

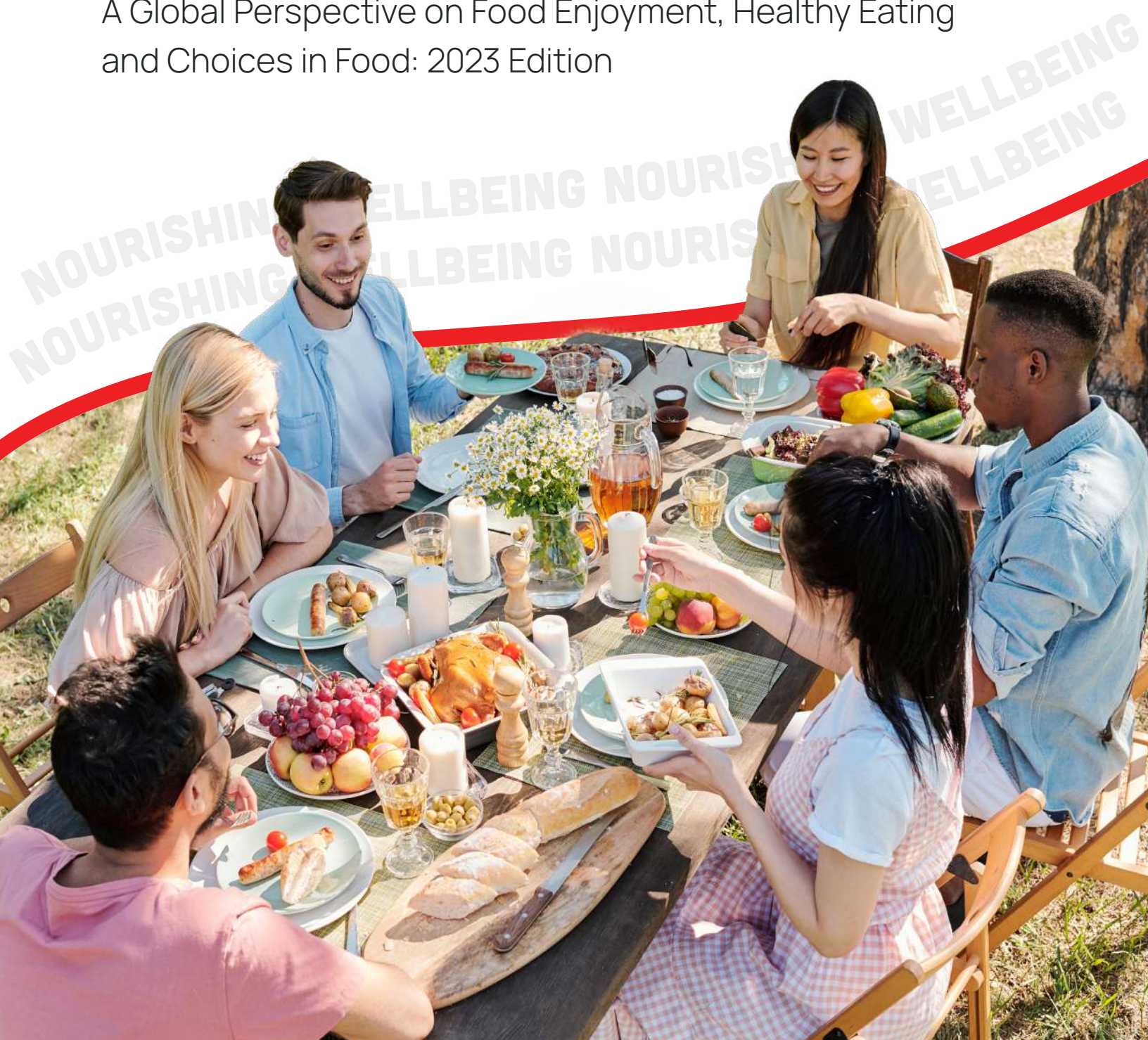


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NOURISHING WELLBEING

Ando Foundation/Nissin Food Products

A Global Perspective on Food Enjoyment, Healthy Eating and Choices in Food: 2023 Edition



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INTRODUCTION

Food Satisfaction Fades Somewhat in 2023 but Is Still an Essential Component of Overall Life Satisfaction

Food Enjoyment in 2023

For the second year in a row, the Ando Foundation/ Nissin Food Products, in partnership with Gallup, conducted the Satisfaction With Food Enjoyment and Variety Survey, reaching over 140 countries and territories in 2023. This groundbreaking study is unique in that it goes beyond the standard measures of what people eat, instead focusing on how people from diverse cultural, economic and demographic backgrounds feel about their diet. In a world where data on food consumption is widely available, but insights into how people feel about the food they eat are far less common, this survey fills a vital gap by exploring individuals' emotional and personal connections to their meals.

Eating is sometimes depicted in research or the media as a commonplace “basic biological function,” with no significant bearing on the overall human condition. Alternatively, discussions about food and the choices people make in what they eat may be reduced to a “discourse on nutrients, calories, physiology and body weight.”¹

Food shapes more than just our bodies — it plays a vital role in nourishing our overall sense of wellbeing.

The inaugural Satisfaction With Food Enjoyment and Variety report revealed that people who are “completely satisfied” with key aspects of their eating experience — whether they enjoyed their food, believed it was healthy and felt they had a variety of choices — are more likely to report higher levels of overall wellbeing. This connection between satisfaction with food and life satisfaction remained strong, even when accounting for differences in age, gender, income and country.

ONE CANNOT THINK WELL, LOVE WELL, SLEEP WELL,

1 Fischler, C. (2011). Commensality, society and culture. *Social Science Information*, 50(3–4), 528–548. <https://doi.org/10.1177/0539018411413963>

As Virginia Woolf once wrote,

“ONE CANNOT THINK WELL, LOVE WELL, SLEEP WELL, IF ONE HAS NOT DINED WELL.”

This sentiment captures the essence of the survey’s focus – not only on the food people consume, but on the emotional and personal satisfaction they derive from it. Woolf’s words reflect an important theme of this report – that food, as a fundamental human experience, is deeply intertwined with overall wellbeing.

Topics discussed in this report include:

- **Chapter 1** provides an update on global food satisfaction, highlighting key shifts in 2023. Evaluations of eating experiences have generally declined, especially in Africa and parts of Asia. Pinpointing a single universal reason for this downward drift is difficult and the drivers of food satisfaction may differ by region and among certain demographic groups.
- **Chapter 2** zeroes in on one important demographic notably less enthusiastic and content with the food they ate in 2023 than the year before: people aged 15 to 24.
- **Chapter 3** explores the connection between being completely satisfied with one’s eating experiences and broader quality of life measures from the Gallup World Poll, including:
 - daily positive emotions
 - social connectedness
 - feeling attached to one’s community

The findings show that food satisfaction is positively associated with these aspects of wellbeing.

- **Chapter 4** focuses on how people’s perceptions of eating mostly healthy foods are influenced by the actual food they consume.



About the 2023 Ando Foundation/Nissin Food Products Survey

The 2023 Ando Foundation/Nissin Food Products Satisfaction With Food Enjoyment and Variety Survey was fielded in over 140 countries as part of the 2023 Gallup World Poll. The questions asked on the survey did not change from the first wave, which was fielded in 2022 and asked individuals whether they mostly enjoyed the food they ate in the past seven days (referenced as “food enjoyment” or “enjoyment of food” throughout this report), thought they ate mostly healthy and felt like they had lots of choices in the types of food they ate each day.

TABLE 1
Ando Foundation/Nissin Food Products Satisfaction With Food Enjoyment and Variety Survey

Question Wording/Description	Response Options
Thinking about the past 7 days ...	
Would you say you mostly enjoyed the food you ate, or not?	Yes
Do you think the food you ate was mostly healthy, or not?	No (Don't know)*
Did you feel you had a lot of choices in the types of food you ate each day, or not?	(Refused)

* “Don't know” was not offered as an explicit response option but was accepted as a valid answer if offered by the respondent.

As first discussed in the last report, these three questions touch upon distinct, though related, aspects of an individual's experiences with respect to food. Moreover, even though these questions highlight one's relationship with food, the underlying three concepts play a significant role in shaping overall wellbeing.



“Food enjoyment” assesses people's positive experience with their food. The concept of enjoyment, which falls under experiential or affective wellbeing, is considered as one of the major components of wellbeing in the classical framework.



Eating “healthy” food – commonly understood as being nutritiously balanced, though the term “healthy” was not defined to respondents during the interview process – is also a core ingredient in terms of developing a sustained sense of satisfaction with one's diet.



Having a variety of “choices in the types of food” available to eat is important for two reasons: Eating a diverse diet is considered by many public health experts and nutritionists as essential to eating healthy and, therefore, having various choices in types of food can potentially indicate that a person has a healthy diet. In addition, variety is vital for maintaining or boosting one's overall enjoyment in eating, since continuous repetitions can make even the most delicious dishes become dull. “Interest and boredom” speak to one important component of wellbeing, according to psychologist Norbert Schwarz, who advised on the Gallup World Poll measures. Lack of interest or feelings of boredom have a negative influence on overall wellbeing. Similarly, those with limited food options may find their diet less fulfilling.

CHAPTER 1

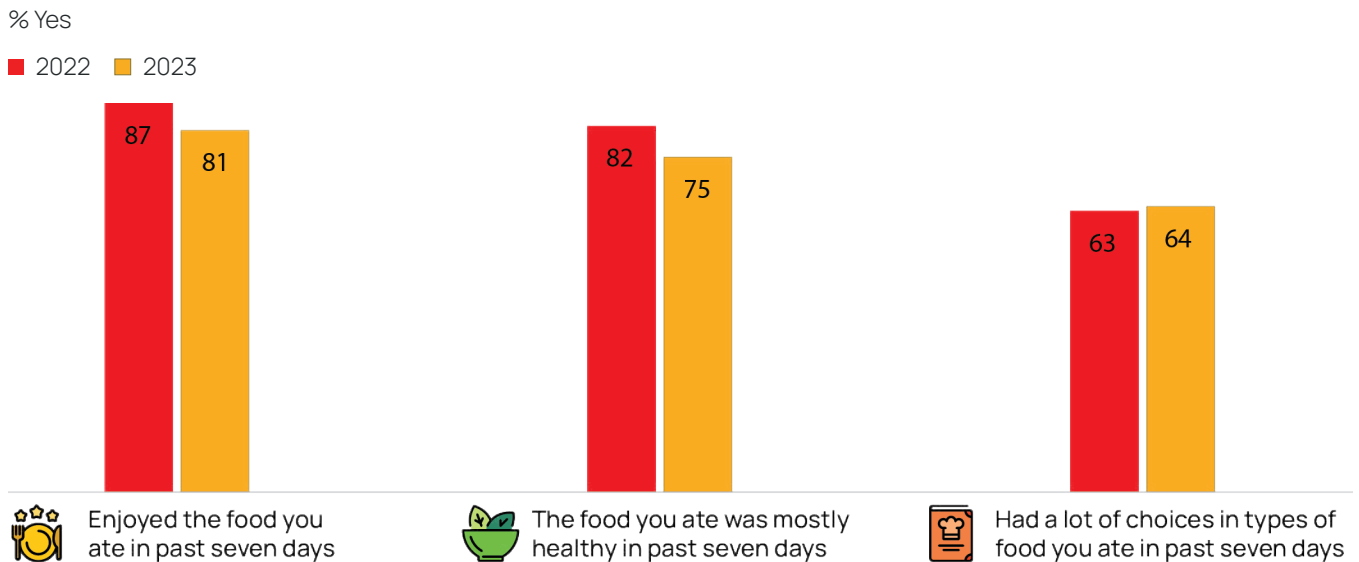
The Changing State of Food Satisfaction Around the World

Section 1.1 Enthusiasm With Eating Experiences Declined in 2023

Globally, people’s perceptions of their eating experience worsened from 2022 to 2023. Slightly more than eight in 10 adults (81%) worldwide said they “mostly enjoyed” the food they ate in the past seven days in this most recent wave, representing a 6-percentage-point dip from the 87% who said this in 2022.²

Likewise, fewer people said they ate “mostly healthy” in the past week, with that figure falling to 75% from 82%. Interestingly, the share of people around the world who said they felt they had a lot of choices in the types of food they ate in the past seven days was static, with 64% saying this in the most recent survey compared with 63% in 2022.

FIGURE 1
Global Results, 2022-23



² When discussing global or regional trends, it should be noted that there has been a slight change in the countries/areas surveyed in 2023 compared to 2022. In 2023, four countries were surveyed that were not surveyed in 2022 (including China, which is discussed on Page 7) and another four countries/areas appeared in the inaugural poll but not this most recent wave. Unless otherwise noted, however, the trend analysis presents the 2022 and 2023 results for all countries surveyed, rather than limiting the focus to the reoccurring countries/areas.

Globally, some of the fundamental barriers to food satisfaction – including affordability and accessibility – eased somewhat compared to the previous year. Though they remained high in many countries, food prices overall did not rise as rapidly in 2023 as they did in 2022. However, this was not the case everywhere. Food security – or access to “sufficient, safe and nutritious food” – was estimated to improve in 83 countries in 2023, according to research conducted by the United States Department of Agriculture (USDA), though the number of people around the world facing food insecurity remains “elevated.”³ Given these positive, if uneven, developments in the overall food situation in 2023, the decline in the rates of people globally who enjoy their food or say they eat “mostly healthy” may seem somewhat surprising.

Several complex factors appear to have contributed to the global decline in food satisfaction in 2023 – a development that, it is important to note, does not necessarily signal a lasting shift. These most recent results may point to a new, prolonged decline in food perception or represent a momentary dip.

Moreover, the global fall in food sentiment was not uniformly experienced across all regions or countries. Satisfaction levels remained relatively stable in some areas, while other places experienced greater change.

While this may seem like a technical detail, it should be noted that feelings of food satisfaction fell at above-average rates in certain populous countries in 2023, pulling down the global figures as a result. A striking example of this is India, where food enjoyment dropped by 11 percentage points in 2023, from 87% to 76%. Perceptions of eating healthy in India followed a similar pattern, also falling 11 points, from 85% to 74%.

In one respect, the 2023 results mirror the preceding wave. Enjoyment of food continues to trump how people feel about the other major aspects of their diet measured on the survey. Similar to 2022, a slight majority of people (52%) who did not believe their diet was “mostly healthy” still said they mostly enjoyed the food. More than six in 10 individuals (63%) who said they did not feel like they had lots of choices in the types of food they had to eat nonetheless expressed enjoyment.



3 Zereyesus, Y. A. (2023). *International food security assessment, 2023-2033*. Economic Research Service, U.S. Department of Agriculture. <https://doi.org/10.32747/2023.8134166.ers>

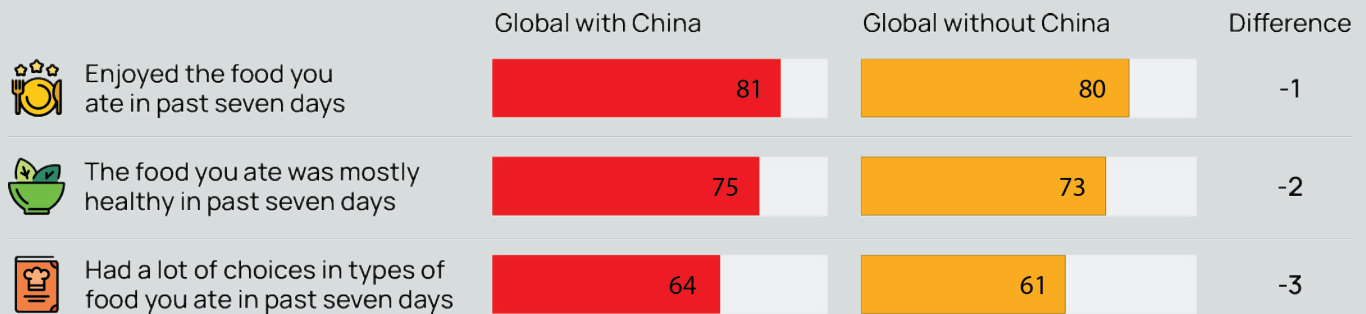
China's Debut: Impact on the 2023 Food Enjoyment and Variety Survey



FIGURE 2

Food Enjoyment, Healthy Eating and Food Choices in 2023: Comparing Global Results With and Without China

% Yes



China is one of four new countries added to the 2023 survey, and the addition of this populous country is worth bearing in mind when comparing global or regional results between the two survey waves. All results based on combining data from different countries – including global and regional results – are calculated in such a way that takes into account the size of each country’s aged 15+ population. Countries with larger populations are given greater weight in determining the overall results.⁴

China’s responses to the survey were generally more positive than average. As a result, if China is excluded, the overall 2023 results are slightly lower. For instance, the revised global rate of food enjoyment without China is 80%, compared to 81% when China is included (see Figure 2). The share of people who believe the food they ate in the past seven days was healthy falls by 2 percentage points if China is not factored into the analysis. Perceptions of having many choices in the types of food one has to eat has the biggest shift when China is removed, falling from 64% to 61%.

