

SUNSTAR

Global Healthy Thinking Report

2021 Air Quality, Health & Wellbeing Survey A worldwide consumer survey of air quality, health & wellbeing

Introduction

Summary overview

Report analysis

Guest editor article by Fiona MacRae

Summary country profiles



Introduction

Air quality is never far from the headlines with atmospheric pollution, a well-known threat to health, but as Sunstar's latest global consumer awareness study reveals, the quality of the air inside our homes is also a concern for many. The results of the air quality, health and wellbeing survey of thousands of people from 15 countries on four continents also provide a thought-provoking insight into the state of mental and physical health around the world.

In the largest study of its kind, equal numbers of men and women aged 18 to 65 in countries across Europe, Asia and North and South America were quizzed on everything from the quality of the air where they live, to the effect of the COVID-19 pandemic on their wellbeing and how technology will be used to improve mental wellbeing in the future.

The answers provided by the 15,000 respondents make fascinating reading. **Strikingly, just 22% of people perceive the quality of the air inside their home as being excellent** and almost all of those questioned feel that breathing in poor quality air at home damages their health. This might be by disrupting their sleep, exacerbating their asthma, worsening their wellbeing or simply by making them feel physically dirty.

Perceptions, however, vary from country to country. People in the UK are the least concerned, with **30% saying indoor air quality has no effect on their wellbeing**. In contrast, just **4%** of the Thai respondents feel it doesn't cause them any problems.



Globally, ventilation is seen as key to good quality indoor air and, not surprisingly, the COVID-19 pandemic has made many of us more conscious of the quality of the air within our homes. But attitudes differ:

- **55%** of Indonesians say they are now more aware of indoor air quality than before the pandemic
- Singaporeans are most likely to worry more about it now
- The Chinese are being the most proactive, with almost a quarter taking steps to improve their indoor air quality
- While people in the UK are the least concerned – 46% are no more worried about indoor air quality than pre-Covid

Looking beyond air quality, the survey also probed how the pandemic has affected people's wellbeing.

Interestingly, the respondents say that COVID-19 has taken a greater toll on their mental than their physical health.

Globally, **28%** say they feel physically no different to pre-pandemic and **18%** believe they are physically fitter. A similar proportion, **19%**, say they are less fit.

In contrast, just **22%** believe their mental health hasn't changed, and while **15%** think it is better than before, **26%** think it has worsened. Mental health

has deteriorated the most in Italy, where 39% feel mentally unhealthier than before the pandemic. In China, in contrast, just 7% have noticed a decline in their mental wellbeing.

Throughout the world, people are, however, investing in their wellbeing by making lifestyle changes designed to give their immunity, and general health, a boost.

Exercise is the favoured health tonic, with **33%** of respondents saying they have upped their physical activity. Lowering stress, eating a more balanced diet, prioritising getting more sleep and taking vitamin supplements are also popular pick-meups.

Being physically active is also our go-to health booster in normal times, with regular exercise the most common wellbeing practice in 13 out of the 15 countries surveyed. Germans and Britons, however, prefer walks and talks with family and friends.

Only in Thailand, where the vast majority of the population is Buddhist, do meditation and mindfulness make it into the top three wellbeing practices.

There is optimism, meanwhile, that technology, such as self-help apps and online video therapy, will play an increasing role in improving mental health in years to come. Not everyone agrees on the most useful gadgets, though. While **34%** of Chinese respondents believe companion robots will be commonplace by 2030, just **21%** globally and **13%** in the UK and **12%** in Japan think the same.

Overall, it is clear that:

- More attention needs to be paid to the quality of indoor air and its effect on health
- The pandemic has taken a heavy toll on mental as well as physical wellbeing
- People the world over are investing in their wellbeing by making lifestyle changes designed to give their immunity, and general health, a boost.

By Fiona MacRae

Fiona MacRae is a UK-based health and science writer. She has 20 years of experience in journalism, including 12 on national newspapers. A finalist in the Medical Journalists' Association's awards for the past two years, she writes for newspapers, companies and charities and has also worked in a busy NHS press office.

Summary overview

As with the inaugural Sunstar Healthy Thinking Report on oral health, when Sunstar commissioned its worldwide consumer awareness survey on air quality, health and wellbeing in March 2021 it wanted to offer a global snapshot of consumers' awareness of these aspects of their lives this year during the worldwide Covid-19 pandemic.

While the questions cover a lot of ground - from the perception of the air quality inside homes, how consumers rate their physical and mental wellbeing, to whether they have done anything to improve their immunity to Covid-19 and/ or general health - they illustrate how different populations feel about these aspects of their lives and how they have responded to the challenges of the pandemic.

In a single report, the findings give a multi-layered illustration of perceptions around air quality, health and wellbeing this year and how consumers have looked after themselves during this unprecedented period.

With an introduction by specialist science and health writer, Fiona MacRae, to give her journalistic overview of the findings, the report includes indepth analysis of the survey results, individual country profiles covering the 15 countries in the report and also a further article to explore its key themes in greater depth.

Numbers surveyed/split

Minimum 1,000 respondents per country = **15,000** worldwide 18-65 years old, equal gender split



Countries surveyed

Argentina, Brazil, China, France, Germany, Indonesia, Italy, Japan, Mexico, Netherlands, Singapore, Spain, Thailand, UK, and US

The worldwide consumer air quality, health and wellbeing survey questioned consumers on:













Their perception of the air quality outside their home



The effect they feel poor indoor

air quality has on them



Which factors they see as having the biggest impact on their perception of the air quality in their home



Any new actions they have started undertaking to improve their indoor air quality



The impact of the Covid-19

pandemic on their awareness of

the air quality in their home

How they rate their general physical and mental wellbeing





Practices they undertake for their wellbeing



The modern technology they think will be regularly used to help improve people's mental health by 2030

Whether they have done anything to boost their immunity to Covid-19 and/or general health



How they look after their facial skin

Key findings



Which country gives the highest rating for air quality in the street outside the home?

22% of US respondents perceive their air quality as excellent (5 rating) outside their home and just 2% consider it poor (1 rating). Still, 39% of US respondents don't know how to rate air quality in the street.

While 25% of Thai perceive the air quality outside their home as poor, and 20% Thai, gave it a 2 rating. Just 11% think air quality was excellent. Globally, just 14% perceive their air quality in the street outside their home as excellent.



In which country has the Covid-19 pandemic most affected people's awareness of air quality within their home?

Indonesians are most aware of the air quality within their home as a result of the pandemic (55%), followed by Argentina and Mexico, 51% and 50% respectively. While the UK was the least affected, 46%.

While China is taking the most steps to improve air quality within their home 24% of respondents, followed by Indonesia and Netherlands, both 23%.



Which countries gives the highest rating for air quality within the home?

34% of Mexicans and Brazilians perceive the indoor air quality within their home as excellent, with just 1% and 4% respectively reporting it as poor.

Globally, just 22% of consumers perceived the air quality within their homes as excellent and 2% think it is poor.

8

Where do consumers feel most stressed by poor indoor air quality?

People in Argentina and Japan feel most stressed (41% by poor indoor air quality, followed by Mexico (40%).

The countries where people feel least stressed by poor indoor air quality were the UK and France (both 23%).



What is the most popular action taken to improve air quality in the home in the last six months globally?

Opening windows/doors to circulate air for longer is the most significant global action taken by consumers, with the highest percentage in Argentina (67%), followed by Italy and Indonesia, 57% and 55% respectively.

Other high scoring actions across countries range from more regularly dusting and changing bedding in Mexico (54%) to running an air purifier which was especially popular in China (44%).



Which countries feels physically the unhealthiest in comparison to pre-pandemic?

25% of Italians feel physically unhealthier compared to pre-pandemic, closely followed by Britons, **24%** and the Dutch, Indonesians and Argentinians at **23%** and Germany **22%**.



Which countries feel mentally unhealthier since Covid-19?

39% of Italians feel mentally unhealthier compared to pre-pandemic, followed by **37%** of Brazilians and **34%** of Britons.

Contrastingly, 27% of consumers in China actually feel mentally healthier overall.



Which country is worst for lowering stress to boost immunity to Covid-19 and/or general health?

The UK has the lowest rating (19%) for trying to lower stress, followed by Japan and the Netherlands tied at 22%, and France 24%. The Argentinians are most successful in lowering their stress, 38%.



Worst countries for selfchecking new or changing moles on facial skin

The UK and France both tied equally with just 9% saying they self-check new or changing moles on facial skin, although this was poor globally at 13%. The US and Brazil do this the most, but just 19% are doing so.



Best country for increasing exercise in recent months?

47% of Chinese respondents are exercising more in the last six months. While consumers in Indonesia, Thailand and Mexico have also increased exercise – **44%**, **43%** and **42%** respectively. Globally **33%** said the same.



Country with the biggest increase in vitamin supplementation to boost immunity

49% of Indonesians are now taking vitamin supplements such as Vitamin C or D to boost their immunity to Covid-19 and/or general health, followed by 46% of Mexicans. Just 12% of Japanese are doing so.



Best country for adopting a generally healthier diet in recent months?

51% of Indonesians are eating a generally healthier diet in the last six months, this was also high is China, 46%, Thailand 42% and Mexico, 41%. While 18% of Britons are eating a less healthy diet.



Country least likely to wear SPF30 sunscreen or above 365 days a year to look after facial skin

The French scored the lowest for wearing protective SPF30 sunscreen or above 365 days a year to look after facial skin. But this was also low across Europe with just 8% in the UK doing so and 9% in Germany (and compared to 28% in Thailand and 21% in Brazil).

Sunstar Global Healthy Thinking Report Analysis

Here we report the overall key findings from the consumer awareness survey along with our analysis of the results incorporating country specific factors such as the health system and cultural/lifestyle choices. All the consumer findings are self-reported.



Global snapshot - air quality outside the home

Overall 39% 29% Argentina 38% 29% 13% 33% 26% 16% Brazil 37% 42% 11% China 42% 29% 15% France 37% 37% 16% Germany 38% 29% 15% Indonesia Italy 39% 31% 14% 52% 21% 11% Japan 23% 37% 15% Mexico 40% Netherlands 36% 13% 32% 45% Singapore 2% 12% 40% 31% 14% Spain Thailand 25% 31% 13% 11% UK 46% 29% 33% US 2% 37% 22% 1 - being poor 2 3 4 5 - being excellent

How do consumers rate the quality of the air in the street outside their home? (consumer perception)

Air quality outside the home

The country with the highest rated perception of outdoor air quality overall was the US, with 22% rating the air quality in the street outside their home as excellent and just 2% as poor.

