

# Wellbeing Through Cooking Global Insights Into Cooking Enjoyment and Eating Together



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# **Executive Summary**

The Ajinomoto Group, a leading global food company committed to helping people "Eat Well, Live Well," sought to understand the role two simple but important activities — cooking and regularly dining with family or friends (or "communal eating") — play in people's lives. Past research has found that cooking and communal eating are associated with a range of social and emotional benefits. However, these findings have yet to be tested across cultures or in a larger, regionally diverse group of countries.<sup>1</sup>

# What This Report Covers

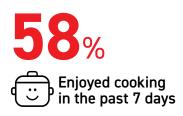
This report seeks to address this research gap, expand the current state of knowledge of how cooking and communal eating factor into people's lives worldwide, and examine whether these activities have any relationship with one's overall sense of wellbeing. The analysis draws on a set of new survey questions designed by the Ajinomoto Group and Gallup asking people if they enjoy cooking and how often they eat lunch or dinner with someone they know. The questions were fielded in over 140 countries as part of the 2022 Gallup World Poll, which annually asks people around the world about a wide range of topics, including perceptions of their current and future lives (a measure of wellbeing).

A key research objective of this report was to determine if cooking enjoyment contributes (in a statistical sense) to whether an individual has a high level of wellbeing, defined as rating one's current and future life highly. It was also important to understand if any such relationship remains intact when controlling for individual characteristics or attitudes that may, in turn, be correlated with wellbeing. Similarly, this report sought to explore what types of quality-of-life-related outcomes are associated with eating with friends or family on a frequent basis, including feelings of social connectedness, perceptions of physical health and experiencing a wide range of positive emotions (all of which are measured on the Gallup World Poll). This analysis also examines people who are the opposite of frequent communal diners — those who habitually eat alone. If frequently dining with others is a boon for one's social and emotional health, then a reasonable hypothesis — and one supported by past research, though within a limited number of countries — would be that dining solo can have an adverse effect on these feelings.

Beyond addressing these high-level questions, this report also dives into the results of the Ajinomoto Group survey module, providing the first global measurement of how many people enjoy cooking as well as where (region or country) and among whom (demographic groups) enjoyment of cooking is either more or less common.

<sup>1</sup> Farmer, N., & Cotter, E. W. (2021, April 12). Well-being and cooking behavior: Using the positive emotion, engagement, relationships, meaning, and accomplishment (PERMA) model as a theoretical framework. *Frontiers in Psychology*, *12*, 560578. https://doi.org/10.3389/fpsyg.2021.560578

# What This Report Finds



Did not enjoy cooking in the past 7 days



Globally, most people (58%) found cooking enjoyable, while 17% said they did not. Twenty-four percent said they did not cook at all in the past seven days — a group predominantly consisting of men. In fact, just as many men worldwide said they enjoyed cooking as said they did not cook in the past seven days (40%).



Though cooking is broadly popular, enjoyment of the activity may be tied to income both at the country and individual level, with more prosperous countries and individuals more likely to say they enjoyed cooking.



Digging deeper into this relationship, there appears to be a meaningful connection between cooking enjoyment and subjective wellbeing, even after considering other aspects of an individual's background and living circumstances. A multivariate analysis finds that people who enjoyed cooking are 1.2 times more likely to be thriving than those who did not enjoy cooking, all else being equal.



THRIVING among those who enjoyed cooking in the past 7 days

31% 21%

T H R I V I N G among those who did not enjoy cooking in the past 7 days

Cooking enjoyment appears to be related to higher subjective wellbeing (or "thriving" in one's life evaluation); 31% of those who said they enjoyed cooking were considered to be thriving, compared to 21% of those who did not enjoy cooking.



In line with past research, the Ajinomoto Group survey found a positive relationship between subjective wellbeing and sharing a meal with someone you know on a frequent basis.



By contrast, in some circumstances, habitually dining alone was associated with feeling less socially connected, poorer perceived physical health and lower life ratings.

# **Chapter 1: Introduction**

#### Section 1.1

# **Cooking Enjoyment**

#### Cooking is an activity that has a wide range of benefits beyond its core function of producing safe and edible food.

From a policy perspective, many governmental organizations around the world — including in developed and developing countries — have championed home cooking as essential to combating obesity and poor nutrition, outcomes often associated with eating away from home frequently.<sup>2</sup> Cooking can also help improve one's economic health, as many find that preparing meals at home is less expensive than dining out.<sup>3</sup>

This is just a taste, so to speak, of the abundant advantages associated with cooking. Beyond satisfying one's taste buds and providing nutrition, cooking has the power to strengthen social, familial, and even romantic bonds and is a mechanism for people to express or connect with their heritage or identity.<sup>4</sup> Moreover, home meal preparation can be emotionally rewarding, as it encourages domestic chefs to think creatively and hone their skills and provides a tangible sense of accomplishment. Such emotional and cognitive benefits have led researchers to assert that cooking is not merely a health-related behavior but one that represents "human flourishing."<sup>5</sup>

However, even as evidence for the benefits of cooking continues to accumulate, the extent to which these messages resonate with the public is unclear. For all its advantages, cooking can require a certain skill level, which may discourage would-be cooks or prevent others from regularly engaging in the practice. Furthermore, cooking takes time, which past research has shown is an insurmountable barrier for many people.<sup>6</sup>

These concerns, as well as other challenges like affordability, are likely key reasons why past research has found that many people do not like and even avoid cooking.<sup>7</sup> Any effort to promote home cooking must address these issues and, fundamentally, whether people enjoy the activity. Crucially, most research on cooking enjoyment — and cooking attitudes more generally — has been conducted in a narrow set of countries, including the United States and many Western European countries. Solving this data inequality is a key research objective of the Ajinomoto Group. Therefore, the Ajinomoto Group partnered with Gallup to ask a simple but important question on the 2022 Gallup World Poll:

"Thinking about the past 7 days, in general, did you enjoy cooking? If you didn't cook in the past 7 days, please just say so."

In addition to shining a light on factors and characteristics associated with cooking enjoyment (or a lack thereof), the analysis will focus on the potential outcomes related to how one views the value of cooking, particularly for individual wellbeing and other quality-of-life measures.

<sup>2</sup> Mills, S., White, M., Brown, H., Wrieden, W., Kwasnicka, D., Halligan, J., Robalino, S., & Adams, J. (2017). Health and social determinants and outcomes of home cooking: A systematic review of observational studies. https://doi.org/10.17863/CAM.8497

<sup>3</sup> Minkow, S., Gray, V., Reiboldt, W., & Gonitzke, D. (2017). Cooking attitudes, behaviors, and self-efficacy in relation to fruit and vegetable intake among young adults. *Journal of the Academy of Nutrition and Dietetics*, *117*(9), A21. https://doi.org/10.1016/j.jand.2017.06.232

<sup>4</sup> Farmer, N., Touchton-Leonard, K., & Ross, A. (2018). Psychosocial benefits of cooking interventions: A systematic review. *Health Education & Behavior, 45*(2), 167-180. https://doi.org/10.1177/1090198117736352

<sup>5</sup> Farmer, N., & Cotter, E. W. (2021). Well-being and cooking behavior: Using the positive emotion, engagement, relationships, meaning, and accomplishment (PERMA) model as a theoretical framework. *Frontiers in Psychology, 12,* 560578. https://doi.org/10.3389/fpsyg.2021.560578

<sup>6</sup> Adams, J., Goffe, L., Adamson, A. J., Halligan, J., O'Brien, N., Purves, R., Stead, M., Stocken, D., & White, M. (2015). Prevalence and socio-demographic correlates of cooking skills in UK adults: Cross-sectional analysis of data from the UK National Diet and Nutrition Survey. International Journal of Behavioral Nutrition and Physical Activity, 12(1), 99. https://doi.org/10.1186/s12966-015-0261-x

<sup>7</sup> Minkow, S., Gray, V., Reiboldt, W., & Gonitzke, D. (2017). Cooking attitudes, behaviors, and self-efficacy in relation to fruit and vegetable intake among young adults. *Journal of the Academy of Nutrition and Dietetics*, 117(9), A21. https://doi.org/10.1016/j.jand.2017.06.232

#### Section 1.2

# Eating With Others and the Consequences of Eating Alone

Another topic of concern covered by the Ajinomoto Group module on the Gallup World Poll addressed how frequently individuals share a meal with another person. Sharing meals with others has the potential to improve people's health as well as confer other critical social and emotional benefits.

Yet, solo dining — or regularly eating alone — may be on the rise in many countries, especially in affluent, aging nations.<sup>8</sup> One reason for this trend is the increasing number of people living alone. A 2021 analysis of living patterns in 75 countries across the world found that the prevalence of single-person households was on the rise in 53 of the countries studied and, in 17 countries, the percentage of single-person households in 2019 was more than one-quarter, including countries in Europe, North America, South Korea and Japan.<sup>9</sup> Additionally, the U.S. Census Bureau found that 27.6% of Americans lived in single-person households in 2020, a substantial increase from 7.7% in 1940.<sup>10</sup>

There are a number of reasons why people are more likely to live alone now compared to the past. Young people are getting married and having children at an older age than their predecessors did, and higher divorce rates also play a part. On the other end
of the age continuum, people over the age of 65
a growing demographic due to people living longer
are more likely than younger people to live alone.<sup>11</sup>

While existing research has explored the possible repercussions of eating in solitude, a holistic, cross-cultural examination has been conspicuously absent. Therefore, the Ajinomoto Group study aims to discern the potential life benefits of communal meals and understand if frequently dining alone is detrimental to one's wellbeing. To answer this research query, the Ajinomoto Group asked:

**"Thinking about the last 7 days ...?** On how many days did you eat lunch with someone you know? On how many days did you eat dinner

with someone you know?"

This pioneering study surveyed participants from over 140 countries through the Gallup World Poll. Gallup typically surveys 1,000 individuals in each country or area using randomly selected, nationally representative samples and asks a standard set of core questions that has been translated into the major languages of the respective country.

<sup>8</sup> Koponen, S., & Mustonen, P. (2022). Eating alone, or commensality redefined? Solo dining and the aestheticization of eating (out). Journal of Consumer Culture, 22(2), 359-377. https://doi.org/10.1177/1469540520955219

<sup>9</sup> Cohen, P. N. (2021). The rise of one-person households. Socius: Sociological Research for a Dynamic World, 7, 237802312110623. <u>https://doi.org/10.1177/23780231211062315</u>

<sup>10</sup> Anderson, L., Washington, C., Kreider, R. M., & Gryn, T. (2023, June 8). Share of one-person households more than tripled from 1940 to 2020. United States Census Bureau. https://www.census.gov/library/stories/2023/06/more-than-a-quarter-all-households-have-one-person.html

<sup>11</sup> Molina-Mula, J., Gallo-Estrada, J., & González-Trujillo, A. (2020). Self-perceptions and behavior of older people living alone. International Journal of Environmental Research and Public Health, 17(23), 8739. https://doi.org/10.3390/ijerph17238739

To better understand the relationship between food and wellbeing, the Ajinomoto Group and Gallup relied on several Gallup World Poll core questions and indexes, including:

"Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?"

"Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. Just your best guess, on which step do you think you will stand in the future, say about five years from now?"

Gallup calculated a Life Evaluation Index that combines the responses from these two questions and classifies individuals as "thriving," "suffering" or "struggling." Individuals who are thriving rated their current lives as a "7" or higher and their future lives at an "8" or higher. Individuals are classified as suffering if they rated their current AND future lives as a "4" or lower. All other individuals are classified as struggling.

#### Section 1.3

# **Core Concepts**

#### This report focuses on the following:

- the current rate of cooking enjoyment around the world and how these feelings varied across regions, country income classifications and countries or areas
- a deep dive into who enjoys cooking in terms of their demographic profile and other notable attributes or characteristics of interest
  - Given the well-documented differences between men and women in cooking-related matters, special attention will be paid to how these characteristics varied between men and women.
- outcomes associated with feelings of cooking enjoyment, including subjective wellbeing, experiencing positive emotions and other quality-of-life measures included on the Gallup World Poll
- the relationship between eating with someone you know and wellbeing, as well as other propitious outcomes, with a particular focus on individuals who eat alone
- the results of the collaboration between the Ajinomoto Group and Cookpad a recipe-sharing multinational Japanese organization
  - Cookpad has been measuring how often people cook lunch or dinner each week. The analysis examines Cookpad's 2022 data in conjunction with the Ajinomoto Group's cooking enjoyment data.

# Chapter 2: How Much Does the World Enjoy Cooking?



- Overall, nearly six in 10 people worldwide (58%) said they enjoyed cooking in the past seven days, while 17% said they did not enjoy cooking in the past seven days; the remaining 24% indicated they did not cook in the past week or said they were unsure.
- Northern America and Northern, Southern and Western Europe were the two regions where people were most likely to say they enjoyed cooking in the past seven days (74% and 73%, respectively). Cooking enjoyment was lower for lower-income countries and increased with country income group.
- Cooking enjoyment was also tied to an individual's standard of living affordability: People who
  indicated they were satisfied with their standard of living or that they were "living comfortably" on their
  household income said they enjoyed cooking at a higher rate than individuals who were not satisfied.

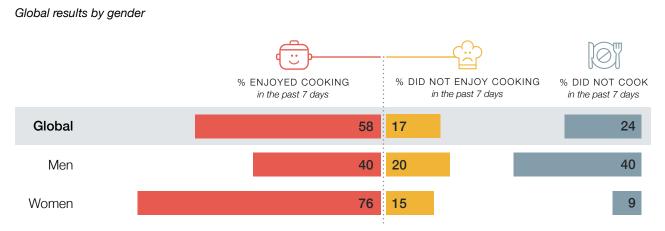
#### Section 2.1

# Where Do People Enjoy Cooking (or Not Enjoy Cooking)?

Nearly six in 10 people worldwide (58%) said they enjoyed cooking in the past seven days. Significantly fewer (17%) said they did not enjoy cooking in the past seven days; the remaining 24% indicated they did not cook in the past week.<sup>12</sup> Notably, the global figures conceal stark gender differences: 76% of women worldwide said they enjoyed cooking, compared with 40% of men. The fact that 40% of men said they did not cook in the past seven days (suggesting this group seldom takes the lead in cooking) may be the primary reason for the cooking enjoyment gender gap, but it still does not fully explain it. Even among only those individuals who had cooked in the past week, men (66%) were less likely than women (84%) to enjoy the culinary process.

#### FIGURE 1

How much did the world enjoy cooking in 2022?



<sup>12</sup> Respondents were also able to select the response options "Do not know" or "Refuse to answer."

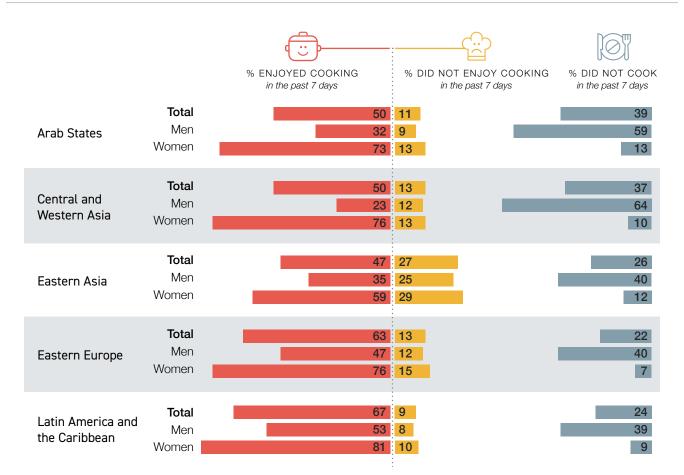
# 2.1.1 Cooking Enjoyment Varied Across Regions, Fueled by Gender Differences

Cooking enjoyment rates varied considerably across world regions. In Northern America and Northern, Southern and Western (NSW) Europe, nearly three in four people said they generally enjoyed cooking in the past seven days, putting these two regions ahead of all other areas.<sup>13</sup> Majorities said they enjoyed cooking in four additional regions: Latin America and the Caribbean (67%), South-Eastern Asia and the Pacific (66%), Eastern Europe (63%) and Sub-Saharan Africa (56%). In the remaining regions, about half of individuals said they generally enjoyed cooking recently.

In every region of the world, a strong majority of women said they enjoyed cooking recently: More than seven in 10 women said this in all but one region, with Eastern Asia being the outlier (59% of women there said they enjoyed cooking).

#### FIGURE 2

#### Enjoyment of cooking in 2022, by region and gender



<sup>13</sup> The regions used in this report correspond with the subregional units used by the International Labour Organization. A listing of those regions can be found at the following link: https://ilostat.ilo.org/resources/concepts-and-definitions/classification-country-groupings/

#### FIGURE 2 CONT.

#### Enjoyment of cooking in 2022, by region and gender

		% ENJOYED COOKING in the past 7 days	% DID NOT ENJOY COOKING in the past 7 days	% DID NOT COOK in the past 7 days
Northern Africa	<b>Total</b> Men Women	19	10 7 12	42 74 9
Northern America	<b>Total</b> Men Women	68	10 9 11	17 23 11
Northern, Southern and Western Europe	<b>Total</b> Men Women	69	13 13 13	14 18 11
South-Eastern Asia and the Pacific	Total Men Women	52	19 25 13	15 23 7
Southern Asia	<b>Total</b> Men Women	49 23 74	24 30 17	27 45 8
Sub-Saharan Africa	<b>Total</b> Men Women	56 34 77	18 21 16	25 45 7

Note: Due to rounding, percentages may not sum to 100%. % "Do not know"/"Refuse to answer" responses are not shown. Source: The Ajinomoto Group/Gallup 2022

Eastern Asia also stands out for the relatively high rate of people who said they did not enjoy cooking recently (27%).<sup>14</sup> Among Eastern Asia countries and territories, lack of enjoyment of cooking was highest in South Korea (37%, the highest country-level percentage worldwide) and Japan (26%).

Regions where levels of cooking enjoyment were relatively low also tended to be places where far fewer men said they enjoyed cooking recently than women. This finding was especially true in Northern Africa, Central and Western Asia and Southern Asia — regions where women were at least 50 percentage points more likely than men to say they found their recent cooking experience pleasurable.

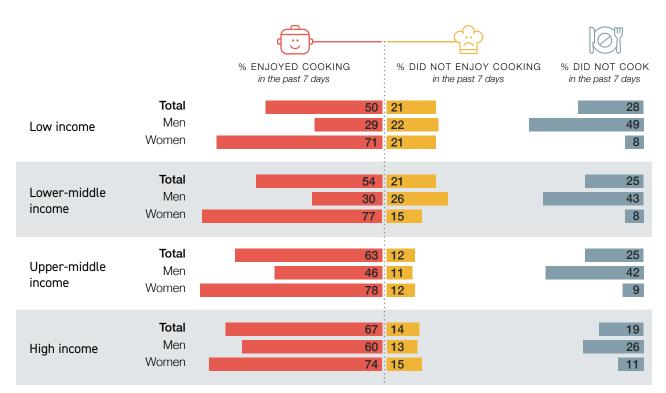
<sup>14</sup> Eastern Asia does not include China, as the Gallup World Poll did not interview in that country in 2022.

### 2.1.2 Country Income-Level Results

Looking at results by World Bank country income classifications, cooking enjoyment rates were lower in low- and lower-middle-income countries (50% and 54%, respectively) and rose to 63% among upper-middle-income countries and 67% in high-income countries.

#### FIGURE 3

#### Cooking enjoyment, by country income group and gender



Note: Due to rounding, percentages may not sum to 100%. % "Do not know"/"Refuse to answer" responses are not shown. Source: The Ajinomoto Group/Gallup 2022

While the percentage of women who enjoyed cooking varied only slightly across country income levels (71% in low-income countries; 77% in lower-middle; 78% in upper-middle; and 74% in high-income countries), responses among men varied widely (ranging from 29% in low-income countries to 60% in high-income countries).

### 2.1.3 Country-Level Results

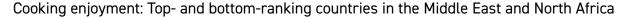
The following country groupings highlight the top five countries in each group with the greatest share of residents who enjoyed cooking in the previous week, as well as the five countries where cooking enthusiasm was lowest.<sup>15</sup>

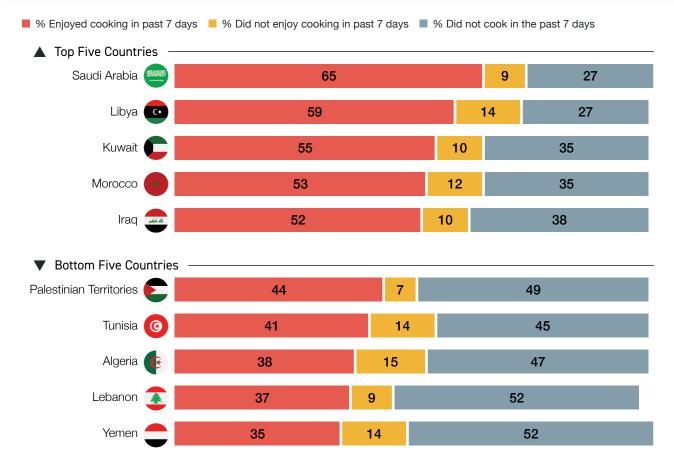
#### MIDDLE EAST AND NORTH AFRICA (MENA)

Saudi Arabia claimed the top spot for cooking enjoyment among MENA countries, with 65% of the country's aged 15 and older population saying they enjoyed cooking in the past seven days. Libya placed second, with 59% of people saying the same. Notably, both countries exhibited the lowest rates of individuals not cooking in the past seven days — indicating that people in those countries cooked often and most enjoyed it. Kuwait, Morocco and Iraq rounded out the top five in terms of cooking enjoyment.