However, the difference is more noticeable in certain regions or income groups. In Eastern Asia, for example, the percentage of people who think their food is “mostly healthy” drops from 82% to 70% without China, and in upper-middle-income countries, the share of people who feel they have many food options falls by 9 points, from 70% to 61%.

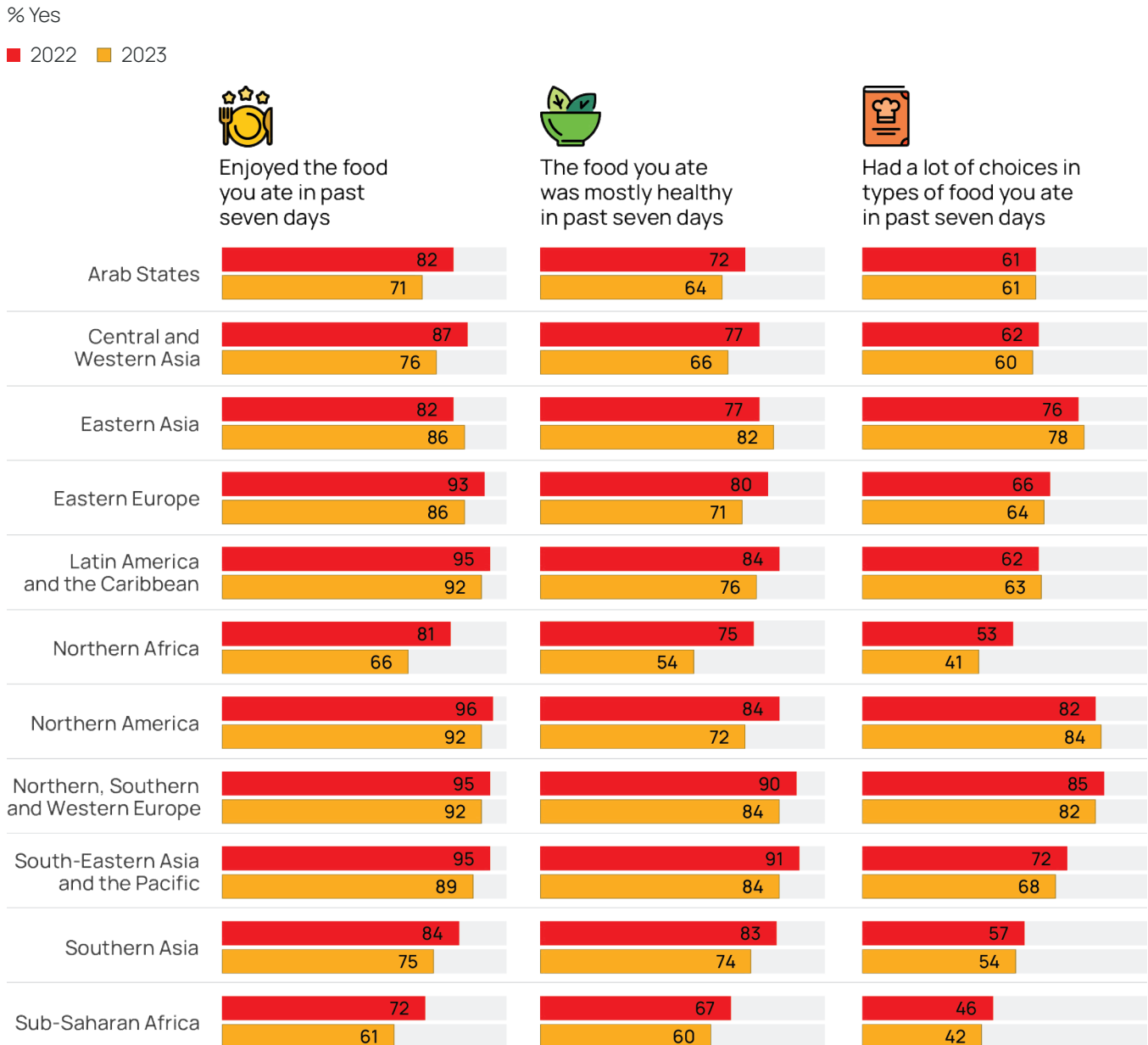
Despite these differences, all 2023 results that reach across countries – such as global or regional percentages – will include China in the calculation unless otherwise noted. Collectively, China may have a loud voice in shaping these global statistics – and one that is important to include.

⁴ In addition, China was the only country or territory where data was collected entirely using an online survey. In most other countries, Gallup conducted interviews in person or by phone. Online surveys can lead to different results because people may answer questions differently online than when speaking to an interviewer. To reduce any potential differences, Gallup made sure to include a diverse mix of people from different backgrounds in China and designed the survey questions to be similar to those used in other countries or territories.

Section 1.2 Many Regions Experienced Downward Shifts in Food Enjoyment and Perceptions of Eating Healthy, While Feelings About Having Many Food Choices Were Stable

Food perceptions – especially with respect to enjoyment and perceived healthiness – declined in 2023 compared to 2022 in many but not all of the 11 global regions. Having a lot of choices in types of food saw the fewest changes among food perceptions; eight of the 11 regions saw an increase or decrease of 3 points or less.

FIGURE 3
Regional Trended Results, 2022-23



Of all regions, Northern Africa – consisting of four countries in 2023 including Egypt, Libya, Morocco and Tunisia⁵ – registered the largest decline across all three questions: From 2022 to 2023, the percentage affirmatively answering the question about having lots of choices in the types of food they recently ate fell 12 percentage points (41% from 53%), while food enjoyment fell 15 points (66% from 81%) and perceptions of eating healthy fell further still, by 21 points (54% from 75%).

Egypt, the most populous country in Northern Africa, also declined by substantial margins on all three questions, including a 31-point drop in the percentage of those who believe the food they recently ate was healthy (see Section 1.3). Over this period, Egyptians also became markedly less confident in their own financial situation, with less than half (49%) saying they are satisfied with their standard of living, compared to 65% the previous year.

Aside from Northern Africa, food enjoyment also fell by double-digit rates in the Arab States, Central and Western Asia, and sub-Saharan Africa (all three regions saw an 11-point decline from 2022). Food enjoyment was lowest in sub-Saharan Africa, as was the case in 2022. Meanwhile, experiences of food enjoyment were high and relatively stable in Latin America and the Caribbean, Northern America, and Northern, Southern and Western Europe. In Eastern Asia, enjoyment increased by 4 points (rising to 86% from 82%), largely due to China's results; if China is excluded, enjoyment of food fell by a modest 3 points in Eastern Asia.

Perceptions of eating healthy falling by 12 percentage points in Northern America was a key driver for the downward shift of this measure globally. The United States was the main contributor to the regional decline in Northern America; perceptions of eating healthy fell to 71% from 83%. In the U.S., people aged 30 to 49 were much less likely in 2023 to say the food they ate in the past week was “mostly healthy” compared to 2022 (57% vs. 82%, respectively). The attitudes of younger and older Americans on this question were, by contrast, relatively stable. Americans also spent less time each day in activities related to eating and drinking in 2023 compared to 2022, according to data from the American Time Use Survey, though it is unclear if this development was a reason people in the U.S. were less happy with some aspects of their diet.⁶

Perceptions about having a variety of choices in the types of food one is able to consume were generally stable across the regions, with the exception of Northern Africa, where the percentage who felt this way fell to 41% from 53%.



⁵ Algeria, a country that was not surveyed in this most recent wave, is included in the 2022 results for this region.

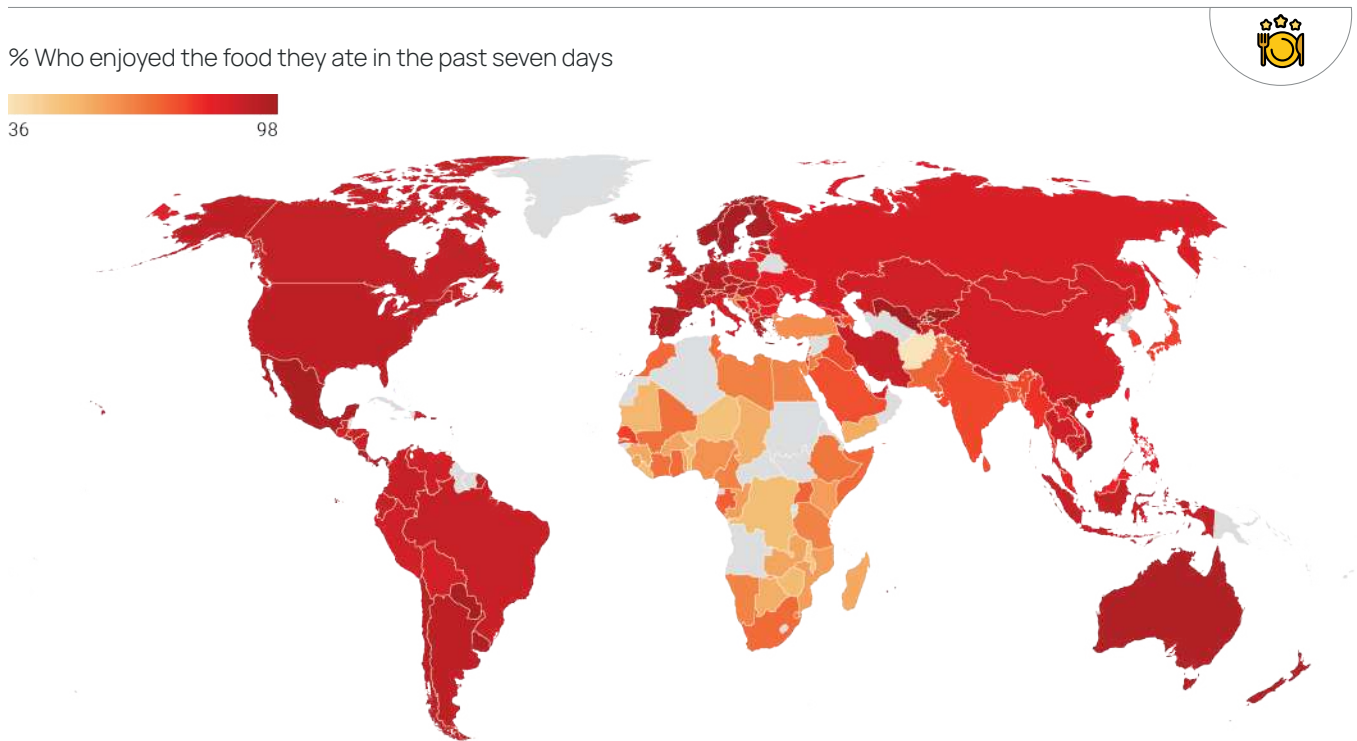
⁶ *Eating and health module (ATUS)*. (2024, October 31). Economic Research Service, U.S. Department of Agriculture. <https://www.ers.usda.gov/data-products/eating-and-health-module-atus/eating-and-health-module-atus/#Archived%20Data%20Tables>

Section 1.3 Country-Level Results in 2023

In 2023, Malta had the highest rate of food enjoyment in nominal terms, at 98%. However, this result is not meaningfully different from the other 22 countries or territories where at least 94% said they mostly enjoyed the food they recently ate. As was the case in 2022, most people in most countries said they enjoyed the food they ate – in all but seven countries the enjoyment rate was above 50%. At 36%, food enjoyment in Afghanistan was lower than in any other country.

Across all countries surveyed, a median of 86% said they mostly enjoyed the food they ate recently.

FIGURE 4
Food Enjoyment in 2023, by Country

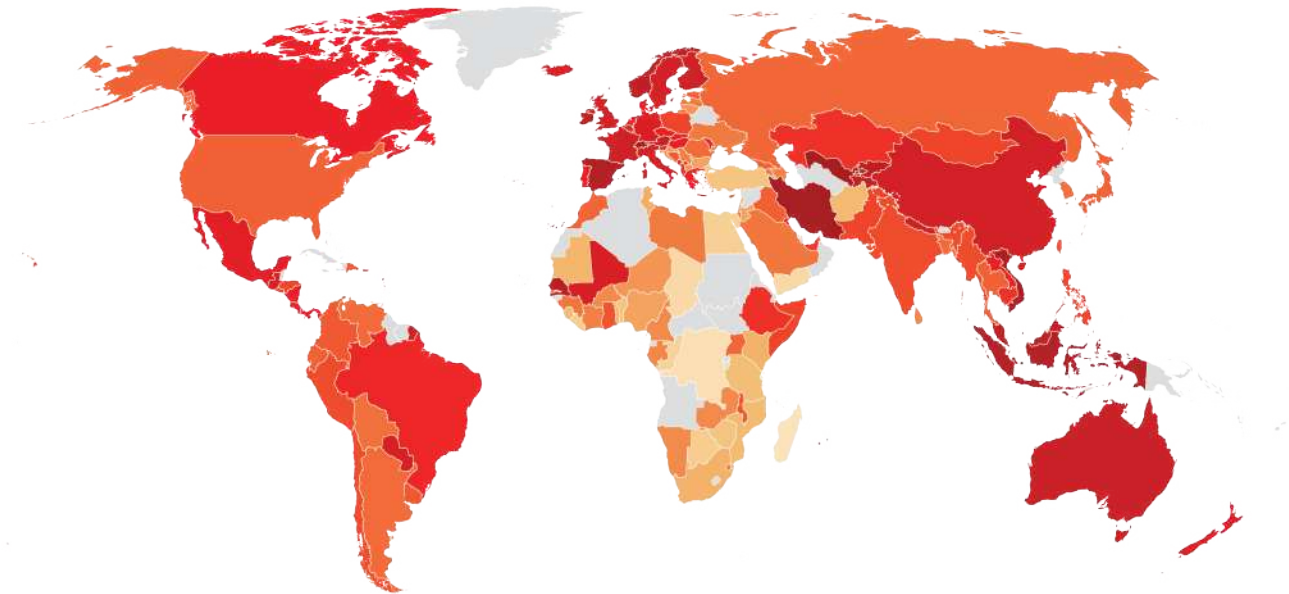


Switzerland, meanwhile, boasted the highest percentage of people who said they ate “mostly healthy” in the past week, at 93%. This is not significantly different than the five other countries where at least nine in 10 people described their diet as mostly healthy. African countries make up most of the bottom 10, with Madagascar at the lowest (41%).

Across all countries surveyed, a median of 72% said the food they ate was mostly healthy.

