

WHAT THE FUTURE: WELLNESS

**What will drive wellness
in the future?** PAGE 5

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**Can devices help us hack our
way to wellness?** PAGE 18

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**+ Experts from CVS Health, Unilever,
Lumen and more share insights
on health equity, gut health and
hacking your metabolism**

GAME CHANGERS



Editor's note: Welcome to What the Future 4.0

A brief explanation of our new design

A lot of planning goes into each issue of **What the Future**, of that you may be certain.

It's that planning that our redesign aims to show you. Foresight, as a discipline, is a way of thinking systematically about the future. Since our first issue, What the Future's editors have gone through a planning process we call editorial foresight. It's similar to a formal futures project, but our end goal is a good story. In the following pages, which you might notice we've flipped sideways, we will tell you the story of what will drive the future of wellness.

You'll hear from experts, as always, but you'll also see why we chose to talk to them, in particular. You'll get Ipsos thought leadership, as always, now with additional context.

You'll get fresh Ipsos data, as always, and you'll understand the tensions behind the questions we asked.

We do this to show, not just tell, the very ethos of What the Future, which is: When you think about tomorrow, you ask better questions today.

Our mission, as always, is to help you understand today's landscape and imagine potential futures so that you can plan for tomorrow.

So, meet the new What the Future, same as the old WTF, and we're showing our work along the way.

Matt Carmichael is editor of What the Future and head of the Ipsos Future and Foresight Lab.

Imagine it's 2028.

The continued waves of the pandemic have strained the healthcare system, for some more than others.

Increasingly, people are taking their health and wellbeing — their wellness — into their own hands. They get encouragement from social media, from friends and family. They get nudged with sticks and carrots by everyone from pharmaceutical companies to insurers, to employers who help pay for that insurance, to the best behavioral science that tech companies can utilize and commercialize.

Our **devices** work together to collect data and customize ways for us to optimize our **foods and fitness** across a range of physical and mental measurements. Wellness is a fad, a trend, a religion, a way of life, and even just a boring part of everyday reality, depending on whom you ask. And yet, it's **out of reach for many**, economically or logistically. Tensions push and pull us along this plausible path to the future.

How do we get to that path, and how did Ipsos think up this plausible path to begin with? Read on in this issue of **What the Future** as we consult the experts, check in on today's data and consider what's next for wellness.



62%

of Americans agree that their health is more important to them now than before the COVID-19 pandemic.

(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)

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1. Territory map

The future of wellness will be driven by forces coming from six directions. We map them out.

2. The lay of the land

We talk with experts from CVS Health, Unilever, Lumen, UnitedHealth Group, Ipsos and more, then collect exclusive data to show where we are today and where we're headed tomorrow.

3. Tensions

Privacy vs. personalization? Equitable access vs. paid access? Opinions about these tensions won't be the only thing that impact the future, but they will shape how we respond. What happens if they shift?

4. Plausible ports

Based on our data and our interviews with experts, we plot out some potential futures.

5. Waypoints

Thinking again of our tensions, how far do they have to shift before we know which plausible port we're approaching?

6. Appendix

Want more? We show our work, including the full text of our expert interviews, our contributors, links to what we're reading today that has us thinking about tomorrow, and some bonus data.

7. Artifact from the future

A look at an item from tomorrow that will someday seem commonplace, but today seems as if it's on the edge of plausibility.

Territory: What will drive the future of wellness?

Wellness is a broad topic, encompassing everything from mental and spiritual wellbeing to financial wellbeing and, of course, physical wellbeing. The future will be impacted by macro trends such as an aging population, which will impact the growing caregiving crisis, to how we innovate products and services to meet their growing needs. And will we create more equitable access to care? Climate change and our built environment play a role as well.

Read on as we go around the map, collect the data and talk to experts in these fields.



Can the healthcare system support wellness — for us all?



U. Michael Currie

Chief health equity officer, UnitedHealth Group

Health and equity are two things that should go hand in hand, yet too often don't. Health providers, which include doctors, nurses, pharmacies, insurance companies, nonprofit organizations and government agencies, are constantly merging and evolving. But they don't always work together or recognize each other, and many still rely on historically biased science. How should these organizations work together to improve the system so that it better supports our individual health? We asked U. Michael Currie, the chief health equity officer for UnitedHealth Group.

36%

of adults ages 18-34 agree that the U.S. healthcare system works for them vs. 60% of those ages 55+.

(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)

Today, only 36% of adults ages 18-34 feel that the U.S. healthcare system works for them.

Americans over age 55, many of whom are part of the Medicare system rather than having private or no insurance, are much more satisfied. Six in ten of that age group think the system works for them.

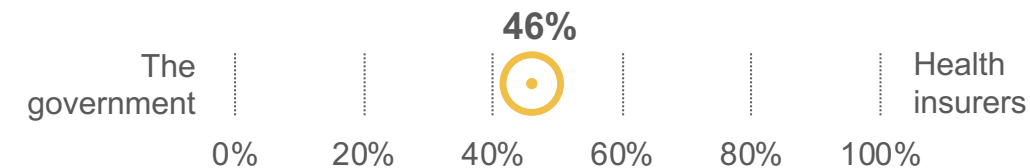
Inequity is an issue, and it's systemic both in terms of the overall healthcare system, and in some of the ways technology is deployed, according to Currie.

“There is historical bias built into the algorithms physicians use to choose clinical care.”

UnitedHealth has a work group focused on evaluating the programs that determine care to remove any biases. “We want to contribute to the science so that we are ensuring the best possible care for all individuals,” he says. Removing bias is an important step, and to get the system to work for everyone and improve outcomes for people in the future, care also needs to be more accessible and convenient.

A silver lining from the pandemic was that telehealth expanded quickly, providing more access to care for those who otherwise wouldn't have had it. But it comes with its own challenges and limitations. How can care providers adapt to make telehealth and other access points more powerful and available to more people?

Who should set standards for necessary medical care and treatments to keep people healthy?



Q. For each pair of statements, please select which statement you agree with more, even if neither is exactly right. – [The government] OR [Health insurance companies] (% Total)

(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)

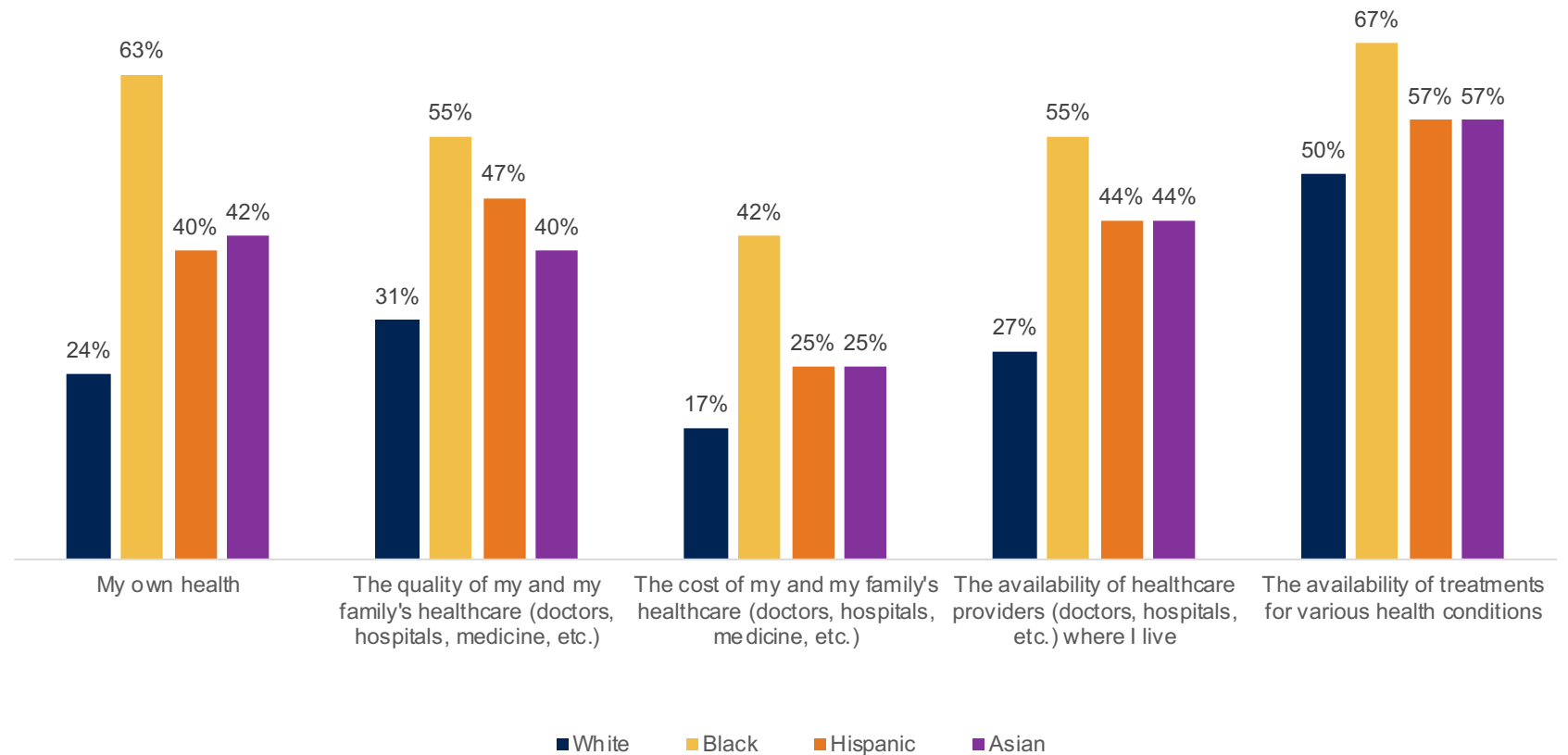
Currie says the company realized that vulnerable patients were reluctant to use traditional telehealth and had hurdles to overcome when it came to access. Many patients were faced with logistical problems of getting to appointments in-person, and they lacked needed technology to access virtual alternatives.

“How could we be intentional and purposeful about removing the barrier and driving better access to this affordable type care?”

The solution: UnitedHealth offered patients tablets with cellular service to access the services. As these technologies become more ubiquitous — or more subsidized, will telehealth become the norm for routine care? [Read the full Q&A on page 32.](#)

Who is most optimistic about their health future?

Q. How do you think the following will change over the next 10 years? (% Improve)



Can telehealth keep more people well?

