A cluster of pneumonia illnesses in Wuhan City, Hubei Province, China, from an unknown cause was first reported in December 2019. In January 2020, the cause was identified and, later, designated by the World Health Organization (WHO) as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) resulting in an infection named COVID-19.
WHO declared a global pandemic on March 11, 2020, and by November 2020, 218 countries and territories were affected by the illness. Since April 2020, many of these countries have instituted strategies to control virus spread so that sudden and large increases in infections needing hospitalization would not tax their medical care capacities. A study published in the Journal of Infection in April 2020 reported that this attempt at “flattening the curve” will reduce case fatality rates. Countries highly encouraged—and mandated in some areas—physical distancing of at least six feet between people, wearing face coverings when physical distancing is not guaranteed, strict hand hygiene, avoiding touching the eyes, nose, and mouth, and good respiratory hygiene (sneezing or coughing on a disposable tissue or bent elbow).

Additional practices include avoiding contact with symptomatic persons, sheltering those who are highly vulnerable (i.e., the elderly, especially those with compromised immune systems), limiting crowd sizes, identifying risky venues and activities, and other strategies, depending on the operations and policy makers. These restrictions reflected and magnified real consumer fears about personal health and safety and financial health. Consumers continue to eat during a pandemic, but consumption of food and beverage is also impacted by the virus.

Because of nationwide shelter-at-home orders during the pandemic, about 40% of U.S. consumers cook at home more often. Approximately 49% of this group expects to keep cooking at home after the pandemic.

In April 2020, The Hartman Group conducted their “Eating Occasions Compass” survey, recruiting approximately 2,500 U.S. adults aged 18 to 73 from the major demographics. Several studies were completed to determine the impact of COVID-19 on eating relative to their cultural values/beliefs, social/political/economic forces, the different media and social networks, what people need for food and beverage, and their behaviors and habits. This article focuses on consumer eating and buying behavior during the pandemic as primarily reported by this organization.

### Eating Occasions

For the majority of consumers prior to the pandemic, dinner was the meal most frequently eaten (80%), followed by lunch (70%) and breakfast (64%). Some consumers also ate an afternoon snack (38%) or an after-dinner snack (32%). American consumers retained the same eating occasions during the pandemic, at approximately the same frequency. In consecutive order during the day, the eating occasions are the early morning snack, breakfast, morning snack, lunch, afternoon snack, dinner, after-dinner snack, and late-night meal/snack.

### Effects of Isolation
To arrest the spread of the coronavirus, most countries isolated themselves from other countries, and residents were instructed or mandated to follow quarantining practices. Most office workers were told to work from home. Venues with high close-contact activities (such as restaurants, fitness centers, salons, travel, banks, schools, and houses of worship) were closed, and residents were severely restricted from using many services. A new term—"untact"—was introduced in South Korea to describe services that minimize direct person-to-person contact, such as online purchasing and payment, self-service counters, videoconferencing, and distance learning. Buffets and hot bars were quickly converted to untact services such as complete meal kits and take outs.

**At-Home Eating**

Before the pandemic, approximately 76% of consumers ate at home, and the remaining 24% ate at work, in restaurants, and at other locations outside the home. During the pandemic, eating at home increased to 88%, reducing eating anywhere away from home to 12%, half of what it was before the pandemic. Morning snack, lunch, afternoon snack, and dinner are eating occasions that now happen significantly more at home, due to increased unemployment and work-at-home strategies or mandates. Generation X (those born from 1965 to 1976) experienced the largest decrease in eating at work during the pandemic.

**Alone Eating**

Before the pandemic, U.S. consumers were more likely to eat alone during early morning snack, breakfast, morning snack, and lunch times when they hurriedly prepared to go to work or were already at work. Although about 43% still ate alone during the pandemic, U.S. consumers are more likely to eat with others (e.g., family, significant others) at these eating occasions. Approximately 88% of snack consumption now occurs at home, and snacks are mostly ready-to-eat items.

Interestingly, about half of all snacking occasions involve adults who are alone, and approximately 53% of these snack foods and beverages are planned and bought more than eight days before consumption. Millennials (those born from 1977 to 1995) ate alone more than they did before the pandemic.