FIGURE 5
Eating Healthy Food in 2023, by Country

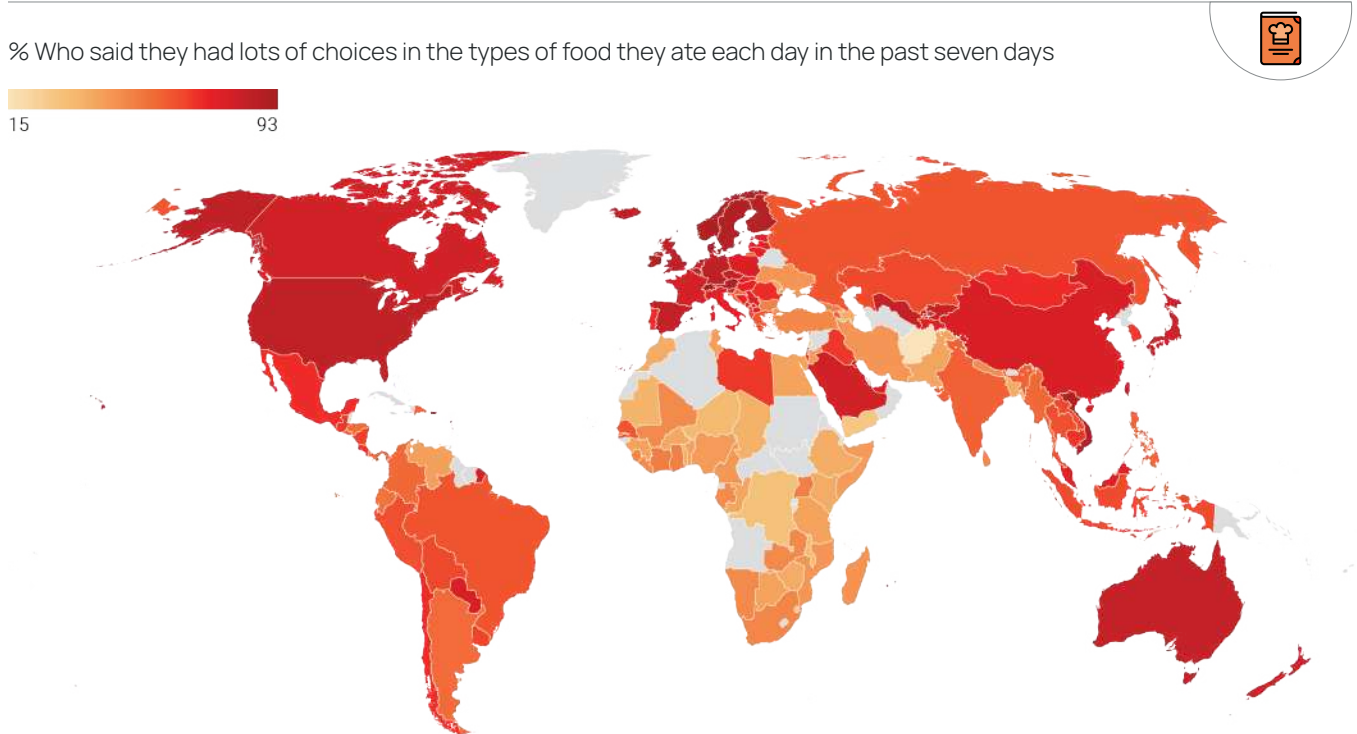
% Who said the food they ate in the past seven days was mostly healthy



Turning to feelings about having a variety of choices in the types of food one has to eat, European countries, particularly Western Europe, dominate the top 10 list for the percentage of those who answered this question in the affirmative. Vietnam (89%) is the only non-European country in the top 10, though at 87%, Singapore is just one spot shy of making the top 10. Most of the countries in the bottom 10 are from Africa.

Across all countries surveyed, a median of 64% said they had a variety of choices in the types of food they had to eat.

FIGURE 6
Choices in Types of Food in 2023, by Country

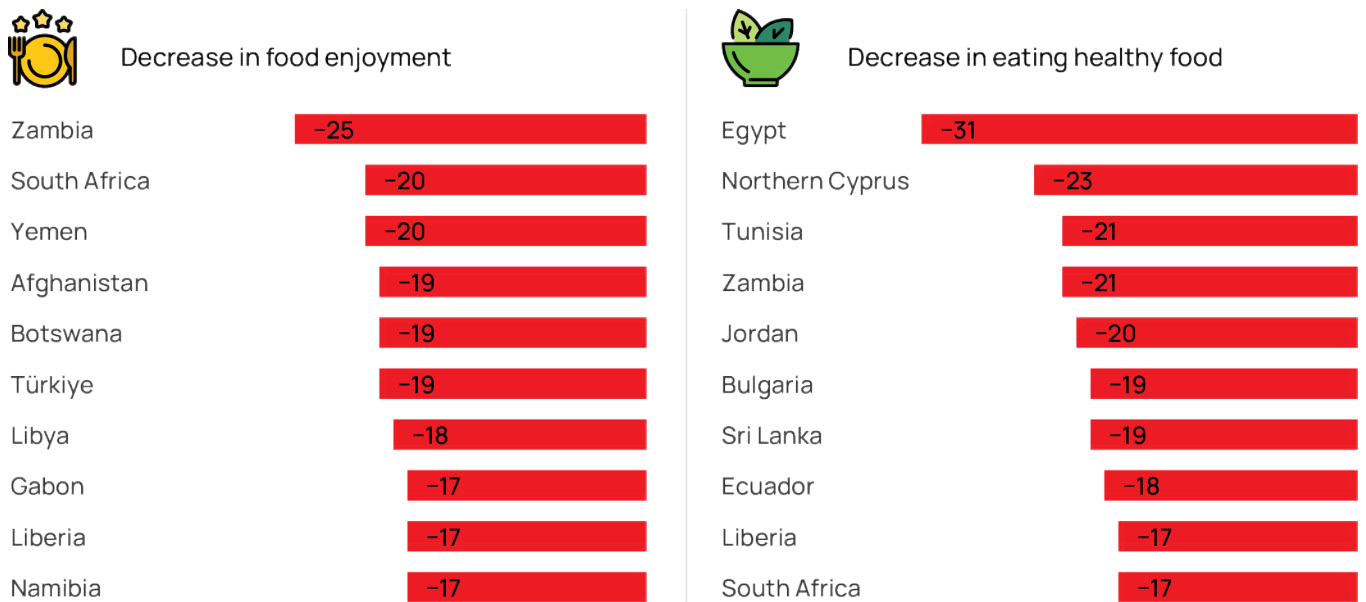


Section 1.3.1 Notable Changes in Country Results From 2022

Moving to how food perceptions *changed* in 2023, 96 countries or territories experienced a statistically significant change in the percentage who said they mostly enjoyed the food they ate compared to 2022. In all but one of these countries – Bangladesh – this represented a negative change in how people perceive this aspect of their meal. The largest declines occurred in Zambia (-25 percentage points), South Africa (-20) and Yemen (-20).

FIGURE 7
Largest Country Decreases in Food Enjoyment and Healthiness, 2022-23

Change in percentage who enjoyed their food and percentage who thought their food was mostly healthy from 2022 to 2023 (in percentage points)



In 97 countries or territories, the share of people who said the food they ate was mostly healthy fell by a statistically significant margin in 2023. Egypt experienced the sharpest fall at 31 points. In Northern Cyprus, Tunisia, Zambia and Jordan, this figure tumbled by at least 20 points.

Two countries registered at least 5-point increases in terms of the percentage who said they eat mostly healthy: Uganda, where this figure rose from 63% to 70%, and Lithuania, where it rose from 56% to 61%.⁷ Uganda had a 7-point increase in perceptions of eating healthy food from 2022 to 2023 and Lithuania had a 5-point increase.

⁷ Despite these seemingly sizeable changes in 2023 results compared to 2022 in Lithuania and Uganda, neither were considered statistically significant at the 95% confidence level. However, they are significant at the 90% confidence level.

How Food Perceptions Changed in Japan in 2023



FIGURE 8
Food Enjoyment, Healthy Eating and Food Choices in Japan, 2022-23

% Yes



Japan is the home country of the Ando Foundation/ Nissin Food Products, making the results of this country of special interest. While enjoyment of food dropped by a modest 4 percentage points in Japan (falling to 77% from 81%), this represents a statistically significant change. Perceptions of eating healthy fell by a wider margin, with 71% saying in 2023 the food they ate in the past seven days was “mostly healthy,” compared to 79% in 2022. Like most other countries or territories, perceptions of having a variety of choices in the types of food one has to eat remained stable, at 82%.

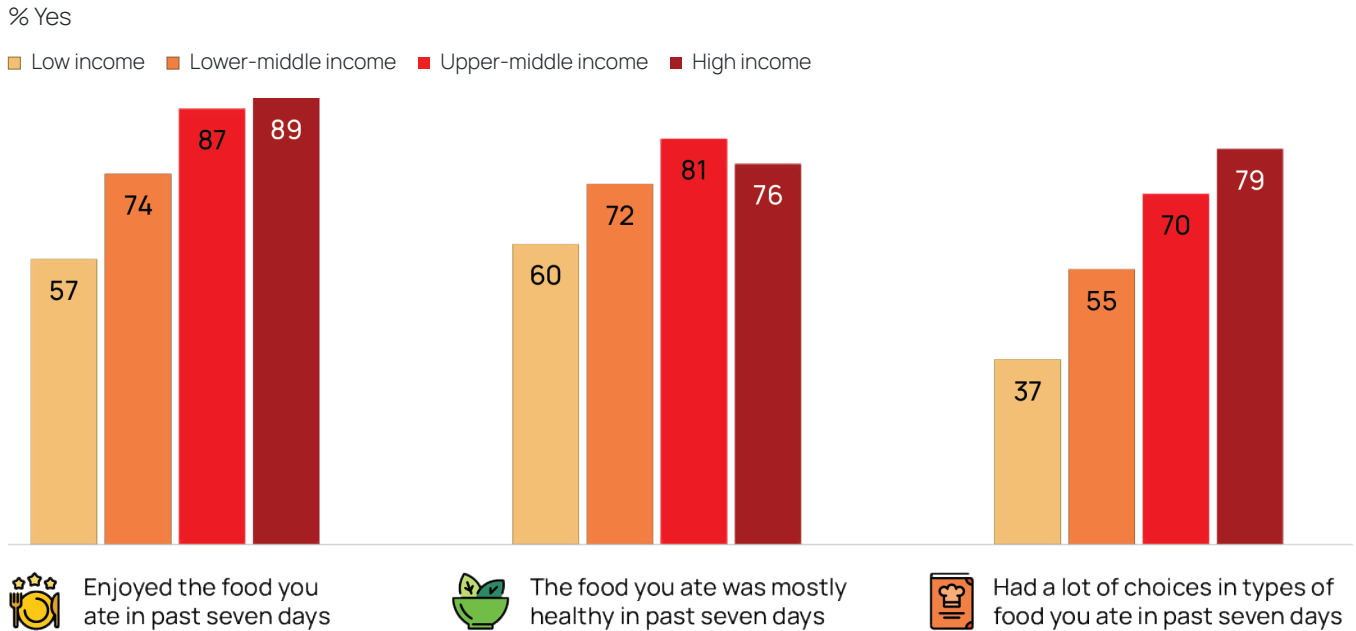
In an interesting break from the larger trend, Japanese residents in 2023 were 5 percentage points more likely to report having many choices in the types of food they had to eat than to say they enjoyed their food, at 82% and 77%, respectively. In virtually every other country or territory, people were more likely to mention that they enjoyed their food than they were to say they had lots of choices in the types of food they had to eat – typically by a difference of 17 percentage points.⁸

Compared to nearly all other countries, there appears to be a closer relationship between having lots of choices in the types of food to eat and overall enjoyment in Japan.

⁸ This is the median difference of the percentage who said they mostly enjoyed the food they ate in the past seven days and the percentage who said they felt they mostly had lots of choices in the types of food they had to eat for the 142 countries or areas surveyed in 2023.

Section 1.4 Differences by Income at the Country and Individual Levels

FIGURE 9
Global Results in 2023, by Country Income Classification



People in high-income economies and upper-middle-income economies tend to enjoy their food more, think they eat more healthily, and have more food type choices than people in low-income and lower-middle-income countries. People in high-income economies are more than twice as likely to report having many choices in the types of food they ate than respondents in low-income areas – the largest difference among the three survey items.

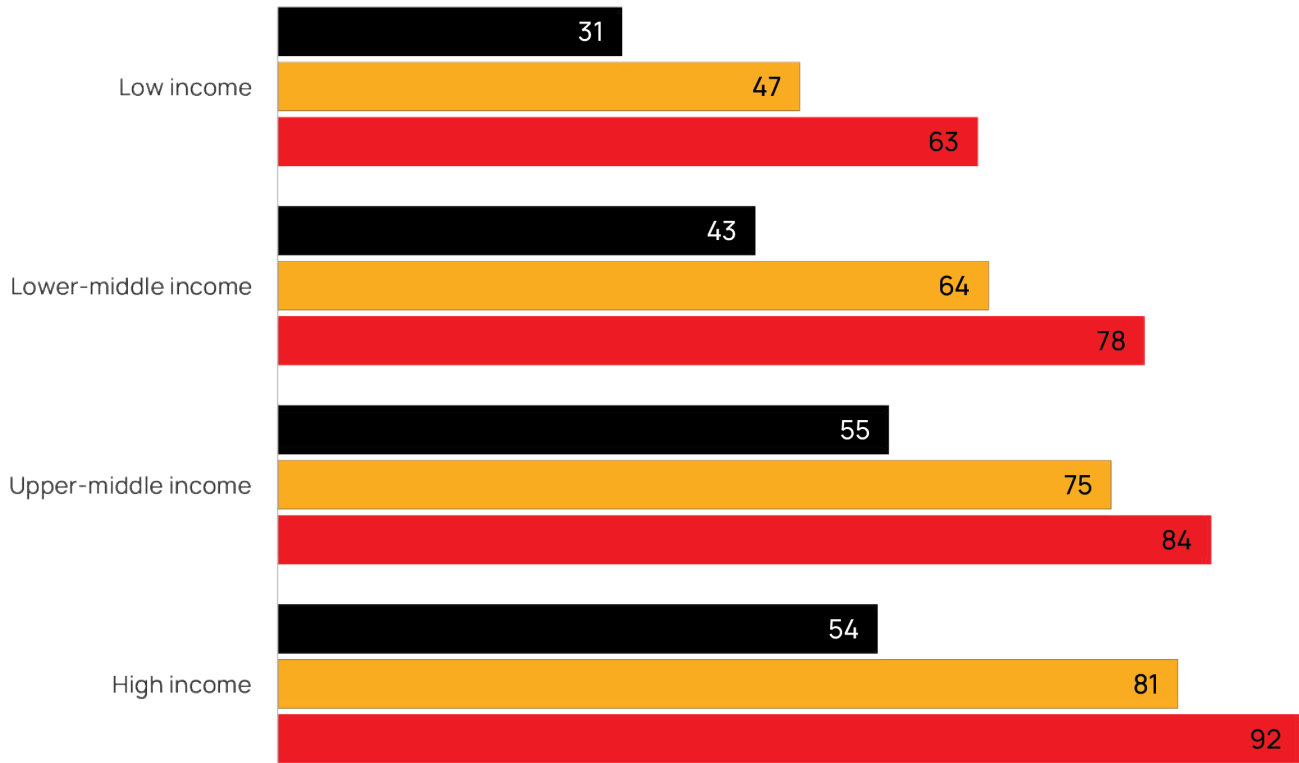
If a country’s overall income level seems to matter in shaping food perceptions, the same appears to be true for an individual’s income (household income). The Gallup World Poll measures both subjective and objective information about individuals’ household incomes. “Subjective income” is based on how respondents answer a question about how they feel about their household income – are they “living comfortably,” “getting by,” or “finding it difficult or very difficult?”

The share of people who said they had a lot of choices in the types of food they ate increased as personal subjective income increased. The amount of food choices also increased across all three personal subjective income levels as the country classification increased. In high-income economies, a 38-percentage-point difference separates the percentage of people who said they had lots of choices in the types of food they had to eat in the past seven days (92%) compared to those who are finding it difficult or very difficult (54%); this is the widest spread across the four country income groups.

FIGURE 10
Food Choice in 2023, by Country Income Classification and Subjective Income

% Who said they had lots of choices in the types of food they ate each day in the past seven days

■ Finding it difficult or very difficult on present income ■ Getting by on present income ■ Living comfortably on present income



A similar pattern is at play with respect to the relationship between income (country and personal) and food enjoyment and perceptions of eating healthy, though there is less variation among those who are living comfortably on their present income across lower-middle-, upper-middle- and high-income economies.

Section 1.5 Differences Between Men and Women

Other research shows men and women typically hold very different attitudes or behaviors with respect to food-related practices such as cooking and, to some extent, the types of food they eat.⁹ Although at the global level findings from 2023 indicate that women and men registered similar levels of food enjoyment, eating healthy and having lots of choices in what they ate, as was the case in 2022, there are some significant differences between genders in several countries.