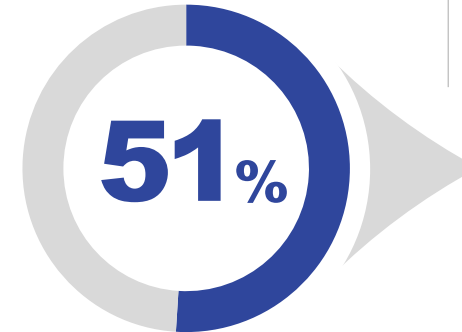
Telehealth is partially about control, which is a dominant theme here. If barriers are dismantled in the future, we'll have more say over how we manage our care within the system and how we monitor our health, diet and exercise.

Three-quarters (78%) — especially those under the age of 25 (90%) — say that they would like to start managing their care using their health plan's website/app and have that serve as a resource for accessing appropriate care, according to an Ipsos survey for Evernorth from late 2020. Many are already using apps and wearables to track various aspects of their health and wellness. And about half have used some sort of virtual care, most positively. Imagine what possibilities augmented and virtual reality will open for care and wellness.

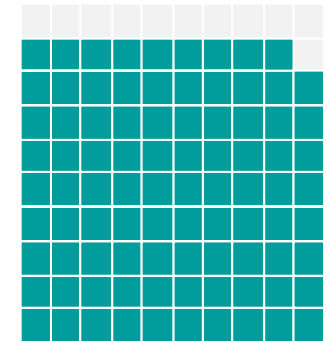
“Over the next three to five years, we expect to see more and more digital systems being used in healthcare, generating a mountain of new types of data,” says David Scowcroft, senior vice president of Healthcare at Ipsos North America.

“The next wave of innovation will revolve around learning how to mine that new data to further improve outcomes and patient wellness.”

Who benefits from virtual care?



of Americans
say that they have consulted a
medical professional via virtual
care in the past 12 months.



89% among this
group say that they were
satisfied with their virtual
care experience.

(Source: Ipsos survey conducted Nov. 9 -16, 2020, on behalf of Evernorth, among 1,001 U.S. adults.)

Will our food become more like medicine?



Naveen Jain

Founder and CEO, Viome Life Sciences

Every day, scientists gain more understanding of what foods and nutrients work best for a person's unique biology. Food and ingredients found in nature can be synthesized for scale and sustainability and improved.

Want a healthier soybean? A company called Calyxt can create one for you. Other companies are working to advance nutrition and supplements for people's individual needs. Naveen Jain, founder and CEO of health and food company Viome Life Sciences, explains where Viome fits in to provide personalized nutrition and supplements.

46%

of Americans say they want the ability to get customized advice and plans for their health.

(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)





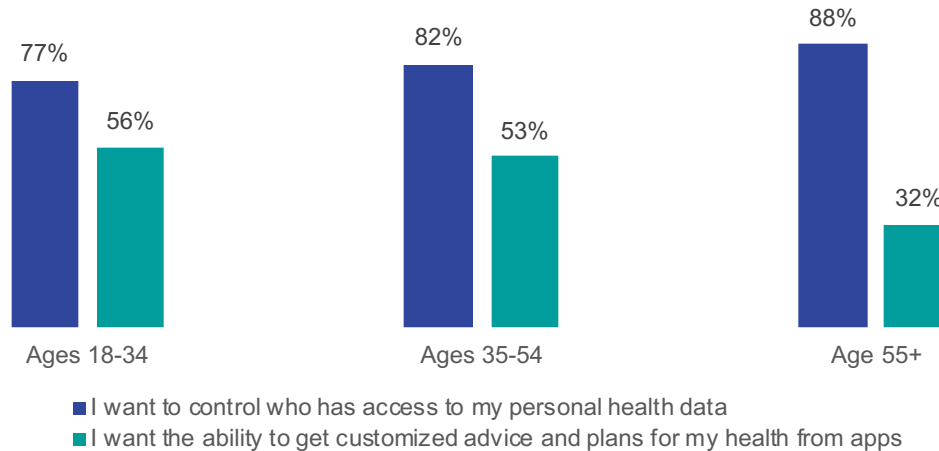
Jain posits that in the future, 3D food printers and health sensors will be ubiquitous in homes, allowing people to print custom, on-demand foods and beverages with specific nutrients and interface with their smart fridge. The agility these technologies provide is critical — and in demand as 46% of Americans say they want the ability to get customized advice and plans for their health.

“What we’re realizing is there is no such thing as universally healthy food or supplements.”

That’s because the nutrition our body needs changes over time. Jain thinks artificial intelligence assistants will play a part, too. “Your fridge will let you know what you should and shouldn’t stock,” he says. “Or we will not let you order the food that’s bad for you anymore, and it’s going to control what you can order right now.” To a consumer, that may sound great — or dystopian. That sort of tension will shape how people embrace technologies that might help them control and improve their wellness. [Read the full Q&A on page 34.](#)

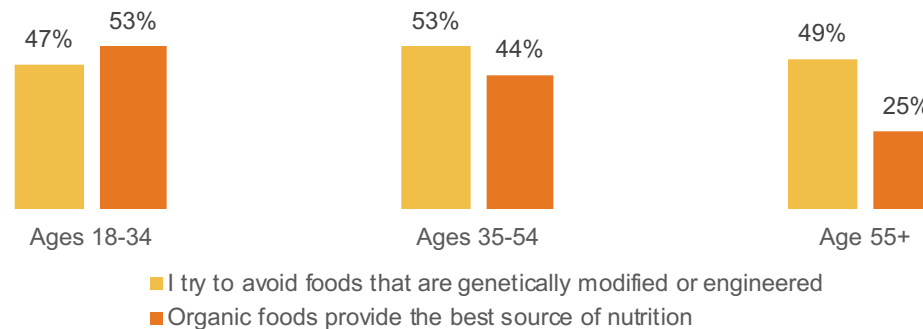
How do people weigh privacy and customization in health apps?

Q. How much do you agree or disagree with the following statements? (% Agree)



For whom do organic and non-GMO foods have more appeal?

Q. How much do you agree or disagree with the following statements? (% Agree)



(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)



How does diet impact wellness?

Simone Pyle, Ph.D

Science and technology manager, gut microbiome, Unilever

What we eat impacts our health in so many ways, some that we are just beginning to understand. “Gut health” might be a new(ish) expression in our wellness lexicon, but in five years it will be better understood by consumers and by science.

Simone Pyle, Ph.D, develops products and solutions related to gut health as a science and technology manager for Unilever. “Multiple areas of health and nutrition are impacted by the gut microbiome. Unilever’s Future Health and Wellness team is currently looking at the impact of the gut microbiome on mental wellbeing, sleep, healthy aging, kids’ growth and development, immunity, as well as the effects of plant-based diets on the gut microbiome,” she says.

“We haven’t even discovered all of the microbes in our gut and there is no clear blueprint for the ideal composition, so we need to learn more about how the ecosystem works and the function the microbes have, plus their role in many aspects of health and wellness.”

[Read the full Q&A on page 36.](#)

What role could food play in mental wellness?



Dr. Uma Naidoo

Author; director of nutritional and lifestyle psychiatry at Massachusetts General Hospital

Mental health is the second-ranked health concern in the U.S. and third in the world, according to a recent Ipsos Global Advisor survey. We have more tools at our disposal now than ever before to manage our mental wellness, and greater understanding that it's connected to our gut health. Managing sleep, nutrition, exercise, hydration, therapy and medications — following advice from a functioning healthcare system — can put us in a great place to be holistically healthy, says Dr. Uma Naidoo, who founded and directs the first hospital-based nutritional psychiatry service in the United States.

She also hopes that technology and advances in research can lead us to a future with more personalized care. She thinks we should focus on understanding dosing of foods. “Nutritional psychiatry is not at a prescriptive point. We are not at a point where we can say eat these three blueberries, four almonds and two carrots,” she says. “But I think research is taking us in that direction of understanding the amounts of food we should be eating for a certain effect.”



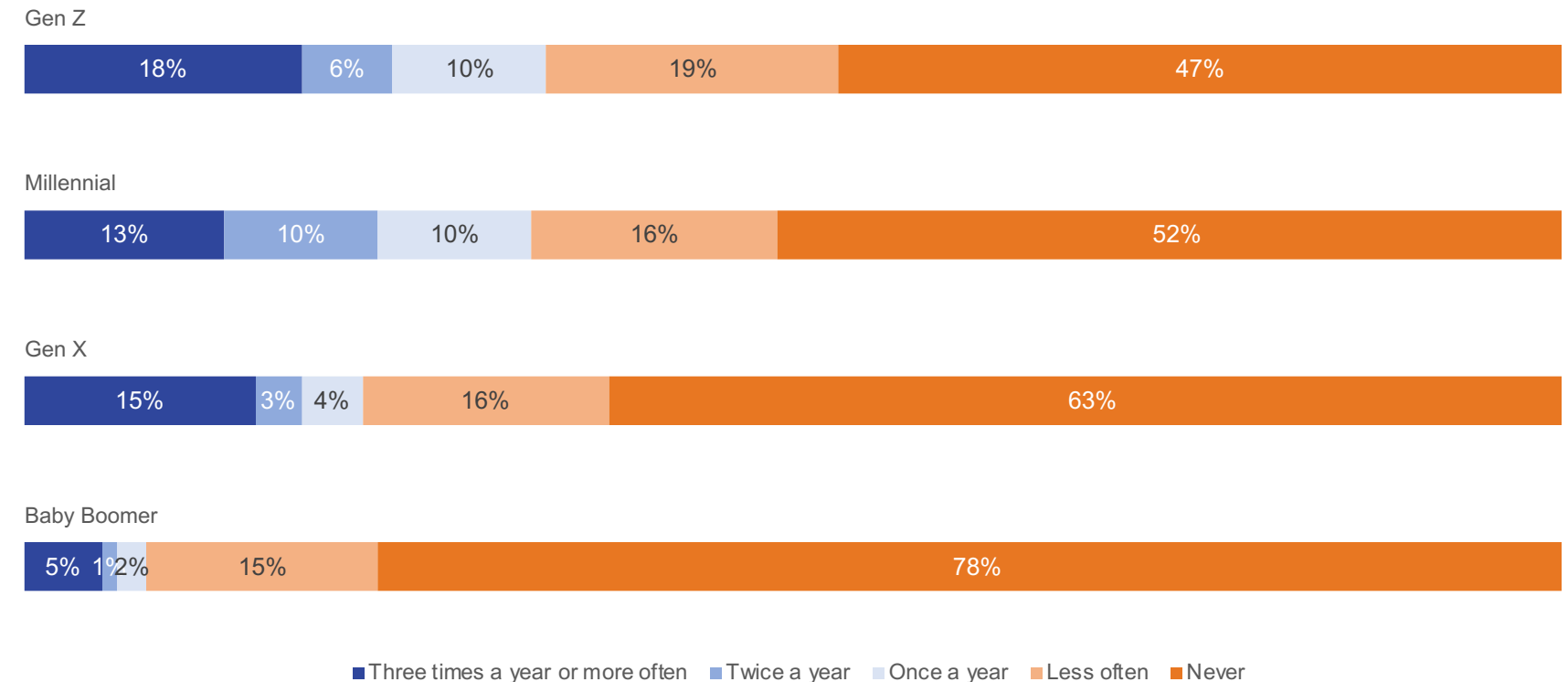
Younger generations are much more in tune with their mental health which is a promising sign, she says. As a psychiatrist, Dr. Naidoo is encouraged by the increased awareness and resources around mental health that are available to people and patients today. But that doesn't mean that we've made all the progress we need yet, just that it's improving.