While **25%** in Thailand perceived their outdoor air quality was poor, with a further **20%** saying it was a '2'.

In Japan, the perception of their air quality, **52%** was a '3' or average. Overall, just 14% globally perceived the quality of the air in their street as excellent, although only **7%** perceived it as poor. This contrasting picture may be a result of the contrast picture between city and non-city living.

Why is air quality important?

According to the World Health Organization, **air pollution is estimated to kill seven million people worldwide each year**. In fact, WHO data illustrated that nearly all (99%) of the global population breathe air that exceeds its own guideline limits.

Read more: <u>https://www.who.int/health-topics/air-pollution#tab=tab_1</u>

The WHO states 'Clean air is fundamental to health' and says there is now greater evidence than ever before that air pollution impacts different aspects of health at much lower concentrations than previously thought, and **the amount of disease linked to** air pollution is now at the same level as other significant global health risks such as tobacco smoking and poor diet.

Whether it's smog in the air above major cities or smoke inside the home, the WHO says the effect of combining outdoor and household air pollution results in seven million premature deaths per annum, mostly as a result of increase death rates from stroke, heart disease, chronic obstructive pulmonary disease, lung cancer and acute respiratory infections. The WHO's latest guidelines Global Air Quality Guidelines were released in September 2021 <u>https://www.who.int/</u> <u>publications/i/item/9789240034228</u>



Global snapshot - air quality inside the home

| Overall | 5% | | 30% | | | 41% | | 22% | | |
|-------------|----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Argentina | 4% | | 26% | | | 42% | | 26% | | |
| Brazil | 4% | 5% | 20% | | | 37% | : | 34% | | |
| China | 4% | | 23% | | | 49% | | 24% | | |
| France | 5% | | 32% | | | 43% | | 19% | | |
| Germany | 5% | | 31% | | | 43% | | 20% | | |
| Indonesia | 3% | | 21% | | | 46% | | 28% | | |
| Italy | 5% | | 30% | | | 42% | | 21% | | |
| Japan | 3% | 10% | | | 55% | | 21% | 11% | | |
| Mexico | 4% | | 19% | | 42 | % | ; | 34% | | |
| Netherlands | 6% | | 33% | D | | 42% | | 19% | | |
| Singapore | 6% | | | 38% | | 40% | | 15% | | |
| Spain | 3% | | 24% | | | 46% | | 26% | | |
| Thailand | 4% | 8% | | 34% | | 37% | | 17% | | |
| UK | 5% | | 33% | | | 43% | | 17% | | |
| US | 6% | | 29% | | | 37% | 26% | | | |

How do consumers rate the quality of the air inside their home?

34% of Mexicans and Brazilians perceived their indoor air quality within their home as excellent and just 1% and 4% as poor respectively. In Japan just 11% perceived their domestic air quality as excellent. Globally, just 22% of consumers perceived the air quality within their homes as excellent and 2% as poor.

Air quality inside the home (consumer perception)

Which factors do you see as having the biggest impact on your perception of the air quality in your home?

| | ality in your home? | Overall | Argenti | Brazil | China | France | Germai | Indone | Italy | Japan | Mexico | Netherl | Singap | Spain | Thailan | ¥ | SU | |
|-----|--|---------|---------|--------|-------|--------|--------|--------|-------|-------|--------|---------|--------|-------|---------|-----|-----|--|
| 1st | Ventilation/circulation | 41% | 55% | 43% | 46% | 28% | 31% | 50% | 31% | 47% | 49% | 34% | 33% | 49% | 41% | 37% | 33% | |
| 2nd | Airborne particles/allergens (e.g dust, pet hair, smoke etc) | 29% | 24% | 23% | 45% | 25% | 27% | 33% | 28% | 27% | 29% | 25% | 30% | 27% | 35% | 29% | 33% | |
| 3rd | Humidity | 29% | 35% | 25% | 28% | 27% | 32% | 36% | 39% | 29% | 21% | 30% | 34% | 28% | 19% | 24% | 28% | |
| | Airborne particles from outside (pollen, smoke, pollution etc) | 28% | 20% | 21% | 45% | 27% | 27% | 29% | 32% | 34% | 21% | 21% | 30% | 26% | 34% | 26% | 30% | |
| | Temperature | 4296 | 260 | 306 | 231 | 277 | 288 | 313 | 215 | 170 | 256 | 343 | 344 | 254 | 415 | 281 | 343 | |
| | Unpleasant smells | 3198 | 139 | 158 | 277 | 238 | 254 | 228 | 179 | 195 | 115 | 201 | 211 | 163 | 332 | 265 | 243 | |
| | Pleasant smells | 3105 | 287 | 258 | 182 | 228 | 268 | 107 | 154 | 89 | 264 | 160 | 240 | 264 | 132 | 236 | 236 | |

| Factor | Top Country | Bottom Country |
|---|-----------------|-----------------|
| Ventilation/circulation | Argentina – 55% | France – 28% |
| Airborne particles (e.g dust, pet hair, smoke, etc.) | China – 45% | Brazil – 23% |
| Humidity | Indonesia – 36% | Thailand - 19% |
| Airborne particles from outside (pollen, smoke, pollution etc) | China – 45% | Argentina – 20% |
| Temperature | Thailand - 41% | Japan – 17% |
| Unpleasant smells | Thailand – 33% | Mexico – 11% |
| Pleasant smells | Argentina – 28% | Japan – 9% |

Ventilation/circulation is a top three factor for every country

Airborne particles from outside only appears in the top three for China, Japan and Italy.

Pleasant smells

only appears in the top three for the three Latin American countries – Argentina, Brazil, and Mexico.

Air quality inside the home (consumer perception)

Which factors do you see as having the biggest impact on your perception of the air quality in your home?

| TOP 3 | Argentina | Brazil | China | France | Germany | Indonesia | Italy | Japan |
|-------|--|-------------------------|--|--|--|--|--|--|
| 1 | Ventilation/circulation | Ventilation/circulation | Ventilation/circulation | Ventilation/circulation | Humidity | Ventilation/circulation | Humidity | Ventilation/circulation |
| 2 | Humidity | Temperature | Airborne particles (e.g dust, pet hair, smoke etc) | Humidity | Ventilation/circulation | Humidity | Airborne particles from outside (pollen, smoke, pollution etc) | Airborne particles from outside (pollen, smoke, pollution etc) |
| 3 | Pleasant smells | Pleasant smells | Airborne particles from outside (pollen, smoke, pollution etc) | Temperature | Temperature | Airborne particles (e.g dust, pet hair, smoke etc) | Ventilation/circulation | Humidity |
| | Mexico | Netherlands | Singapore | Spain | Thailand | UK | US | |
| 1 | Ventilation/circulation | Ventilation/circulation | Humidity | Ventilation/circulation | Ventilation/circulation | Ventilation/circulation | Temperature | |
| 2 | Airborne particles (e.g dust, pet hair, smoke etc) | Temperature | Temperature | Humidity | Temperature | Airborne particles (e.g dust, pet hair, smoke etc) | Ventilation/circulation | |
| 3 | Pleasant smells | Humidity | Ventilation/circulation | Airborne particles (e.g dust, pet hair, smoke etc) | Airborne particles (e.g dust, pet hair, smoke etc) | Temperature | Airborne particles (e.g dust, pet hair, smoke etc) | |

How does poor air quality in the home make people feel?

What effect do you feel that poor indoor air quality at home has had on you when you have experienced it?

| Factor | Global score | Most impacted | Least impacted |
|---|--------------|------------------------------|---------------------------------|
| I feel stressed/upset/negative | 31% | Japan & Argentina – 41% | Netherlands – 20% |
| I can't sleep/have bad quality sleep | 29% | Germany & Indonesia – 37% | Japan – 20% |
| I feel physically dirty/unclean | 28% | Mexico – 40% | France – 15% |
| I feel unwell | 27% | China – 54% | Mexico – 10% |
| It worsens the symptoms of my chronic respiratory condition (e.g asthma, COPD etc) | 20% | Thailand – 38% | Argentina, Mexico & UK – 13% |
| It worsens the symptoms of my mental health condition (e.g depression, bi-polar disorder etc) | 14% | Singapore – 25% | Argentina – 7% |
| It has no impact on me/none of the above | 16% | Thailand – 4% | UK – 30% |

A quarter of Singaporeans find their mental health worsens when the indoor air quality is poor. Almost a quarter of Americans say the same.

Over a third of Thai respondents find poor indoor air quality worsens their chronic respiratory condition.

Only 4% of Thai feel they are not affected by poor indoor air quality.

China is the only country where over half of all respondents agreed on one effect: **54% feel unwell when their indoor air quality is poor.**



Air quality inside the home

Top three – what effect do you feel poor indoor air quality has on you at home when you have experienced it?

| | , | ŇŎ | Arg | Bra | Chi | Frai | Ger | Inde | Italy | Jap | Me | Net | Sin | Spa | Tha | ž | |
|----|--------------------------------------|-----|-----|-----|-----|------|-----|------|-------|-----|-----|-----|-----|-----|-----|-----|--|
| st | I feel stressed/upset/negative | 31% | 41% | 31% | 29% | 23% | 27% | 32% | 28% | 41% | 40% | 20% | 32% | 35% | 34% | 23% | |
| nd | I can't sleep/have bad quality sleep | 29% | 30% | 30% | 30% | 27% | 37% | 37% | 22% | 20% | 35% | 25% | 31% | 28% | 34% | 27% | |
| d | I feel physically dirty/unclean | 28% | 38% | 16% | 27% | 15% | 20% | 39% | 37% | 24% | 40% | 21% | 30% | 32% | 34% | 24% | |

Why does air quality have such a big impact?

"Sick building syndrome is the name for symptoms you get while you're in a particular building. It usually happens in an office, but you can get it in any building." *NHS England*

Symptoms include:

headaches

1st

2nd

3rd

- blocked or runny nose
- dry, itchy skin
- dry, sore eyes or throat
- cough or wheezing
- rashes
- tiredness and difficulty concentrating

"Excessive complaints relevant to indoor air pollution caused by interior decoration and refurbishment and the prevalence of sick building syndrome (SBS) have aroused deep concern of IAQ problems from the government and the public."

Hao, J., Zhu, T., & Fan, X. (2014). Indoor Air Pollution and Its Control in China. Indoor Air Pollution, 64, 145–170. <u>https://doi.org/10.1007/698_2014_257</u>

"**Dry air perception**, not due to physical dryness, was a strong and consistent risk factor for SBS symptoms. Low ventilation and dampness were also risks for SBS symptoms."