While attitudes about different aspects of food satisfaction may be roughly even among men and women, they are not exactly even. Men, for instance, are 3 percentage points more likely than women to say they have lots of choices in the types of food they eat, a slight but statistically significant difference.

At the country level, this split can be even sharper: In seven countries or areas surveyed in 2023, men were at least 10 percentage points more likely than women to say they had lots of choices in the types of food they eat, including Greece, which had the widest gap at 18 points, Costa Rica (13 points), El Salvador (12 points), Panama (12 points), Brazil (11 points), Albania (11 points) and Portugal (11 points). By contrast, there are fewer places where the disparity is equally substantial in favor of women.

Finally, there is still another demographic factor — age — whose relationship with food satisfaction and, more specifically, the Food Wellbeing Index, merits mentioning. This is the topic of the next chapter.



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

CHAPTER 2

Like a Fine Wine, Enjoyment of Food Increases With Age

This chapter examines how food perceptions differ by age group, paying special attention to the youngest age cohort – those aged 15 to 24. The inaugural report of the Ando Foundation/Nissin Food Products survey found “minor, even inconsequential” differences between how young people view different aspects of their eating experience compared to older adults, though the report did note that the oldest age cohort – those aged 65+ – were systematically more likely to rate the different aspects of their diet positively than younger individuals.

In 2023, these differences became more pronounced, as this chapter will show. Young people’s sense of food satisfaction slumped more in this most recent wave relative to any other age group; in many regions, such as Northern America and parts of Europe, 15- to 24-year-olds now trail the oldest cohort in their sense of food satisfaction by wide margins.

Interestingly, these trends in food satisfaction converge with findings from the 2024 *World Happiness Report*, which found that “happiness” – how individuals rate their current lives on a 0 to 10 scale, with 0 representing the worst possible life and 10 the best possible life – has fallen among the young in many of these same places¹⁰ and, in some instances such as Northern America, the young are now “less happy than the old.”¹¹

However, this should not be mistaken for a universal trend: The same report found that young people in other parts of the world, such as Eastern Europe, are happier than their older counterparts (and their happiness has grown over time).¹²

This chapter will assess whether a similar story is at play with respect to people’s eating experiences. Breaking somewhat from the last chapter, which focused on the results of each individual item on the Ando Foundation/Nissin Food Products Survey, the analysis will focus primarily on how the different age groups performed on the Food Wellbeing Index to understand how they felt about the food they recently ate.

First introduced in the inaugural report of this study, the Food Wellbeing Index identifies individuals who are “completely satisfied” with the food they recently ate – meaning they enjoyed the fare, thought it was mostly healthy and felt they had lots of choices in their consumption offerings – and those who are not completely satisfied (i.e., anyone who answered “no” to any of those three questions).

10 The regional groupings used in the *World Happiness Report* differ slightly from those used in this report.

11 Helliwell, J. F., Layard, R., Sachs, J. D., De Neve, J.-E., Aknin, L. B., & Wang, S. (Eds.). (2024). *World Happiness Report 2024*. University of Oxford: Wellbeing Research Centre. <https://worldhappiness.report/ed/2024/>

12 The *World Happiness Report* combines Eastern Europe with Central Europe such that the overall region is called “Central and Eastern Europe.”

Section 2.1 Globally, 15- to 24-Year-Olds' Satisfaction With Food Fell Behind All Other Groups in 2023

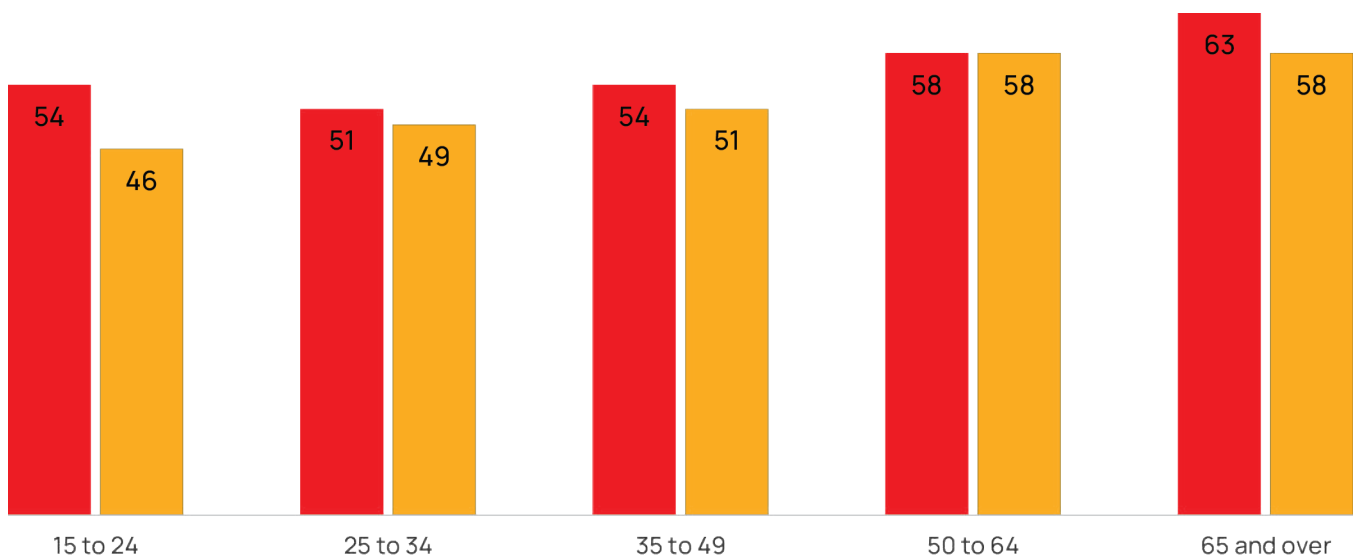
While the rate of those who were considered to be “completely satisfied” on the Food Wellbeing Index dipped across most age groups in this most recent survey compared to 2022, the decline among young people aged 15 to 24 fell more and to a lower level than their older counterparts.

In 2023, slightly less than half (46%) of those aged 15 to 24 were “completely satisfied” – representing an 8-point drop from the 54% who were completely satisfied in 2022.

FIGURE 11
Food Wellbeing Index, by Age, 2022-23

% Who are considered “completely satisfied”*

■ 2022 ■ 2023



* Individuals are considered “completely satisfied” if they said “yes” to all three questions about the food they recently ate: enjoyment, healthy eating and variety of choices.

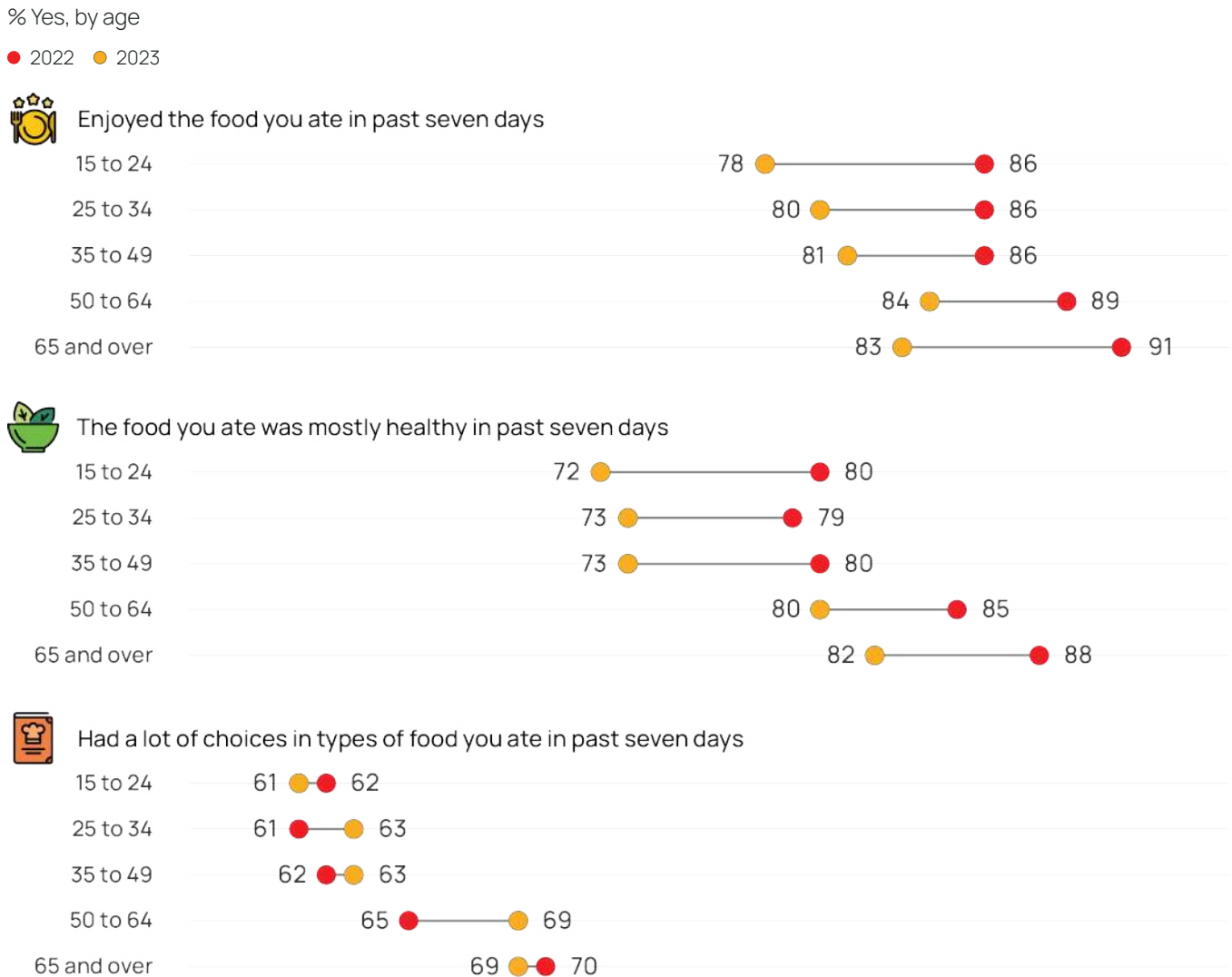
Moreover, all older age groups are more satisfied than the youngest group, especially the two oldest cohorts – those aged 50 to 64 and 65+. While the percentage of people aged 65 and older who are completely satisfied with their eating experiences did fall to 58% in 2023 from 63% in 2022, the oldest age group nonetheless holds a 12-point advantage vis-à-vis the youngest cohort on this measure.

Food perceptions among those aged 50 to 64 were stable in 2023, with 58% of this group being “completely satisfied” with the food they recently ate. In 2022, the difference between 50- to 64-year-olds and the youngest group on the Food Wellbeing Index was only 4 points; it has now grown to a 12-point divide.

At the individual question item level, food enjoyment and healthy eating decreased across age groups between 2022 and 2023, particularly for those 15 to 24, while choices in food saw less variation. Seventy-eight percent of 15- to 24-year-olds said they mostly enjoyed the food they recently ate in 2023, down 8 points from the year before. Perceptions of eating healthy also worsened, with 72% of young adults describing the food they recently ate as “mostly healthy” in the recent survey, compared to the baseline reading of 80%.

By contrast, young people’s feelings about having a variety of choices in their food options were essentially unchanged, with slightly more than six in 10 saying this (61%). Across all three measures, 15- to 24-year-olds were either the least likely cohort to answer in the affirmative or were statistically tied with another cohort for that distinction.

FIGURE 12
Widespread Decrease in Food Perception From 2022-23, Especially for Youth



Section 2.2 In 2023, the Gap Between the Young and the Old in Food Satisfaction Varied Regionally and Economically

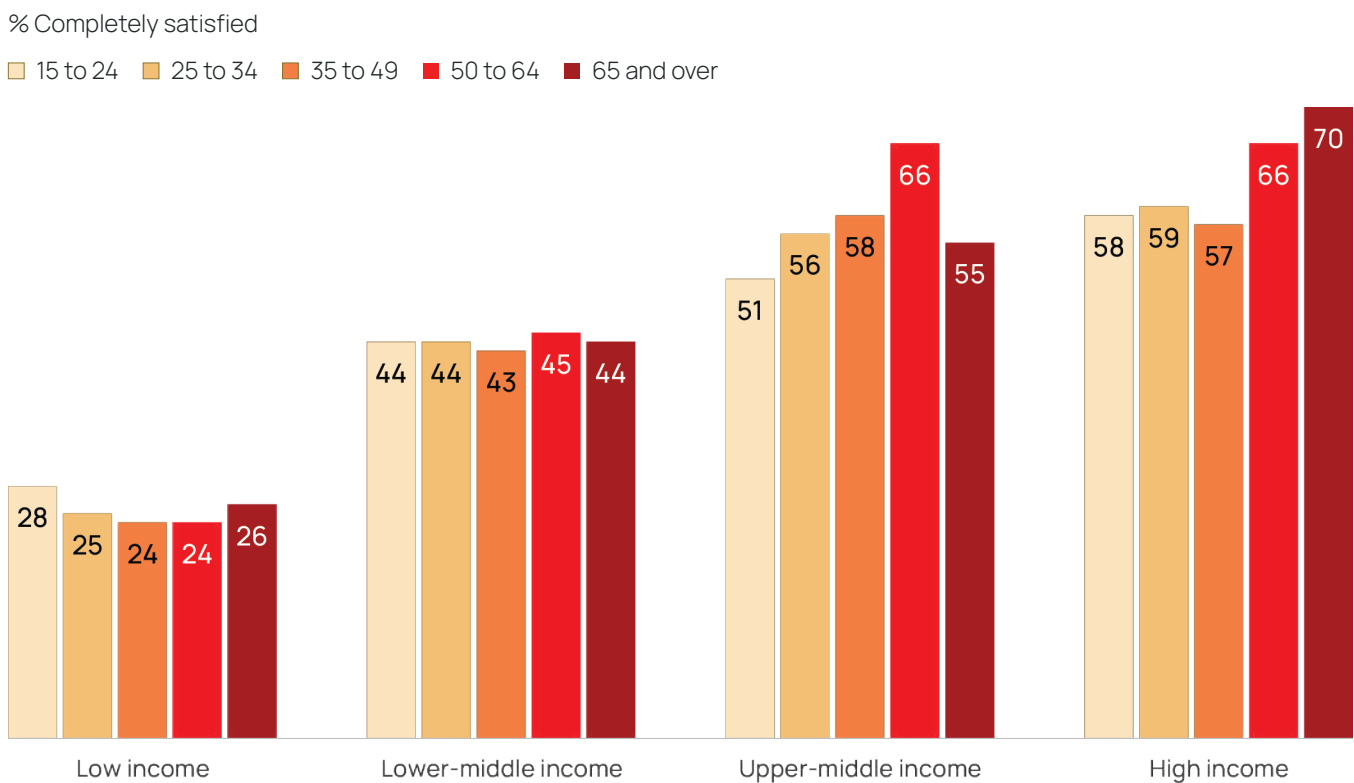
While people living in high-income and upper-middle-income countries are, regardless of their age, more likely than residents of low-income and lower-middle-income countries to be completely satisfied with their eating experience, there is also a greater level of inequality between the different age groups of the higher-income countries on this measure.

There is a 12-point difference between the youngest and the oldest age groups in high-income countries with respect to food satisfaction.

In high-income countries, 58% of residents aged 15 to 24 were completely satisfied according to the Food Wellbeing Index, compared to 66% of 50- to 64-year-olds and 70% of those aged 65 and older.

Young people in upper-middle-income countries also lag their older counterparts in terms of their performance on the Food Wellbeing Index, with the gradient especially steep when compared to people aged 50 to 64. Sixty-six percent of 50- to 64-year-olds were completely satisfied with their eating experience in 2023, compared to 51% of those aged 15 to 24.

FIGURE 13
Food Wellbeing Index in 2023, by Age and Country Income Classification



At the regional level, it is clear that young people do not uniformly perform worse on the Food Wellbeing Index compared to the oldest age cohort.