“I think that people are maybe the slightest bit more open to hearing about a less stigmatized version of mental health.”

[Read the full Q&A on page 38.](#)

How do generations impact mental health visits?

Q. In general, how often do you visit/consult with each of the following for yourself? – A mental health professional (e.g., psychiatrist, psychologist)



(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)



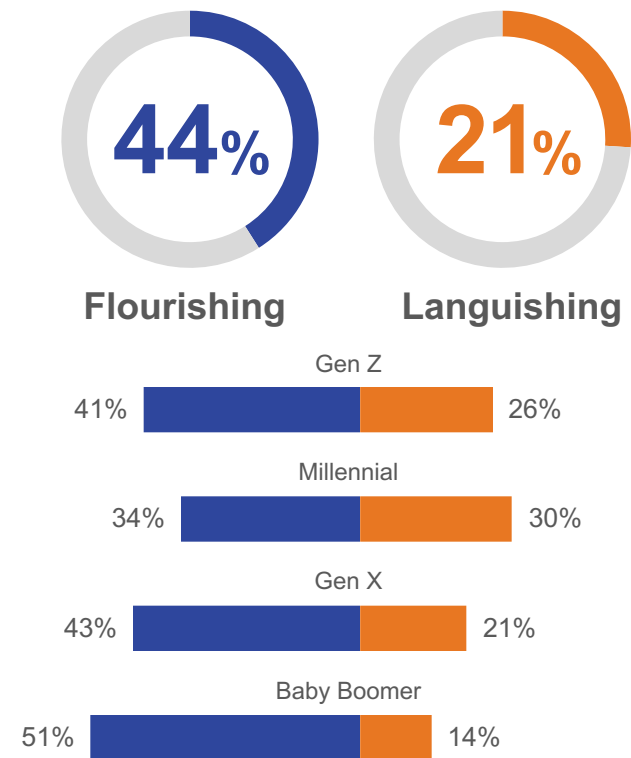
How are mental health views changing?

Americans, like most global citizens, recognize that mental wellbeing is a strong component for our overall health and wellness. But younger generations — even before, but more so since the pandemic — are struggling. Yoga, formal therapy and medications, and apps like Calm and Breethe can help. But how will we integrate all of these into our daily lives and wellness practices, and how will a greater understanding of these issues impact our overall wellness in the future?

As the pandemic continues to linger, we wanted to check in on America's mental health, says Jennifer Berg, a director in Ipsos' U.S. Public Affairs service line. "Like most of our surveys that relate to mental wellness, we see an age break in those ages 40 and under who state they are struggling with mental health. They may not necessarily be struggling more than other generations, but they are allowing themselves to focus on it more than those from earlier generations. This seems to be an attitudinal shift across generations."

She adds that mental wellness is an important topic that can permeate seemingly unrelated industries, including education and personal finances. "In healthcare especially, we talk about whether mental health is treated as importantly as physical health," says Berg. "We are measuring point-in-time check-ins, but we are also looking at resiliency on how people are able to bounce back vs. those who get stuck in their problems."

How are Americans coping in the pandemic?*



(Source: Ipsos KnowledgePanel survey conducted Apr. 23-26, 2021, among 1,014 U.S. adults. *Index of survey results based on Keyes' definition for flourishing and languishing. See [ipsos.com/en-us](https://www.ipsos.com/en-us) for full details.)

Can we live somewhere that won't slowly kill us?

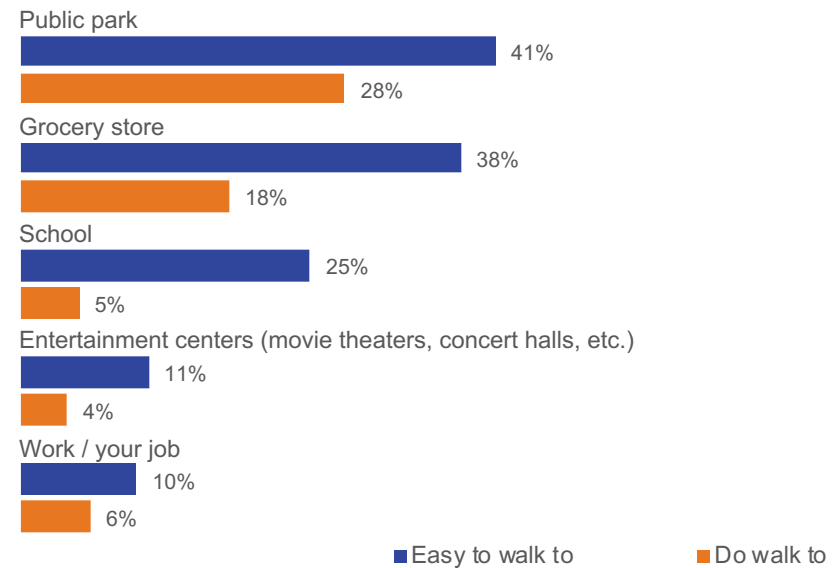


Climate change and pollution are two obvious environmental drivers of our wellbeing. We see that concern in our surveys, even if we don't see as much action on them as is needed to alleviate these global threats.

Our built environment's roads, layout and buildings currently work against us, and in ways that exacerbate inequality in our health. Yet the built environment can evolve from a problem to a solution, and/or into a means of coping with a changing climate landscape. For instance, walking is healthy by itself, and even healthier if used as a replacement mode of transit from sitting inert in polluting cars (regardless of whether we drive, or they drive themselves). But does where we live facilitate walking or biking? And does it do so in a pleasant and safe way? Because getting hit by a car isn't very good for our health, either. "Cities are paying more attention these days, so progress toward a more sustainable and safer future is plausible," says **What the Future** editor Matt Carmichael, who is a former editor of Livability.com. In theory, self-driving cars will be safer for sharing the road, but will that lead to an even more car-centric built environment?

Would people walk more if it were made it easier?

Q. Thinking about where you live, which of the following places/locations would it be easy for you to walk to/Do you currently actually walk to? (Total)



... or kill us more rapidly?



Climate change will play a role in every aspect of our future lives. It will be a recurring topic in **What the Future**.

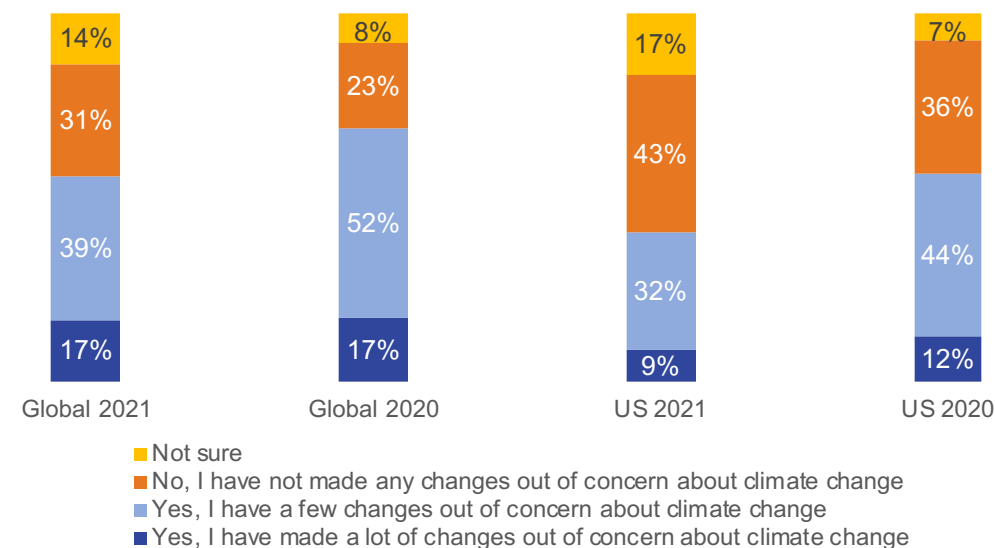
Coping with heat, potential food and water shortages, a lack of biodiversity and a whole host of environmental issues will present challenges to our health and wellbeing. Ipsos data shows that we mostly understand the threat, but we're likely not taking enough action to stave it off in a meaningful way.

"People globally and especially in the U.S. report having pulled back on making changes to their consumer behavior out of concern for climate change," says Nicolas Boyon, senior vice president, U.S. Public Affairs at Ipsos.

"That could be a short-term change as a result of the global COVID-19 pandemic as consumers trade sustainability for safety and convenience. As people start to realize that the climate is impacting their personal health and safety, will that be a tipping point?"

Have people changed to stave off climate change?

Q. Over the past few years, have you made any changes regarding the products and services you buy or use, specifically out of concern about climate change?



(Sources: Ipsos surveys conducted Sept. 24-Oct. 8, 2021, among 23,055 adults under age 75 in 29 countries, including 1,001 in the U.S.; and 19,964 adults under age 75 in 28 countries, including 999 in the U.S.)



Can devices help us hack our way to wellness?



Michal Mor

Co-founder, Lumen

Wearables, trackers and even our clothing can now help us achieve wellness goals. There's even a haptic suit on the market that gives you physical feedback if your yoga poses aren't quite in shape. Lumen is an Israeli start-up that created a device that you blow into to measure and monitor your metabolism. More and more tools exist and will exist to measure, nudge and track our health — actively and passively. Will it lead to greater health when we can take matters into our own hands? Can we “hack” our biology?