Huo, X., Sun, Y., Hou, J., Wang, P., Kong, X., Zhang, Q., & Sundell, J. (2020). Sick building syndrome symptoms among young parents in Chinese homes. Building and Environment, 169, 106283.

32%

28%

31%

Has the Covid-19 pandemic affected awareness of air quality within the home?

The majority of Indonesians (55%) say they feel more aware of the air quality within their home since the pandemic.

Only **19%** of Japanese say the same.

Singaporeans are the most concerned about the air quality in their home since the pandemic -35% say they are more aware of it and worry more about it.

In contrast, only **14%** of Indonesians say they worry more.

China is taking the most steps to improve their air quality. **24%** say they are doing so.

Only 14% of Japanese say the same.

The UK is the least concerned – **46%** say they feel no more aware and don't worry more.

Only 6% of Chinese are unconcerned or unaware of their air quality.

| Overall | 36% | | | | | 19% | | | 21% | |
|-------------|-----|-----|-----|-----|-----|------|-----|-------|-----|--|
| Argentina | 5. | ۱% | | | 18% | | 17% | | 14% | |
| Brazil | 39% | | | | | 21 % | | | 15% | |
| China | 46% | | | 25 | | | 2 | 24% 6 | | |
| France | 33% | | 28% | | | 18% | | | 20% | |
| Germany | 30% | 24% | | 18% | | | 28% | | | |
| Indonesia | | | | 14% | | 239 | % | 8% | | |
| Italy | 38% | | | 30% | | | 15% | | 16% | |
| Japan | 19% | 26% | | 14% | | | 41% |) | | |
| Mexico | 50 | % | | 16 | 6% | | 21% | | 13% | |
| Netherlands | 27% | | 22% | | 23% | | | 28% | | |
| Singapore | 27% | | 35% | | | 22 | % | | 17% | |
| Spain | 36% | | 26 | % | | 199 | 6 | | 19% | |
| Thailand | 38% | | | 31% | | | 19% | | 12% | |
| UK | 24% | 129 | /o | | | 46% | | | | |
| US | 33% | | 24% | | 159 | % | 27% | | | |

Yes, I feel more aware of the air quality within my home

Yes, I am more aware of the air quality/take steps to improve it

Yes, I am more aware of the air quality/worry more about the air within my home No, I don't feel any more aware/worry any more about the air quality within my home

What new actions have global consumers taken to improve air quality inside their home (over the last six months)

The most significant change is amongst Argentinians – two-thirds (67%) are now circulating the air by opening windows/doors for longer.

The majority of Mexicans (54%) are now more regularly dusting and changing their bedding.

44% in China are now keeping indoor plants.

24% in China and the US are now running a humidifier.

What other actions are popular across countries?

The biggest uptake in air purification is in China – where **41%** are now running an air purifier.

China was the only country to list both indoor and outdoor airborne pollutants as factors in their perception of indoor air quality.

21% in Italy are now running a dehumidifier.

Italians listed humidity as the top factor in their perception of indoor air quality.

35% of Argentinians are now using air fresheners, scented candles or oils.

Argentina was one of only three countries to list pleasant smells amongst their top three factors in their perception of indoor air quality.

"China air purifiers market stood at USD 1489.84 Million in 2019 and is projected to grow at a CAGR of 5.12% to surpass USD 1767.81 Million by 2025"

"Anticipated growth in the market can be attributed to deteriorating air quality due to rising vehicular pollution and booming industrial sector in the country, which is resulting in higher PM2. 5 concentration levels, and consequently, increasing incidences of respiratory diseases."

China Air Purifiers Market, By Filter Type, By End Use, By Distribution Channel, Competition Forecast & Opportunities, 2015 – 2025



Are there any new actions in the past six months or longer that you now regularly take to improve the air quality in your home?

| | Overall | Argentina | Brazil | China | France | Germany | Indonesia | Italy | Japan | Mexico | Netherlands | Singapore | Spain | Thailand | ΛĶ | SU |
|---|---------|-----------|--------|-------|--------|---------|-----------|-------|-------|--------|-------------|-----------|-------|----------|-----|-----|
| I circulate the air more by opening windows/doors for longer 1st | 46% | 67% | 54% | 43% | 48% | 44% | 55% | 57% | 42% | 50% | 32% | 33% | 54% | 47% | 37% | 35% |
| I circulate the air by running an air conditioner or electric fan | 19% | 22% | 22% | 22% | 12% | 12% | 28% | 13% | 14% | 21% | 13% | 28% | 11% | 31% | 7% | 27% |
| I run an air purifier | 21% | 12% | 16% | 41% | 15% | 15% | 18% | 15% | 33% | 17% | 19% | 29% | 17% | 32% | 11% | 24% |
| I run a humidifier | 14% | 7% | 18% | 24% | 9% | 11% | 10% | 11% | 22% | 11% | 12% | 20% | 16% | 12% | 8% | 24% |
| I run an air dehumidifier | 11% | 6% | 6% | 19% | 9% | 10% | 6% | 21% | 9% | 6% | 9% | 18% | 11% | 13% | 11% | 15% |
| I regularly dust, wash bedding | 37% | 42% | 45% | 42% | 31% | 28% | 51% | 35% | 17% | 54% | 25% | 30% | 42% | 45% | 29% | 33% |
| I vacuum more regularly | 30% | 16% | 26% | 21% | 34% | 35% | 26% | 43% | 19% | 21% | 33% | 31% | 29% | 41% | 34% | 37% |
| I keep indoor plants | 26% | 28% | 28% | 44% | 29% | 33% | 27% | 19% | 9% | 27% | 33% | 22% | 18% | 24% | 22% | 26% |
| I use air fresheners/fragranced candles/oils | 25% | 35% | 15% | 26% | 21% | 19% | 28% | 29% | 9% | 21% | 19% | 31% | 28% | 29% | 29% | 34% |
| I avoid smoking/smoke in my home | 20% | 20% | 12% | 28% | 16% | 21% | 33% | 21% | 6% | 25% | 20% | 15% | 22% | 29% | 12% | 19% |
| No, I haven't changed anything | 8% | 4% | 5% | 3% | 8% | 12% | 2% | 5% | 20% | 4% | 12% | 6% | 7% | 2% | 20% | 10% |

Country comparisons – general wellbeing compared to pre-pandemic

| How would you rate your general wellbeing at this moment, in comparison to pre-pandemic? | Overall | Argentina | Brazil | China | France | Germany | Indonesia | Italy | Japan | Mexico | Netherlands | Singapore | Spain | Thailand | Я | SU |
|--|---------|-----------|--------|-------|--------|---------|-----------|-------|-------|--------|-------------|-----------|-------|----------|-----|-----|
| I feel physically healthier | 18% | 19% | 15% | 28% | 14% | 14% | 20% | 12% | 6% | 23% | 17% | 24% | 16% | 21% | 15% | 20% |
| I feel physically unhealthier | 19% | 23% | 21% | 8% | 19% | 22% | 13% | 25% | 17% | 20% | 23% | 17% | 23% | 17% | 24% | 16% |
| I feel physically about the same 1st | 28% | 27% | 23% | 30% | 28% | 31% | 30% | 29% | 41% | 24% | 24% | 24% | 25% | 22% | 26% | 29% |
| I feel mentally healthier | 15% | 17% | 12% | 27% | 11% | 9% | 17% | 8% | 7% | 19% | 15% | 19% | 14% | 21% | 9% | 19% |
| I feel mentally unhealthier | 26% | 26% | 37% | 7% | 25% | 29% | 21% | 39% | 28% | 21% | 26% | 18% | 31% | 24% | 34% | 21% |
| I feel mentally about the same | 22% | 23% | 15% | 26% | 25% | 23% | 20% | 19% | 21% | 20% | 24% | 22% | 23% | 19% | 25% | 24% |
| I am unsure | 5% | 3% | 4% | 4% | 4% | 9% | 5% | 2% | 11% | 3% | 7% | 8% | 3% | 3% | 8% | 7% |

Physical wellbeing since Covid-19

| l feel physically healthier | I feel physically about the same | l feel physically unhealthier |
|--------------------------------|-------------------------------------|----------------------------------|
| China – 28% | Japan – 41% | Italy – 25% |
| Japan – 6% | Thailand – 22% | China – 8% |

Mental wellbeing since Covid-19 – highest and lowest

| l feel mentally healthier | I feel mentally about the same | l feel mentally unhealthier |
|------------------------------|-----------------------------------|--------------------------------|
| China – 27% | Japan – 26% | Italy – 39% |
| Japan – 7% | Thailand – 15% | China – 7% |

Global snapshot – How physical and mental wellbeing changed since Covid-19 across countries

Countries where more people feel mentally healthier than unhealthier:

- China
- Singapore

Countries where more people feel mentally unhealthier than healthier:

- US
- Japan
- Thailand
- Argentina
- Mexico
- Italy
- France
- Germany
- Netherlands
- Indonesia
- Spain
- Brazil
- UK



The Covid-19 pandemic has had an overwhelmingly negative impact on mental wellbeing, and appears to have had a greater impact on mental health than on physical health throughout the world.



Countries where more people feel physically healthier than unhealthier:

- US
- China
- Singapore
- Thailand
- Mexico
- Indonesia

Countries where more say they feel physically unhealthier than healthier:

- Japan
- Argentina
- Italy
- France
- Germany
- Netherlands
- Spain
- Brazil
- UK

The World Health Organization (WHO) describes mental health as a "state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community."

Said WHO on mental health during the pandemic. "Fear, worry, and stress are normal responses to perceived or real threats, and at times when we are faced with uncertainty or the unknown. So it is normal and understandable that people are experiencing fear in the context of the COVID-19 pandemic."

How physical activity has been reported in the US and UK during the pandemic

"The declaration of COVID-19 as a global pandemic in March 2020 resulted in a rapid decrease in step counts worldwide, including in the United States, according to a new study by researchers at UC San Francisco."

https://www.ucsf.edu/news/2020/07/417951/physical-activity-dropped-worldwideduring-covid-19-raising-concerns-health

"Changes in physical activity were reported in 64 studies, with the majority of studies reporting decreases in physical activity and increases in sedentary behaviours during their respective lockdowns across several populations, including children and patients with a variety of medical conditions."

https://bmjopensem.bmj.com/content/7/1/e000960

The COVID-19 pandemic has a negative impact on physical activity. Those who reduced their level of physical activity had the highest levels of mood disorders.

https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-021-10470-z



What are the top three dietary or wellbeing changes in the last six months across countries?