Young people were 10 percentage points more likely than the most senior age category to be completely satisfied with food they recently ate in Eastern Europe. The 2024 *World Happiness Report* also found that young people in Eastern Europe show “much higher life evaluations for the young, with a steady decline across age groups thereafter.”¹³

The divide between the young and the old in terms of food satisfaction is sharpest in Northern America, at 26 percentage points.¹⁴ Notably, these findings echo discoveries from the 2024 *World Happiness Report*, which found that in the United States and Canada, “life evaluations in 2021-2023 were lowest among the young, rising gradually with age to be highest among the old.”¹⁵

Young people in Northern, Southern and Western Europe were also less likely to be completely satisfied with their food than those 65 and older, by a difference of 9 percentage points. Younger and older people in some of these regions also saw some of the same happiness patterns as the U.S. In Eastern Asia, the gap between the young and the old is 8 points, with 49% of 15- to 24-year-olds being completely satisfied according to the Food Wellbeing Index, compared to 57% of those 65+.

FIGURE 14
Food Wellbeing Index Regional Age Differences in 2023

% Completely satisfied

Region	15 to 24	65 and over	Difference
Northern America	54	80	-26
Northern, Southern and Western Europe	65	74	-9
Eastern Asia	49	57	-8
Latin America and the Caribbean	56	59	-3
Arab States	35	36	-1
South-Eastern Asia and the Pacific	57	58	-1
Central and Western Asia	48	47	1
Sub-Saharan Africa	30	29	1
Southern Asia	47	44	3
Northern Africa	31	25	6
Eastern Europe	58	48	10

¹³ The report refers to “Central and Eastern Europe.”

¹⁴ In 2023, Gallup interviewed 163 respondents aged 15 to 24 in the United States and Canada collectively. Given this relatively low sample size, some caution is required when interpreting the results of this analysis.

¹⁵ Australia and New Zealand were also identified as having a similar pattern, though the *World Happiness Report* notes that the “age gap favoring the old is evident in all four countries, while being much larger in the United States and Canada” (Chapter 2).

Special Focus: How Food Satisfaction Changes by Age in the U.S. and Japan

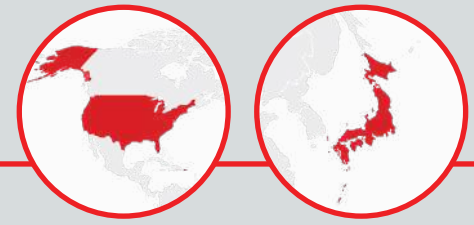
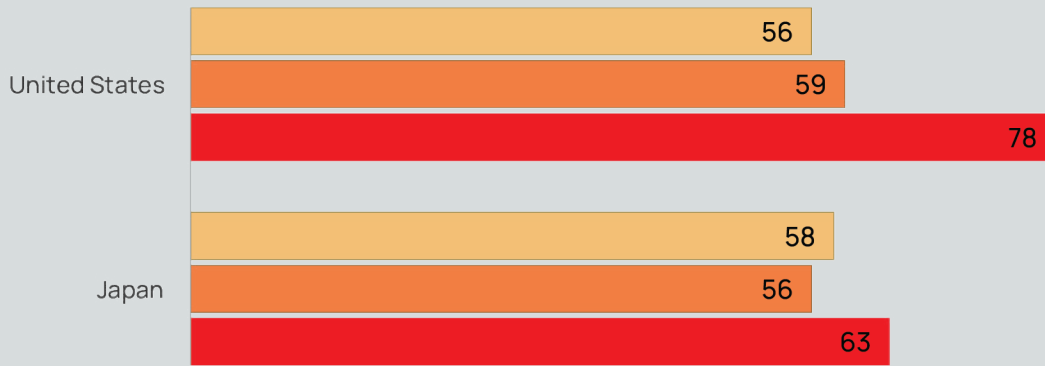


FIGURE 15

Food Wellbeing Index: Older Americans Are More Satisfied With Their Food Than Older Japanese

% Completely satisfied, by age

15 to 29 30 to 49 50 and over



2022 and 2023 data combined.

This special focus concentrates on the differences between age cohorts in the U.S. and Japan. Somewhat differently from the approach taken in the rest of this report, the analysis here is based on the *combined* 2022-2023 data from the U.S. and Japan. Furthermore, the youngest age group has now expanded to include people aged 15 to 29. Both of these changes were made to boost the sample size of the youngest age group to allow for a more robust comparison of food perceptions across these two countries.

In the U.S. and Japan, young people aged 15 to 29 are about as likely to be completely satisfied with their eating experiences, with 56% of young Americans and 58% of young Japanese expressing such sentiments in 2022-2023.

The level of food satisfaction among the middle-aged cohort (30 to 49) remains relatively stable in both countries at 3 percentage points higher than the younger cohort in the U.S. and 2 percentage points below the younger cohort in Japan.

Food satisfaction rates skyrocket among Americans aged 50 and older – with 78% of individuals in that age cohort considered as completely satisfied with the food they recently ate. Older adults in Japan, by contrast, do not show such a substantial uptick: At 63%, the percentage of Japanese adults aged 50 and older is only 5 points higher than the youngest cohort. In the U.S., the food satisfaction age gap is 22 points. As noted earlier, other research has found that life satisfaction is improving among older adults in the U.S. (as well as other places), and this startling finding – that food satisfaction is about 20 points higher among Americans aged 50 and older than among younger U.S. adults – suggests this trend may apply to how older adults feel about their food.

CHAPTER 3

What Food Satisfaction Brings to the Table: The Relationships Between the Food Wellbeing Index and Measures of Quality of Life

Building on the central finding of the last report – that people who are completely satisfied with their eating experience also tend to have higher wellbeing, all other things being equal – this chapter considers what other quality of life indicators the Food Wellbeing Index may be correlated with, including experiential wellbeing, feelings of social connectedness and feeling attached to one’s community.

Before this, the report will first briefly check in on how the Food Wellbeing Index changed in 2023, both at the overall level and across the surveyed countries.

Section 3.1 Despite Dip in Enjoyment and Perceived Healthiness, Food Wellbeing Index Is Relatively Stable in 2023

Despite the downward drift in the percentage of people worldwide who said the food they recently ate was enjoyable or mostly healthy in 2023, the Food Wellbeing Index remained relatively stable. Globally, just over half (52%) were completely satisfied with the food they recently ate – meaning they enjoyed their food, thought it was mostly healthy and selected from a variety of options. This represents a modest 3-point decline from 2022, when 55% were completely satisfied.¹⁶ By contrast, the rate of food enjoyment fell 6 points year over year, while perceived healthiness dropped by 7 points.

FIGURE 16
Food Wellbeing Index, Global Results, 2022-23

% Completely satisfied

● 2022 ● 2023

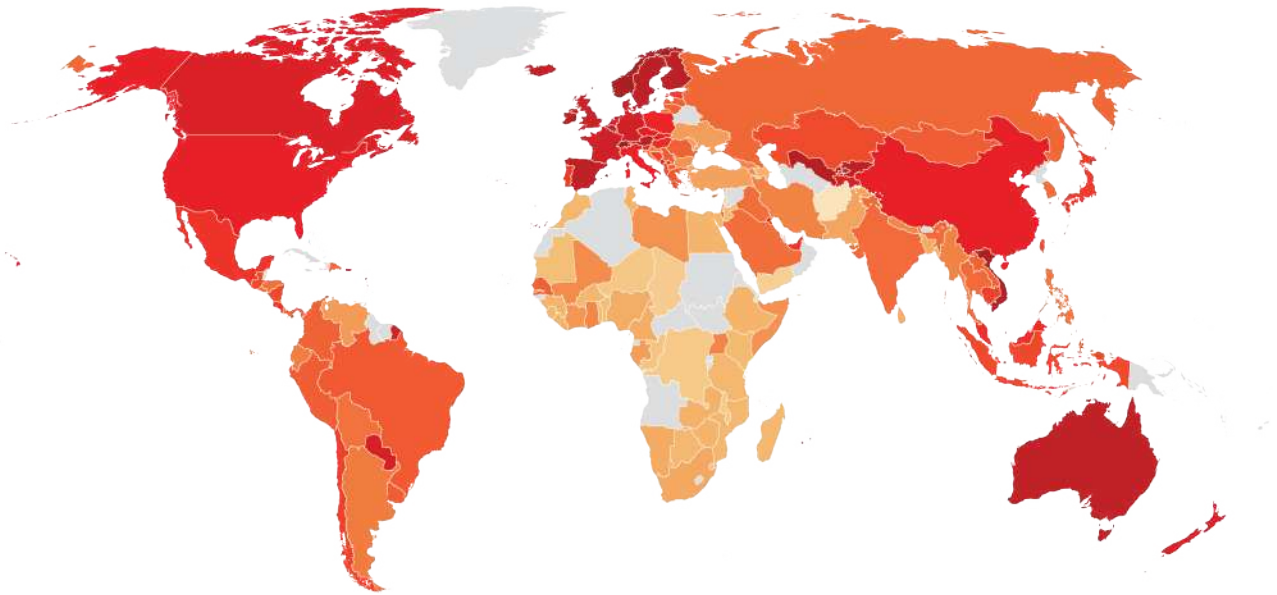


¹⁶ If China is not included in the calculation, the share who are completely satisfied on the Food Wellbeing Index declines to 49% in 2023.

In 2023, Switzerland and Norway vied for the top ranking among all the countries and territories surveyed, with slightly more than eight in 10 expressing complete satisfaction with the food they ate in 2023. As was the case the year before, Afghanistan was the least content of all countries, with only 9% considered completely satisfied with what they recently ate.

FIGURE 17
Food Wellbeing Index in 2023, by Country

% Completely satisfied



Section 3.2 Food Wellbeing Index Linked With Higher Life Evaluations of the Present and More Positive Experiences

Across all regions, people who experienced complete satisfaction with their eating rated their current lives consistently higher than those who were not completely satisfied with their eating experiences in 2023.

Globally, people who are completely satisfied with their eating experiences collectively rated their lives at a 6.2 out of 10, or 1.3 points higher than those who are not completely satisfied. This “happiness advantage” – the tendency to rate their lives higher – enjoyed by people who are completely satisfied on the Food Wellbeing Index, holds across all global regions, ranging from as high as a 1.5-point differential in Northern Africa to 0.7-point margins in Eastern Asia and Northern, Southern and Western Europe.

Quality of Life Measures Used in This Section

The Gallup World Poll measures two important forms of individual wellbeing: **evaluative** and **experienced**. Evaluative wellbeing is concerned with how people feel about the state of their life overall and is represented by the Life Evaluation Ratings question described below. Experiential wellbeing focuses on the type of interactions and feelings a person typically has in a day. This is represented by the Positive Experience Index described below.

Life Evaluation Ratings: Respondents are asked to rate their present life on a 0 to 10 scale, where 0 indicates the worst possible life and 10 the best possible life.

Positive Experience Index: The Positive Experience Index summarizes how respondents answered five questions asking if they experienced the following positive emotions the day before the survey, including whether they: 1) felt well-rested, 2) were treated with respect all day, 3) smiled or laughed a lot, 4) learned or did something interesting, and 5) experienced enjoyment. Respondents are given a score of 1 for every question they answer affirmatively; all other responses (including “don’t know”) are scored as 0. A respondent’s score is then tallied (ranging from 0 to 5, with 0 indicating they did not answer any question in the affirmative and 5 indicating they answered all questions positively) and then the average is taken. The final score is then multiplied by 100 for ease of interpretation, with 0 indicating a person, country or group experienced no positive emotions of the five tested and 100 indicating the opposite.

FIGURE 18**Life Evaluation Ratings in 2023, by Food Wellbeing Index and Region**

Average life evaluation rating of people who are “completely satisfied” on the Food Wellbeing Index vs. those who are not completely satisfied

Region	Completely satisfied	Not completely satisfied	Difference
Global	6.2	4.9	1.3
Northern Africa	5.2	3.7	1.5
Arab States	6.3	4.9	1.4
Eastern Europe	6.5	5.2	1.3
Southern Asia	5.3	4.0	1.3
Northern America	7.0	5.8	1.2
Central and Western Asia	6.3	5.3	1.0
Latin America and the Caribbean	6.9	6.0	0.9
Sub-Saharan Africa	5.1	4.2	0.9
South-Eastern Asia and the Pacific	6.2	5.4	0.8
Eastern Asia	6.4	5.7	0.7
Northern, Southern and Western Europe	6.8	6.1	0.7

These findings reinforce the main discovery of the last report¹⁷ – though this may not come as a surprise, as evaluation of one’s current life is one of two questions used to assess if an individual is “thriving” (the other question is evaluation of one’s life in five years). The analysis in the last report used an individual’s “thriving” status as a proxy for higher subjective wellbeing and found that people who were considered completely satisfied on the Food Wellbeing Index were 1.62 times more likely than those who were not completely satisfied to have higher subjective wellbeing (i.e., thriving), even after controlling for other important characteristics or attitudes known to influence an individual’s sense of wellbeing.

Moreover, the analysis found that one’s performance on the Food Wellbeing Index was one of the strongest predictors of the other variables included in the regression model.

This analysis was conducted with the 2023 data and, once again, the Food Wellbeing Index reveals itself to have a powerful, statistically significant relationship with the likelihood of having higher subjective wellbeing (as measured by being considered “thriving” in one’s life evaluations).

¹⁷ Ando Foundation/Nissin Food Products. (2023). *Recipes for wellbeing report: The first global study on food enjoyment, healthy eating, choices in types of food and subjective wellbeing*. <https://www.gallup.com/analytics/512390/eating-behavior-wellbeing.aspx>

In 2023, individuals who were considered completely satisfied on their Food Wellbeing Index were 1.71 times more likely to be thriving in their life evaluation than those who did not feel completely satisfied; once again the Food Wellbeing Index is one of the top predictors of “thriving.”¹⁸ Please see Appendix Section A6 for additional information about this analysis.

Finally, the Food Wellbeing Index is also associated with higher experiential wellbeing. The Gallup World Poll, in line with the pioneering research of Nobel laureate Daniel Kahneman, measures wellbeing from two broad vantage points: evaluative and experienced. How people rate their current lives is an example of the former type of wellbeing, while the Positive Experience Index – which measures how many positive emotions people experienced in a typical day – is an example of the latter.

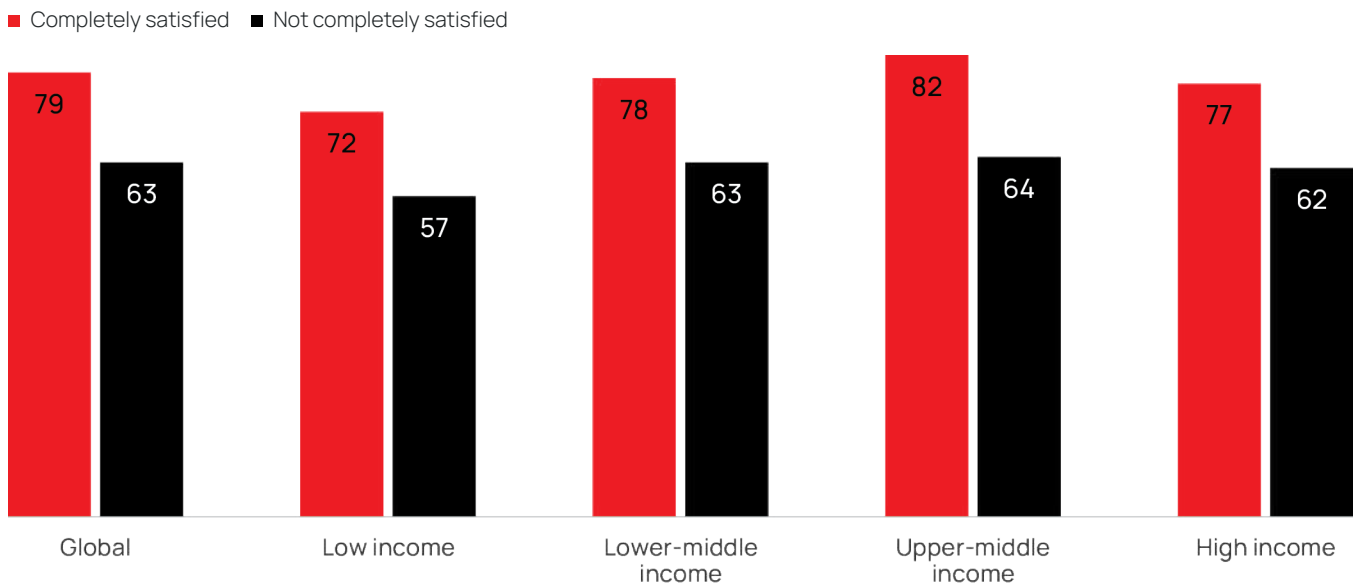
Evidence from this most recent survey suggests the Food Wellbeing Index has as strong a relationship with experiential wellbeing as it does with evaluative wellbeing. Globally, people who were completely satisfied with the food they recently ate scored an average of 79 on the Positive Experience Index, compared to 63 among those who did not fit the description.