“When we started Lumen, most of our users were biohackers motivated to optimize their metabolism. Today, people want to be engaged, to achieve their health goals using technology,” says Michal Mor, who co-founded the company with her twin sister.



Lumen is one of many devices that can help us track and measure various aspects of our wellness and fitness. However, as more of these products have come to market, some of their luster has faded among consumers [see chart]. Why? Part of it may be a tension between our data and privacy. Part of it could be that each device only measures one or two data points and there is only so much available real estate to “wear” them.

Measuring metabolism is essentially measuring everything that impacts metabolism. Soon, devices like these might have more functionality or even provide passive measurement, which could help adoption.

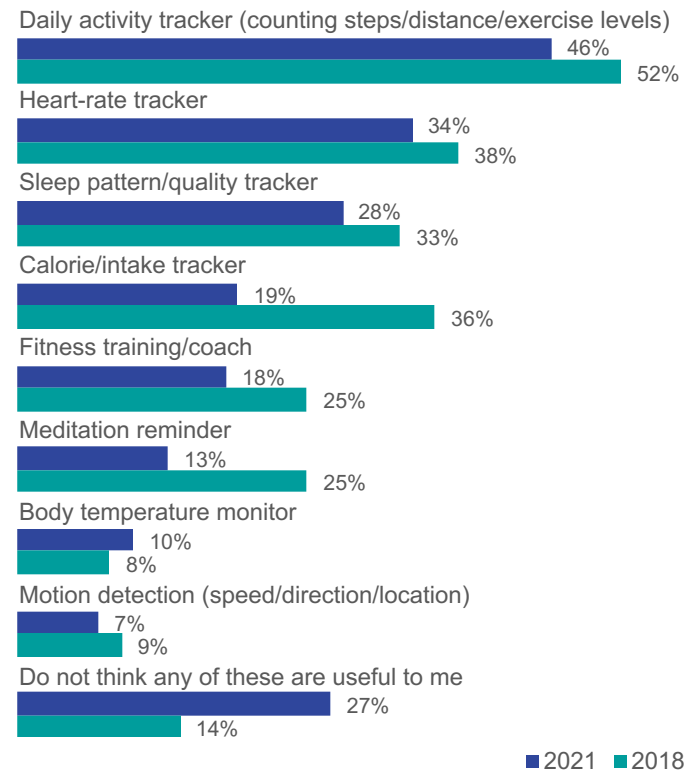
“I could see in my own data that we can recognize pregnancy because our metabolism suddenly shifts in a very extreme way.”

Lumen is also making progress toward being able to identify that people are developing metabolic syndromes and developing conditions like pre-diabetes. We’re not far, therefore, from devices like this being able to bring our care and tracking closer and closer to ourselves and our homes. [Read the full Q&A on page 40.](#)

How has the usefulness of wellness wearables changed over time?



Q. Wearables are electronic devices that people wear – such as an Apple Watch or Fitbit – that monitor things like heart rate or daily activity. They can also be used for things like sending a reminder to take a medication. Of the following possible uses for wearables, which of the following possible uses for wearables do you think are MOST useful to you? (Total)



(Sources: Ipsos surveys conducted Dec. 3-6, 2021, among 1,158 U.S. adults, and May 17-21, 2018, among 1,890 U.S. adults.)

**Gil Blander**

Co-founder and chief scientific officer, InsideTracker

How precise could wellness tracking be for optimal health?

One issue today is that trackers mostly take work. While your wearable or phone might count your steps or measure sleep, more advanced and detailed measurements require you to take time, sit down and collect some sort of sample: breath, blood, etc. At the moment, you need to collect different types of samples at different points during the day with different devices and different apps doing the analysis.

This kind of active tracking requires building habits and routines, which are often hard to do and harder to keep up. Gil Blander is the co-founder and chief scientific officer of InsideTracker, which for more than a decade has helped people optimize their health with tracker data, DNA analysis and collection of biomarker blood samples. He sees a future where this process will get simpler and easier — but might still need at least some active steps from users. That could greatly help adoption.

“In the future, maybe you’ll have a machine at your house that can prick your finger and run 12 to 15 biomarkers in two minutes,” he says. “It’ll go to our server, and we’ll tell you, ‘OK, today you shouldn’t exercise. You should eat that and at 1 p.m., you should take a nap for half an hour.’”

[Read the full Q&A on page 42.](#)

What role do people play in their own wellness?



Joneigh Khaldun, M.D.

Vice president and chief health equity officer, CVS Health

“People do have a role to play in being as healthy as possible,” says CVS Health’s Dr. Joneigh Khaldun. “But a lot of these issues with health are not about individual choices, particularly when you’re talking about health equity. They are about systems. If you don’t have a job, you don’t have insurance. How can we reasonably expect someone to appropriately manage their diabetes and be healthy?”

75% of Americans of color agree that their health is more important to them now than before the COVID-19 pandemic compared to just over half of white Americans.

(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)



Overall, Americans (81%) see their primary care doctor at least once a year. Black Americans are about 15 percentage points less likely to than Americans of other races — while being about 10 points (27%) more likely to see alternative medicine providers.

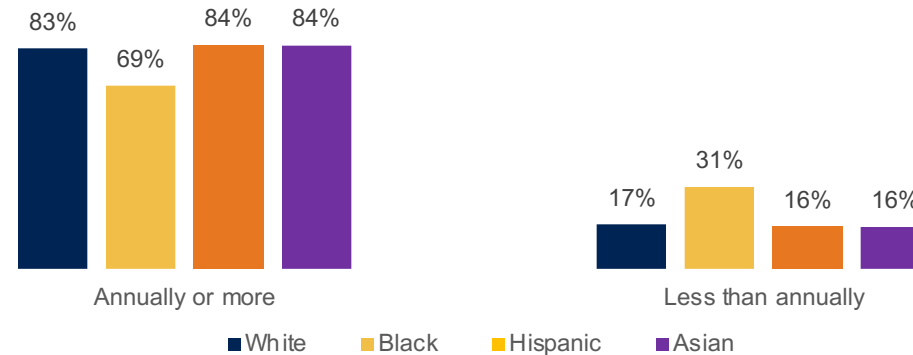
How should the larger healthcare system take the lead to remove structural barriers to optimal health? She contends that it's hard to achieve individual wellness if the healthcare system or broader social systems aren't supporting you.

“[As care providers] you cannot address what you don’t know and what you don’t measure.”

She says the healthcare ecosystem needs to better research and measure how different populations are interacting with and faring. “If we could really focus on health outcomes and understanding our customers, our patients and those nonclinical social determinants of health, that would make a lot of progress.” [Read the full Q&A on page 44.](#)

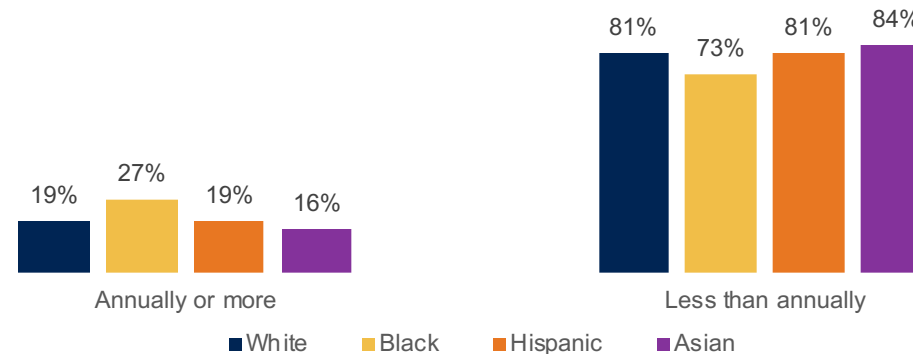
How often do people see a doctor?

Q. In general, how often do you visit/consult with each of the following for yourself? - A primary care physician (general practitioner, internist, family doctor, etc.)



How often do people see other health professionals?

Q. In general, how often do you visit/consult with each of the following for yourself? - An alternative medicine professional (e.g., acupuncturist, osteopath, chiropractor, traditional Chinese medicine)



(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)



How can better research reduce inequity?

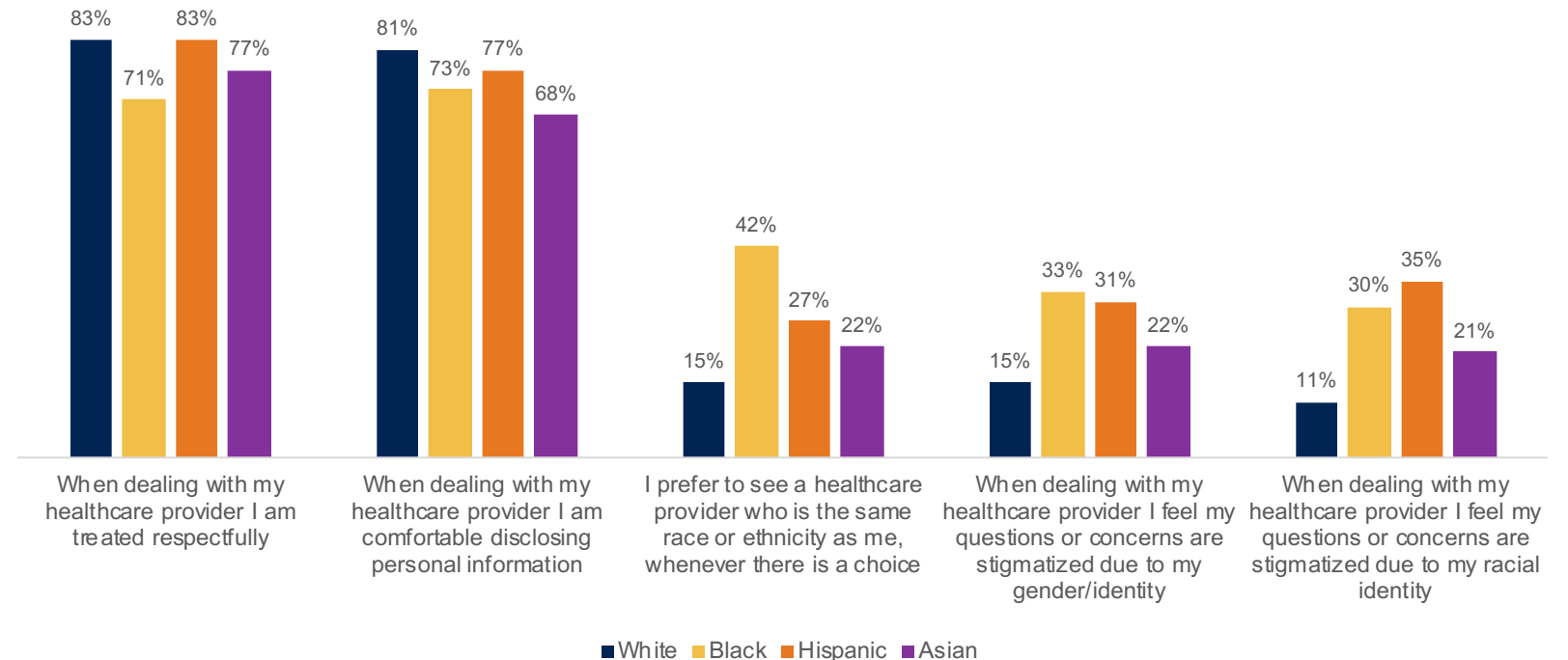
In an ideal world, every patient would have the same, positive experience where the system and their providers treated them with dignity and respect.