Exercising more

(33% globally)

China – 47%

Japan – 13%

26% of Japanese respondents say they are exercising less (globally: 16%).



Healthier diet

(31% globally) Indonesia – 51% Japan – 12%

18% of Britons say they are eating a less healthy diet (globally: 12%).



Better skincare

(26% globally) Mexico, Thailand, China – 35% Japan – 13%

11% of Singaporeans say they are taking less care of their skin (globally: 8%).

Global snapshot – have you made any dietary or wellbeing changes in the past six months?

| | Overall | Argentina | Brazil | China | France | Germany | Indonesia | Italy | Japan | Mexico | Netherlands | Singapore | Spain | Thailand | ЛХ | SU |
|--|---------|-----------|--------|-------|--------|---------|-----------|-------|-------|--------|-------------|-----------|-------|----------|-----|-----|
| Yes, drinking less alcohol | 18% | 19% | 19% | 33% | 14% | 16% | 8% | 19% | 9% | 22% | 17% | 14% | 24% | 28% | 16% | 17% |
| Yes, drinking more alcohol | 8% | 11% | 8% | 3% | 9% | 10% | 2% | 7% | 13% | 6% | 10% | 11% | 6% | 5% | 13% | 12% |
| Yes, drinking more tea/coffee | 21% | 24% | 23% | 14% | 20% | 28% | 16% | 23% | 26% | 21% | 22% | 18% | 18% | 16% | 21% | 24% |
| Yes, exercising more 1st | 33% | 37% | 30% | 47% | 26% | 27% | 44% | 27% | 13% | 42% | 26% | 33% | 36% | 43% | 29% | 32% |
| Yes, exercising less | 16% | 21% | 21% | 11% | 18% | 19% | 10% | 23% | 26% | 15% | 19% | 13% | 13% | 12% | 14% | 13% |
| Yes, my diet has become generally healthier | 31% | 37% | 27% | 46% | 24% | 25% | 51% | 28% | 12% | 41% | 22% | 23% | 38% | 42% | 18% | 25% |
| Yes, my diet has become generally more unhealthy | 12% | 16% | 16% | 6% | 13% | 14% | 7% | 12% | 9% | 13% | 14% | 12% | 12% | 7% | 18% | 16% |
| Yes, taking better care of my skin | 26% | 31% | 25% | 35% | 21% | 22% | 26% | 24% | 13% | 35% | 20% | 24% | 33% | 35% | 20% | 29% |
| Yes, taking less care of my skin | 8% | 8% | 7% | 7% | 9% | 8% | 6% | 8% | 8% | 6% | 9% | 11% | 5% | 6% | 7% | 9% |
| Yes, taking better care of my hair | 21% | 25% | 24% | 31% | 17% | 16% | 21% | 22% | 9% | 27% | 19% | 20% | 25% | 29% | 13% | 23% |
| Yes, taking less care of my hair | 8% | 7% | 8% | 7% | 10% | 11% | 6% | 9% | 9% | 6% | 10% | 9% | 7% | 6% | 10% | 11% |
| Yes, taking more care of my mental wellbeing | 25% | 33% | 32% | 42% | 16% | 19% | 29% | 19% | 18% | 35% | 16% | 23% | 25% | 35% | 13% | 23% |
| Yes, taking less care of my mental wellbeing | 8% | 7% | 10% | 5% | 10% | 9% | 6% | 12% | 4% | 6% | 12% | 12% | 6% | 7% | 10% | 9% |
| No, I haven't made any notable dietary/well-being changes in the last six months | 13% | 8% | 11% | 6% | 17% | 16% | 7% | 15% | 31% | 6% | 16% | 10% | 10% | 4% | 26% | 14% |

Have you made any dietary or wellbeing changes in the past six months?

I am taking more care of my mental wellbeing



Taking more care – 25% globally

China – **42%** Thailand & Mexico – **35%**

Argentina – 33%

Taking less care – 8% globally

Singapore, Italy, Netherlands – 12% France, Brazil, UK – 10% Germany & US – 9%



Most and least popular regular wellbeing activities across countries

| Practice | Global score |
|---|--------------|
| Physical exercise | 52% |
| Walk & talks with family/friends | 43% |
| Massage | 19% |
| Mindfulness/meditation at home self-guided | 15% |
| Online mindfulness/meditation at home | 12% |
| Weekend digital detoxes | 10% |
| Alternative or complementary therapies with a qualified practitioner (e.g reiki, acupuncture etc) | 9% |
| Talk therapy/CBT with any licensed practitioner | 9% |
| Cold therapy/wild swimming | 6% |

Regular online mindfulness/meditation at home for wellbeing



Regular coldwater or wild swimming for wellbeing



The top three wellbeing practices across each country

Thailand is the only country where at-home mindfulness/meditation is a top three practice.

Around **95%** of the population is Buddhist. Meditation has been an important part of Thai Buddhism since the mid-20th century. Meditation is more common in parts of Asia and the western world and often rooted in daily life in some countries. Germany and the UK are the only countries where physical exercise comes second to walk and talks with family/friends.

| TOP 3 | Argentina | Brazil | China | France | Germany | Indonesia | Italy | Japan |
|-------|---|---|---|---|--|---|---|---|
| 1 | Physical exercise | Physical exercise | Physical exercise | Physical exercise | Walk & talks with family/ friends | Physical exercise | Physical exercise | Physical exercise |
| 2 | Walk & talks with family/ friends | Physical exercise | Walk & talks with family/ friends | Walk & talks with family/ friends | Walk & talks with family/ friends |
| 3 | Massage | Massage | Massage | Massage | Massage | Massage | Massage | Massage |
| | Mexico | Netherlands | Singapore | Spain | Thailand | UK | US | |
| 1 | Physical exercise | Walk & talks with family/ friends | Physical exercise | |
| 2 | Walk & talks with family/ friends | Physical exercise | Walk & talks with family/ friends | |
| 3 | Massage | Massage | Massage | Massage | Mindfulness/ meditation at home self-guided | Massage | Massage | |



What are the changes to boost immunity to Covid-19 and/or general health since the pandemic began?

| | Overall | Argentina | Brazil | China | France | Germany | Indonesia | Italy | Japan | Mexico | Netherlands | Singapore | Spain | Thailand | UK | SU |
|--|---------|-----------|--------|-------|--------|---------|-----------|-------|-------|--------|-------------|-----------|-------|----------|-----|-----|
| I now take more exercise 1st | 33% | 38% | 35% | 44% | 26% | 26% | 44% | 29% | 17% | 39% | 27% | 29% | 36% | 48% | 25% | 29% |
| I now try to lower my stress | 29% | 38% | 30% | 29% | 24% | 26% | 34% | 31% | 22% | 31% | 22% | 28% | 31% | 35% | 19% | 29% |
| l now take vitamin supplements e.g C, D | 28% | 19% | 34% | 32% | 18% | 22% | 49% | 27% | 12% | 46% | 25% | 28% | 21% | 35% | 24% | 28% |
| I now eat a more balanced diet | 26% | 27% | 23% | 41% | 20% | 22% | 36% | 24% | 20% | 32% | 15% | 28% | 30% | 35% | 19% | 21% |
| I now prioritise getting more sleep | 26% | 27% | 30% | 42% | 19% | 22% | 31% | 23% | 23% | 26% | 19% | 25% | 27% | 31% | 18% | 22% |
| I now make or buy healthy vitamin/mineral drinks | 17% | 13% | 22% | 20% | 9% | 15% | 35% | 11% | 9% | 23% | 11% | 22% | 13% | 23% | 9% | 20% |
| I have now lost weight | 17% | 21% | 18% | 17% | 19% | 15% | 10% | 16% | 8% | 20% | 17% | 18% | 21% | 13% | 17% | 17% |
| I now take mineral supplements e.g zinc, magnesium | 16% | 10% | 19% | 22% | 14% | 18% | 22% | 17% | 8% | 19% | 12% | 17% | 12% | 19% | 10% | 20% |
| l now take herbal supplements | 11% | 8% | 9% | 11% | 8% | 9% | 22% | 9% | 5% | 11% | 7% | 16% | 8% | 25% | 6% | 15% |
| I now take pro-biotic drinks | 10% | 6% | 7% | 26% | 8% | 9% | 12% | 8% | 3% | 9% | 8% | 17% | 7% | 13% | 6% | 14% |
| I now use essentials oils | 9% | 6% | 6% | 10% | 13% | 7% | 9% | 7% | 3% | 8% | 9% | 17% | 9% | 11% | 7% | 14% |
| I haven't made any changes | 14% | 16% | 11% | 4% | 16% | 18% | 3% | 14% | 36% | 6% | 16% | 8% | 16% | 5% | 29% | 15% |

Exercising more – 33% globally

48% of Thai respondents are now exercising more in order to boost their health and immunity, versus just **17%** of Japanese.

Try to minimise stress – 29% globally

38% of Argentinians are trying to lower their stress in order to boost their health and immunity, compared to only **19%** of Britons.

Take vitamin supplements – 28% globally

49% of Indonesians are now taking vitamin supplements (such as Vitamin C or D), compared to just **12%** of Japanese.

Over a quarter of respondents globally (26%) are now:

- Eating a more balanced diet
- Prioritising getting more sleep

The three least common changes are:

- Using essential oils **9%**
- Taking pro-biotic drinks **10%**
- Taking herbal supplements **11%**

14% globally have not made any changes.

This is true for only **3%** of Indonesians, but **36%** of Japanese.

Since the pandemic have you done anything to boost your immunity?