Slightly more than one in three people in Yemen (35%) said they enjoyed cooking — the lowest level of any country in the region. Lebanon, Algeria, Tunisia and the Palestinian Territories also placed in the bottom five in this region.

#### FIGURE 4A





Note: Due to rounding, percentages may not sum to 100%. % "Do not know"/"Refuse to answer" responses are not shown. Source: The Ajinomoto Group/Gallup 2022

15 The global region definitions used elsewhere in this report are not used for this analysis, as several regions have fewer than 10 countries. For the purposes of this section, the regions have been rolled into six larger regions: Middle East and North Africa; Southern & Eastern Asia and the Pacific; Europe; the Americas; Central and Western Asia; and Sub-Saharan Africa.

#### SOUTHERN & EASTERN ASIA AND THE PACIFIC

There was a wide range in rates of cooking enjoyment in Southern & Eastern Asia and the Pacific, spanning from 83% in the Philippines to a low of 34% in Afghanistan.

Among the top-ranking countries in this region (the Philippines, Cambodia, Australia, Laos and New Zealand), at least three in four people said they enjoyed cooking, while the rate of non-participation in cooking activities tended to be just over 10%.

Afghanistan was at the opposite end of the spectrum and reported the lowest cooking enjoyment globally. More than four in 10 Afghans (44%) said they did not cook in the past seven days — among the highest rates of all countries and likely a reflection of the acute challenges many Afghans face regarding food security and affordability.<sup>16</sup>

Taiwan occupied the second-lowest ranking in terms of cooking enjoyment, at 39%. Similar to Afghanistan, 43% of Taiwan residents said they had not cooked in the past seven days, though likely for very different reasons. Numerous studies have found that Taiwanese eat out frequently and at rates that eclipse other wealthy countries or areas.<sup>17</sup>

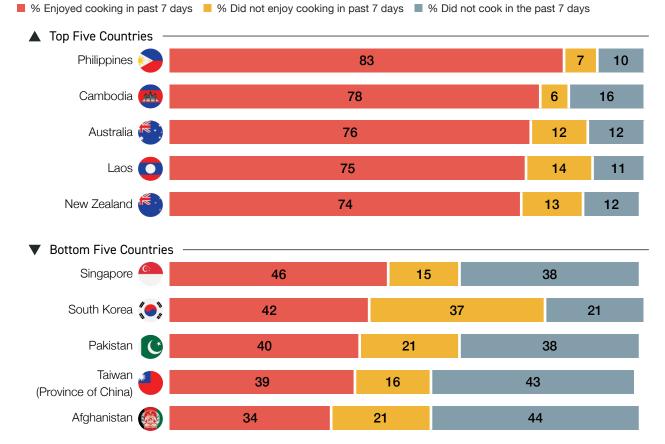
Pakistan, South Korea and Singapore rounded out the bottom five. While South Korea stands out for its record-high percentage of people who said they did not enjoy cooking (37%), it was also a rare instance of a country where more women said they did not enjoy cooking (40%) than men (34%).

<sup>16</sup> In 2022, the Gallup World Poll found that 86% of people in Afghanistan said there was a time in the past 12 months when they could not afford food — the highest rate of any country or area polled by the Gallup World Poll in 2022 and statically tied with a 2020 Central Africa reading as the highest rate for any country over the past 16 years (source: Evans, M. D. (2022, December 1). *Taliban plunge Afghans into economic ruin*. Gallup.com. <u>https://news.gallup.com/</u>poll/405524/taliban-plunge-afghans-economic-ruin.aspx)

<sup>17</sup> Lin, H.-W., & Liu, W.-Y. (2023). How to enhance the food self-sufficiency rate of Taiwan? Applying the theory of planned behavior to decision making for food away from home. Journal of Agriculture and Food Research, 12, 100629. https://doi.org/10.1016/j.jafr.2023.100629

#### FIGURE 4B

Cooking enjoyment: Top- and bottom-ranking countries in Southern & Eastern Asia and the Pacific



Note: Due to rounding, percentages may not sum to 100%. % "Do not know"/"Refuse to answer" responses are not shown. Source: The Ajinomoto Group/Gallup 2022

#### **Special Focus**

Japan, the home country of the Ajinomoto Group, does not appear in the list of the five countries in Southern & Eastern Asia and the Pacific that enjoyed cooking the least. Slightly fewer than one in two Japanese residents (49%) said they enjoyed cooking in the past seven days. This overall figure conceals a substantial difference between men and women — as is the case in many countries. In Japan, 63% of women said they enjoyed cooking recently, compared to 34% of men.

Within the five Eastern Asia countries surveyed in the 2022 Gallup World Poll, Japan's level of cooking enjoyment falls in the middle of the pack — below Mongolia and Hong Kong (S.A.R. of China) but above South Korea and Taiwan. However, Japan does stand out among these countries in one area: Japanese men (42%) were notably more likely than women (8%) to say they did not cook in the past seven days. This 34-percentage-point difference between genders in cooking participation was larger than in any other country in Eastern Asia.

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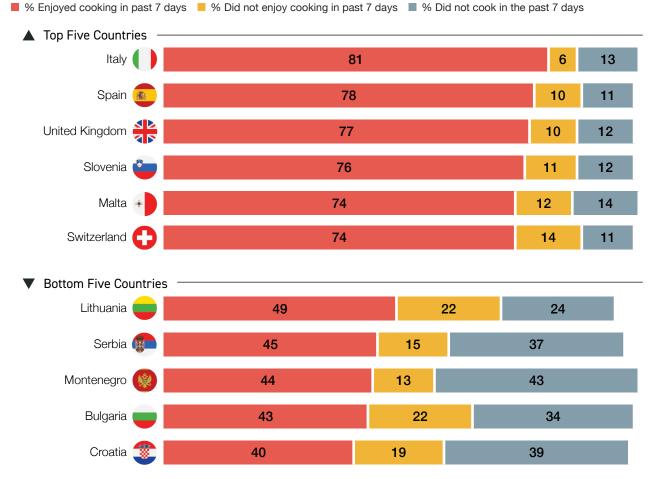
#### EUROPE

Italy led all European countries in cooking enjoyment, with 81% of Italians saying they generally enjoyed cooking in the past seven days. Spain took second place with a cooking enjoyment rate of 78%. The United Kingdom and Slovenia were close behind, at 77% and 76%, respectively. Switzerland and Malta tied for fifth place at 74%.

Four in 10 people in Croatia said they enjoyed cooking recently, the lowest of all European countries. Nearly as many Croatians said they did not cook at all in the past seven days (39%) as said they enjoyed cooking. Bulgaria, Montenegro, Serbia and Lithuania were also at the bottom of the rankings. Like Croatia, substantial percentages of these countries — most of which have faced significant food supply disruptions and price increases since Russia invaded Ukraine in March 2022<sup>18</sup> — said they did not cook at all in the past seven days.

#### FIGURE 4C

#### Cooking enjoyment: Top- and bottom-ranking countries in Europe



Note: Due to rounding, percentages may not sum to 100%. % "Do not know"/"Refuse to answer" responses are not shown. Among top-ranking countries, Malta and Switzerland "tied" for the fifth-ranking European country in terms of cooking enjoyment. Source: The Ajinomoto Group/Gallup 2022

<sup>18</sup> Laaninen, T. (2022, April). Russia's war on Ukraine: EU food policy implications. *European Parliamentary Research Service*. <u>https://www.europarl.europa.eu/</u> RegData/etudes/ATAG/2022/729368/EPRS\_ATA(2022)729368\_EN.pdf

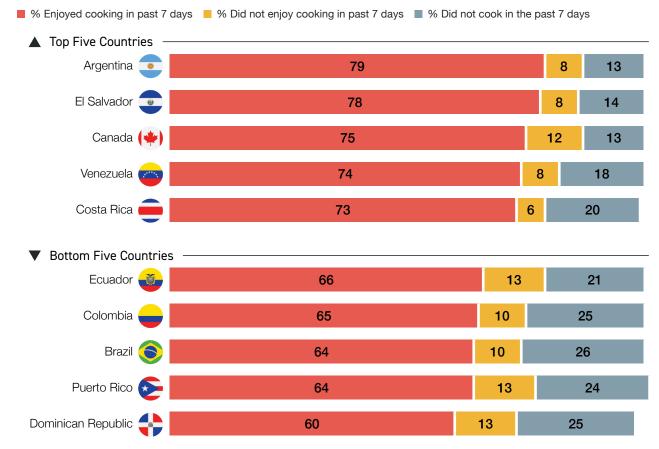
#### AMERICAS

Argentina exhibited the highest rate of cooking enjoyment across the Americas (comprising Northern and Southern America and the Caribbean), with 79% of people indicating they enjoyed cooking in the past seven days, followed by El Salvador at 78% and Canada at 75%.

With six in 10 people saying they enjoyed cooking, the Dominican Republic takes the least amount of pleasure from the activity in the region. Other countries in the bottom five include Ecuador, Colombia, Brazil and Puerto Rico, with cooking enjoyment rates varying from 66% to 64%.

#### FIGURE 4D

#### Cooking enjoyment: Top- and bottom-ranking countries in the Americas



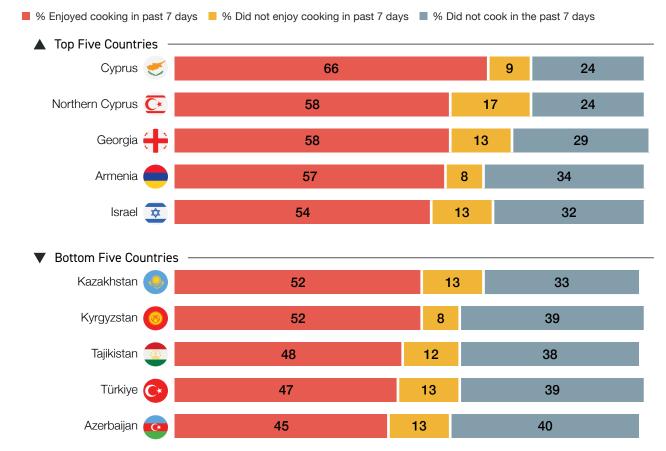
#### CENTRAL AND WESTERN ASIA

The Central and Western Asia region has 11 countries or areas in total — meaning nearly every state makes the top or the bottom five on the list. Cyprus (a country sometimes classified as European) showed the highest rate of cooking enjoyment, at 66%. Northern Cyprus, Georgia, Armenia and Israel rounded out the top five.

