foods on the previous day and in the previous week for approximately 10,000 individuals. Overall, the pattern of food intake was indicative of poor-quality diets associated with moderate to high risk of dietary inadequacy and NCDs, as indicated by low Global Diet Quality Scores (GDQS). These scores take into account the quantity of 25 food groups (16 healthy, 7 unhealthy, and 2 unhealthy when consumed in high amounts) consumed in the past day, with a higher score indicating a healthier diet (Bromage et al. 2021). The GDQS scores for the study districts were between 16 and 18 out of a maximum possible score of 49. These low scores reflect insufficient consumption of healthy foods and overconsumption of unhealthy foods. Biscuits and baked goods, for example, were consumed by 88 percent of men in the districts surveyed in Bangladesh. Nuts

FIGURE 1.1 Percentage of women and men who consumed healthy (circles) and unhealthy (triangles) foods in past 24 hours in six South Asian countries



Source: Data from Global Diet Quality Project, Gallup polls 2021–2023.

and seeds were consumed by fewer than 1 in 10 individuals in all countries.

In terms of the types of foods consumed, the TAFSSA surveys found that diets were high in starchy staples, with rice dominant in the study districts in Bangladesh and Nepal, and both rice and wheat commonly consumed in Nalanda, India. Diets were generally low in diversity, with only 3 to 4 out of 10 food groups consumed per day on average. A few foods were consumed by nearly all individuals with high frequency — potatoes, onions, lentils, and tomatoes — but foods such as animal proteins, fruits, and orange vegetables were consumed less frequently. The source of animal protein varied by location, with more than 90 percent of individuals in the Bangladesh districts consuming fish versus 10–15 percent in the districts in India and Nepal, whereas poultry was most commonly consumed in the districts in Nepal. About 40 percent of individuals across sites had consumed milk in the previous week, whereas egg consumption varied greatly, from about 15 percent in Nalanda to about 75 percent in Bangladesh; in Nalanda, where a high percentage of the population is lacto-ovo vegetarian, milk is an important source of protein and vitamins.

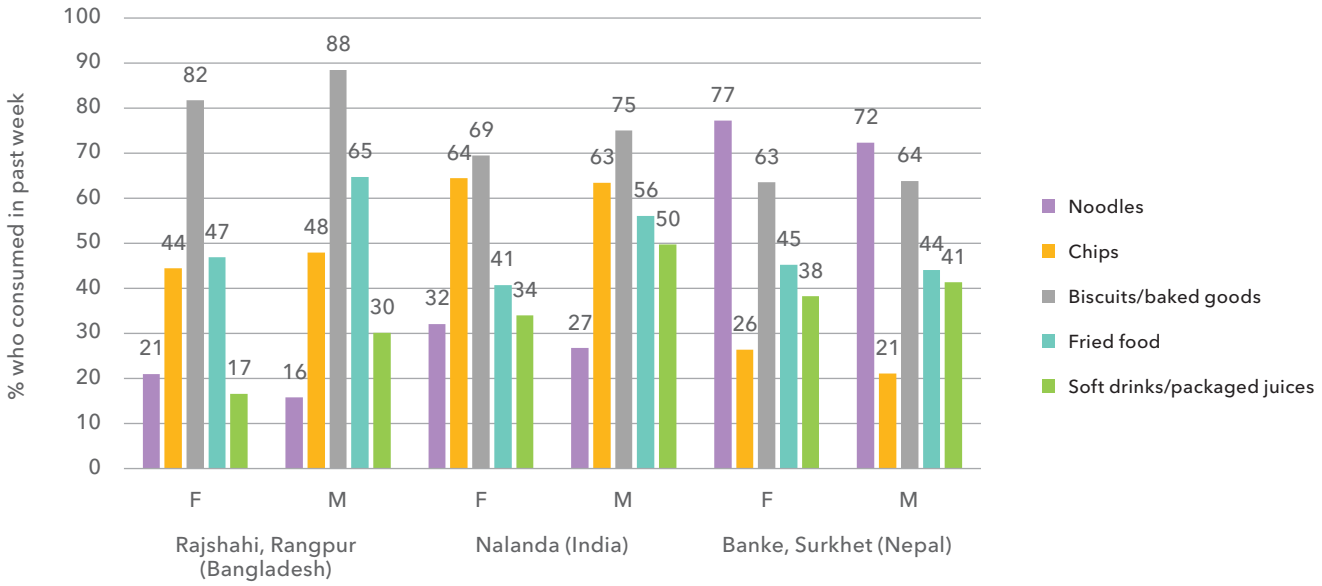
Diet quality in South Asia varies across dimensions such as age, gender and wealth. Understanding heterogeneities in diets related to these characteristics can inform program design and targeting for particular subpopulations. Data are scarce on what adolescents eat, especially those ages 10 to 14. Describing diets in this age group is important as young adolescents are entering their childbearing years and will pass habits on to their children; adolescence is also a stage of life when individuals can start making their own food-related decisions (Chapter 8 discusses this key age group from a food systems lens). In the TAFSSA surveys, adolescents (ages 10 to 19) in Nalanda, for example, were three times more likely to consume purchased fried foods compared with adults (age 20+). Weekly consumption of unhealthy foods among adolescents, assessed using a food frequency questionnaire, revealed that biscuits and baked goods, chips, and deep-fried foods are commonly consumed across all countries surveyed (Figure 1.2). For example, more than 80 percent of adolescents in the Bangladesh districts consumed biscuits or baked goods at least once in the past week; about 15 percent of this group consumed these products daily and 60 percent consumed them "a few times a week." Consumption of unhealthy foods was higher among male than female adolescents in the districts in Bangladesh and India, but similar between genders in districts in Nepal.