I now try to lower my stress

Looking ahead – what modern technology do consumers think will be regularly used to help improve people's mental wellbeing by 2030?

| | | Overall | Argentina | Brazil | China | France | Germany | Indonesia | Italy | Japan | Mexico | Netherlands | Singapore | Spain | Thailand | ž | SU |
|-----|---|---------|-----------|--------|-------|--------|---------|-----------|-------|-------|--------|-------------|-----------|-------|----------|-----|-----|
| 1st | Daily apps to check your mental wellbeing | 37% | 37% | 45% | 42% | 24% | 31% | 50% | 31% | 32% | 38% | 27% | 35% | 34% | 51% | 34% | 36% |
| 2nd | Online video therapy/ telepsychiatry | 36% | 45% | 49% | 40% | 26% | 30% | 35% | 33% | 26% | 46% | 28% | 31% | 39% | 39% | 31% | 38% |
| 3rd | Alexa/Siri Al virtual assistants | 24% | 35% | 29% | 28% | 17% | 20% | 22% | 28% | 13% | 36% | 17% | 19% | 27% | 27% | 16% | 21% |
| | Wearable mood tech | 23% | 28% | 20% | 36% | 20% | 22% | 29% | 30% | 8% | 26% | 15% | 25% | 23% | 26% | 20% | 24% |
| | Online chat tools/chatbots | 23% | 17% | 21% | 36% | 13% | 24% | 26% | 16% | 18% | 18% | 22% | 27% | 19% | 29% | 24% | 29% |
| | Crisis text/WhatsApp lines to support | 22% | 29% | 27% | 22% | 22% | 20% | 25% | 18% | 5% | 28% | 22% | 26% | 27% | 20% | 23% | 22% |
| | Companion/support robots | 21% | 24% | 23% | 34% | 21% | 14% | 24% | 25% | 12% | 21% | 22% | 27% | 18% | 24% | 13% | 20% |
| | None of the above | 16% | 10% | 9% | 12% | 22% | 22% | 8% | 12% | 42% | 5% | 19% | 12% | 12% | 8% | 29% | 17% |

American Psychological Association 2021 trends report

"Mental health apps are gaining traction

Self-help apps are leading more people to therapy rather than replacing it, psychologists say"

https://www.apa.org/monitor/2021/01/trends-mental-health-apps

The top three modern technologies predicted across countries

1. Daily apps to check your mental health: 37%

The most common answer in: China, Germany, Indonesia, Singapore, Thailand, UK

2. Online video therapy/telepsychiatry: 36%

The most common answer in: Argentina, Brazil, France, Italy, Mexico, Netherlands, Spain, US

3. Alexa/Siri AI virtual assistants: 24%

The most common answer in Japan was "None of the above" (42%), followed by "Daily apps to check your mental health" (32%).

"Wearable mood tech" and "Online chat tools/chatbots" were significantly more popular answers in China (36%) compared to everywhere else (23% globally), as was "Companion/support robots" (34% vs 21%).

How does skincare vary globally?

The top three skincare priorities across each country

| TOP 3 | Argentina | Brazil | China | France | Germany | Indonesia | Italy | Japan |
|-------|--|--|---|--|--|---|--|--|
| 1 | Moisturise my face daily | Always wash my face with a gentle soap or cleansing foam | Eat a balanced diet, rich in vitamins, minerals & antioxidants | Moisturise my face daily | Moisturise my face daily | Always wash my face with a gentle soap or cleansing foam | Always wash my face with a gentle soap or cleansing foam | Never smoke |
| 2 | Always wash my face with a gentle soap or cleansing foam | Moisturise my face daily | Moisturise my face daily | Never smoke | Always wash my face with a gentle soap or cleansing foam | Eat a balanced diet, rich in vitamins, minerals & antioxidants | Use day/night face cream | Moisturise my face daily |
| 3 | Never smoke | Never smoke | Always wash my face with a gentle soap or cleansing foam | Use day/night face cream | Never smoke | Moisturise my face daily | Moisturise my face daily | Always wash my face with a gentle soap or cleansing foam |
| | Mexico | Netherlands | Singapore | Spain | Thailand | UK | US | |
| 1 | Always wash my face with a gentle soap or cleansing foam | Never smoke | Always wash my face with a gentle soap or cleansing foam | Moisturise my face daily | Always wash my face with a gentle soap or cleansing foam | Moisturise my face daily | Moisturise my face daily | |
| 2 | Moisturise my face daily | Use day/night face cream | Moisturise my face daily | Use day/night face cream | Use a facial serum daily | Never smoke | Always wash my face with a gentle soap or cleansing foam | |
| 3 | Use day/night face cream | Moisturise my face daily | Never smoke | Always wash my face with a gentle soap or cleansing foam | Wear an SPF 30 or above when it's sunny/go outside | Always wash my face with a gentle soap or cleansing foam | Use day/night face cream | |

Skincare priorities across countries

| | Overall | Argentina | Brazil | China | France | Germany | Indonesia | Italy | Japan | Mexico | Netherlands | Singapore | Spain | Thailand | Ŋ | NS |
|--|---------|-----------|--------|-------|--------|---------|-----------|-------|-------|--------|-------------|-----------|-------|----------|-----|-----|
| Moisturise my face daily 1st | 36% | 41% | 34% | 45% | 40% | 32% | 33% | 31% | 33% | 44% | 22% | 31% | 43% | 34% | 41% | 35% |
| Always wash my face with a gentle soap or cleansing foam | 35% | 37% | 41% | 36% | 29% | 30% | 57% | 34% | 20% | 45% | 18% | 33% | 33% | 48% | 27% | 36% |
| Never smoke | 29% | 36% | 33% | 24% | 31% | 27% | 25% | 29% | 36% | 25% | 28% | 27% | 31% | 28% | 31% | 25% |
| Use day/night face cream | 28% | 29% | 27% | 32% | 30% | 26% | 32% | 32% | 11% | 37% | 24% | 23% | 34% | 35% | 26% | 26% |
| Eat a balanced diet, rich in vitamins, minerals & antioxidants | 25% | 19% | 20% | 47% | 19% | 20% | 43% | 19% | 13% | 24% | 19% | 25% | 26% | 35% | 19% | 26% |
| Wear an SPF 30 or above when it's sunny/go outside | 20% | 17% | 25% | 26% | 10% | 15% | 23% | 13% | 13% | 27% | 17% | 21% | 19% | 36% | 14% | 18% |
| Never drink alcohol | 19% | 18% | 17% | 17% | 20% | 19% | 28% | 18% | 19% | 14% | 16% | 19% | 19% | 24% | 13% | 16% |
| Use a make-up remover | 18% | 19% | 13% | 21% | 23% | 15% | 21% | 23% | 8% | 27% | 16% | 14% | 23% | 16% | 17% | 21% |
| Use a facial serum daily | 18% | 9% | 10% | 35% | 17% | 13% | 23% | 15% | 4% | 16% | 13% | 20% | 19% | 42% | 14% | 19% |
| Wear an SPF 30 or above sunscreen 365 days of the year | 15% | 13% | 21% | 14% | 7% | 9% | 16% | 9% | 11% | 20% | 10% | 21% | 15% | 28% | 8% | 16% |
| Self-check any new or changing moles on my face | 13% | 12% | 19% | 17% | 9% | 12% | 18% | 13% | 8% | 8% | 13% | 16% | 13% | 13% | 9% | 19% |
| Visit a dermatologist for an annual check | 10% | 12% | 9% | 17% | 9% | 14% | 5% | 9% | 4% | 11% | 9% | 12% | 9% | 11% | 4% | 13% |
| Other | *% | *% | *% | 0% | 0% | *% | *% | *% | *% | 0% | *% | 0% | *% | 0% | *% | *% |
| No daily routine | 10% | 11% | 10% | 4% | 10% | 11% | 3% | 10% | 24% | 7% | 14% | 6% | 11% | 3% | 19% | 10% |

Differences in skincare routines across countries



Moisturising my face daily 36%

China – 45%

Netherlands – 22%



Always wash my face with a gentle soap or cleansing foam 35%

Thailand – 48%

Netherlands – 18%



Never smoke 29% Japan & Argentina – 36% China – 24%

Globally, **10%** have no daily skincare routine, with this peaking in Japan at **24%**.

Only 3% of Thai and Indonesian respondents said they had no routine.

Thailand is the only country where using SPF features in the top three skincare practices.

Only one in ten globally visit a dermatologist for an annual skin check.

The US and Brazil are the best for regularly selfchecking new or changing moles (19%)



Action regularly taken to look after skin

Wear an SPF 30 or above sunscreen 365 days of the year



Wear an SPF 30 or above when it's sunny/go outside



Self-check any new or changing moles on my face



19%

Despite dermatologists now regularly advising that SPF (Sun Protection Factor) sunscreen with a 'Broad Spectrum' should be worn all year round to prevent skin aging and as protection from skin cancer, globally many consumers are not following this advice widely - even when it's sunny.

SPF protects against skin damaging UVB rays that cause sunburn and skin cancer. 'Broad spectrum' sunscreen means it has ingredients that can protect the skin from both UVB and UVB rays which cause skin damage, resulting in a tan and subsequently skin aging and wrinkles. The SPF number on a sunscreen indicates how long the sun's UV radiation would take to redden the skin against the amount of time without sunscreen e.g SPF 30 allows a 3 percent of UVB rays to hit the skin and it would take 30 times longer to burn, against not wearing any sunscreen protection on the skin.

The self-checking for any new or changing moles is poor worldwide, especially in Japan, Mexico, the UK and France. This means it could potentially take longer for skin cancers to be identified by a medical professional if a patient does not make their doctor aware of any concerns. As with other cancers, early detection of skin cancer can save lives when the cancer can be easier to cure and treat.

Survey reveals the true impact of the pandemic on our physical and mental wellbeing worldwide – and most popular lifestyle changes

As the world unites against the common enemy of COVID-19, this study, the largest of its kind, gives a fascinating insight into perceptions of wellbeing in different countries. It also provides a snapshot of the changes people are making to their everyday lives to give their immunity, and general health, a boost.

For its latest global consumer awareness study, Sunstar surveyed 15,000 people from 15 countries across Europe, North and South

America and Asia. The questions were wide-ranging but, taken together, the answers to those about COVID-19 build a picture of a pandemic that has taken a heavy toll on mental – as well as physical – wellbeing.

They also reveal the lifestyle changes we are making. Whether it's buying house plants and throwing open our windows or eating better and exercising more, people around the world are investing in the health of their body and mind.

The survey's respondents were aged between 18 and 65 and each country's sample was nationally representative and contained equal numbers of men and women. Differences in healthcare systems, including the speed of the vaccine roll-out, as well as variations in lifestyles and cultures, do mean that the results should be interpreted with caution. There are, however, some thought-provoking observations on the effect of the pandemic on physical health and mental wellbeing, as well as striking differences in levels of concern about the quality of the air inside our homes.

Air quality, health & wellbeing during COVID-19

The participants were asked detailed questions about their perception of the quality of the air, both in the street where they live and inside their homes.

Just 14% of respondents overall rate outdoor air quality as excellent. Outdoor air quality is perceived as being best in the US, where 22% say its excellent and just 2% describe it as poor. Ratings are lowest in Thailand, while in Japan, most people think air quality is simply average.

Air pollution is, of course, a well-known threat to health, and can fuel heart disease, lung cancer and respiratory conditions and shorten life expectancy. And research is starting to link it to COVID-19. In a recent review, scientists from Imperial College London, UK, found that long-term exposure to air pollution was associated with a greater risk of someone with Covid becoming so ill that they needed to be treated in hospital.