Furthermore, this pattern persists even when taking into account each of the four World Bank country income level classifications. Even after taking into account gender and age group, the gulf between those who are completely satisfied on the Food Wellbeing Index and those who are not did not diminish.

FIGURE 19

Positive Experience Index in 2023, by Food Wellbeing Index and Country Income Classification

Average Positive Experience Index score for those who are completely satisfied vs. those who are not completely satisfied



¹⁸ The coefficient (odds ratio) associated with being satisfied with the amount of freedom a person has in their life is technically higher at 1.76. However, it should be noted that the confidence intervals for both estimates – those associated with the Food Wellbeing Index and being satisfied with the amount of freedom you have in your life – overlap.

Section 3.3 Food: The Secret Sauce for Socializing?

Another important quality-of-life dimension that appears to be positively related to feeling fully satisfied with one's food is social connectedness — a concept measured by the Gallup World Poll Social Life Index (see box below).

In many ways, food plays a prominent role in social life.¹⁹

In essentially all cultures, eating with other people is an important way to forge new relationships or deepen existing ones.²⁰ While past research has demonstrated this connection between food and social life, less is known about the relationship between feelings of satisfaction with the food one regularly eats and one's social support structure.

Quality of Life Measures Used in This Section

This section examines people's sense of **social connectedness** and **attachment to their communities**. Both measures are factors that contribute to an individual's overall wellbeing. The Gallup World Poll indices discussed here include:

Social Life Index: The Social Life Index is calculated using the following two questions: "If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?" and "In the city or area where you live, are you satisfied or dissatisfied with the opportunities to meet people and make friends?" Positive responses are given a value of 1; all other responses are assigned a value of 0. An individual's average score is calculated from these two questions and then divided by two. The resulting number is then multiplied by 100.

Community Attachment Index: The Community Attachment Index is calculated based on responses to three questions: Are respondents satisfied with the city or area they live in, are they planning to move in the next 12 months, and would they recommend their city to a friend or family member? Responses signifying that respondents are content with their community (being satisfied, not planning to move and being ready to recommend their city) are given a value of 1 and all other responses are given a 0. Respondents must answer at least two of the three questions to receive a valid score. The index is calculated by summing individuals' scores to the three questions and then taking an average. The number is then multiplied by 100, with a higher score indicative of feeling more attached to one's community.

¹⁹ Germov, J. (Ed.), & Williams, L. (2016). *A sociology of food and nutrition: The social appetite*. (4th ed.) Oxford University Press, USA.

²⁰ Fischler, C. (2011). Commensality, society and culture. *Social Science Information*, 50(3–4), 528–548. <https://doi.org/10.1177/0539018411413963>

THERE MAY BE SUCH A LINK:

In 2023, people who were completely satisfied on the Food Wellbeing Index registered an average score of 85 on the Social Life Index – 15 points higher than those who did not feel completely satisfied.

FIGURE 20
Average Social Life Index in 2023, by Food Wellbeing Index

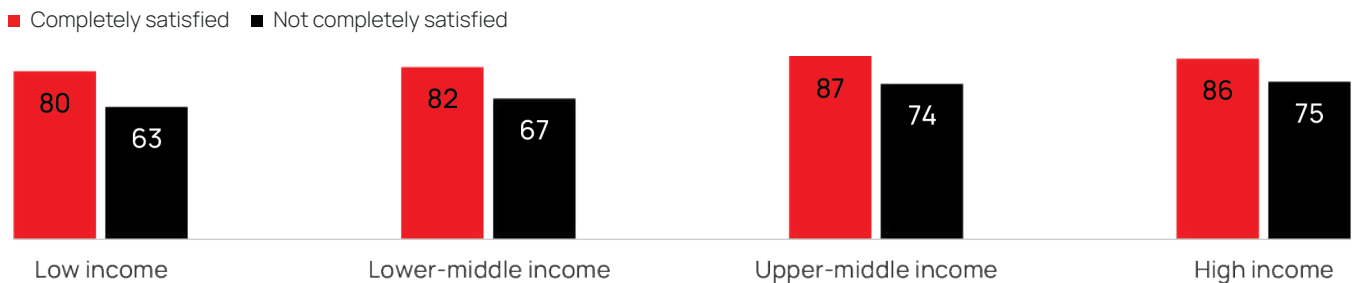


This positive relationship between the two measures persists across the four country income groups.

In all four groups, those who are completely satisfied with their food have a higher average Social Life Index score.

The Social Life Index generally increases with country income grouping, with a gap of 14 points between the low-income group and the high-income group. However, among those who are completely satisfied with their food, this gap is reduced to 6 or 7 points between the low-income group (80%) and upper-middle-income (87%) and high-income (86%) groups.

FIGURE 21
Average Social Life Index in 2023, by Food Wellbeing Index and Country Income Classification



Moreover, the link between food satisfaction and social support holds even when controlling for other key demographic factors like age, perceptions of one’s household income, gender and other personal characteristics.

This analysis, of course, cannot reach any conclusions about causality between the two measures and indeed it is difficult to imagine either outcome – feeling satisfied with one’s diet and socially supported – “causing” the other. It seems more likely that the feelings feed off one another to some extent.

Similar to its relationship with social life, the Food Wellbeing Index also demonstrates a positive relationship with the Gallup World Poll Community Attachment Index, which measures how content people are with the community in which they live (see box on Page 29).

Overall, individuals who are completely satisfied with their food have a higher average Community Attachment Index score than those who do not, at 81 to 69.

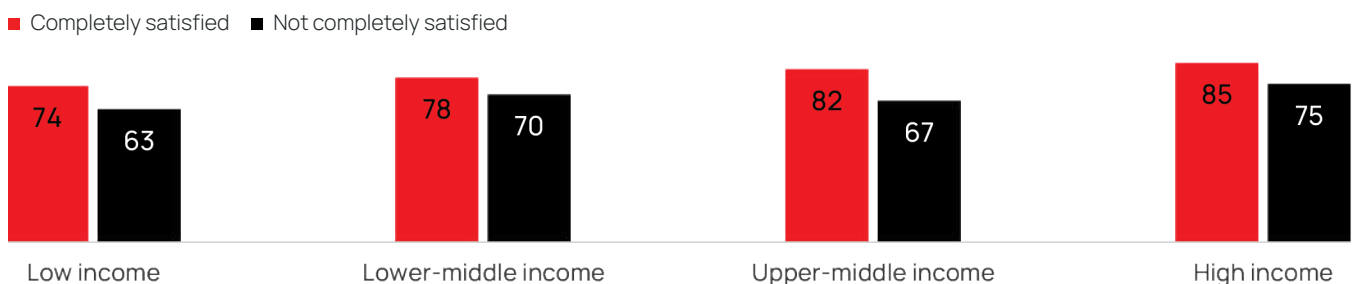
FIGURE 22
Average Community Attachment Index in 2023, by Food Wellbeing Index



This dynamic holds across regions and country income levels. As with the Social Life Index, in all four country income groups, those who are completely satisfied with their eating experiences over the last seven days have a higher average Community Attachment Index score than those who are not completely satisfied.

Like the Social Life Index, country income in and of itself appears to boost the average Community Attachment Index, with a difference of 15 between low-income and high-income groups. While this dynamic is not completely washed away when looking only at people who are completely satisfied on the Food Wellbeing Index, it is mitigated slightly with an 11-point gap separating the highest and lowest scores.

FIGURE 23
Average Community Attachment Index in 2023, by Food Wellbeing Index and Country Income Classification



Section 3.4 Chapter Takeaways

This chapter picked up on the major finding from the last report, namely that people who enjoyed the food they recently ate, believed it was healthy and felt they had a variety of choices in the types of food they consumed (i.e., those who are considered as being “completely satisfied” on the Food Wellbeing Index) tend to have a higher level of subjective wellbeing than those who do not feel this way.

This year’s analysis not only bolstered these initial findings but expanded on them. Feelings of food satisfaction as measured by the Food Wellbeing Index are statistically linked not only with measures of evaluative wellbeing (including evaluations of one’s current life as well as whether an individual is “thriving,” which was the focus of the last report) but experiential wellbeing. If anything, the relationship between the Food Wellbeing Index and the Positive Experience Index appeared to be even stronger than with the other form of wellbeing.

Intuitively, this would seem to make sense, as both indices are focused on an individual’s recent experiences (whether emotive or food-related) and, notably, both metrics include questions that ask about experiencing enjoyment.

On a broader level, there is clear evidence that the Food Wellbeing Index is positively linked with many different quality-of-life measures, including one’s sense of social support and feeling attached to one’s community. In most cases, the Food Wellbeing Index remained a powerful predictor of these indices even after accounting for country or personal income, gender, age and other relevant demographic variables. Clearly, the Food Wellbeing Index is a powerful, socially relevant indicator in its own right and one that will be important to track over time.



CHAPTER 4

Back to Reality: Comparing Food Perceptions and Consumption Patterns

As the Ando Foundation/Nissin Food Products Survey does not actually ask individuals to describe the contents of their diet (or the food they recently ate), it is unclear what relationships the types of food people regularly eat have with their sense of enjoyment, perceptions of choices and, of particular interest here, whether they describe the consumption patterns as “mostly healthy.”

The Global Diet Quality Project — a collaboration of Gallup, Harvard University (Department of Global Health and Population), and the Global Alliance for Improved Nutrition (GAIN), along with many global stakeholders — has fielded the Diet Quality Questionnaire (DQQ) as part of the Gallup World Poll since 2021. The survey measures respondents’ consumption of 29 food groups the day before the survey.

Information collected from the DQQ generates several diet-quality indicators, which capture key aspects of an individual’s diet, including:

- **The Dietary Diversity Score:** Measures whether an individual has consumed an item from 10 specific food groups.²¹ An individual’s score will fall between 0 and 10, with a higher score indicating a more diverse diet.
- **The All-5:** A measure of food group adequacy, this indicator represents the proportion of people consuming all five food groups typically recommended by dietary guidelines throughout the world.
- **NCD-Protect:** Measures the extent a person is meeting the World Health Organization’s dietary recommendations (such as eating a diversity of fruits and vegetables), which can protect against NCDs. The NCD-Protect is measured on a 0 to 9 scale, with a higher score indicating more recommendations have been met.
- **NCD-Risk:** This indicator measures to what degree a person’s diet consists of food groups that put a person at greater risk of developing noncommunicable diseases, such as sweet beverages, salty packaged snacks or fast food. The NCD-Risk is also measured on a 0 to 9 scale, with a higher score indicative of worse diet quality.

In 2022, the Ando Foundation/Nissin Food Products Survey and the DQQ were included in the same survey wave in the United States. This provides a unique opportunity to understand how people’s food perceptions are shaped by their actual consumption.

This chapter will provide the findings of this exciting analysis but will first briefly discuss the United States results of the DQQ in 2022, as well as the Ando Foundation/Nissin Food Products Survey.

²¹ For more information about this or any indicator calculated from the Diet Quality Questionnaire, please consult the following resource: https://drive.google.com/file/d/1epIRm9i5_109-a5Ac1Lqj-IUI3VgVIFx/view.

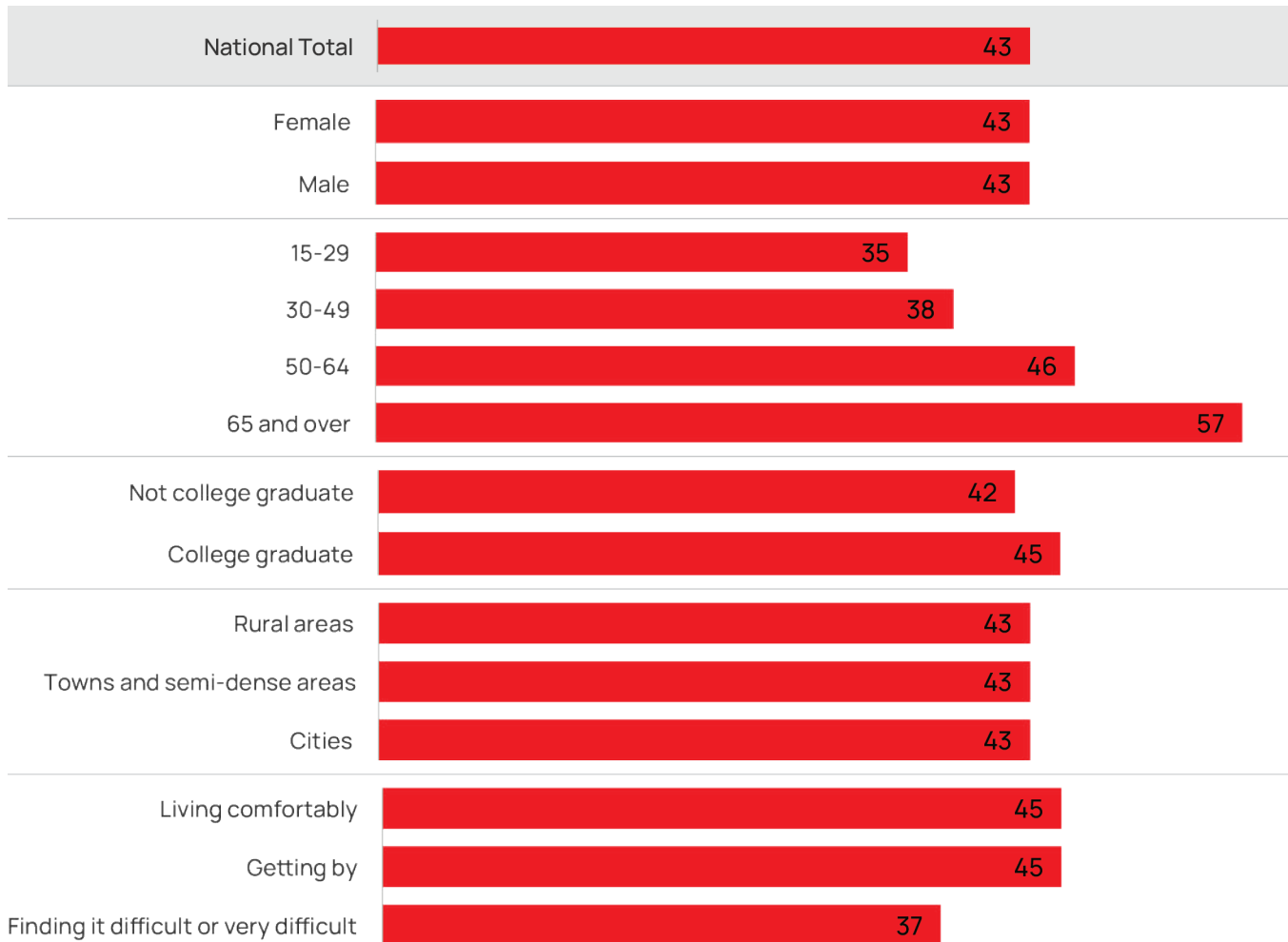
Section 4.1 Diet Quality in the United States, as Measured by the DQQ

In 2022, 43% of Americans consumed diets that contained all five recommended food groups.

Americans aged 65 and older were substantially more likely than their younger counterparts to eat such a varied diet; meanwhile, those U.S. residents who were the least financially secure (those who said they find it difficult or very difficult to get by on present income) were slightly less likely to have eaten items across all five food groups. However, there were no statistically significant differences on this item by gender, educational attainment or urbanicity.