Cynthia Pelayo, a vice president in the Ipsos U.S. Public Affairs service line sees potential in the data.

“These numbers in the chart show we still have some work to do, but as Dr. Khaldun says, measurement allows us to see where there are gaps and work to address them.”

How does race factor into the patient experience?

Q. The next few questions ask about your experience of going to see your primary healthcare provider (your general practitioner or main doctor) at their office. Please indicate the extent to which you agree or disagree with each of the following statements: (% Agree)



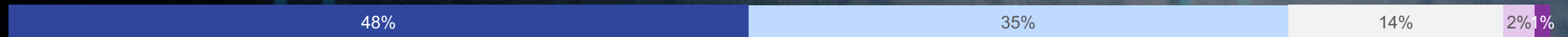
Four tensions that will drive change:

1. Do we want privacy or personalization?

In many ways, this is the tension that shouldn't be a tension. We should be able to get the customized benefits of a wearable, for instance, while also knowing where that data is and isn't going. There are benefits to sharing the data with insurers, etc., because collecting data at all on your own tells them something. "If you are engaged with your health, you're probably going to be healthier," says Lumen's Michal Mor. But that can cut both ways — all that data can demonstrate that you're not taking care of yourself. People have good cause to be skeptical of the benefits and risks.

Privacy wins, but so does personalization

I want to control who has access to my personal health data



I want the ability to get customized advice and plans



■ Strongly agree

■ Somewhat agree

■ Neither agree nor disagree

■ Somewhat disagree

■ Strongly disagree

Q. How much do you agree or disagree with the following statements?

(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)

Four tensions that will drive change:

2. How do we balance between care and cost?

There's a saying that you can have your health, your family, or your career: Pick two. That's a true tension today, as you see in the data. There is no clear winner in terms of what people prioritize. Health beats budget for many. In another survey question, health beats time by almost the same 60/40 ratio. But time and money are split 50/50. Now imagine a world (like, in many other countries today) where people don't even have to make that choice. Expansion of telehealth could help manage that balance between time and cost (and equity) by removing logistic barriers like transportation to and having to take time off work for appointments and doctor visits as we saw with UnitedHealth Group's example of providing tablets to underserved communities.

More prioritize their health over their budget. But what if that didn't have to be a choice?



Q. For each pair of statements, please select which statement you agree with more, even if neither is exactly right. - [I prioritize my health] OR [I prioritize my household budget] (% Agree)

(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)

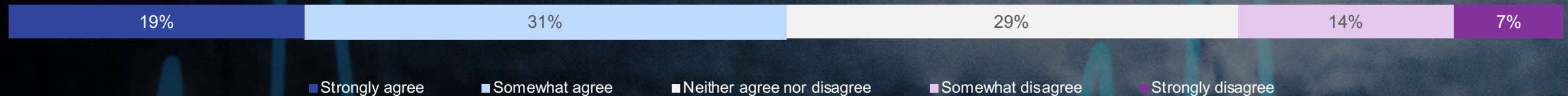
Four tensions that will drive change:

3. ‘Organic’ vs. modified and engineered foods

This tension is like many playing out in the U.S. today — pitting scientific advancement vs. the traditional and alternative. Or, perhaps you see it as pitting the natural order vs. tampering? The truth is that most food we eat now is modified by science in some way, whether that’s processing, synthesizing or genetically modifying. But whatever you believe — and wherever you get the information on which you base that belief — will cause you to fall on one side or the other of this divide. These opinions will have very real consequences for how and how well we are able to feed humanity moving forward, especially during the accelerating climate crisis. One area which could be a model is gut health, where science is driving consumer interest, which is driving adoption. “These scientific advancements are now feeding into consumer understanding, which has led to more consumers actively seeking health and wellbeing solutions in food and refreshment products,” says Unilever’s Simone Pyle.

A significant minority try to avoid foods that they don’t view as ‘natural’ but that’s a widely misunderstood label

I try to avoid foods that are genetically modified or engineered



Q. How much do you agree or disagree with the following statements?

(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)

Four tensions that will drive change:

4. Equitable access vs. pay for access

About half of Americans say the healthcare system works for them (23% disagree). But those who make more than \$100,000 a year are twice as likely to say so as those who earn less than \$50,000. While Americans strongly agree that access should be equitable — across race, party, gender, income and age — clearly that's not what is happening today. One thing to keep in mind is that equity doesn't mean everyone gets the same kind of care. "Part of advancing health equity is making sure people have access to the care and services and support that they need and that they receive it in a way that is culturally responsive to what they need," says CVS Health's Joneigh Khaldun. "Of course, we want people to have access to the highest-quality medical care, which oftentimes does include an M.D. or a specialist. Sometimes it's really about broader support systems and services, and we can use non-M.D. specialists and professionals to help advance that."

A significant majority across demographics share this view



Q. For each pair of statements, please select which statement you agree with more, even if neither is exactly right. (% Agree)

(Source: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)

Plausible Port One:

Tech enables wellness, but only for those who (can) embrace it.

Today we live in a nation where people absolutely want to control who has access to their health data, and many also want customized health advice. We prioritize our health over our budgets, but not by much. Many try to avoid genetically modified organisms (GMOs). And overwhelmingly, we think everyone should have access to quality healthcare, regardless of the ability to afford that care. Where does that take us in 2028?

In one plausible future, political gridlock, or worse, decay, prevents systemic reform in the U.S. Our unmet desire for a better healthcare system leads to further frustration, and people take more and more matters into their own hands in good and bad ways. A bifurcation expands between the haves and have-nots — not based on demographics, but of those who have access to and meaningfully embrace wellness technology, and those who don't.

The pandemic was a fulcrum. While technology can undoubtedly provide benefits for our health and wellness, not everyone is buying it. Some distrust the health system that provides advice and guidance. Some distrust the companies creating the apps, wearables, synthetic and modified foods and other solutions. But as the tech continues to advance, many who can (and yes, that's a huge equity issue) lean in. They use the products, follow the advice, and see the privacy implications as a fair trade-off. It's not just the healthcare system, but people use these tools for their overall wellness plans. Their outcomes improve. A subset pushes even further into biohacking through natural as well as tech-augmented means. This is neither dystopian nor utopian. But what if we were able to nudge public opinion?

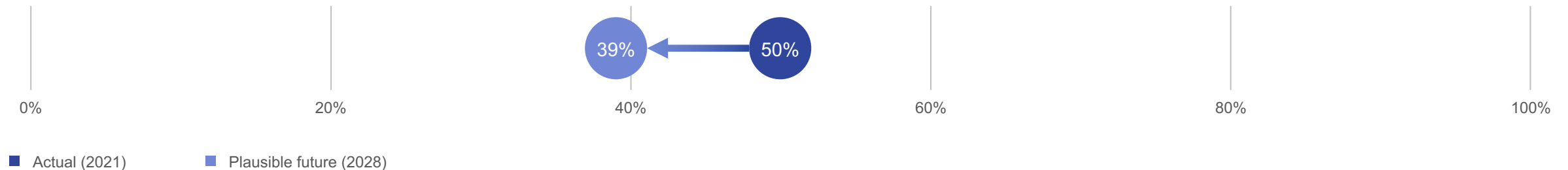
Waypoints

How will you know which plausible port you're steering toward?

Opinion impacts how we react to future events — from natural disasters to technical triumphs and political turmoil.

Suppose our tensions shift and acceptance of wellness technologies increase, including those used to synthesize foods and medications. What could that world look like? These waypoints are a good starting point of topics to continue researching to guide us toward a desired future, and to see if we've charted the correct course.

How those who avoid foods they don't view as 'natural' could change their minds in the future



Q. How much do you agree or disagree with the following statements? (Net agree) - I try to avoid foods that are genetically modified or engineered
(Source for actual today: Ipsos survey conducted Dec. 3-6, 2021, among 1,158 U.S. adults.)

Plausible Port Two:

Tech enables better wellness outcomes for more people

Now imagine 2028 again, based on that changing waypoint in which our acceptance of technology grows in relation to our food and by extension other areas in wellness.