The researchers concluded that, while more work is needed, 'it is already clear that tackling air pollution is important in reducing the vulnerability of the population to COVID-19, and other infections like it'.

While it is easy to think of air pollution as a haze of toxins hanging over cities, **Sunstar's survey reveals that the quality of the air inside our homes is also a concern for many**.

Globally, just 22% of respondents describe it as excellent, with the highest ratings coming from Mexico and Brazil and the lowest from Japan.

Many participants also say that they have become more aware of indoor air quality during the pandemic. This may simply be because they have been spending more time indoors, particularly during periods of lockdown, but it could also be down to growing awareness of the importance of ventilation in keeping COVID-19 at bay.

As advice from the UK government states: 'Letting fresh air into indoor spaces can help remove air that contains virus particles and prevent the spread of coronavirus.'

The guidance continues: 'The more fresh air that is brought inside, the quicker any airborne virus will be removed from the room. Good ventilation has also been linked to health benefits such as better sleep and fewer sick days off from work or school.'

Whatever the reason for people's growing awareness of the quality of the air they are breathing in when at home, the survey shows that many are taking measures to improve it.

The most popular solutions vary from country to country:

- 67% of Argentinians are opening windows and doors for longer
- More frequent dusting and bedding changes is the favoured option among those in Mexico
- Fixes in China range from keeping indoor plants (44%) to running air purifiers (41%)

Levels of concern also differ and while **55%** of Indonesians say the pandemic has made them more aware of the quality of air within their homes, just **24%** of people in the UK feel the same. In fact, almost half of those in the UK (**46%**) are no more worried about indoor air quality than they were pre-Covid.

The results also provide a global snapshot of how people believe Covid has affected their general wellbeing.

Asked how their physical wellbeing is compared to before the pandemic, globally, **28%** say they feel physically no different, while **18%** think they are physically fitter. A similar number, **19%**, say they are less fit.

In six of the 15 countries – the US, China, Singapore, Thailand, Mexico and Indonesia –physical fitness seems to have improved. In these countries, more people feel physically heathier than unhealthier.

The Chinese lead the field here, with **28%** believing they are now in better physical shape than before.

In contrast, Italians are most likely to think their physical fitness has declined, with 25% saying they feel less physically fit than before, closely followed by people in the UK (24%).

Given the physical effects of Covid itself, plus the impact of social distancing measures on people's daily routines, including their ability to exercise, it is to be expected that many people feel their physical fitness has deteriorated.

More surprising, perhaps, is the finding that COVID-19 seems to have taken a greater toll on mental, than physical, wellbeing.

Globally, **22%** globally believe their mental wellbeing hasn't been affected by the pandemic. However, while **15%** think it is better than before, **26%** believe it has worsened.

There are, in fact, only two countries in which mental wellbeing seems to have improved – China and Singapore. More than a quarter (27%) of the Chinese respondents and 19% of those in Singapore say they feel mentally healthier.

The figure for Japan, in contrast is just **7%**. Three European countries, Germany, the UK and Italy, are also in single figures.

The World Health Organization (WHO) says that the combination of fear about catching the virus and the changes to our daily lives, including lack of contact with family, colleagues and friends, means that 'it is important that we look after our mental, as well as our physical, health'.

The Chinese appear to be following this advice, with **42%** saying they have been taking more care of their mental wellbeing in recent months. In the UK, in contrast, just **13%** have been prioritising their mental wellbeing.

More generally, people the world over are making lifestyle changes designed to give their immunity, and general health, a lift.

In fact, only 14% of respondents globally haven't made any changes since the start of the pandemic.

Exercise is the most popular health tonic, with 33% of participants more active than pre-Covid. The proportion upping their exercise is highest in Thailand, at 48%, and lowest in Japan, where people are focusing on getting more sleep, lowering stress and eating a balanced diet.

Stress-busting measures are the second most favoured health tonic globally (29%), followed by vitamin supplements (28%).

And with many of us swapping the office for homeworking, it has become easier to catch up on sleep – something 26% of respondents say they are doing. Obesity is known to increase the odds of severe Covid and **17%** of participants say they have deliberately lost weight since the start of the pandemic, in a bid to boost their health and/or immunity.

At the bottom of people's list of pick-me-ups are essential oils, probiotics drinks and herbal supplements.

And what of the future? Many scientists believe that COVID-19 is here to stay, although factors such as vaccination mean it will pose less of a danger over time.

It remains to be seen, however, whether our new health routines will have the same staying power.

As countries learn to live with Covid and more people go back to the office, for instance, fast food may seem more tempting than healthy meals.

Similarly, a return daily commute may cut into time to exercise, while the earlier starts will shorten sleep.

But any lifestyle changes that do become part of our day-to-day lives could have lasting benefits to health, in all sorts of ways.

Better sleep, for instance, can reduce a person's risk of heart disease and diabetes, while regular exercise is credited with everything from boosting self-esteem and mood to lowering the risk of an early death. Keeping to a healthy weight, meanwhile, cuts the odds of 13 different types of cancer, according to the charity Cancer Research UK.

Simply put, embedding some of the 'health hacks' we have adopted during the pandemic into our everyday lives could produce a wealth of benefits to health and happiness for years to come.

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By Fiona MacRae

Fiona MacRae is a UK-based health and science writer. She has 20 years of experience in journalism, including 12 on national newspapers. A finalist in the Medical Journalists' Association's awards for the past two years, she writes for newspapers, companies and charities and has also worked in a busy NHS press office.
Summary country profiles

Argentina Air quality, health & wellbeing profile

AIR QUALITY

Two in five Argentinians (41%) report feeling stressed, upset or negative when perceiving poor indoor air quality at home.

Fortunately, just 2% feel the air in their home is poor. However, 10% give the air quality outside of their home the same rating – the fourth high-est percentage globally.

Argentina is the number one country for noting ventilation/ circulation (55%) and pleasant smells (28%) as leading factors in perception of the air quality in the home. This likely explains why 35% of Argentinians regularly use air fresheners, fragranced candles, or oils to improve the air quality of their homes – and why more than two-thirds (67%) have begun to circulate the air by leaving windows and doors open for longer since the Covid-19 pandemic.

Perhaps unsurprisingly, more than half (51%) say they feel more aware of the air quality within their home since the Covid-19 pandemic, which is the second-highest rate after Indonesia.

HEALTH & WELLBEING

Over a quarter **(26%) of Argentinians report feeling mentally unhealthier since Covid-19**. They're taking steps to combat this: one-third (33%) have started taking more care of their mental wellbeing.

This isn't the only lifestyle change Argentinians have made. 37% are eating a healthier diet, and 37% are exercising more – particularly to boost their general health and immunity to Covid-19. In addition to this, 38% also try to lower their stress.

Many Argentinians undertake physical activity for their wellbeing more generally – 60% report exercising regularly. The second most popular well-being practice is walks and talks with family and friends (48%), followed by massage (17%).

Healthy skin is another priority, with over a third (36%) reporting that in order to look after their facial skin, they never smoke. 41% moisturise their face daily, and 37% always wash their face with a gentle soap or cleansing foam.

Online video therapy/telepsychiatry was a popular answer from Argentinians (36%) in response to the question of what modern technology will be regularly used to help people's mental wellbeing by 2030.



AIR QUALITY

34% of Brazilians perceive their air quality as being excellent, more than any other country.

Ventilation/circulation is the most common factor in perception of air quality in the home for 43% of Brazilians, whilst unpleasant smells is the least common (16%).

At 26%, pleasant smells ranks as one of the three most impactful factors for Brazilians – alongside the other two Latin American countries surveyed.

However, unlike Mexico and Argentina, relatively few respondents (15%) say they are now using air fresheners, fraganced candles or oils to improve their air quality. Instead, the most common new actions include circulating air more by opening windows/ doors for longer (54%), regularly dusting and washing bedding (45%), and keeping indoor plants (28%). Just 6% are now running a dehumidifier – three times as many (18%) have started to run a humidifier.

HEALTH & WELLBEING

Brazil is one of the nine countries surveyed where people largely feel **both mentally and physically unhealthier since Covid-19**.

In fact, **Brazil ranks second in feelings of decreased mental wellbeing**, with 37% of respondents answering that they feel mentally less healthy, whilst one in five (21%) feel physically less healthy.

Exercise is a popular practice for general wellbeing amongst Brazilians – over half (56%) undertake it regularly. More than a third (35%) report exercising more frequently since the pandemic, in order to boost their wellbeing and immunity.

The pandemic has prompted 34% to take vitamin supplements (such as Vitamin C), whilst 22% say they now make or buy healthy vitamin/mineral drinks.

Certain activities are significantly less common, such as cold therapy (4%), alternative and complementary therapies like reiki or acupuncture (6%), and selfguided meditation or mindfulness (6%). Apart from Americans, Brazilians are more diligent than anyone else for self-checking new or changing moles (19%), and use of SPF 30 or above (21%) is the second-highest outside of Thailand.

China Air quality, health & wellbeing profile

AIR QUALITY

China is the only country where over half of respondents (54%) said poor indoor quality makes them feel unwell.

However, just 1% perceived their indoor air quality as poor. 3% gave the same low rating to the air in the street outside their home.

China's perception of air quality is more sensitive than other countries surveyed to the influence of airborne particles and allergens – from both inside (45%) and outside (45%) the home.

China is taking the most steps to improve their air quality since the start of the Covid-19 pandemic. 24% say they are doing so.

HEALTH & WELLBEING

China reports a greater sense of post-pandemic wellbeing than any other country.

27% of Chinese respondents reported feeling mentally healthier since Covid-19, and 28% that they felt physically healthier. In both respects, fewer than one in ten felt less healthy than before (8% physically, 7% mentally).

Chinese dietary and wellbeing habits have seen positive changes recently. **Almost half of Chinese respondents (47%) reported that they had been exercising more within the last six months**. 35% are taking better care of their skin, and 33% are drinking less alcohol. Just 6% admit to eating a less healthy diet. The top three ways Chinese respondents are taking care of their wellbeing are physical exercise (67%), walking and talking with friends/family (55%), and massages (25%). On each of these practices, China is the highest ranked. This is also the case for the practice of weekend digital detoxes (20%), alternative and complementary therapies (19%), and talk therapy/CBT (16%).

A balanced diet, rich in vitamins, minerals & antioxidants, is a popular practice for healthy skin amongst Chinese respondents (47%). Facial moisturising is the next most common action, with 45% saying they do so daily. However, a smaller percentage than elsewhere say they avoid smoking for healthy skin (24%).

China is more confident than other countries that wearable mood tech (36%), online chat tools/chatbots (36%), and companion support robots will be common solutions for mental wellbeing by 2030.