FIGURE 24
Percentage Who Consumed All Five Recommended Food Groups in U.S., Overall and by Demographic Group

% in 2022



Of the five recommended groups captured by the “All 5” measure, people in the United States are the least likely to have consumed at least one pulse, nut or seed, at 64% – though this food group is the least consumed of the five in most countries included in the DQQ study.²² Slightly fewer than eight in 10 Americans (77%) ate at least one fruit yesterday, while 85% consumed at least one vegetable. Slightly over nine in 10 (92%) consumed some form of a starchy staple and 97% ate animal-source foods.

On other important indicators, Americans’ Dietary Diversity Score (DDS) stood at 6.5 out of 10, which is above the target score of above 5. With an average NCD-Protect score of 3.9, most U.S. adults are falling well short of heeding those dietary recommendations which may ward off NCDs (represented by a score of 9). In fact, Americans’ NCD-Protect score is nearly equal to the average NCD-Risk score, which stands at 3.6 (the NCD-Risk metric is also scored on a 0 to 9 scale, with a lower score being a better outcome).

In its 2022 report examining the first round of diet quality data collected by the Gallup World Poll, the Global Diet Quality Project found that the NCD-Protect score ranged between 2.5 and 4.9 across the 41 countries featured in the analysis.²³

Recall that a higher score is indicative of a healthier diet in terms of providing protection against NCDs. While the U.S. score falls toward the higher end of this range, a number of other countries boast higher NCD-Protect scores, including Mexico, Bolivia, Indonesia, China, Vietnam and Türkiye.²⁴

On the other hand, the lower the NCD-Risk score, the better. At 3.6, the United States’ NCD-Risk score is close to the maximum score of 3.9 (Kazakhstan), according to the Global Diet Quality Project report. Sierra Leone had the lowest score on NCD-Risk, at 1.0.

As these figures might suggest, a substantial percentage of Americans enjoyed some form of food or beverage associated with elevating one’s NCD risk – including the 43% of Americans who said they drank a soda or sugar-sweetened beverage. Among Americans under 50, this figure is closer to one in two. Seventeen percent of Americans, meanwhile, ate from a fast food place yesterday, with men significantly more likely than women (20% vs. 14%) to engage in this behavior.



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

23 Please note that the 2022 DQQ report focused on data collected by the 2021 Gallup World Poll, while this section is focused on discussing the 2022 diet quality data for the United States.

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

Section 4.2 Food Perception in the United States in 2022

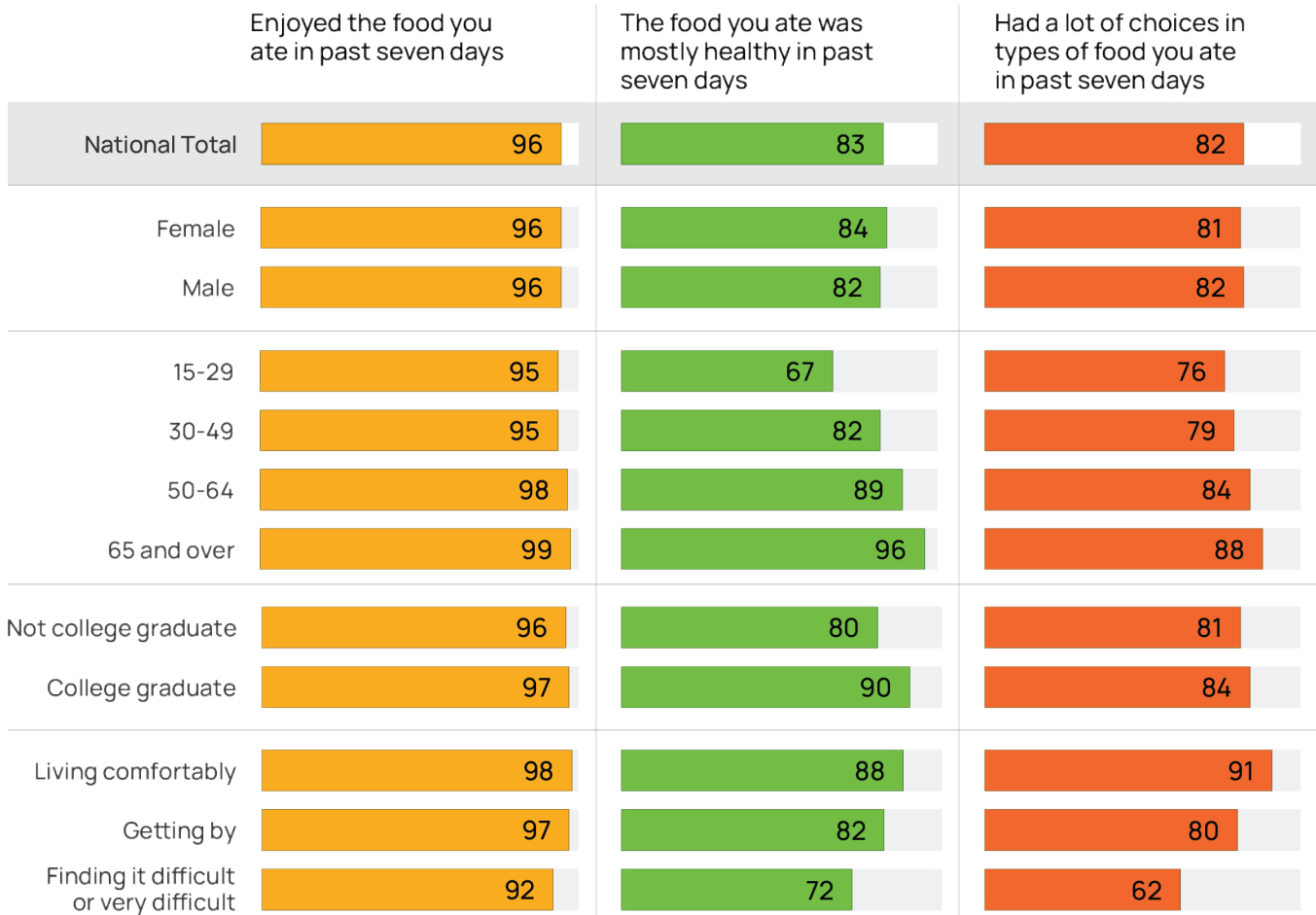
Turning to Americans' food perceptions in 2022, the percentage who said they enjoyed the food they ate in the past seven days was nearly universal, at 96%. This figure was high across virtually all demographics, with the lowest rate across the major groups standing at 92% among those who said they were finding it difficult or very difficult to get by on their present income.

Slightly over eight in 10 (83%) described the food they ate in the past seven days as "mostly healthy," but there was notable variation on this item across key subgroups. In particular, older Americans were more likely to say they ate healthy in the past seven days (as was also discussed in Chapter 2); 96% of those aged 65+ said they ate mostly healthy, compared to 67% of 15- to 29-year-olds. While the figures for both age cohorts far exceed the percentage of those consuming food across all five recommended types daily, it is true that older Americans are more likely to eat food from all recommended groups.



FIGURE 25
Food Enjoyment, Healthy Eating and Food Choices in U.S., Overall and by Demographic Group

% Yes (2022)



Likewise, people in the U.S. who find it difficult or very difficult to get by on their present income are considerably less likely than those who feel more financially secure to describe their diet as healthy, a relationship that also has broad similarities to the results for these groups for the All-5 metric.

Finally, 82% felt they had lots of choices in the types of food they had to eat in the past seven days, with similar patterns at play as perceptions of eating healthy with respect to the demographic groups.

Section 4.3 Americans Who Say They Ate Mostly Healthy Score Better on Several Indicators of Dietary Quality, but a Majority Do Not Eat From All Five Recommended Food Groups

Given that more than eight in 10 U.S. adults (83%) said they ate mostly healthy in 2022, it's tempting to conclude that perceptions of how one eats have little bearing on *what* one eats, setting aside questions about the degree to which Americans (or people from any country or territory) understand or accept the prevailing wisdom as to what constitutes a healthy diet.²⁵

FIGURE 26
Indicators of Diet Quality and Perceptions of Eating Healthy in U.S. in 2022

Performance on selected DQQ indicators by whether person reported eating healthy in past seven days or not

Diet Quality Indicator	Yes, ate healthy in past seven days	Did not say ate healthy	Difference
Dietary Diversity Score (out of 10)	6.6	5.9	0.7*
NCD-Protect Score (0-9)	3.9	2.9	1.0*
NCD-Risk Score (0-9)	3.4	4.6	-1.2*
All-5: % who consumed all five recommended groups	44	37	7

* Indicates a statistically significant difference between those who said they ate healthy and those who did not.

²⁵ A 2002 U.S. Gallup poll found that 24% of Americans said they were "very" or "somewhat" confused about how to eat a healthy diet. Of course, this poll was conducted over two decades ago, so it is unclear to what extent these findings still hold: <https://news.gallup.com/poll/6424/nutrition-food.aspx>.

Evidence suggests that Americans who say they eat healthy do eat healthier on several indicators of diet quality measured by the Diet Quality Questionnaire, including:

- **Dietary Diversity Score:** Those who said they ate healthy boast an average score of 6.6 on this measure, compared to an average of 5.9 for those who did not say they ate healthy in the past week.²⁶ This is a statistically significant difference and indicates people who perceive themselves as eating healthy tend to enjoy a more diverse diet.
- **NCD-Protect Score:** The healthy eaters – or at least those who believe they are healthy eaters – have an average higher score on this metric than those who do not say they eat healthy, meaning the former group is following more of the dietary guidelines believed to help fight NCDs. A full point separates the NCD-Protect scores between these two groups (3.9 vs. 2.9), which is a statistically significant difference.
- **NCD-Risk Score:** In this case, those who say they do not eat healthy have a higher average score (4.6 out of 9) than those who do eat healthy (3.4) – though, unlike the other indicators reviewed here, a higher score is not indicative of a beneficial outcome. In fact, a higher score means an individual is consuming more risky types of food. The NCD-Risk, as the DQQ notes, can be viewed as “a proxy for ultra-processed food intake.”²⁷ Again, the difference between the two groups is statistically significant.
- **All-5:** Recall this is the percentage of people who have consumed food from all five recommended groups. While U.S. adults who said they eat healthy appear to be more likely to eat from all five recommended groups than their counterparts who did not say they eat healthy (44% vs. 37%), the difference between the groups is not statistically significant. Even more notably, a majority of individuals from both groups did not eat from all five recommended groups.

Based on a comparative analysis alone, there is some evidence that Americans who say they eat healthy do generally have a more nutritious and diverse diet than people who say otherwise. At the same time, those who see themselves as eating healthy seem to have plenty of room for improvement based on their performance on these measures of diet quality.

²⁶ This group includes people who explicitly said they did not eat healthy, as well as any “do not know” responses.

²⁷ https://drive.google.com/file/d/1epIRm9i5_109-a5Ac1Lqj-lUI3VgVIFx/view

Section 4.4 Chapter Takeaways

While the Ando Foundation/Nissin Food Products Survey sheds light on perceptions of food enjoyment and health, it doesn't reveal which specific foods people find healthy. This chapter aimed to explore whether those who say their diet is "mostly healthy" actually follow more nutritious and varied diets, as measured by the DQQ indicators.

The findings show that individuals who perceive their diet as healthy generally score better on these indicators than those who don't, with statistically significant differences, except in consuming food from all five recommended groups.

However, many who believe they eat healthy still miss key components of a balanced diet. For example, less than half of Americans (44%) who described themselves as eating mostly healthy actually incorporated all five food groups into their meals.

Overall, the analysis reveals a mixed picture: While those who think they eat healthy often fare better nutritionally, there's room for improvement. These insights, though limited to the U.S., highlight the gap between perception and reality in healthy eating. As both the Ando Foundation/Nissin Food Products and DQQ surveys expand globally, future research can offer a deeper, multicultural understanding of this important issue.



RAISE AWARENESS

IMPORTANCE OF

CONCLUSION

This report represents a continued effort by the Ando Foundation/Nissin Food Products and Gallup to explore the important topic of how people around the world perceive the food they eat and its broader impact on various aspects of life.

This year's findings offer valuable and intriguing insights. In 2023, people were less likely to enjoy the food they ate than they were the year before – enjoyment rates remain high in most countries and in around two dozen countries are nearly universal. Perceptions of eating healthy also declined, often by a larger amount at the country level.

In both instances, young people's rising dissatisfaction with the food they eat was a major reason for this development. Interestingly, this growing sense of food dissatisfaction in some countries echoes a broader trend of unhappiness among young people, at least in certain regions.

This report found that food perceptions – as captured by the Food Wellbeing Index – have a positive and statistically significant relationship with both evaluative (or subjective) and experienced wellbeing, as well as other indicators of life satisfaction, such as feeling connected socially and to one's community.

These findings are significant as they not only provide an understanding of personal experiences but also have the potential to inform insights into the actual quality of diets. The hope is that these results will **raise awareness about the importance of food experiences in wellbeing and inspire researchers and policymakers to delve deeper into this issue**, with the aim of improving public understanding and health outcomes.

FOOD EXPERIENCES IN WELLBEING AND INSPIRE

APPENDIX

A1 Survey Method

A1.1 Survey Instruments

This survey was included as a module within the Gallup World Poll in 2022 and 2023. Since 2005, the World Poll has regularly surveyed people in more than 160 countries using mixed methods of telephone and face-to-face interviewing. In a typical year, the poll results represent more than 95% of the world's population aged 15 and older, using randomly selected, nationally representative samples.

A1.2 Translation and Quality Control

The questionnaire was translated into the major conversational languages of each country and area (autonomous or semi-autonomous regions or territories that are not recognized as sovereign states). The survey was originally developed in English. From this starting point, Gallup translators produced several master-language questionnaires in French, Spanish, Portuguese, Russian and Arabic (using one of two translation methods, as deemed appropriate by the Gallup World Poll Regional Directors). Then, local language translations were performed from the master-language version. For example, the Russian master-language questionnaire was created first (translation from English to Russian), then translated from Russian into other languages such as Ukrainian, Kyrgyz and Uzbek.

A1.3 Sampling and Data Collection

In 2023, most Gallup World Poll samples were probability-based – meaning respondents were selected randomly – and nationally representative of the aged 15 and older population. As all eligible landline exchanges and valid mobile service providers were included, the coverage area is an entire country, including rural areas. The sampling frame represents adults aged 15 and older with access to a phone (either landline or mobile). Gallup used random-digit dialing (RDD) or a nationally representative list of phone numbers.

In some countries, Gallup collected data using computer-assisted web interviewing (CAWI). In 26 countries, only a fraction (around 20%) of all interviews were completed online. This hybrid approach was employed in countries where Gallup traditionally interviews by telephone and where internet access is very high.

China was the only country where CAWI was the sole mode of data collection.

A1.4 Response Rate and Data Weighting

As is the case with Gallup World Poll surveys more generally, response rates for this survey varied considerably across countries. In general, response rates are lower in countries where interviewing is conducted by telephone than in-person countries, though in many countries and territories where telephone interviewing is used, response rates are comparable to those of other polling firms. The Gallup World Poll does not publish individual country response rates.

Data weighting is also used to minimize bias in survey estimates and is intended for use in generating nationally representative estimates within a country. The weighting procedure was formulated based on the sample design and performed in multiple stages.