Contrary to the commonly held notion that women's diets are generally poorer than men's diets, GDQS scores were similar among women and men in all districts. Wealth levels exhibited different patterns in consumption of healthy and unhealthy foods; whereas all wealth quintiles in all locations had similar GDQS− (unhealthy) scores, GDQS+ (healthy) scores increased with increasing wealth in Bangladesh and India. This finding suggests few barriers, if any, to unhealthy food consumption and, as households move up the wealth ladder, they may opt to consume more healthy foods but are unlikely to opt out of unhealthy food consumption.

LOOKING FORWARD: EVIDENCE-BASED POLICY FOR BETTER DIETS

Improving the healthiness of diets for South Asians is a challenge. Both the availability and affordability of healthy foods are under threat from climate shocks and increasing food prices (Gunaratne et al. 2021; Dizon and Herforth 2018), while corporations profit from selling ultra-processed unhealthy foods that are widely consumed in the region. A first step in addressing the issue is diagnosing the problem, that is understanding the current state of diets and drivers of these diets, in detail, in different subgroups of the population. To this end, the Global Diet Quality Project has been useful, but routine surveys that measure consumption of individual foods and their quantities are needed to better assess specific divergences from healthy diet guidelines. Ideally, such surveys would be representative at

FIGURE 1.2 Percentage of adolescent females (F) and males (M) who consumed different types of unhealthy foods in the past week



Source: Data from TAFSSA agrifood systems assessment in five districts, 2023.

Note: n = 4,000 adolescents.

a subnational geographic level (such as the district, province, or upazila) to inform local decision-making on strategies to improve diets. Sustained political commitment to such efforts is critical, particularly given the high cost of detailed subnational surveys using current methods to assess diets. Looking ahead, technological and methodological advancements, such as the use of artificial intelligence to identify foods through mobile phone photographs and to link this data to existing data on the macro- and micronutrient content of the foods, may offer a more efficient way of tracking diets. While such tools are already being developed and tested, traditional dietary surveys using resource-intensive measurement methods are still required to assess how well current diets align with dietary guidelines.

Research focusing on diet quantity and quality among adults and adolescents in South Asia is still at its nascent stage. Research on why people eat what they eat or "drivers of food choice" is even newer, but this work will be important in designing interventions to improve diets. Some of these drivers are explored in Chapters 3 and 4 in this report. Although more evidence is necessary, several policy and programmatic actions can be undertaken based on the available data. Low consumption of fruits and vegetables, along with high consumption of processed foods and added sugar, is a common problem for all countries in South Asia, in both urban and rural areas and across the wealth spectrum. It is very clear that South Asians today should be eating more of some foods and less of others. Making healthy foods more available, desirable, accessible, and affordable (and making unhealthy foods less available, desirable, accessible, and affordable) requires a multisectoral approach that takes advantage of the wide reach of the health and education sectors to deliver interventions. The food industry is also a key partner and should be incentivized to deliver healthy foods that everyone can afford. Governments need to regulate when appropriate, following successful efforts in other regions such as Latin America, where taxes

on sugar-sweetened beverages, for example, have raised revenue while decreasing consumption and disease incidence (Sandoval et al. 2021). Other opportunities to enhance diets in South Asia include increasing the nutritional quality of foods delivered through existing safety net programs, complementing cash or in-kind transfers with education on healthy diets, restricting unhealthy food advertisements, and improving food labeling to better inform consumers about the benefits and risks of consuming certain foods.

Ensuring healthy diets for all may require reorientation of agriculture sector priorities toward foods that provide both adequate energy and adequate nutrients. Given the high population density in South Asia, governance of land resources and trade agreements to ensure food supplies are sustained throughout the year, especially in remote areas, remains important. Policies and strategies to reduce food and nutrient losses along the value chain are also important. Large variation within and between South Asian countries in terms of food choices, production, culture, and equity makes research on diets and drivers of diets complex. Likewise, policy and programmatic interventions to build food systems that support healthy diets for all need to be context-specific and address both supply-side and demand-side challenges.

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