France Air quality, health & wellbeing profile

AIR QUALITY

Only 1% of French respondents perceive the air quality within their home as poor.

A quarter (26%) of French adults do not feel poor air quality has an effect on them, but slightly more find it impacts their sleep (27%).

Ventilation/circulation within the home has less impact on French respondents' perception of air quality than anywhere else, at 28% - but this was still the nation's highest ranked impact, and almost half (48%) of those surveyed have become more diligent about ventilating their home by opening windows and doors for longer.

Other common new actions appear focused on removing physical pollutants: just over a third (34%) are vacuuming more regularly, and 31% are regularly dusting and washing their bedding. Humidifiers and dehumidifiers have been taken up in equal proportions (9% of respondents for each), while 15% say they now run an air purifier.

HEALTH & WELLBEING

A quarter (25%) of French respondents reported feeling mentally unhealthier compared to prepandemic.

Results show that 16% are taking greater care of their mental wellbeing, but one in ten (10%) are taking less care.

36% think online video therapy/ telepsychiatry will become more regularly used to improve people's mental wellbeing by 2030. At the moment, physical exercise (48%), walks and talks with friends and family (38%), and massage (18%) are the most common practices for overall wellbeing in France.

Over a quarter (26%) report exercising more since the pandemic to boost their general health and immunity, whilst just under a quarter (24%) are focused on lowering their stress. **Essential oils are relatively popular for the same purpose, with 13% now using them – a higher rate than any other country in Europe**.

Sunscreen use is much lower than anywhere else, however; **only one in ten French adults (10%) wear SPF30 or higher when the sun is out, and this drops to just 7% for everyday use**. In context, the French are twice as likely to completely avoid alcohol (20%) for their skin health, and three times as likely to never smoke (31%) as they are to wear sunscreen on a sunny day – even whilst reporting diligent daily use of facial serum (17%) and/or moisturiser (40%).

Germany Air quality, health & wellbeing profile

AIR QUALITY

More than a third (37%) of Germans struggle to get a good night's sleep when they feel the indoor air quality is poor.

Two in five (41%) feel unwell in the same situation, with 20% saying their chronic respiratory condition suffers.

Luckily, only 1% of Germans perceive the air quality within their home as being poor, with this perception being impacted largely by humidity (32%), ventilation/ circulation of air (31%), and temperature (29%).

Still, many respondents are keen to improve the air in their home, with a third (33%) now keeping indoor plants, and 15% running an air purifier.

HEALTH & WELLBEING

Germany's hot drink consumption has increased more than any other country since the pandemic, with 28% admitting to drinking more tea and coffee recently – more than have increased their physical activity (27%) or improved their diet (25%).

29% of Germans reported feeling mentally unhealthier since the start of the pandemic, with 22% feeling physically unhealthier. Whilst 18% say they have made no efforts to improve their wellbeing or immunity since the pandemic, many are now taking more exercise (26%), endeavouring to lower their stress (26%), or even focusing on better gut health by taking probiotic drinks (9%).

In general, the most popular wellbeing practice in Germany is walk and talks with friends or family (49%), with physical exercise being second to this (41%).

The most common skincare practice is the daily use of a facial moisturiser (32%) – a substantially lower percentage than their generally more southwest neighbours, France, but significantly higher than the Netherlands to the northwest. Conversely, Germany's SPF use (daily: 9%; on sunny days: 15%) is higher than that of France, but lower than that of the Netherlands. Germany is one of the most diligent countries for annual dermatologist check-ups (14%), second only to China.

 Germany introduced the world's first nationwide skin cancer screening programme in 2008.
 Residents are entitled to a free screening every two years from the age of 35.

Indonesia Air quality, health & wellbeing profile

AIR QUALITY

Perceived poor air quality leads to poor sleep for over a third of Indonesians (37%). Along with Germans, they are the country most prone to this negative impact.

Ventilation/circulation is the most commonly cited factor in perception of indoor air quality amongst Indonesians, at 50% of respondents. This is followed by humidity, which is deemed the most impactful for 36%.

Indonesians are taking a number of steps to improve their indoor air quality in the wake of the pandemic. Over half of respondents (55%) are leaving doors and windows open longer to encourage natural ventilation. 28% are using an electric fan or air conditioner to do the same. One-third (33%) have now begun to avoid smoking to improve the air quality in their home – a higher percentage than any other country.

HEALTH & WELLBEING

More than half (51%) of Indonesians have changed their diet for the better since the **Covid-19 pandemic**. This is significantly higher than the global total of 31%.

Vitamin supplements have become very popular for immunity and wellbeing in Indonesia, with 49% having begun to take them since the

pandemic. This is the largest percentage globally, and the most common new action amongst Indonesians. Similarly, over a third (35%) now make or buy healthy vitamin/mineral drinks, a much higher proportion than in any other country surveyed.

People in Indonesia, alongside Thailand, are also prioritising sleep more than anywhere else (31%). Just 3% have made no changes.

28% say they never drink alcohol in order to keep their skin healthy; 25% never smoke for the same reason. 57% use of gentle soap or cleanser to wash their face – more than anywhere else. For general wellbeing, Indonesians largely focus on exercise, with 62% reporting that they do this regularly. Massage is a routine undertaking for almost a quarter (24%).

Balinese massage, originally developed in Bali, Indonesia, is a globally popular form of full-body massage therapy.

Italy Air quality, health & wellbeing profile

AIR QUALITY

Outdoor air quality is generally well-perceived in Italy, with 84% of respondents giving a rating of 3, 4 or 5 out of 5. 93% feel their indoor air quality merits a 3 or higher, with one in five (21%) perceiving it to be excellent.

Almost two in five (39%) Italians listed humidity as the top factor in their perception of indoor air quality – more than any other country.

Unsurprisingly then, dehumidifier uptake also peaks in Italy (21% said they had starting using one in the past 6 months). This makes Italy the only nation where dehumidifiers are more popular than humidifiers.

32% feel airborne allergens and pollutants from outside (such as pollen or smoke) have the biggest impact on the air quality in their home, and 28% say the same of domestic irritants like pet hair and dust. **The most commonly reported impact of perceived poor indoor air quality is a feeling of physical uncleanliness (37%)**, followed by a negative impact on mood (28%). The pandemic has had an above average impact on Italians' awareness of air quality in their home, with 30% more aware and worrying more about it. Amongst other changes, including the increase in dehumidifier usage, this has translated into **57% of people circulating the air more by leaving windows and doors open, and 43% now vacuuming more regularly**.

HEALTH & WELLBEING

The Covid-19 pandemic has had an overwhelmingly negative impact on Italians, with a decreased sense of general wellbeing more common than in any other country surveyed. A quarter (25%) say they feel physically less healthy compared to **prepandemic.39% report feeling mentally less healthy, with this peaking in young people (52% of 18-25 year olds, vs. 28% of 56-65 year olds) and women (27% of females, vs. 22% of males)**.

The most common wellbeing practices amongst Italians are physical exercise (52%), walks and talks with family and friends (43%) and massage (13%). Regular engagement in activities beyond these three is relatively low – fewer than one in ten (<10%) report participating in practices like meditation, talk therapy, or alternative therapies. The least popular is cold therapy/wild swimming, at 3% of Italians.

In terms of facial skincare, the least common practices are daily SPF usage and annual dermatologist visits (both 9%). Far more Italians report washing their face with a gentle cleanser, using day/night face cream (32%), and using a facial moisturiser daily (31%).

Post-pandemic, the most common change made by Italians to boost their wellbeing and immunity is to lower their stress (31%). At the other end, only 7% are now using essential oils for this purpose.

Japan Air quality, health & wellbeing profile

AIR QUALITY

Only 11% of Japanese respondents perceived their outdoor air quality as excellent. The majority of people are ambivalent – 55% give a rating of 3 out of 5.

Alongside Argentina, perceived poor indoor air quality has a greater impact on mood in Japan than any other country surveyed – **41% say it makes them feel stressed, upset, or negative**. One-third (35%) say it makes them feel unwell.

This may be reflected in the popularity of air purifiers in Japan. 33% have recently started to run one - more than twice the number that have taken to running an air conditioner or electric fan. Ventilation is a considerable factor in the Japanese perception of air quality (47%), explaining why 42% have been encouraging better air circulation in their homes since the pandemic.

HEALTH & WELLBEING

People in Japan report the least change in their wellbeing in comparison to pre-pandemic; **41% say they feel physically about the same, and 26% say they feel mentally about the same**. Still, more respondents reported feeling unhealthier than healthier in both regards. Just 6% feel their physical wellbeing has improved, and 7% say the same of their mental wellbeing.

Overall, Japanese respondents report the least engagement in regular wellbeing practices.

Physical exercise is undertaken regularly by just onethird (33%), a low rate compared to the global average of 52%. The pandemic saw a significant decrease in physical activity – a quarter (26%) of Japanese respondents say they are exercising less. Whilst 36% of respondents say they've made no changes to boost their immunity and general health since Covid-19, those that have largely lean towards wider lifestyle changes, rather than uptake of health foods and supplements. Close to a quarter (23%) now prioritise getting more sleep, 22% are trying to minimise their stress, and 20% are eating a more balanced diet.

The pursuit of healthy skin leads to over a third (36%) of Japanese people to avoid smoking – the highest percentage across all countries – but use of products like make-up remover (8%) and facial serum (4%) is lower than elsewhere.

Mexico Air quality, health & wellbeing profile

AIR QUALITY

Mexicans perceive their indoor air quality more highly than any other country – 34% believe it is excellent.

40% of people in Mexico say they feel physically unclean when their perceived indoor air quality is poor. At the time of the survey, the majority of Mexicans (54%) said they had begun more regularly dusting and changing their bedding in the past 6 months.

Where they are relatively unphased by unpleasant smells (11%), pleasant smells are cited by more than a quarter (26%) as having the biggest impact on their perception of air quality.

HEALTH & WELLBEING

One in five (20%) Mexican adults say they've lost weight to boost their health and immunity since the Covid-19 pandemic.

Two in five (41%) say their diet is now healthier, and a similar proportion (42%) are exercising more. With **a total of 63% of respondents reporting that they exercise regularly**, this makes Mexico one of the leading countries for physical activity.

Another 46% say they're taking vitamin supplements, whilst 19% have taken up mineral supplements, and over a quarter (26%) are focused on getting more sleep to improve their immunity. The greatest changes are amongst those aged 46 to 65.

Use of day/night face cream is higher than in other countries, at 37% of respondents, as is use of makeup remover, at 27%. People in Mexico are above average users of SPF30, both in terms of daily application (20%) and on particularly sunny days (27%).