A2 Survey Questionnaire

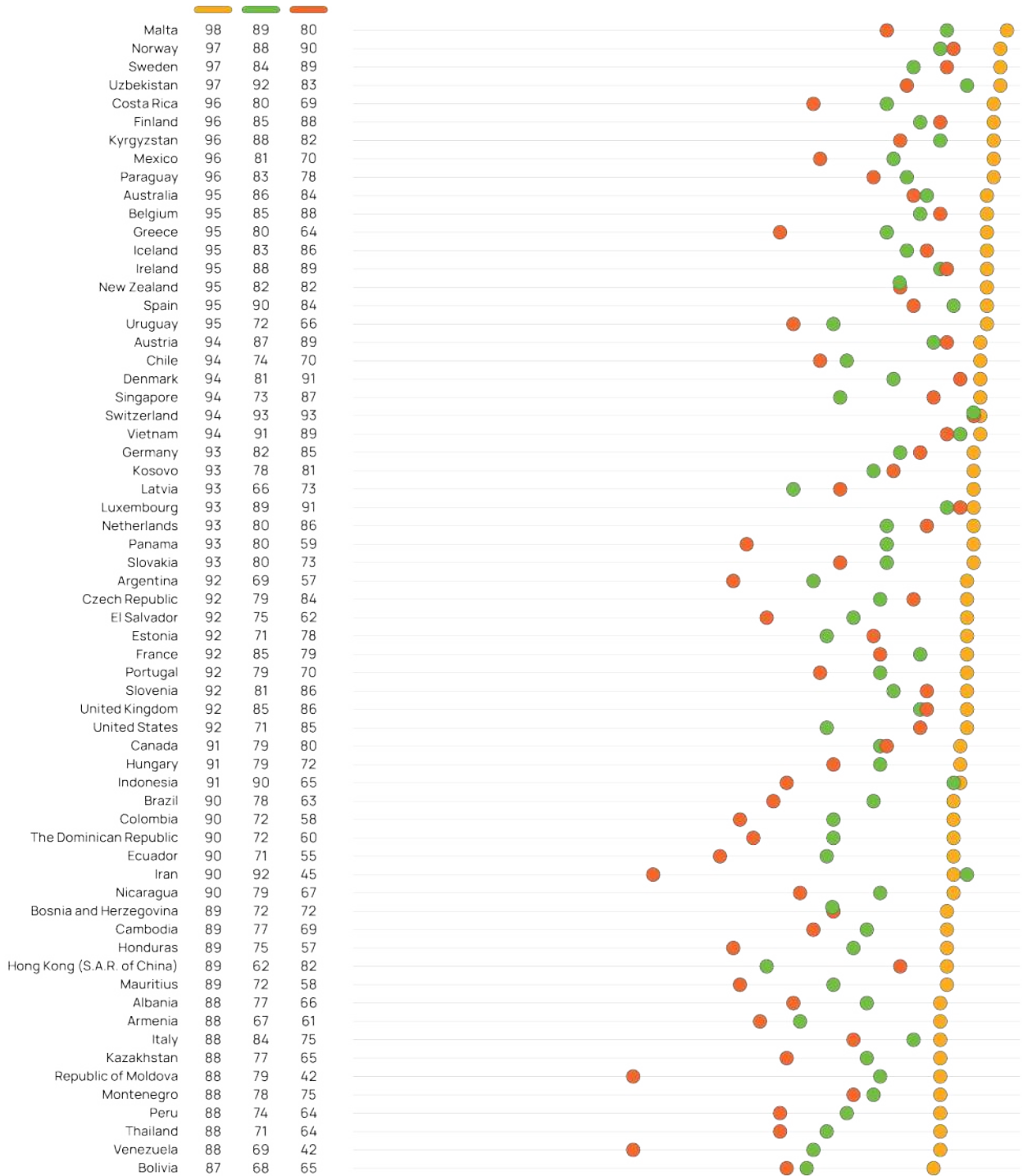
TABLE 2
Survey Questionnaire

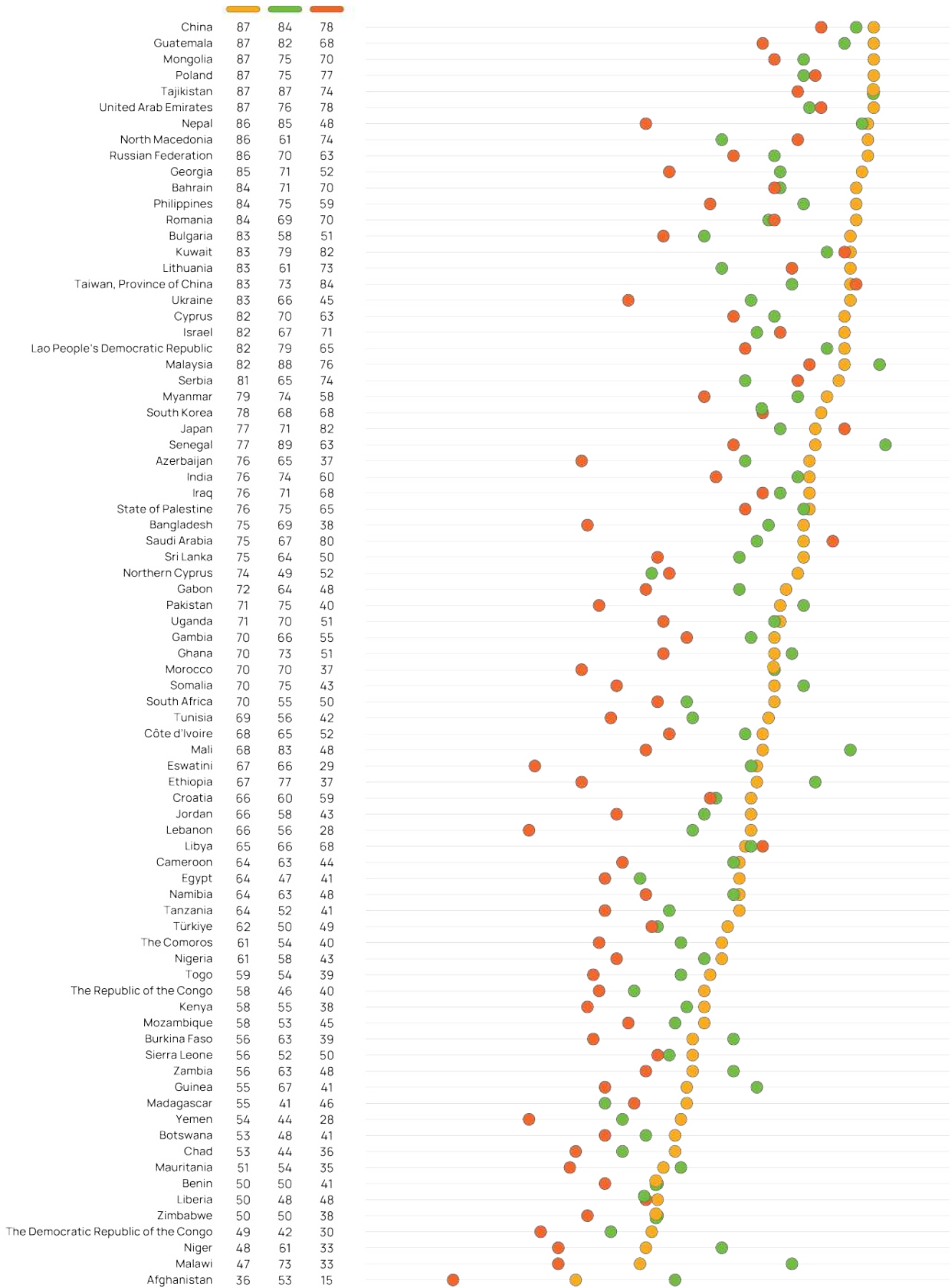
Thinking about the past 7 days ...	Response Options
Would you say you mostly enjoyed the food you ate, or not?	Yes No (DK) (Refused)
Do you think the food you ate was mostly healthy, or not?	Yes No (DK) (Refused)
Did you feel you had a lot of choices in the types of food you ate each day, or not?	Yes No (DK) (Refused)

A3 Country-Level Results for All Three Survey Questions, Ranked by Food Enjoyment (2023)

FIGURE 27
Country-Level Results, Ranked by Food Enjoyment

● % Enjoyed the food you ate in past seven days ● % The food you ate was mostly healthy in past seven days
 ● % Had a lot of choices in types of food you ate in past seven days



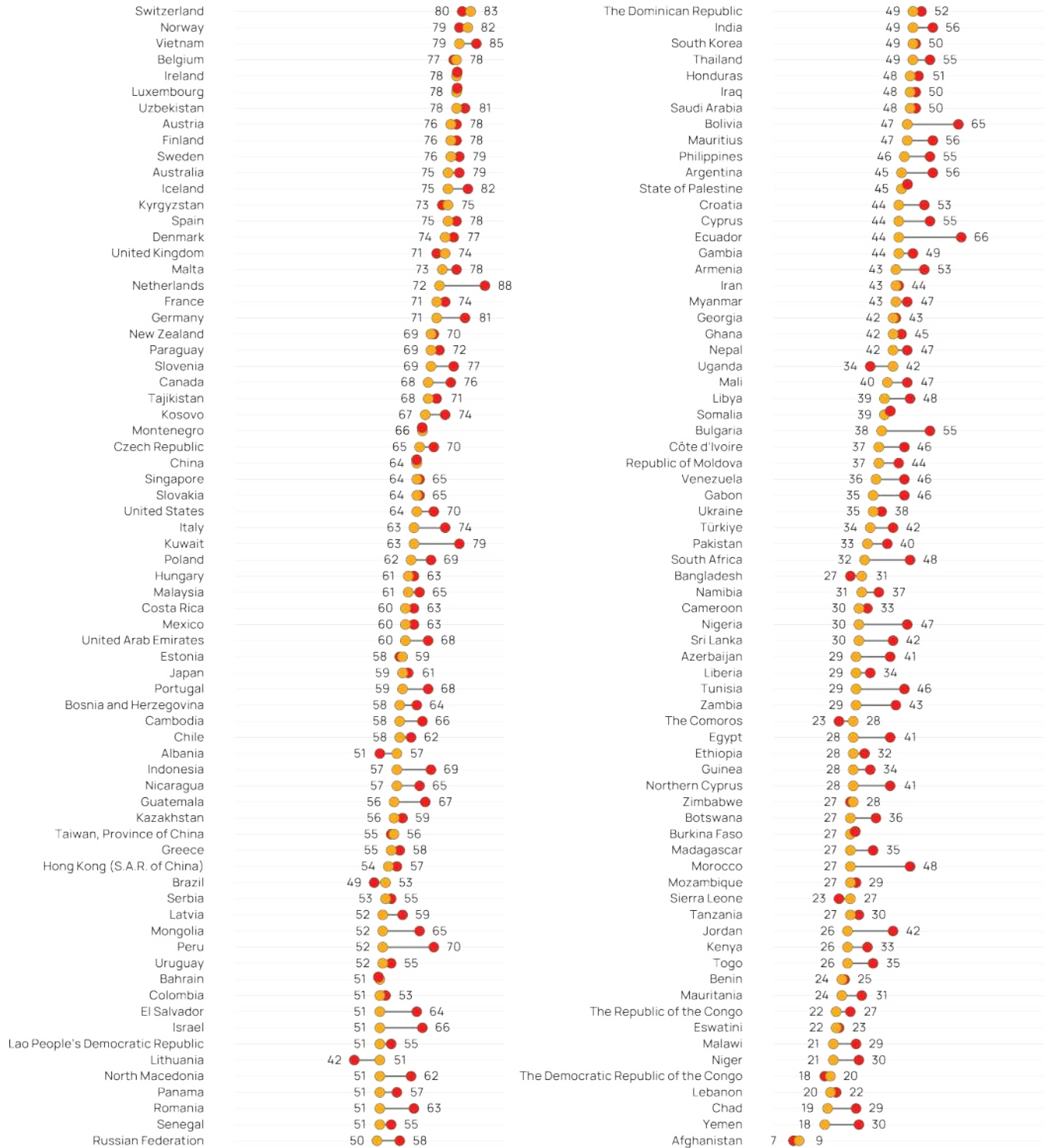


A4 Food Wellbeing Index: Country-Level Distribution (2022-23)

FIGURE 28

Food Wellbeing Index, by Country

● 2022 ● 2023



A5 Regional Groupings

TABLE 3
Regional Groupings

Region	Country
Arab States	Bahrain, Iraq, Jordan, Kuwait, Lebanon, State of Palestine, Saudi Arabia, United Arab Emirates and Yemen
Central and Western Asia	Armenia, Azerbaijan, Cyprus, Georgia, Israel, Kazakhstan, Northern Cyprus, Tajikistan, Türkiye and Uzbekistan
Eastern Asia	China, Hong Kong (S.A.R. of China), Japan, Mongolia, South Korea and Taiwan, Province of China
Eastern Europe	Bulgaria, Czech Republic, Hungary, Republic of Moldova, Poland, Romania, Russian Federation, Slovakia and Ukraine
Latin America and the Caribbean	Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, The Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela
Northern Africa	Egypt, Libya, Morocco and Tunisia
Northern America	Canada and United States
Northern, Southern and Western Europe	United Kingdom, France, Germany, Netherlands, Belgium, Spain, Italy, Sweden, Greece, Denmark, Albania, Austria, Bosnia and Herzegovina, Croatia, Estonia, Finland, Iceland, Ireland, Latvia, Lithuania, Luxembourg, North Macedonia, Malta, Montenegro, Norway, Portugal, Serbia, Slovenia, Switzerland and Kosovo
South-Eastern Asia and the Pacific	Indonesia, Singapore, Australia, Philippines, Vietnam, Thailand, Cambodia, Lao People's Democratic Republic, Myanmar, New Zealand and Malaysia
Southern Asia	Pakistan, Bangladesh, Iran, India, Sri Lanka, Afghanistan and Nepal
Sub-Saharan Africa	Nigeria, Kenya, Tanzania, Ghana, Uganda, Benin, Madagascar, Malawi, South Africa, Botswana, Ethiopia, Mali, Mauritania, Mozambique, Niger, Senegal, Zambia, Cameroon, Sierra Leone, Zimbabwe, Chad, The Comoros, The Democratic Republic of the Congo, The Republic of the Congo, Gabon, Guinea, Côte d'Ivoire, Lesotho, Liberia, Mauritius, Namibia, Eswatini, Gambia and Togo

A6 Supplementary Information About Multivariate Analysis of Ando Foundation/Nissin Food Products Survey Items and Subjective Wellbeing

FIGURE 29
Thriving Regression Analysis (2023): Selected Output

Variable	Description/ Question wording	Variable category	Odds ratio (Transformed regression coefficient)	P-value	Interpretation
Food Wellbeing Index	A composite measure of whether people mostly enjoyed the food they ate, thought it was mostly healthy and felt that they had a variety of choices in the types of food they ate	Completely satisfied	1.71	0.000	People who are “completely satisfied” (said “yes” to all three questions) are 1.71 times MORE LIKELY than those who are not completely satisfied to be thriving.
WP134	In (this country) are you satisfied or dissatisfied with your freedom to choose what you do with your life?	Satisfied	1.76	0.000	People who are “satisfied” are 1.76 times MORE LIKELY than those who did not say they were satisfied to be thriving.
WP108	Have you done any of the following in the past month? Donated money to a charity?	Yes	1.18	0.000	People who said “yes” are 1.18 times MORE LIKELY than those who did not say “yes” to be thriving.
WP65	Did you learn or do something interesting yesterday?	Yes	1.41	0.000	People who said “yes” are 1.41 times MORE LIKELY than those who did not say “yes” to be thriving.
WP1219	Gender	Female	1.19	0.000	Women are 1.19 times MORE LIKELY than men to be thriving.
WP1220	Age of respondent	Single year estimate	0.98	0.000	N/A (Odds ratio near 1)

Variable	Description/ Question wording	Variable category	Odds ratio (Transformed regression coefficient)	P-value	Interpretation
Income_5	Income quintiles	Second 20%	1.09	0.004	Reference category is lowest 20%.
		Middle 20%	1.26	0.000	Reference category is lowest 20%.
		Fourth 20%	1.44	0.000	Reference category is lowest 20%.
		Richest 20%	1.80	0.000	Reference category is lowest 20%.
WP3117	Highest level of educational attainment	Completed secondary	1.11	0.002	Reference category is "completed primary."
		Completed tertiary	1.47	0.000	Reference category is "completed primary."
WP1223	Marital status	Married/in domestic partnership	1.13	0.000	People who are married or in a domestic partnership are 1.13 times MORE LIKELY than those who did not say they were married/in a domestic partnership to be thriving.

Additionally, the regression controlled for a respondent’s region and country of residence, though this output is omitted from this table. Additional control variables included in the model, but which were not found to be statistically significant, include urbanicity and employment status (employed full time for an employer or not).

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