Azerbaijan exhibited the lowest rate of cooking enjoyment, at 45%. Türkiye, Tajikistan, Kyrgyzstan and Kazakhstan also appeared on the bottom end of the list.

#### FIGURE 4E

#### Cooking enjoyment: Top- and bottom-ranking countries in Central and Western Asia



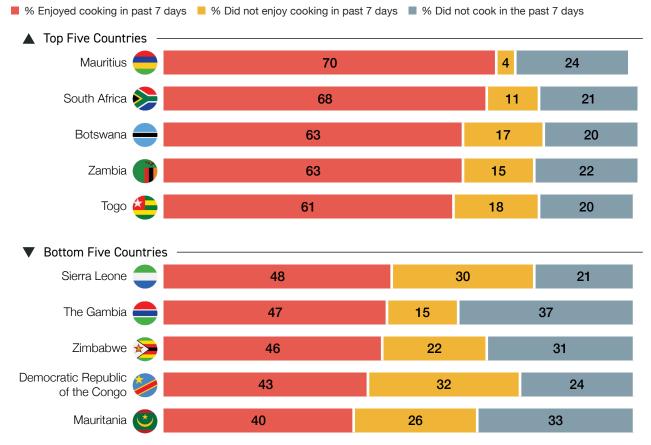
#### SUB-SAHARAN AFRICA

Mauritius and South Africa were effectively tied for the highest cooking enjoyment rates in this region at 70% and 68%, respectively.

Mauritania was on the other end of the list, where only 40% of people enjoyed cooking in the past seven days, followed by the Democratic Republic of the Congo (43%). Notably, among countries in the bottom five of the region, the Gambia had the most people who didn't cook (37%). It is worth emphasizing that all bottom-five countries — as well as many countries in this region more generally — face major challenges concerning food affordability and security, an issue that would have obvious implications for individuals' ability to enjoy cooking.

#### FIGURE 4F

#### Cooking enjoyment: Top- and bottom-ranking countries in Sub-Saharan Africa



#### Section 2.2

## Who Enjoys Cooking?

In general, cooking enjoyment rates were fairly similar across demographic groups, such as age cohort, educational attainment, employment status or where a person lives (i.e., in an urban or rural area), with one exception: gender. Across all major demographic groups, women were substantially more likely to say they enjoyed cooking recently than men.

#### AGE GROUP

Overall, men aged 15 to 24 expressed the lowest rates of cooking enjoyment at 35%. Cooking enjoyment among men rose slightly to 40% among those aged 25 to 34 and essentially remained stable among the older age cohorts, at around four in 10.

Among women, 80% of 25- to 34-year-olds reported enjoying cooking, compared to 72% of those aged 15 to 24. Cooking enjoyment among women did not otherwise meaningfully change with age, with the notable exception of women aged 65+, among whom the figure falls to 70%.

#### EDUCATION LEVEL

Women did not show much variation by education level, with a steady rate of cooking enjoyment of 76% across education groups, while men showed much greater variation. Half of all men with tertiary education (such as attaining a college or university degree) said they enjoyed cooking, while this rate stood at 32% among those with elementary levels of education.

#### EMPLOYMENT STATUS

Women employed full-time for themselves indicated the highest rates of cooking enjoyment at 81%, while those who were out of the workforce indicated the lowest at 74% — suggesting that cooking enjoyment may be tied to household income. Meanwhile, unemployed men had the lowest rate of cooking enjoyment at 34%, while those employed full time by an employer had the highest at 45%.

#### URBANICITY

While women living in rural areas indicated the highest levels of cooking enjoyment, at 78%, those living in cities indicated the lowest, but by a small margin, at 75%. Men living in rural areas also exhibited the highest rates of cooking enjoyment (41%), while those in towns and semi-dense areas had the lowest (37%).

#### FIGURE 5

#### Cooking enjoyment, by demographic characteristics and gender

Percentage who enjoyed cooking in the past 7 days

#### Men 🛛 Women 0 100 15-24 -35 •----**•** 72 **+37** 40 • 80 +40 Age 41 •----**—•** 79 **+38** — 41 • 76 +35 50-64 -43 • 70 +27 65+ -45 • 76 +31 Employed full time for an employer **81 +47** Employed full time for self 34 • Employment **• 78 + 37** — Employed part time, do not want to work full time 41 • 42 • 79 + 37 Employed part time, want to work full time Unemployed -34 •-----**• 77 +43** 38 • 74 +36 Out of workforce Elementary education or less (up to 8 years of basic education) **-•** 76 +44 ----32 • Education Secondary to Tertiary (9-15 years of education) 43 **76 +33** Four years beyond high school and/or 50 **— 76 + 26** received a 4-year college degree Rural areas 41 • 78+37— Urbanicity Towns and semi-dense areas 37 **77 +40** Cities – 40 • 75 + 35

Source: The Ajinomoto Group/Gallup 2022

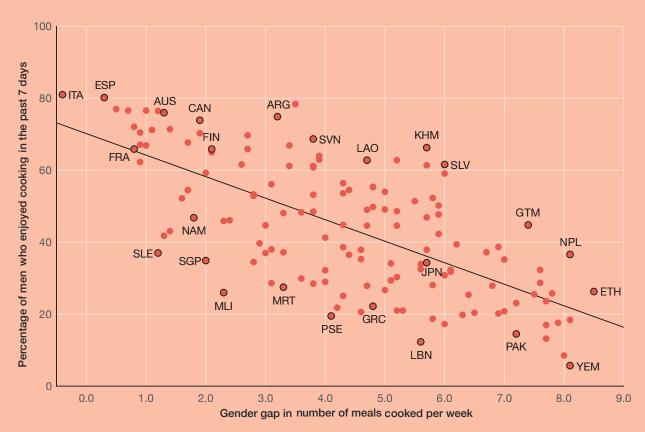
# Men were less likely to cook than women: How does this affect their cooking enjoyment?

Since 2018, Cookpad — a recipe-sharing multinational Japanese organization committed to tracking eating and cooking habits — has partnered with Gallup to include questions about people's cooking habits in the Gallup World Poll. One consistent finding from that research is that, in virtually every country in the world, there is a predictable and intractable "cooking gender gap" (i.e., the difference between the average number of meals cooked by women minus the average number of meals prepared by men), with women shouldering most cooking responsibilities.

Is there a relationship between the cooking gender gap and cooking enjoyment in a country? For women, the answer appears to be no. However, this is not the case for men. Generally speaking, in countries where the cooking gender gap was relatively large — meaning women cooked significantly more than men — the percentage of men who said they enjoyed cooking was low. By contrast, in countries with a modest cooking gender gap, significant majorities of men said they enjoyed their recent cooking experience. These findings suggest men are just as able to derive joy from cooking, provided they are willing to engage in the activity.

#### FIGURE 6

#### Percentage of men who enjoyed cooking in each country compared to cooking gender gap



Note: Data about average number of meals cooked per week comes from the 2022 Cookpad-Gallup home-cooking survey. Source: The Ajinomoto Group and Cookpad/Gallup 2022

#### Section 2.3

# **Cooking Affordability**

Income and food affordability are often barriers to cooking enjoyment. As has already been shown, this relationship is true at the country level, with low- and lower-middle-income countries enjoying cooking less than higher-income countries.

A similar dynamic is apparent at the individual level, which is the focus of this section. Specifically, this analysis considers how cooking enjoyment rates differ depending on how people answered two Gallup World Poll questions which measure some aspect of an individual's financial wherewithal, including:

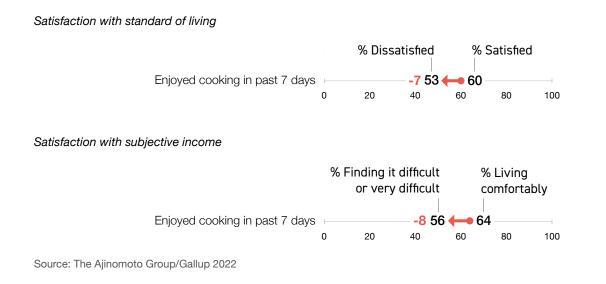
#### "Right now, do you feel your standard of living is getting better or getting worse?"

"Which one of these phrases comes closest to your own feelings about your household's income these days — living comfortably on present income, getting by on present income, finding it difficult on present income or finding it very difficult to get by on present income?"

Overall, people who indicated that they were satisfied with their standard of living were more likely to enjoy cooking than those who were dissatisfied (by seven points). Similarly, people who said they were living comfortably on their present income were more likely to have enjoyed cooking in the past seven days than those who said they were finding it difficult or very difficult to get by (by eight percentage points).

#### FIGURE 7

Cooking enjoyment, by satisfaction with standard of living and subjective income



# Chapter 3: The Relationship Between Cooking Enjoyment and Attitudes About Life and Society

#### In this chapter:

- People who enjoyed cooking were more likely to have higher subjective wellbeing as measured by the Gallup World Poll Life Evaluation Index than those who did not enjoy cooking or did not cook at all. This relationship was stronger for men than for women.
- People who enjoyed cooking were 1.2 times more likely to be "thriving" in their life evaluations than non-cooks, even after controlling for a range of demographics and personal characteristics.
- Cooking enjoyment was tied to other positive outcomes measured on the Gallup World Poll, including experiencing positive emotions and having friends or family members to count on for help.

Does happiness while cooking translate to a greater sense of wellbeing? This section examines this question from several angles using items on the Gallup World Poll related to an individual's quality of life, including subjective wellbeing.

#### Section 3.1

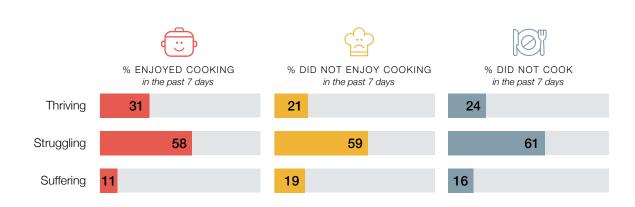
# **Cooking Enjoyment and Subjective Wellbeing**

Globally, individuals who said they generally enjoyed cooking in the past seven days were substantially more likely to be "thriving" in their life evaluation than those who said they did not enjoy their recent cooking experience or did not cook at all.

Nearly one in three people who found cooking enjoyable (31%) rated their lives positively enough to be considered thriving, compared with 21% of those who said they did not enjoy cooking and 24% of those who did not cook at all.