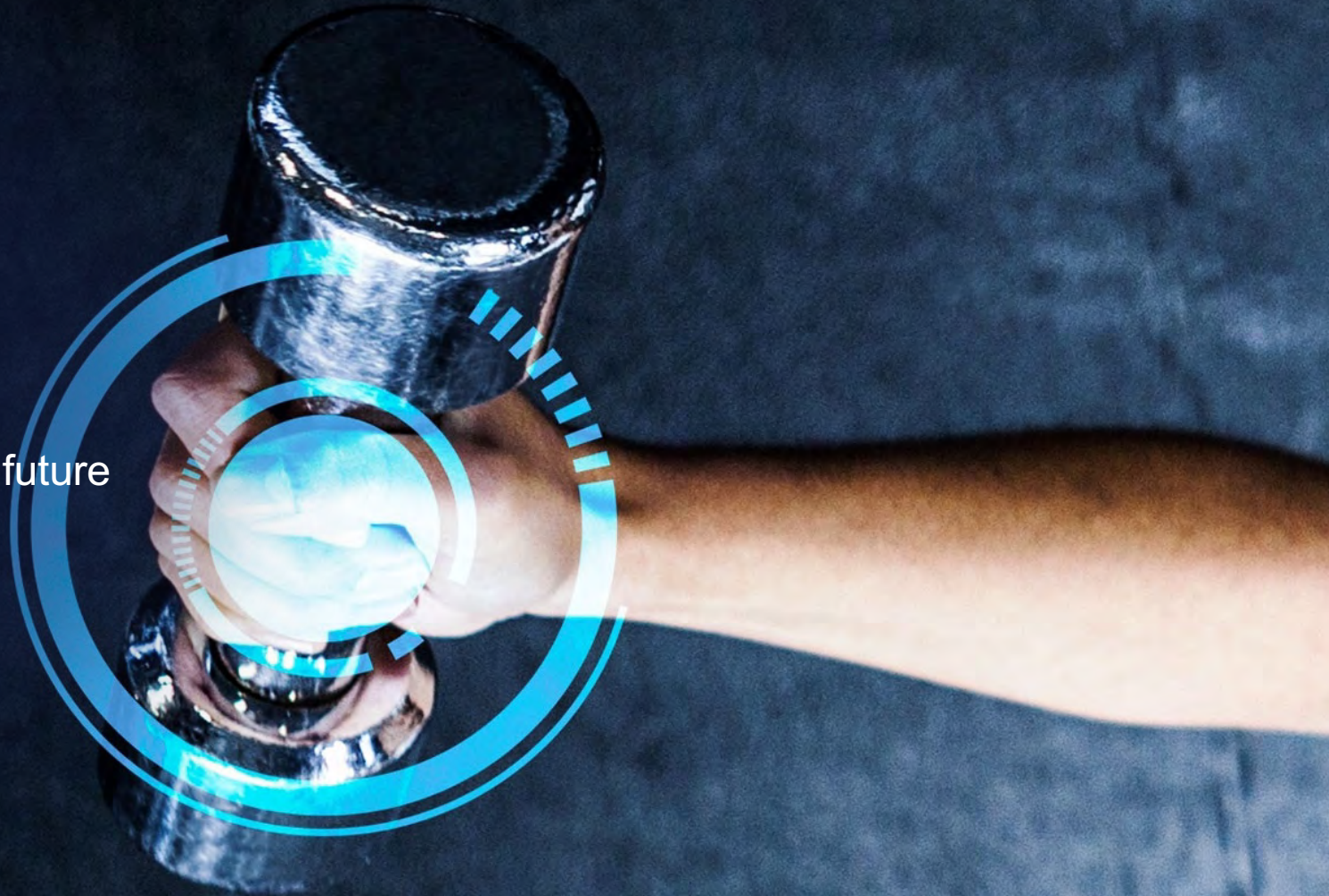
Two factors contribute to this. One is greater transparency, driven by maturing regulation and consumer pressure. The second is a perception that we need these technologies to solve climate problems as well as improve our own health and wellbeing. More people realize the connection between their mental wellness, their physical health and the health of their community and broader ecosystem. Research and development into synthetic food ingredients leads to fewer food shortages, more resilient crops and even less need to grow many forms of crops and livestock. With a little hindsight, people realize how much worse the pandemic would have been without mRNA and other pharmaceutical advancements.

Meanwhile, work continues to reduce barriers to equitable care, but those are bigger problems than a few years can solve, especially since this shift in opinion doesn't change the likely political gridlock. Telehealth is embraced by more patients and care givers for the convenience and way it extends coverage to those whom the healthcare system wasn't serving as well. Either of these futures is plausible. The key will be keeping an eye on these tensions and planning for what could come next.

Appendix

In this section,
we show our work
and our workers

1. Full Q&As
2. Signals
3. Contributors
4. Artifact from the future



Can the healthcare system support wellness — for us all?



U. Michael Currie

Chief health equity officer, UnitedHealth Group

Health and equity are two things that should go hand in hand, yet too often don't. Health providers, which include doctors, nurses, pharmacies, insurance companies, nonprofit organizations and government agencies, are constantly merging and evolving.

How should these organizations work together to improve the system so that it better supports our individual health? We asked U. Michael Currie, the chief health equity officer for UnitedHealth Group.

Kate MacArthur: Does the health system work for everyone?

U. Michael Currie: The healthcare system currently works best or better for some rather than others. That includes both access to and the affordability of quality care.

MacArthur: How is your role helping to remove barriers to health equity?

Currie: By using our data and data insights to identify health disparities where they exist and to what order of magnitude they exist. That then allows us to prioritize these opportunities for improvements. We work with community-based and national stakeholders to develop comprehensive healthcare to try to address these health disparities even when we can't completely remove them.

MacArthur: You're working on taking race out of the equation for kidney health. Should demographic breakouts have any role in care?

Currie: There's historical bias built into the algorithms doctors use to choose clinical care. We have a work group that is evaluating a whole host of these clinical algorithms that leverage race in a way that doesn't support evidence-based science. We want to contribute to the science so that we are ensuring the best possible care for all individuals.

MacArthur: What did the pandemic accelerate for wellness equity across the health system, if anything?

Currie: The pandemic didn't create health inequities, but it did shine a huge spotlight and underscore the urgency of addressing them. One technology that has really shown itself to be beneficial is telehealth and the increase of telehealth by giving patients an easier option to access care. But there are also barriers that people experience associated with telehealth, as well.

MacArthur: What got better, what got worse?

Currie: We realized early on that many of those vulnerable patients were unable or reluctant to use traditional telehealth. So how could we be intentional and purposeful about removing the barrier and driving better access to this affordable type care? We offered them data-loaded devices. In this case, it was a tablet with access to a cellular provider's data network that enabled this virtual care. That's a program that we've now scaled nationally and made a new standard of care across Optum Care.

MacArthur: Given that many people don't have equal access to care, is it appropriate to think about ways individuals can improve their own health?

Currie: Absolutely, because we all have that duty and obligation to do what's necessary to keep ourselves safe and healthy. Where I see a variation is in what people believe is the safest and healthiest course of care or treatment for themselves. Some of that has to do with trust. How do we drive more trust in the engagement and outreach that we have with individuals? No. 1, it has to be consistent outreach because just one outreach to a person doesn't drive trust. That takes time.

MacArthur: To what extent is your role about simply building trust?

Currie: There's an understanding of why people don't trust the system, which is why we really focus on the diversity of the healthcare workforce and our Diverse Scholars Initiative, so individuals feel like they're getting messages from individuals that come from places and people that look like them and talk like them and have cultural values that are like theirs. Then, there's what we support in others. That's what we can do to increase the diversity of the workforce, but also what local, community-based organizations are doing that already have a trusted relationship with the people they serve.

Kate MacArthur is deputy editor of What the Future and associate director of the Ipsos Future and Foresight Lab.

“We all have that duty and obligation to do what’s necessary to keep ourselves safe and healthy. Where I see a variation is in what people believe is the safest and healthiest course of care or treatment for themselves. Some of that has to do with trust.”

Will our food become more like medicine?



Naveen Jain

Founder and CEO, Viome Life Sciences

Naveen Jain is a serial entrepreneur who's built companies including Infospace, Intelius, Talentwise, Moon Express and, now food and health company Viome Life Sciences. He is one of a growing body of thinkers working to optimize health and prevent disease through precision nutrition. He spoke with *What the Future* on why he agrees with Hippocrates that food is medicine.

Kate MacArthur: What is Viome and what can consumers learn from it?

Naveen Jain: What Viome does is understand the biochemistry of the human body, and then use machine learning to be able to adjust the chemistry of the body so you can stay healthy.

MacArthur: You identify this by blood and stool samples, correct?

Jain: And very soon, saliva.

MacArthur: How exactly does it work?

Jain: You send the samples to us. We analyze the sample and what you get back in your app is, "What is your biological age? What is your immune health? What is your cellular health? What is your

mitochondrial health? What is your gut health? What is your cellular response, stress response health?" and 400 other scores. Then we say, "Here are the foods you should eat and why, here are the foods you should not eat and here is why." We give you all the vitamins, minerals, herbs, digestive enzymes, amino acids, probiotics, prebiotics, and we make them for you on-demand, robotically. As your body changes, we reanalyze your body. Then we say, "Now you need this, not this," and that is constantly done.

MacArthur: So, food really is medicine in this case?

Jain: What we're realizing is there is no such thing as universally healthy food and there is no such thing as a universally healthy supplement. What is good for you today may not be good for you six months from now as your body changes.

MacArthur: Are we getting to a point where we can use synthetic biology to customize the food itself?

Jain: Synthetic biology is slightly different, but I would argue that we can custom print the food so you can 3D print your food one day. It is possible that we can take a natural base and customize the food, even customize your water. It could be an oat milk ice cream, and I can now sprinkle my nutrients on top of that. That could be personalized ice cream.

MacArthur: It feels like we're not going to see that in homes anytime soon.

Jain: No, but everything starts at the experimental level and next thing you know, they're at your home, right? All these sensors are going to constantly be interacting with us. Our personal assistant called AI is going to be constantly looking at everything that's happening in our life and analyzing. Your fridge will let you know what you should and shouldn't stock. Or we will not let you order the food that's bad for you anymore, and it's going to control what you can order right now.

MacArthur: How do you make it equitable and affordable for everyone?

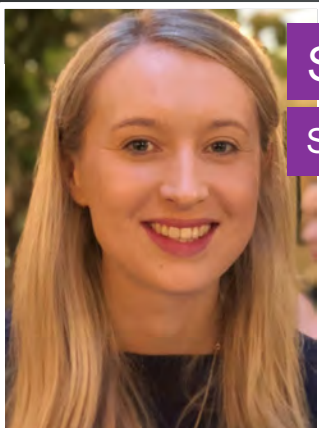
Jain: Our test, when we started five years ago, cost us \$400, and we sold them for \$400. We are already working on technologies that will bring our cost down to \$10 and will bring them under \$10. Then it becomes a matter of scaling to bring them to a point where everybody can afford it.

Eventually, the cost of these preventions will be so low, if food and testing can prevent the diseases, then every government, every employer would make it a part of their [benefits] and will become free to everyone. The cost of healthcare for chronic diseases in the U.S. alone is \$3 trillion. So having everybody be tested and making sure they don't get sick is the best thing you can do because you don't have to spend money on a cancer cure anymore.

Kate MacArthur is deputy editor of What the Future and associate director of the Ipsos Future and Foresight Lab.

“It is possible that we can take a natural base and customize the food, even customize your water. It could be an oat milk ice cream, and I can now sprinkle my nutrients on top of that. That could be personalized ice cream.”

How does diet impact wellness?



Simone Pyle, Ph.D

Science and technology manager, gut microbiome, Unilever

What we eat impacts our wellness. That's always been known. But recently science has made huge advancements in understanding how, exactly, that all works.