Netherlands Air quality, health & wellbeing profile

AIR QUALITY

Temperature has a notably greater impact on people in the Netherlands than in other European countries. Over a third (34%) said that this had the greatest effect on their perception of the air quality within their home.

One-third (33%) of Dutch adults have recently started keeping indoor plants to improve their air quality at home.

33% are also vacuuming more regularly, and 32% have begun to circulate the air more by opening windows or doors for longer.

HEALTH & WELLBEING

One in ten (10%) Dutch people say they undertake regular talk therapy/CBT, making this a more common practice in the Netherlands than in the other European countries surveyed.

However, physical exercise is the most popular wellbeing practice, with 45% undertaking it regularly.

More Dutch adults report feeling physically about the same as they did before the pandemic (24%) than feel physically healthier (17%) or unhealthier (23%).

This is most pronounced in the oldest age group surveyed (56–65-year-olds), 40% of whom feel their physical wellbeing has remained about the same. A greater proportion of the youngest group (18–25-yearolds) reported feeling less healthy (30%) than about the same (19%).

More respondents say they have started taking better care of their skin (20%) and hair (19%) than their mental health (16%). Tea and coffee consumption has increased for 22% of all adults. Alcohol consumption has increased for 10%, but decreased for 17%.



Singapore Air quality, health & wellbeing profile

AIR QUALITY

Perceived poor air quality appears to have a strong impact on the mental wellbeing of Singaporeans.

32% feel stressed, upset or negative when they perceive the air quality in their home as poor: an effect more commonly reported by younger adults (35% of those aged 18-25, vs. 23% of those aged 56-65).

More than a third (35%) are more worried about the air quality within their home since the pandemic. The three most common changes Singaporeans have made to improve their indoor air quality are: circulating the air more by opening windows and doors for longer (33%); using air fresheners or scented candles (31%); and vacuuming more regularly (31%).

HEALTH & WELLBEING

Singapore is one of only two countries where more people feel mentally healthier (19%) than unhealthier (18%) since Covid-19. A further 22% report no change in their perceived mental wellbeing. More Singaporeans also report feeling physically healthier (24%) than unhealthier (17%).

In order to boost their immunity and general health, Singaporeans have made a variety of post-pandemic changes. **Essential oils prove more popular here than anywhere else, with 17% now using them for this purpose**; uptake is highest amongst those aged 26-35 (21%), compared to just 9% of 56-65 year olds. 17% also report now taking pro-biotic drinks.

Cold therapy/wild swimming is popular amongst Singaporeans – 13% undertake the practice regularly for their wellbeing, compared to just 6% globally. However, the most common wellbeing practice is physical exercise, undertaken regularly by 41%.

A third (33%) of respondents take care of their facial skin by always washing their face with a gentle soap or cleansing foam. 31% moisturise their face daily (40% of women, but just 26% of men – and peaking in the 36-45 age group).



Spain Air quality, health & wellbeing profile

AIR QUALITY

Spain has a more favourable opinion of their indoor air quality than any other European nation surveyed. 96% gave a rating of 3 out of 5 or higher, which includes the 26% of respondents who gave an "excellent" rating of 5.

Almost a third of Spaniards (32%) feel physically dirty or unclean when the air quality within their home feels poor, while more than a third (35%) find it has a negative impact on their mood.

They have a comparatively less positive perception about their outdoor air quality. 85% give a rating between 3 and 5 here.

There are a range of new actions that the Spanish now regularly take to improve the air quality within their homes. This ranges from the 11% that circulate the air by running an air conditioner or electric fan, to the 54% that leave windows/doors open for longer for the same purpose. 17% of respondents now use an air purifier, and 16% now run a humidifier.

HEALTH & WELLBEING

Half (50%) of all Spanish respondents say they regularly walk and talk with friends or family. This is reflected evenly across men and women, but less so across age groups – jumping from 57% in the 26-35 age range, to 36% in the 56-65 cohort.

Talk therapy is about as common in Spain as in the rest of Europe, with just 7% having regular sessions; alternative or complementary therapies with a qualified practitioner (e.g reiki, acupuncture, etc.) are equally popular. Almost two in five respondents (39%) believe that online video therapy/telepsychiatry will be regularly used to help improve people's mental wellbeing by 2030.

The Spanish tend to take greater care of their skin than the other European consumers

surveyed. 43% moisturise daily, 33% always wash their face with a gentle soap or cleanser, and 19% protect their skin with SPF 30 or higher when it is sunny outside.

A third (33%) of Spanish respondents say they are taking better care of their skin since the pandemic, with only 5% taking less care. A quarter (25%) are taking more care of their hair. In order to improve their immunity and general health, 36% are now exercising more; 31% are working on lowering their stress; and 30% are eating a more balanced diet.

Thailand Air quality, health & wellbeing profile

AIR QUALITY

The Thai are amongst the most sensitive to perceived poor indoor air quality. **Over a third (38%) of Thai respondents say that (perceived) poor indoor air quality worsens their chronic respiratory condition**. Only 4% feel they are not affected by poor indoor air quality.

Air quality is rated lower in Thailand than any other country surveyed. One in four (25%) feel their outdoor air quality is poor, and 4% feel their indoor air quality is poor.

The Thai are the least phased by indoor humidity, with just 19% saying this is the factor with the greatest impact on their perception of indoor air quality.

However, they are impacted more than any other nation by temperature (41%) and unpleasant smells (33%). Alongside temperature, ventilation/circulation (41%) is the top-rated factor for Thai respondents.

• Chronic Obstructive Pulmonary Disease (COPD) is the 9th leading cause of death in Thailand. *WHO*, 2021

HEALTH & WELLBEING

Thailand is the only country where mindfulness/ meditation is a top three wellbeing practice.

One-third (33%) of Thai adults regularly practice this at home, self-guided, and 19% do so online.

The most common practice is physical exercise, reported by 61% of respondents, with frequency of exercise having recently increased amongst 43%.

One in five (22%) Thai respondents perceive their current physical wellbeing as comparable to prepandemic – a lower proportion than in other countries. Only 19% feel their mental wellbeing remains unchanged.

Skincare is a priority in Thailand, where 28% wear SPF30 or above on a daily basis, and 36% when it is sunny outside. 42% use a facial serum daily, and 48% always wash their face with a gentle soap or cleanser.

 Around 95% of Thailand's population is Buddhist. Meditation has been an im-portant part of Thai Buddhism since the mid-20th century.



UK Air quality, health & wellbeing profile

AIR QUALITY

Britons are the least troubled by their perception of indoor air quality.

30% of British adults feel that poor air quality within their home has no impact on them, almost twice the global average of 16%.

Meanwhile, 46% say they don't feel any more aware, or worry any more about the air quality within their home, since the Covid-19 pandemic.

However, more than a quarter (27%) of UK respondents feel (perceived) poor indoor air quality affects their sleep; 24% say it makes them feel physically dirty/unclean; and 23% report that it makes them feel stressed, upset, or negative.

Fortunately, just 2% perceive the air within their home as being of poor quality. Twice as many (4%) say the outdoor air quality is poor – although this rises to 8% amongst Londoners.

HEALTH & WELLBEING

British dietary and drinking habits have become less healthy since the pandemic. 18% of Britons say they are now eating a less healthy diet, and 13% admit their alcohol consumption has increased.

However, over a quarter (29%) of respondents said they are now exercising more, and a further quarter (26%) report having made no notable dietary or wellbeing changes.17% of British adults have lost weight since the pandemic, with the aim of boosting their immunity and/or general health – this includes a quarter (25%) of 18- to 25-year-olds.

'Walks and talks' with family and friends are the most popular wellbeing practice amongst Britons, placing above physical exercise in the UK's top three. 43% say they do this regularly.

Dermatology visits are at their lowest in the UK. Just 4% visit the dermatologist for an annual

skin check. Daily use of SPF30 or higher is reported by 8% of all respondents, but is twice as high amongst women (10%) as men (5%). 19% of all UK respondents say they have no daily skincare routine. A 2021 study of UK adults during the COVID-19 social lockdown found a large proportion of participants reported negative changes in eating and exercise habits.
 Robinson et al. 2021

US Air quality, health & wellbeing profile

AIR QUALITY

Americans perceive their outdoor air quality more highly than any other country. 22% of those surveyed rated it as excellent – far exceeding the global average of 14% - and only 2% said that it was poor.

Temperature has the greatest impact on perceived air quality for over a third of Americans (34%). The next most frequently reported factors are ventilation/ circulation of air (33%), and airborne particles such as dust, pet hair, or smoke (33%).

When at-home air quality is perceived as poor, 32% of respondents find their mood is negatively impacted. Compared to those in other regions, a greater proportion of people living in the Western United States report perceived poor air quality worsens the symptoms of their chronic respiratory condition (28% in the West, vs. 20-22% in the South, Midwest and Northeast).

Almost a quarter (24%) of Americans say they are now running a humidifier to improve the air quality in their home – more than any country aside from China. Another 24% are now running an air purifier.

- The Clean Air Act, introduced in 1963, has been key to reducing pollution and improving air quality.
- A 2020 survey shows a significant improvement in air quality as perceived by Americans before and during the enforcement of COVID-19 restrictions. *Barbieri et al. 2020*

HEALTH & WELLBEING

One in five (21%) Americans feel their mental wellbeing is worse now than pre-pandemic – but a similar proportion (20%) feel their physical wellbeing is better.

This places the US amongst the few countries where more people feel physically healthier than unhealthier. Americans have made several positive changes to their lifestyle, from exercising more (32%) to drinking less alcohol (17%).

To specifically boost their immunity and health, post-pandemic, 29% are now attempting to keep their stress low; 29% are taking more exercise; and 28% are taking vitamin supplements. 14% are now consuming probiotic drinks – an action taken up by twice as many people in the Northeast (18%) as those in the Midwest (9%).

More generally, a number of wellbeing practices are widely practiced, with mindfulness and meditation twice as popular (self-guided: 22%, online: 18%) amongst Americans than Brits.

Physical exercise is the most commonly practiced activity for adults overall (43%), and men (48%) and 18- to 25-year-olds (44%) specifically.

The most widely reported practice amongst women is walks and talks with friends and family (46%); this is also the activity most reported by adults aged 36 to 45 (43%), and 56 to 65 (48%).

Americans are one of the two countries where people are most diligent about self-checking new and changing moles on their face (19%). However, their top facial skincare practices include washing with a gentle soap or cleanser (36%), moisturising daily (35%), and using a day/night face cream.