#### FIGURE 8

#### Life Evaluation Index, by cooking enjoyment



Note: The Gallup World Poll Life Evaluation Index categorizes people as "thriving," "suffering" and "struggling," depending on how they rated their present and future lives. Those who are considered "thriving" rate their life highly on both items; "suffering" represents people who rated their life poorly for both items. All other individuals are classified as "struggling." Source: The Ajinomoto Group/Gallup 2022

Interestingly, men who said they recently enjoyed their cooking experience were 13 points more likely to be thriving than men who did not enjoy cooking recently (33% vs. 20%). By contrast, the "thriving boost" associated with cooking enjoyment was smaller among women: 29% of women who said they enjoyed cooking recently were thriving in their life evaluations, compared with 23% among women who said they did not enjoy cooking.

### 3.1.1 Happy Cooks, Happy Lives?

While the above analysis suggests a concrete relationship between cooking enjoyment and thriving in one's wellbeing, appearances can sometimes be deceiving, particularly when assessing statistical relationships. It may be that people who enjoy cooking generally share a similar characteristic — such as higher educational attainment — that is associated with higher rates of thriving.

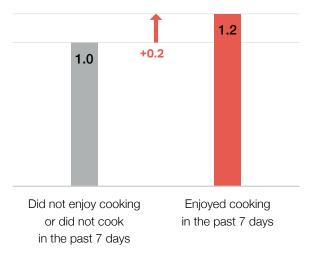
Regression analysis was used to account for these types of complicating factors. This multivariate statistical technique is able to assess the relationship of a specific variable (such as whether somebody said they enjoyed cooking recently) with an outcome of interest (whether that individual is thriving) while controlling for all other variables in the analysis. The model included a range of personal demographics and other characteristics that may affect how individuals rate their lives, including household income, gender, age cohort, educational attainment, employment status, marital status, urbanity and country of residence.

The analysis revealed that individuals' feelings about cooking remained statistically significant even after controlling for other factors. In particular, people who said they enjoyed cooking in the past seven days were 1.2 times more likely to be thriving than people who did not enjoy cooking or had not cooked during that time.

#### FIGURE 9

Odds of thriving in the Life Evaluation Index are 20% higher among those who enjoyed cooking in the past seven days

Odds ratio of "thriving" for "enjoyed cooking in the past 7 days," after controlling for age, gender, education level, income, marital status, employment, type of area person lives in, global region and country of residence.



Note: "Did not enjoy cooking" or "did not cook in the past 7 days" is the reference category, meaning the odds are set at 1. Source: The Ajinomoto Group/Gallup 2022

To see a table showing the full results from this analysis, please refer to Appendix 1.

#### Section 3.2

# **Cooking Enjoyment and Positive Emotions**

Another quality-of-life measure on the Gallup World Poll is the Positive Experience Index, which measures the emotional or physical wellbeing a person experienced the day before the survey, including if the person felt well-rested, was treated with respect during most of the day, smiled or laughed, learned or did something interesting, or experienced enjoyment.

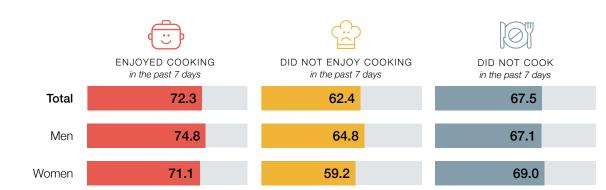
The Positive Experience Index summarizes people's answers to these questions into a single average score on a 0-100 scale. A higher score indicates that a person experienced a greater number of positive emotions.

Consistent with findings that individuals who enjoyed cooking recently tended to rate their lives higher than people who did not (or did not cook), those who enjoyed cooking have an edge over others in experiencing positive emotions. Overall, people who said they enjoyed cooking in the past seven days had an average score of 72.3 on the Positive Experience Index, compared to 62.4 among those who said they did not enjoy cooking — a statistically significant difference. People who had not cooked at all fell between these two poles, with an average index score of 67.5.

There was a similar gulf between feelings about cooking and experiencing positive emotions among men. Those who enjoyed cooking had an average Positive Experience Index score of 74.8 - 10 points higher than men who did not enjoy cooking (64.8). Men who did not cook at all had an index score of 67.1, still notably below those who had a favorable opinion of their recent cooking experience.

Among women, those who enjoyed cooking had an average index score of 71.1, compared to 59.2 among those who did not — a gap of nearly 12 points. Interestingly, women who did not cook in the past seven days comprised a relatively small group but fared about as well as those who enjoyed cooking on the Positive Experience Index, with an average score of 69.0.

#### FIGURE 10



Enjoyment of cooking and experiencing positive emotions

Gallup World Poll Positive Experience Index average score by whether a person enjoyed cooking in the past 7 days

Note: The Positive Experience Index has a scale between 0-100. A higher value indicates an individual experienced a wider range of positive emotions the day before the survey. Source: The Ajinomoto Group/Gallup 2022

#### Section 3.3

# Social Relevance of Enjoying Cooking

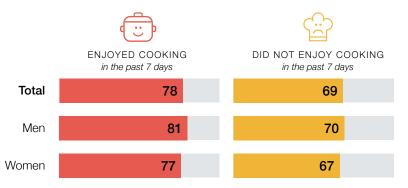
According to at least one study, skillful cooks tend to have stronger social ties.<sup>19</sup> Does a similar relationship exist between cooking enjoyment and the state of one's social life?

To address this question, this analysis utilized an item on the core Gallup World Poll that asked individuals if they have a network they can rely on in times of need:

"If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?" Among those who enjoyed cooking in the past seven days, nearly eight in 10 (78%) said they had someone they could count on to help — nine points higher than the share who said the same but did not enjoy cooking (69%). Among both men and women, those who enjoyed cooking were substantially more likely than those who did not to say they had someone they could count on.

#### FIGURE 11

Percentage who have someone to count on, by cooking enjoyment and gender



Percentage who said "yes," they have someone they can count on

Note: % "No"/"Do not know" responses to having someone to count on question are not shown; Results for those who said they did not cook in the past 7 days are not shown.

Source: The Ajinomoto Group/Gallup 2022

# In sum, these findings seem to support the notion that cooking can brighten one's social life just as it can help improve other facets of an individual's life.

<sup>19</sup> Tani, Y., Fujiwara, T., & Kondo, K. (2023). Associations of cooking skill with social relationships and social capital among older men and women in Japan: Results from the JAGES. *International Journal of Environmental Research and Public Health, 20*(5), 4633. https://doi.org/10.3390/ijerph20054633

# Chapter 4: Eating With Someone You Know and Downsides of Dining Alone



#### In this chapter:

- In line with past research, the Ajinomoto Group survey found a positive relationship between subjective wellbeing and sharing a meal with someone you know on a frequent basis.
- By contrast, in some circumstances, habitually dining alone was associated with a lower quality of life.

# Background and Discussion of Methodological Limitations

Earlier sections of this report explored how people felt about cooking and how these attitudes may affect other aspects of their lives, including their sense of wellbeing.

#### This chapter shifts the attention to focus on the experience of eating and, more specifically, the extent to which individuals dine with people they know.

Like cooking, the act of sharing everyday meals with family or friends — also known as "communal dining" or "communal eating"<sup>20</sup> — is another example of a familiar, simple activity that appears to be connected to a wide range of beneficial outcomes with respect to individuals' physical and mental health, social connectedness and relationships. A recent Oxford study neatly summarized, "The more often people eat with others, the more likely they are to feel happy and satisfied with their lives."<sup>21</sup> If frequently eating with others can be a source of positive change in a person's life, it also appears to be the case that regularly dining alone — or what is sometimes referred to as "solitary eating" — may have a negative influence on quality of life, particularly when people are eating alone involuntarily or because they lack friends or family members to dine with regularly.<sup>22</sup> Research suggests that solo diners are at greater risk of experiencing physical health maladies and depressive attitudes.<sup>23</sup>

This section compares individuals' "social" dining habits (i.e., eating with someone they know) against an array of measures on the Gallup World Poll that measure different aspects of individuals' lives. However, before moving into that analysis, it is important to discuss how key concepts were measured on the survey.

23 Ibid.

<sup>20 &</sup>quot;Communal dining" or "communal eating" can also refer to the act of feasting, which tends to be a form of eating together on a grander scale in terms of the amount of food prepared and the number of people dining collectively. Feasting is often an activity that has a special purpose or occasion, such as religious celebrations. While important, this activity is relatively rare and not the focus of this analysis. (Wallis, N. J., & Blessing, M. E. (2015). Big feasts and small scale foragers: Pit features as feast events in the American Southeast. *Journal of Anthropological Archaeology*, *39*, 1-18. <u>https://doi.org/10.1016/j. jaa.2015.01.003</u>)

<sup>21</sup> Dunbar, R. (2017). Breaking bread: The functions of social eating. Adaptive Human Behavior and Physiology, 3(3), 198-211. https://doi.org/10.1007/ s40750-017-0061-4

<sup>22</sup> Jang, S., Lee, H., & Choi, S. (2021). Associations among solo dining, self-determined solitude, and depression in South Korean university students: A crosssectional study. International Journal of Environmental Research and Public Health, 18(14), 7392. https://doi.org/10.3390/ijerph18147392

# How Communal or Solo Dining Was Measured on the Survey

The Ajinomoto Group module allows for the first global study of dining frequently with others and its converse — habitually eating alone — using the following two questions:

#### "Thinking about the last 7 days ...?

On how many days did you eat LUNCH with someone you know? [0-7 days]

On how many days did you eat DINNER with someone you know? [0-7 days]"

The phrase "someone you know" was intended to include any familiar person in an individual's life, including family or household members. However, there is reason to believe that not all respondents interpreted the question in this manner and instead believed the question was asking about eating with familiar individuals other than respondents' immediate family (or household) members. This misunderstanding appears to have been particularly common in parts of Asia and some Middle East countries but is not limited to those areas.

As a consequence of this misunderstanding, Gallup and the Ajinomoto Group believe many respondents underreported the number of meals they ate with "someone they know." For this reason, this report does not provide a descriptive overview of the results of these questions — meaning, the analysis will not focus on who eats with others more often or where communal dining is more common. A careful review of the survey data, however, revealed that it can still be informative in studying the relationship between frequent communal eating (or, alternatively, habitual solo dining) and other quality-of-life outcomes, including subjective wellbeing, experiencing positive emotions and how people rate their personal health.

In that spirit, this chapter will focus on the association of people eating with someone they know and how they feel about other aspects of their lives. Instead of looking at the exact number of days individuals said they ate lunch or dinner with someone they know, this chapter will focus on three groups: individuals who ate alone (zero days for either lunch or dinner), people who ate with others they know infrequently (1-3 days for either meal) or those who ate together frequently (4-7 days).