Simone Pyle studies the gut biome, or the microorganisms that live in people's digestive tracks, for Unilever, which has more than 400 food, vitamin and personal care products. She uses those learnings to develop products to maximize the health of what we put in our bodies.

Matt Carmichael: "Gut biome" is a term most of us have heard only in recent years. Why is that? What has changed?

Simone Pyle: The microbiome has been researched for many years, but with advancements in technology, our knowledge is rapidly increasing. We now understand much more about the important role that the gut microbiome plays in health and wellness, so much so that it would be difficult to survive without it. Your microbiome is as unique to you as your fingerprint, but what is really exciting, and why there is so much interest in it, is that it can change over time and in response to environmental factors such as diet. These scientific advancements are now feeding into consumer understanding, which has led to more consumers actively seeking health and wellbeing solutions in food and refreshment products.

Carmichael: How does managing gut health play into our broader nutrition and wellness priorities?

Pyle: It is important to differentiate between the gut microbiome and gut health. Although both are interrelated, the gut microbiome is about so much more.

We know that our gut microbiome plays a major role in helping support and improve symptoms of gut diseases and disorders, but we now know that our guts have important connections with other organs such as the heart, brain, and skin; just to name a few. A healthy gut can lead to a healthy body and mind.



Carmichael: Do you work with the beauty team as well on biome-related research?

Pyle: Across Unilever, we have teams looking at different microbiomes — those on the body, such as on the skin or scalp, those around us in the home, as well as those in the body such as the gut microbiome. Although we are each looking at it from different perspectives, consumer wellbeing is at the core for us all, and we are also finding out how many of these different microbiomes are interrelated. In addition, although the microbiomes are different, the underlying capabilities, approaches and techniques are the same, so we collaborate closely.

Carmichael: Unilever has “committed to doubling the number of products that deliver positive nutrition by 2025.” How do you get there?

Pyle: At Unilever, we want to transform the global food system and ensure foods are a force for good. Last year, we launched our “Future Foods” ambition to help people transition toward healthier diets and to help reduce the environmental impact of the global food chain. We are working to deliver more products with impactful amounts of fruits, vegetables, proteins, wholegrains and micronutrients. In a recent study, we showed that in all types of diets studied, ranging from meat-eaters to vegans, people were not consuming a sufficient variety of foods to get all the nutrients they need.

Carmichael: How are these products more sustainable?

Pyle: We provide sustainable nutrition by improving consumers’ health and wellbeing. In addition to delivering healthier products, we understand that how we grow and source our food is important. That’s why we recently launched the Unilever Regenerative Agriculture Principles, which provide guidance on how to nourish the soil, capture carbon and restore and regenerate the land. [Unilever brand] Knorr’s plan for 50 regenerative agriculture projects is predicted to reduce greenhouse gas emissions and water use by an estimated 30% while improving biodiversity, soil health and livelihoods. We are committed to reducing the environmental footprint of our food system also by transitioning to more plant-based products. The EAT-Lancet Commission showed that if people eat more plant-based foods, emissions could be cut by up to 80%.

Carmichael: What is there still to learn about gut biome’s role in our wellness?

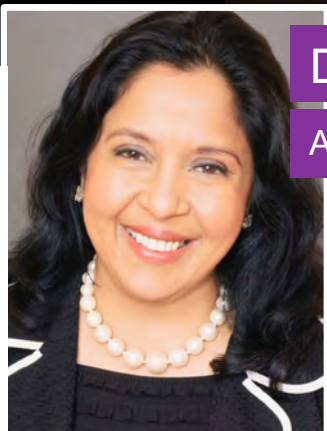
Pyle: There is still more to learn about the composition of the gut microbiome, its role in health and wellness, and the impact of modifying it. We haven’t even discovered all of the microbes in our gut and there is no clear blueprint for the ideal composition. We need to learn more about how the ecosystem works and the function the microbes have, plus their role in many aspects of health and wellness.

Matt Carmichael is editor of What the Future and head of the Ipsos Future and Foresight Lab.

“It is important to differentiate between the gut microbiome and gut health. Although both are interrelated, the gut microbiome is about so much more.” ...

“A healthy gut can lead to a healthy body and mind.”

What role could food play in mental wellness?



Dr. Uma Naidoo

Author; director of nutritional and lifestyle psychiatry at Massachusetts General Hospital

Dr. Uma Naidoo is a highly unusual combination of psychiatrist, nutritionist, professional chef and author. She combines these disciplines as the director of nutritional and lifestyle psychiatry at Massachusetts General Hospital. Her book, “This is Your Brain on Food,” looks at the role that food plays in how we feel, both physically and mentally.

Matt Carmichael: What are we learning about the role of mental health in our overall wellness?

Dr. Uma Naidoo: A lot of recent research has shown how influential our gut health is in determining our mental health. It's the basis of our understanding the connection between mental health and food. I think people ignore how they're eating in terms of their emotional health, and that's a link we really need to start making.

Carmichael: What is still on the horizon in this space?

Dr. Naidoo: More precision technologies and understanding the biological factors that are implicated in mental health, then tailoring that plan to help that individual. I feel that nutrition is very much a part of that. And the second area of expanding research is what we call psychobiotics — basically live bacteria.

I feel that the cutting edge is going to be that these will be available in a pill form. My hope is that we can integrate this in nutrition. A person could speak to their doctor about it, but I think the gap is that psychiatrists are not necessarily practicing this way yet.

Carmichael: It sounds like the whole package — the pharmaceutical solutions, the therapeutic solutions, the nutritional solutions, and the lifestyle solutions — is what you want to be shooting for.

Dr. Naidoo: That's what I want to be shooting for. The model of care that I practice in psychiatry is holistic, integrated and functional. You might have irritable bowel syndrome but come to me [as a psychiatrist] with anxiety. But in fact, what's driving that anxiety could be the disruption of your gut through IBS.

Carmichael: To what extent do science and technology play a positive role in our food system?

Dr. Naidoo: New means of preserving any type of nutritional value in food for a longer time would be welcomed. It's obviously going to prevent foodborne illnesses or infection, or disease transmitted by food. It could be more efficient production of foods and more widespread access of food. It's a delicate balance of finding enough nutrition in something, but not processing the life out of it.

Carmichael: We have a current bifurcation of those who are attuned to their health and nutrition, and simultaneous crisis of those who struggle with it. How can we improve that?

Dr. Naidoo: Access to information, especially during COVID, has changed because people are accessing things online. But it's also the responsibility of scientists, physicians and media outlets, to put forth accurate educational content. I think it's powerful to bridge that chasm between different demographics and people who need access to information and those who are providing it. I feel the increased awareness of mental health conditions and the resources that are available is

something that I find encouraging. I think that people are maybe the slightest bit more open to hearing about a less stigmatized version of mental health.

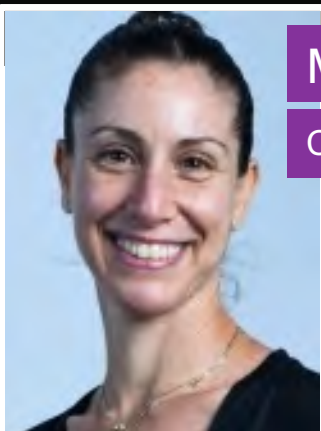
Carmichael: What does this intersection of food and mental wellness look like five to ten years out?

Dr. Naidoo: The direction we are going in is focusing the research and getting to the point where we understand dosing of foods. Nutritional psychiatry is not at a prescriptive point. We are not at a point where we can say eat these three blueberries, four almonds and two carrots. But I think research is taking us in that direction of understanding the amounts of food we should be eating for a certain effect. It's almost like someone at the holiday party going through the buffet table and making a selection. I think we have personalized nutritional psychiatry and personalized medicine taking us in a direction where we are not just making choice on our own but with guidance.

Matt Carmichael is editor of What the Future and head of the Ipsos Future and Foresight Lab.

“A lot of recent research has shown how influential our gut health is in determining our mental health. It's the basis of our understanding the connection between mental health and food.”

Can devices help us hack our way to wellness?



Michal Mor

Co-founder, Lumen

Lumen is a breathalyzer-like device that measures your metabolism. It was created by twin sisters Michal and Merav Mor, who are both Ph.Ds in physiology and triathlon winners. They understand from their own experience that developing a better understanding of our metabolism and especially how it changes through the day and over time can help us all reach our diet and wellness goals. They spoke to *What the Future* over Zoom from their headquarters in Israel.

Matt Carmichael: I get that I need to eat more veggies and exercise more and watch my carbs. Do I really need a device to tell me that?

Michal Mor: I think one of the main problems that Lumen comes to solve is the frustration around diets because you know that some of the diets might work for me, but not work for me a year from now. This is mainly because that there is no one diet that fits all because our body is always changing.

Carmichael: There so many things that we can measure for the health of our body. Why is metabolism important to measure and why would we prioritize it?

Michal: If I can measure something that already takes into consideration my steps, my nutrition, my sleep and my energy, then I don't need many wearables.

Carmichael: What does five or ten years from now look like for this technology?

Michal: The science field understands that in order to be able to do good science, it's not enough to test something in the lab because we want to see real data of real people when they're living their life. So you can see that the more and more trackable and wearable devices we have, the data suddenly becomes more scientifically valid.

Eight years ago, if you needed to manage your health, you would do blood tests. As long as the blood tests are OK, you thought to yourself, "OK, I'm healthy, no need to take any actions." Today more and more people understand that being healthy is not just not being sick.

Carmichael: Do new technologies open up the idea of biohacking in the “trying to optimize our personal performance” way?

Michal: When we started Lumen, most of our users were biohackers because they came with the motivation to optimize their metabolism. But there was a shift, so it's no longer only for biohackers. More people want to be engaged and to achieve their wellness goals using technology.

Carmichael: How do you help people to develop healthy behaviors, habits and routines?

Michal: I think the real-time feedback loop helps. When you are on a journey of improving your life and achieving your goals, those goals often are far away, and it's very hard to keep motivated. The feedback loop allows you to see the impact of your actions on your metabolism in real time, even before the scale is going to show it.

Carmichael: Does the future of measuring health generally move more toward embedded sensors in our garments and such?

Merav Mor: We have limited space on our wrist and body, so we're definitely brainstorming about if the sensors will extend to other things we wear, like clothes.

Michal: The trend is that everything will be passive. We (users) don't want to put much effort into things.

If we imagine the ideal wearable, it's something where we hardly need to do anything, and it will collect my data and give me a recommendation and help me carry out that recommendation. We want things to be easy.