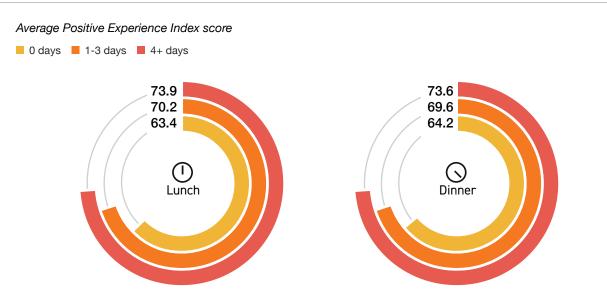
This focus allows the narrative to sidestep any discussion of the precise number of days an individual ate lunch or dinner (except for zero), which may be somewhat misleading due to the issues mentioned above, but also has the benefit of clarifying certain relationships, given the reduced number of categories being compared.

# **Communal Eating and Positive Emotions**

At the global level, people who frequently ate together<sup>24</sup> were more likely than those who ate together infrequently or ate alone to score higher on Gallup's Positive Experience Index (see description in Section 3.2). People who ate lunch with someone they know on four or more days scored an average of 73.9 on the Positive Experience Index. This figure was slightly higher than the 70.2 index average for those who ate lunch together between 1-3 days and considerably higher than the 63.4 score among those who did not eat lunch with someone they know. Findings were similar for the number of days people ate dinner with someone they know (see below graph).

#### FIGURE 12

Positive Experience Index, by number of days people ate meals together



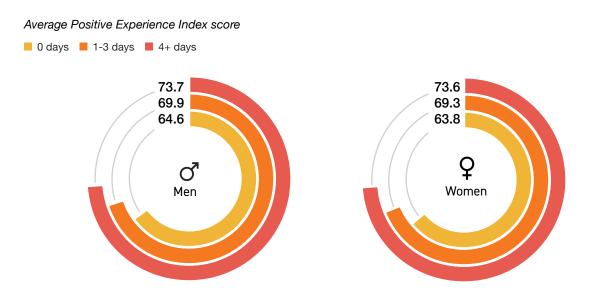
Source: The Ajinomoto Group/Gallup 2022

<sup>24</sup> In this chapter, the expression "eating together" is used as shorthand for "eating with someone you know."

The boost in experiencing positive emotions associated with sharing a meal with others was enjoyed by men and women alike. As shown below, Positive Experience Index scores rose for both genders in tandem with the number of dinners shared with people they know. The same dynamic was at play with respect to eating lunch with recognizable company.

#### FIGURE 13

#### Positive Experience Index, by number of days people ate dinner together and gender



Source: The Ajinomoto Group/Gallup 2022

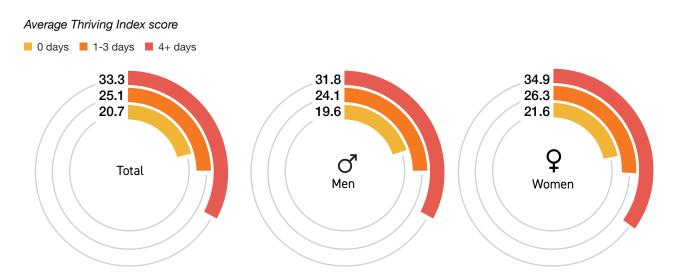
# **Communal Eating and Thriving**

Individuals who regularly dined with someone they know were substantially and significantly (both in a statistical and meaningful sense) more likely to be thriving in their life evaluations.

Recall that individuals are considered "thriving" if they rate their current and future lives highly; Gallup uses this information to create the Thriving Index, which uses a score between 0-100 to determine how pervasive this state of wellbeing is within a group of interest.<sup>25</sup>

Globally, those who ate dinner with people they know at least four days in the previous week had an index score of 33.3, compared to 25.1 among those who did so less frequently and 20.7 among those who did not eat dinner with others. A similar picture emerged when comparing how frequently people ate lunch with others they know and their likelihood of thriving in their life evaluation. Women and men were both significantly more likely to score higher on the Thriving Index if they ate dinner with someone they know at least four times in the past week than those who did so on a less frequent basis or not at all. While the general pattern was the same across genders, women appear to experience a slightly higher boost in their thriving rate when comparing those who did not eat dinner with someone they know to those who did so frequently.

#### FIGURE 14



#### Thriving Index, by number of days people ate dinner together and gender

Note: The Thriving Index has a scale between 0-100. A higher value indicates a larger number of people within a given group are considered "thriving" in their life evaluations. Source: The Ajinomoto Group/Gallup 2022

<sup>25</sup> Respondents who are considered "thriving" are given a score of "1," while those who are not thriving are given a score of "0." The final index score is then multiplied by 100. When aggregated at a higher level (such as a country, demographic group, global region, etc.), the Thriving Index is no different from providing the percentage of people within the group of interest who are "thriving."

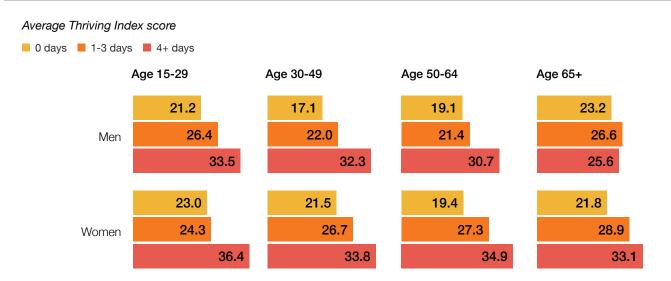
These results align with a 2017 Oxford study that found "the frequency of social meals" (i.e., eating with someone you know) was strongly correlated with higher life satisfaction. That study relied on advanced statistical techniques to investigate whether dining with people you know more frequently in and of itself led to higher life satisfaction — a question which they answered in the affirmative.<sup>26</sup>

Additional past research — admittedly, from a narrow set of countries — suggests that men who eat with others seldomly, if at all, are particularly more likely to experience adverse physical health outcomes (including increased risk for heart disease and diabetes).<sup>27</sup> Women — especially the youngest and oldest age cohorts — may be more susceptible to unhappiness.<sup>28</sup>

These findings suggest that the intersection of age and gender is worth considering when inspecting wellbeing trends. The graph below shows how thriving rates varied by the number of days people ate dinner together and by gender and age cohort. The clearest takeaway is that, in general, the pattern was similar: People who ate dinner more frequently with others they know saw themselves as living a more fulfilling life as measured by the Thriving Index.

However, this relationship varied in degree across gender and age cohorts — most notably, the 65+ age group. Thriving rates among men in this age cohort were relatively stable, and there was no statistical difference between the upper two categories of eating dinner with others (though those who ate dinner alone had a slightly lower thriving rate). However, women in this age range saw a sizable improvement in their thriving rate as their rate of dining with others increased.

#### FIGURE 15



#### Thriving Index, by number of days people ate dinner together, gender and age

Note: The Thriving Index has a scale between 0-100. A higher value indicates a larger number of people within a given group are considered "thriving" in their life evaluations. Source: The Ajinomoto Group/Gallup 2022

<sup>26</sup> Dunbar, R. (2017). Breaking bread: The functions of social eating. Adaptive Human Behavior and Physiology, 3(3), 198-211. https://doi.org/10.1007/ s40750-017-0061-4

<sup>27</sup> Macmillan, A. (2017, October 25). Why eating alone may be bad for you. Time. https://time.com/4995466/eating-alone-metabolic-syndrome/

<sup>28</sup> Jang, S., Lee, H., & Choi, S. (2021). Associations among solo dining, self-determined solitude, and depression in South Korean university students: A crosssectional study. International Journal of Environmental Research and Public Health, 18(14), 7392. https://doi.org/10.3390/ijerph18147392

#### Section 4.5

## People Who Regularly Ate Together Were More Socially Connected

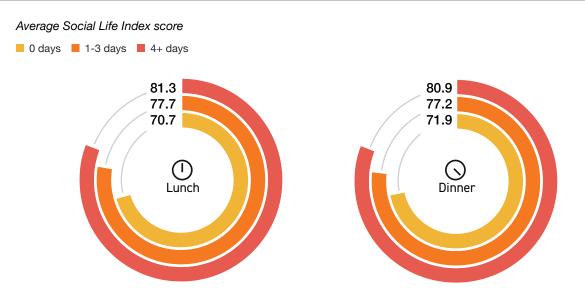
Another important quality-of-life dimension that may be positively affected by eating with people one knows is feelings of social connectedness — a concept measured by the Gallup World Poll Social Life Index.

Like the other indexes reviewed in this section, the Social Life Index uses a 0-100 scale, with higher scores indicating a greater number of individuals feeling they have a social support structure and opportunities to make friends in their local city.

Consistent with past studies, individuals who ate together frequently (four or more days in the previous

week) had higher Social Life Index scores. Those who frequently ate lunch with others had an average Social Life Index score of 81.3, compared to 77.7 for those who enjoyed lunch with familiar faces on an infrequent basis and 70.7 among those who dined alone. These findings were comparable for frequency of eating dinner with someone you know, and the relationship holds when comparing men and women by age cohort.

#### FIGURE 16



Social Life Index, by number of days people ate meals together

Note: The Social Life Index is based on Gallup World Poll questions which measure a respondent's social support structure and opportunities to make friends. The index has a scale of 0-100, with a higher score indicating an individual is more socially connected. Source: The Ajinomoto Group/Gallup 2022

#### Section 4.6

## The Downsides of Dining Alone? A Closer Look at Those Who Did Not Eat With Someone They Know

If, as the evidence suggests, the act of "eating together" frequently leads to a fuller life, the seemingly obvious corollary would be that solitary diners may be at risk of missing out on these benefits.

To some degree, this supposition is supported by previous studies that point to tangible consequences associated with habitually eating alone, including greater feelings of stress and loneliness<sup>29</sup> — factors that previous Gallup research has linked to poor wellbeing.<sup>30</sup> Additionally, solitary diners may experience more health problems than individuals of a similar demographic profile who do not regularly eat alone.

"Solitary diners," for the purposes of this section, includes only those respondents who said they did not have lunch or dinner with someone they know in the past seven days and who also lived alone.<sup>31</sup>

These strict criteria were imposed for two reasons. First, it helps address the aforementioned data issues, as the analysis will focus on respondents who provided consistent and seemingly valid answers to the two questions of focus. Secondly, those individuals who live alone and habitually eat alone are more likely to dine solo due to a lack of options rather than by choice. Existing evidence suggests that those who dine alone on an "involuntary" basis are at greater risk of experiencing certain downsides associated with this behavior.<sup>32</sup> The survey results show that 2% of people worldwide are considered solitary diners under this definition. Most of these individuals (55%) live in high-income countries or areas — substantially more than the 23% of all people interviewed in the 2022 Gallup World Poll who live in high-income countries.

Given this imbalance, this analysis will focus on solo diners in high-income countries only;<sup>33</sup> limiting the analytical scope in this way helps control for the role a country's economic development can play in shaping how people feel about different aspects of their lives, including their life evaluation, feelings of social connectedness and perceptions of their personal health.

<sup>29</sup> Kwon, Y., Hong, K. H., Park, Y.-K., & Kim, S. (2023). How does the frequency of eating-alone among older people in Korea affect their health and dietary behavior? *Nutrients, 15*(9), 2085. https://doi.org/10.3390/nu15092085

<sup>30</sup> Witters, D. (2023, April 4). Loneliness in U.S. subsides from pandemic high. Gallup.com. https://news.gallup.com/poll/473057/loneliness-subsidespandemic-high.aspx

<sup>31</sup> Gallup determined whether a respondent lives alone based on how they answered separate questions that appeared as part of the core World Poll questionnaire: *"Including yourself, how many people, age 15 or older, currently live in this household," and "How many children under 15 years of age are now living in your household?"* 

<sup>32</sup> Jang, S., Lee, H., & Choi, S. (2021). Associations among solo dining, self-determined solitude, and depression in South Korean university students: A crosssectional study. International Journal of Environmental Research and Public Health, 18(14), 7392. https://doi.org/10.3390/ijerph18147392

<sup>33</sup> Solitary diners who do not live alone are not included in this analysis.

# 4.6.1 Solitary Diners Rated Their Lives Lower and Felt Less Connected Socially

Solitary diners in high-income countries appear to perform worse on key quality-of-life measures featured on the Gallup World Poll than those in high-income countries who ate at least one meal with someone they know in the past seven days (see below graph).

Solitary diners in high-income countries were three times more likely than their counterparts who ate at least one meal with someone in the past seven days to be considered "suffering" in their life ratings (15% vs. 5%, respectively). People who were "suffering" rated both their current and future lives poorly, meaning they were not only unhappy in the present but had relatively little hope that things would improve soon.

Regarding social connectedness, solitary diners in high-income countries were at a clear disadvantage to those who ate with someone they know, as reflected by the former group's Social Life Index<sup>34</sup> score of 74.8 versus the notably higher average of 82.5 enjoyed by the latter group. Similarly, solitary diners had worse perceptions of their personal health than those who ate with others, as measured by the Personal Health Index.

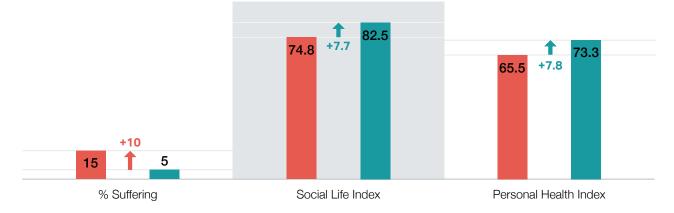
#### FIGURE 17

Solitary diners who live alone vs. those who eat with others: Differences in life evaluation ratings, feelings of social connectedness and perceptions of physical health

Percentage suffering and average score by group on the Social Life Index and Personal Health Index among respondents living in-high income countries

Solitary diners: Those who did not eat lunch or dinner with someone they know and live alone





Note: Respondents who said they did not eat lunch or dinner in the past seven days with someone they know but do not live alone were excluded from this analysis. Source: The Ajinomoto Group/Gallup 2022

This overall pattern of solitary diners in high-income countries rating their lives as suffering and feeling less socially connected and less healthy than those who ate at least one meal with someone they know holds even when accounting for age or gender.

<sup>34</sup> The Social Life Index uses a 0-100 scale, with higher scores indicating a greater number of individuals feeling they have a social support structure and opportunities to make friends in their local city.

# Chapter 5: Cooking Enjoyment and the Frequency of Cooking at Home:

A Research Collaboration With Cookpad

#### In this chapter:

- In 2022, people worldwide cooked an average of 6.4 meals at home each week and ate an average of 10 meals at home.
- Women cooked more frequently than men, with an average gap of 4.7 more meals per week.
- People who said they cook were grouped into five clusters, with the largest including people who cook often (9.1 meals per week) and love doing it. Three in four people in this cluster were women.

# Since 2018, Cookpad, a recipe-sharing multinational Japanese organization committed to tracking the habits of eating and cooking at home, has asked the world a simple question: How often do you cook or eat at home?

Over the years, through the participation of hundreds of thousands of respondents in over 140 countries, the data that Cookpad provides has shed light on important facets of the impact cooking and eating at home has on people and communities around the world.

In 2022, there were signs that many people around the world, and especially in certain regions, were returning to their normal cooking habits after a slight uptick in home cooking during the pandemic years. The average number of lunches and dinners cooked per week last year was 6.4, down slightly from the 6.7 meal average seen in 2020-21. The current level of cooking, in fact, is on par with 2018 — the first year of the Cookpad survey — when people cooked an average of 6.5 meals per week. One trend has not fluctuated over the past five years: Women cook far more often than men, a pattern that holds across regions and demographic groups. In 2018, the gender gap (i.e., the difference between the cooking frequency of men and women) showed that women cooked an additional 5.2 meals on average each week. That gap narrowed to 4.0 meals in 2021 before increasing again in 2022 to 4.7 more meals cooked by women each week. By 2022, women were cooking an average of 8.7 meals per week, whereas men were cooking just 4.0.

This section seeks to synthesize findings from the Ajinomoto Group survey and the 2022 wave of the Cookpad survey to investigate, in an innovative way, the relationship between cooking frequency and enjoyment of cooking. Specifically, this joint analysis utilizes information from both data series to identify the different types of home cooks around the world.

#### Section 5.1

## The Joy of Cooking? A Cluster Analysis of Cooking Enjoyment and Frequency Worldwide

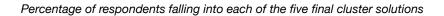
This section attempts to identify the different types of cooks around the world using a statistical technique called cluster analysis that groups data observations (in this case, survey respondents) based on their similarities. In this context, cluster analysis was used to establish different profiles of home cooks based on their frequency of cooking and whether they enjoyed the activity, as well as additional background information, including age, gender, employment status and household size. Clustering respondents into distinct groups helps increase understanding of the inherent organization of these groups of people, thus providing insights for further analysis.

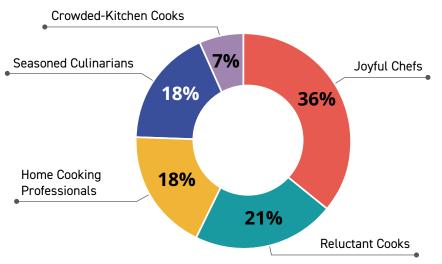
This analysis identified five types of home cooks. While some only cook occasionally but enjoy it, others may cook often but not enjoy it. Some are employed and do not have much time to cook but do enjoy it when they cook, while others live in large households where the responsibility of cooking is delegated to others. And while some cook out of necessity, others do so out of obligation, with expected levels of enjoyment varying between the two groups.

Of the five "types" of home chefs across the world, Joyful Chefs comprise the largest cluster, at 36% of the global population, while just 7% belong to the Crowded-Kitchen Cooks group.<sup>35</sup>

#### FIGURE 18

#### Demographic composition of the five types of home cooks





## What type of cook are you?

How often do you cook at home? How often do you eat at home? Do you enjoy the act of cooking when you do it? Based on key demographic characteristics, such as gender, age, household size, employment status or urbanicity, you will fit into one of the five groups of home cooks.

Source: The Ajinomoto Group and Cookpad/Gallup 2022

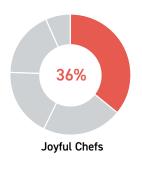
35 Note that respondents who indicated not having cooked in the past seven days were excluded from this analysis.

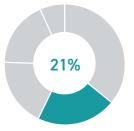
#### FIGURE 19

#### Demographics of the Five Types of Home Cooks

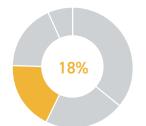
			Joyful Chefs	Reluctant Cooks	Home Cooking Professionals	Seasoned Culinarians	Crowded- Kitchen Cooks
101	Cooking and Eating at Home	Number of days cooked any meals at home in past 7 days	9.1	5.0	7.4	9.6	7.0
		Number of days ate any meals at home in past 7 days	10.9	9.7	9.7	11.1	10.3
<u> </u>	Cooking	Enjoyed cooking	100%	0%	100%	99%	76%
	Enjoyment	Did NOT enjoy cooking	0%	100%	0%	1%	24%
07	Gender	Male	25%	59%	52%	34%	33%
ţo		Female	75%	41%	48%	66%	67%
Ē.	Employment	Not full time for an employer	100%	75%	0%	100%	90%
ĽO		Full time for an employer	0%	25%	100%	0%	10%
<b>B</b>	Household Size	Total number living in household	4	4	3	3	11
	Age	15 to 34	64%	45%	41%	0%	62%
<del>ይ</del> መራ		35 to 64	36%	46%	56%	58%	35%
		65 and older	0%	9%	3%	42%	4%
	Region	Arab States	2%	1%	2%	1%	5%
		Central and Western Asia	3%	2%	2%	3%	2%
		Eastern Asia	1%	6%	6%	7%	0%
		Eastern Europe	3%	4%	9%	9%	1%
$\sim$		Latin America and the Caribbean	12%	6%	12%	15%	6%
(33)		Northern Africa	4%	2%	1%	2%	2%
÷		Northern America	4%	4%	17%	11%	1%
		Northern, Southern and Western Europe	6%	7%	16%	18%	1%
		South-Eastern Asia and the Pacific	14%	13%	13%	14%	9%
		Southern Asia	35%	44%	18%	16%	35%
		Sub-Saharan Africa	16%	11%	6%	5%	39%

Source: The Ajinomoto Group and Cookpad/Gallup 2022





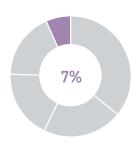
**Reluctant Cooks** 



Home Cooking Professionals



Seasoned Culinarians



Crowded-Kitchen Cooks

This group cooks often. In fact, they cook 9.1 meals at home per week — nearly three full meals more than the global average (6.4). They often eat at home, too, averaging 10.9 meals per week. Enjoyment of cooking is universal in this group. Notably, three in four Joyful Chefs are women, and they tend to belong to younger age brackets — 64% are age 34 or younger. People in this group do not tend to work full time for an employer, but they may be employed part time, self-employed or unemployed. Group members live in medium-sized households with three other members in all regions of the world, with the largest concentration (35%) residing in Southern Asia.

This second group of people cooks the least, averaging just five meals per week — well below the global average. They are also one of two groups that eat the least at home, with an average of 9.7 meals per week. Reluctant Cooks do not enjoy cooking at all. The group's composition is more evenly split between men and women (59% vs. 41%, respectively), and 25% work full time for an employer. They live in medium-sized households with three other people and are evenly distributed between the 15- to 34-year-old and 35- to 64-year-old age groups, with only a small proportion aged 65 or older. They live across regions but, like Joyful Chefs, are largely concentrated in Southern Asia.