Carmichael: Do you see a future where part of the tailored recommendations from something like Lumen include synthetic products or supplements that you can customize to help with your diet and metabolism, or things that you could 3D print at home or have delivered?

Michal: Yes. Lumen currently recommends nutrition, but we are now working on something that takes into consideration your entire lifestyle. Nutrition is a huge and important part, but also your sleep and your activity.

Maybe we see that you are a bit stressed, so we might recommend meditation and mindfulness. Or we could explore collaboration with meal delivery.

Matt Carmichael is editor of What the Future and head of the Ipsos Future and Foresight Lab.

“When we started Lumen, most of our users were biohackers because they came with the motivation to optimize their metabolism. But there was a shift, so it’s no longer only for biohackers. More people want to be engaged and to achieve their wellness goals using technology.”

How precise could wellness tracking be for optimal health?



Gil Blander

Co-founder and chief scientific officer, InsideTracker

InsideTracker is a 12-year-old company that uses blood and DNA samples and fitness tracker data to help people optimize their health, wellness and athletic performance. Clients follow 90-day intervention plans with recommendations for food, supplements, exercise and other lifestyle changes and results tracking. What the Future asked Gil Blander, co-founder and chief scientific officer, how getting precise, personalized health insights can make a difference in our future wellness.

Kate MacArthur: What's the advantage of doing this kind of program?

Gil Blander: All the recommendations are based on science. We are telling you to eat this food or to do this exercise or to take this supplement based on the data that we extract from peer-reviewed, scientific publications. We are combining blood, DNA and the fitness tracker together. We're looking at 43 blood biomarkers, so we are really giving you a holistic picture.

MacArthur: Your biomarker targets use more narrow ranges than the "normal" medical ranges for blood tests. How much better is that going to make your longevity or your health?

Blander: Because our optimal zone is always narrower than the normal zone, if we are trying to help you to stay in the optimal zone, there is a

better chance for you not to get outside of the normal zone. So, basically, what we are trying to do is prevention.

MacArthur: You're not only drawing blood, but doing DNA tests, too. Do you see a point where you'll be able to do this in less intrusive ways?

Blander: I think that day will come. Apple is working on having a continuous glucose monitor inside the Apple watch. In the future, maybe you'll have a machine at your house that can prick your finger and run 12 to 15 biomarkers in two minutes. It'll go to our server, and we'll tell you, "OK, today you shouldn't exercise. You should eat that, and at 1 p.m., you should take a nap for half an hour."

MacArthur: How much more life do you think we can build into our lifespan by optimizing?

Blander: Lifespan is basically how long you live from the moment that you have been born to the moment that you die. Health span is how long you live in a good condition. We know already that the lifespan was significantly increased in the last century, so I don't see a problem to get to the highest limit. We have seen a French woman who lived to 122. Can everyone get to that? No, it's a lot about genetics. I always look at genetics like the cards when you go to the casino in Las Vegas. You have the cards that you have that we cannot change, but let's give you ammunition to play the cards the best that you can in order for you to live a longer, better life.

MacArthur: For many, the meal planning and prep is a big hurdle. How do you help people with that?

Blander: The nutrition part is one of the biggest hurdles or mountains that we will need to climb in in the next few decades. We have more than 8,000 different kind of foods available for us, and if you look at the average American on an average week, we consume maybe 20 of those.

Part of what we are trying to do is educate you about other kinds of food. Then we are also giving you some recommendations on how to cook it with recipes and other

things. What I'm working on right now is a nutrition solution inside your pocket that will give you, all the time, recommendations when you need them.

MacArthur: How would that work?

Blander: It's very similar to the Waze navigation system. We are working to develop a Waze for health, wellness and performance. We're building something that will either push or pull information from you, and all the time, be your guardian angel for health.

MacArthur: One tension we find is people want to get insights from providers, but they're really concerned about protecting their data. How do you see this changing in the future?

Blander: The way that the consumer needs to look at that is the value vs. cost. The value for you to live another five years, let's say in a good condition, in my opinion is greater than the cost that someone might know the level of your cortisol.

Kate MacArthur is deputy editor of What the Future and associate director of the Ipsos Future and Foresight Lab.

“Because our optimal zone is always narrower than the normal zone, if we are trying to help you to stay in the optimal zone, there is a better chance for you not to get outside of the normal zone. So, basically, what we are trying to do is prevention.”

What role do people play in their own wellness?



Joneigh Khaldun, M.D.

Vice president and chief health equity officer, CVS Health

Dr. Joneigh Khaldun has been on the front lines of battling healthcare disparities as an emergency medicine specialist in hospitals and public health departments. She recently joined CVS Health as vice president and chief health equity officer from the state of Michigan, where she was the chief medical executive. She spoke with *What the Future* about why individual wellness depends on way more than the individual.

Kate MacArthur: How is your role empowering you to remove barriers from the equity of care for the future?

Dr. Joneigh Khaldun: What's exciting about this role is when you think about all the reasons why people are unable to achieve optimal health, things like historical and structural barriers, racism, classism, ableism, discrimination, unequal access to quality jobs, housing and education.

When I think about how we as a CVS Health enterprise can think about our policies, our programs, our partnerships across the country, there's a really exciting and great opportunity to improve the health of millions of people across this country.

MacArthur: Does the system work for everyone?

Dr. Khaldun: There's no question that the system overall marginalizes many people in society, and that is why we have such health disparities across this country.

MacArthur: Where do people go if they're not getting the care they need from the system?

Dr. Khaldun: It goes back to this definition of what the system is. What happens is people aren't getting the care they need. They're not getting it in the right place, at the right time, or getting it at all.

MacArthur: Many people turn to providers like midwives and herbalists, or remedies like essential oils when they don't get what they need from the current system.

Dr. Khaldun: We need to be careful when we talk about what's accepted as far as care and not perpetuating inequities by denigrating other cultures. That part of advancing health equity is making sure people have access to the care and services and support that they need, and that they receive it in a way that is culturally responsive to what they need.

Of course, we want people to have access to the highest-quality medical care, which oftentimes does include an M.D. or a specialist. Sometimes it's really about broader support systems and services, and we can use non-M.D. specialists and professionals to help advance that.

MacArthur: What would you like to see individuals do to help their own cause for better health?

Dr. Khaldun: People do have a role to play in being as healthy as possible. But a lot of these issues with health are not about individual choices, particularly when you're talking about health equity. They are about systems. If you don't have a job, you don't have insurance. How can we reasonably expect someone to appropriately manage their diabetes and be healthy?

MacArthur: How can organizations play a bigger role in helping people this way?

Dr. Khaldun: First and foremost, [organizations] can take the initiative to hold your own company accountable for health equity, whether it's in performance measurement or how you pay people. Are you even collecting data on different populations? Are you collecting it as robustly as you potentially could? Are you identifying disparities and then looking at your own internal policies, external policies and programs to actually be able to impact those disparities? If you interact with external providers, how are you working with those external partners to be able to collectively address disparities as well? There's a lot that organizations and companies can do, but that work needs to be both internally and externally centered.

MacArthur: If there was one thing that could make the most impact in creating real positive change what would that be?

Dr. Khaldun: You cannot address what you don't know and what you don't measure. There's an opportunity and there's an imperative for us as a healthcare ecosystem to better measure granularly how different populations are experiencing healthcare, what their healthcare outcomes are, and then thinking about our data infrastructure and technology systems and interoperability. If we could really focus on health outcomes and understanding our customers, our patients and those nonclinical social determinants of health, that would make a lot of progress.

Kate MacArthur is deputy editor of What the Future and associate director of the Ipsos Future and Foresight Lab.

“People do have a role to play in being as healthy as possible. But a lot of these issues with health are not about individual choices, particularly when you're talking about health equity. They are about systems. If you don't have a job, you don't have insurance. How can we reasonably expect someone to appropriately manage their diabetes and be healthy?”

Signals

What we're reading today that has us thinking about tomorrow

Patients want alternative therapies. How can hospitals offer them without putting medical integrity at risk? via the [New Yorker](#). “Wellness is often presented as an alternative to the modern medical system... in recent years, hospitals have begun embracing it, too... There is a gap between what we want from health care and what we get. Wellness stands ready to fill it.”

What It Means to Design a Space for ‘Care’ via [Bloomberg](#). “Planners and designers are linking labor, social services, and maintenance to building projects by prioritizing the concept of ‘care’.”

The 7 Best Smart Clothes of 2021 via [Lifewire](#).

Wearable Device That Puts Users in Control of Their Focus and Flow via [Accesswire](#). “The new Apple Watch will do EKG’s while you’re driving but the Crown claims to do EEGs while you’re gaming to help you find the perfect state of focus based on brainwaves!”

Online features play key role in ‘ideal health care experience’ via [Ipsos](#). New Evernorth/Ipsos poll finds that most are comfortable with virtual consultations replacing in-person visits and many predict more care will be delivered at home vs. in a typical healthcare setting in the future.

Ipsos U.S. Mental Health 2021 Report via [Ipsos](#). Younger Americans are more likely to be languishing than older Americans.

Fewer consumers say they have changed their behavior due to climate concern than did before the pandemic via [Ipsos](#). In-home behaviors top list of climate-conscious actions taken more often: recycling/composting, saving energy, saving water and avoiding food waste.

Ipsos What the Future Health via [Ipsos](#). As our nation ages and a caregiver shortage looms, will technology be able to bridge the gap? We ask experts from IBM/Watson, MIT, and the Milken Institute to explore these “big questions.”

Scanning for signals is a type of research that is foundational to foresight work. These signals were collected by the staff of What the Future and the Ipsos Trend Advisory Board, including Britt Calvert, Kenneth Chen and Hannah Fitton.

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Artifact from the future

Their grandfather, an aging Millennial, was having a hard time understanding.

Sure, grandpa, himself, had gotten tattoos when he was a 20-something in the 2010s. But not because a doctor prescribed it. His grandchild patiently explained that it wasn't just art; it was for their health. Each part of the dragon was a monitor. Depending on the colors it turned, it told them something about their metabolism, their blood glucose and their blood pressure.

When grandpa asked why a dragon and not something like a band logo, or something that would match their avatar, they rolled their eyes.

“OK, Millennial.”



For full results and methodology, visit future.ipsos.com
and subscribe to our newsletter to receive our next issue, *What the Future: Aging*

What the Future is produced by the Ipsos Future and Foresight Lab

GAME CHANGERS