People in this group cook around 7.4 meals per week, a little over the global average, but eat 9.7 meals at home per week — well below the global average. Notably, all Home Cooking Professionals enjoy cooking, and they are evenly split between men and women. More notably, all members of this group work full time for an employer, and they tend to live in small households with two other people across all regions of the world. While 3% of this group are aged 65 and older, the rest are split between age groups: 41% are aged 15 to 34, and 56% are 35 to 64.

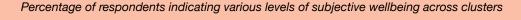
Members of this group cook the most, with an average of 9.6 meals per week. They also eat the most meals at home, with an average of 11.1 meals per week. While 1% do not enjoy cooking, the other 99% love it. Two in three Seasoned Culinarians are women, and they tend not to be employed full time for an employer. This group has the largest proportion of seniors aged 65 and older (42%), while the rest are between the ages of 35 and 64. Notably, this group does not have any individuals aged 15 to 34. They tend to live in smaller households with two other people and are found across multiple regions of the world.

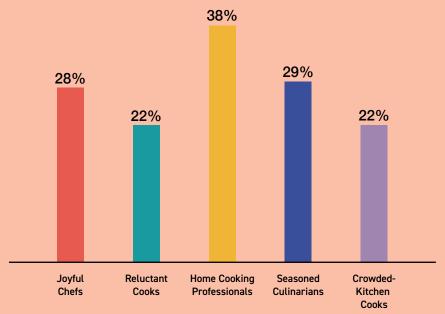
The size of households in this group is certainly its most defining characteristic; they tend to live in large households with 10 other people. People in this group cook about seven meals per week — almost on par with the global average — and eat about 10.3 meals at home per week. While most of them do enjoy cooking, about one in four do not. Most Crowded-Kitchen Cooks are women, but one in three are men, and just 10% are employed full time for an employer. The majority of this group (62%) are between the ages of 15 and 34, 35% are 35 to 64, and the rest are 65 and older. While individuals in this group live in most regions of the world, they can primarily be found in Southern Asia and Sub-Saharan Africa.

# Home Cooking Professionals are more likely than other groups of cooks to rate their lives positively enough to be considered "thriving"<sup>36</sup> (38%), while only about one in five Reluctant Cooks and Crowded-Kitchen Cooks fall into this category.

#### FIGURE 20

Life Evaluation, by type of home cook





Source: The Ajinomoto Group and Cookpad/Gallup 2022

<sup>36</sup> Building on the earlier work by Hadley Cantril and the Cantril Self-Anchoring Striving Scale, Gallup measures life satisfaction by asking respondents to place the status of their lives on a "ladder" scale with steps numbered from 0 to 10, where 0 indicates the worst possible life and 10 the best possible life. Individuals who rate their current lives a "7" or higher *and* their future lives an "8" or higher are considered "thriving." Individuals are "suffering" if they report their current *and* future lives as a "4" or lower. All other individuals in between are "struggling."

## **Chapter 6: Conclusion**



Cooking and dining with people you know, such as family members or friends, may seem like familiar, commonplace activities that bear little consequence on an individual's overall quality of life. However, the Ajinomoto Group survey results suggest otherwise: Those who enjoy cooking and frequently eat with others not only potentially nourish their body through these actions but their soul as well.

Nearly six in ten people worldwide (58%) said they enjoyed cooking in the past seven days. This is an interesting statistic, but also an important one considering a key finding of this report — that those who experience enjoyment from cooking are likely to be thriving in their lives, even after accounting for all the manifold ways people differ from each other (and hence how they rate their lives), such as age, gender, education, socioeconomic status and country of residence. Put simply, those who enjoy cooking also tend to enjoy their lives.

While cooking may be broadly popular, there remains a substantial proportion of people worldwide who do not enjoy the practice and an even larger percentage who do not engage with it at all. Men are especially likely to fall into the latter group: Globally, just as many men said they did not cook at all in the past seven days as said they enjoyed their recent cooking experience, at 40% each. This serves as yet another example of the sharp divide between men and women with respect to cooking; however, it also highlights a potential way many men might enhance their sense of wellbeing. Eating with friends and family members on a frequent basis also appears to relate to beneficial outcomes, including having more daily positive experiences and, like cooking enjoyment, improved wellbeing — at least when compared to those who do not eat with others frequently.

By contrast, solitary diners — as defined in this report — may not only be at risk of missing out on these potential upsides but also encountering outright negative outcomes. This is perhaps best exemplified by the finding that solo diners in high-income countries are about three times as likely to be suffering in their life evaluation as high-income residents who shared at least one meal with someone they know.

As a greater number of people around the world live alone, often not by choice but due to changing life circumstances which may themselves be difficult — such as the death of a household member or divorce — this is a serious challenge to tackle for policymakers, community advocates and other stakeholders interested in improving the overall wellbeing of their community.

## **Appendix Material**

A.1: Results of Multivariate Analysis of Thriving in One's Life Evaluation Index

Table 1. Understanding the factors behind "thriving": Results of multivariate analysis				Confidence	Confidence interval		
	Odds ratio	P-value	Statistically significant?	Lower bound	Upper bound		
COOKING ENJOYMENT							
Enjoyed cooking (vs. did not enjoy cooking or did not cook)	1.2	0	Yes	1.1	1.3		
AGE COHORT							
15-24 (reference category)	N/A	N/A		N/A	N/A		
25-34	0.67	0	Yes	0.60	0.75		
35-49	0.54	0	Yes	0.49	0.60		
50-64	0.47	0	Yes	0.41	0.53		
65+	0.35	0	Yes	0.31	0.39		
EDUCATIONAL ATTAINMENT							
Primary (0-8 years) (reference category)	N/A	N/A					
Secondary	1.2	0	Yes	1.1	1.3		
Tertiary	1.8	0	Yes	1.6	2.0		
GENDER							
Female (vs. male)	1.1	0.0	Yes	1.1	1.2		
INCOME QUINTILE							
Bottom 20% (reference category)	N/A	N/A		N/A	N/A		
Second 20%	1.0	0.927	No	0.90	1.1		
Middle 20%	1.3	0.027	Yes	1.2	1.5		
Fourth 20%	1.4	0	Yes	1.3	1.6		
Richest 20%	1.9	0	Yes	1.7	2.1		
MARITAL STATUS							
Married/in domestic partnership (vs. not married/in domestic partnership)	1.3	0	Yes	1.2	1.3		
EMPLOYMENT STATUS							
Employed full time for employer (reference category)	N/A	N/A		N/A	N/A		
Employed full time for self	0.89	0.03	Yes	0.80	0.99		
Employed part time do not want full time	1.1	0.05	Yes	1.0	1.3		
Unemployed	0.72	0	Yes	0.62	0.83		
Employed part time want full time	0.98	0.74	No	0.85	1.1		
Out of workforce	0.98	0.64	No	0.89	1.1		
URBANICITY							
Lives in large city or suburb of large city (vs. living in rural area or small town)	1.0	0.951	No	0.92	1.1		

Note: The model also included global region and country of residence; however, that output is omitted from this table for the sake of brevity.

## A.2: Survey Method

### A1.1 Survey Instruments

This survey was included as a module within the Gallup World Poll in 2022. 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.

See the online appendix for more information on the Gallup World Poll.

### A1.2 Translation and Quality Control

The questionnaire was translated into the major conversational languages of each country. The translation process started with an English, French or Spanish version, depending on the region. One of two translation methods may have been used. In the first, two independent translations were completed. An independent third party, with some knowledge of survey research methods, adjudicated the differences. A professional translator translated the final version back into the source language. In the second, a translator translated into the target language. An independent third party with knowledge of survey methods reviewed and revised the translation as necessary.

Core Gallup World Poll question translations remain consistent over time. Any new question items were translated according to the Gallup World Poll's quality procedures. Interviewers were instructed to follow the interview script and may not deviate from the translated language.

See the online appendix for more information on translation quality control, interviewer training and data quality control.

### A1.3 Sampling and Data Collection

All 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.

See the online appendix for more information on how the sample generation/selection process works in practice.

## 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 were lower in countries where interviewing was conducted by telephone than in in-person countries, though in many countries and territories where telephone interviewing was used, response rates were comparable to those of other polling firms. The Gallup World Poll does not publish individual country response rates.

Data weighting was also used to minimize bias in survey estimates and was 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.

See the online appendix for the weighting approach, weight adjustments and sampling error/precision of estimates.

## A.3: Survey Questionnaire

### Thinking about the last 7 days ...?

- 1 On how many days did you eat lunch with someone you know?
  - (0-7 days)
- 2 On how many days did you eat dinner with someone you know?
  - (0-7 days)
- Thinking about the past 7 days, in general did you enjoy cooking? If you didn't cook in the past 7 days, please just say so.
  - Yes
  - No
  - Did not cook in the past 7 days
  - (DK/Refused))

## A.4: Regional Groupings Used in This Report

In analyzing the results from 142 countries and territories, this report uses the following regional groupings:

Regional Groupings	Region	Countries surveyed
Arab States and	Arab States	Lebanon, Saudi Arabia, Jordan, Palestinian Territories, Iraq, Kuwait, United Arab Emirates and Yemen
Northern Africa	Northern Africa	Egypt, Morocco, Algeria, Libya and Tunisia
	Eastern Asia	Hong Kong (S.A.R. of China), Japan, South Korea, Taiwan and Mongolia
Southern and Eastern Asia and the Pacific	South-Eastern Asia and the Pacific	Indonesia, Singapore, Australia, Philippines, Vietnam, Thailand, Cambodia, Laos, Myanmar, New Zealand and Malaysia
	Southern Asia	Pakistan, Bangladesh, Iran, India, Sri Lanka, Afghanistan and Nepal
	Eastern Europe	Poland, Hungary, Czech Republic, Romania, Moldova, Russia, Ukraine, Bulgaria and Slovakia
Europe	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
Americas	Latin America and the Caribbean	Venezuela, Brazil, Mexico, Costa Rica, Argentina, Bolivia, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Puerto Rico and Uruguay
	Northern America	United States and Canada
Central and Western Asia	Central and Western Asia	Türkiye, Israel, Georgia, Kazakhstan, Kyrgyzstan, Armenia, Azerbaijan, Cyprus, Tajikistan, Uzbekistan and Northern Cyprus
Sub-Saharan Africa	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, Comoros, Democratic Republic of the Congo, Republic of the Congo, Gabon, Guinea, Côte d'Ivoire, Lesotho, Liberia, Mauritius, Namibia, Eswatini, The Gambia and Togo



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