**Shopping Trips**

As eat-at-home occasions surge, the U.S. consumer is shopping more efficiently, conducting fewer shopping trips for the major eating occasions because stores are considered to present higher risks of contracting COVID-19. An exception to this statistic are the Boomers (those born from 1946 through 1964), who significantly increased their stock-up trips during the pandemic. Shopping trips are conducted at least three days in advance for food and beverage consumed at home (especially dinners), for snacks and meals that had been purchased from food service before the pandemic, and for possible food shortages and other needs resulting from new sheltering orders. Generation Z (those born from 1996 through 2010), the first
generation to grow up completely in the digital age, and Millennials are more likely than Gen X and Boomers to purchase their dining options on the same day of consumption. Even before the pandemic, Gen Z used delivery and takeout options more often, especially for last-minute dining decisions.

Online shopping revenue grew significantly, from 10.5% of all grocery spending in 2019 to 14.5% in February 2020 to almost double that in March and April of 2020 (27.9%). All generations, both with and without children, used online grocery shopping, according to The Food Marketing Institute. In addition to citing safety and health as the top reasons for online shopping, the U.S. consumer likes the time saved, its ease, and the fact that it includes delivery. As of August 2020, however, 39% of all generations still prefer in-store to online (26%) grocery shopping.

Food Categories

The U.S. consumer retained the same predominant food categories eaten before the pandemic—breads/rolls/tortillas (13%), cheese (12%), eggs (11%), dairy products other than cheese (10%), fruit/fruit snacks (9%), meat cuts (9%), and common breakfast items (7%), according to The Hartman Group. During the pandemic, more than twice as many breads/rolls/tortillas as potatoes (6%), and more than three times the amount of rice and other starches (4%), have been eaten. A November 2000 study published in Psychosomatic Medicine reported that emotional eaters, when stressed, increased their consumption of “sweet high-fat foods and a more energy-dense meal,” foods that quickly supply energy.

But there’s a concern that stress and anxiety induced by the pandemic and quarantine mandates may also lead to “the quarantine 15,” the term coined for the 15 pounds that some people may gain during isolation. Pizza/pasta/Italian food, sweets, and burgers, which were mostly outsourced to restaurants and other away-from-home locations before the pandemic, have been consumed less during the pandemic because consumers preferred not to replicate the foods at home, even when they decided not to purchase the same foods from providers outside the home.

Cooking at Home

Because of nationwide shelter-at-home orders during the pandemic, about 40% of U.S. consumers cook at home more often. Approximately 49% of this group expects to keep cooking at home after the pandemic, according to The Hartman Group. The novelty of cooking at home during the day is enjoyed as a recreational activity, especially among the younger generations, resulting in some meals not usually eaten pre-pandemic for the same eating occasions.

For example, while lunches were consumed mostly away from home before the pandemic, approximately 81% of lunches are now prepared at home for families and from “scratch,” entailing a moderate increase in time and effort using “fresh, less processed,” and “special
Health” foods and ingredients. Lunches during the pandemic look more like pre-pandemic dinners.

Before the pandemic, many dinners were outsourced to food service. During the pandemic, approximately 93% of dinners are prepared at home for the same persons involved pre-pandemic but with “heavy preparation” and increased planning time. Approximately 42% of consumers bought the food supplies during their usual shopping trips, not as last-minute decisions.

**Food Pick-up and Delivery**

Although most restaurants converted from dine-in to solely takeout and delivery, about 24% of all eating occasions entail restaurant-prepared foods. For 35% of Gen Z, 36% of Millennials, 19% of Gen X, and 11% of Boomers, eating occasions involve such restaurant-prepared foods. Third-party delivery services are more important to Millennials than to the other generations. Lower-contact ordering significantly increased during the pandemic for restaurant pick-up, drive-throughs, and other options such as orders by phone, app, or on-site. Both the Millennials and Boomers prefer drive-through pick-up of restaurant-prepared food, and Boomers order more via phone, app, or on site.

About 37% of the eating occasions using foods outsourced to restaurants are planned by parents and 19% by non-parents. The planning time to purchase these foods during the pandemic has increased significantly to about a day before consumption (17%), so many eating occasions are now planned ahead.

Before the pandemic, there was high consumer awareness in promoting sustainability by decreasing single-use plastics. COVID-19, however, reintroduced the use of non-recyclable food plastic ware and packaging to limit the spread of the virus. It will be interesting to see how plastics are used after the pandemic.

**Buying Behavior**

In 2017, according to *Retail Dive*, food and beverage shopping in the U.S. was influenced by price, taste, convenience, and a “meaningful and memorable” “stress-free experience.” Other factors such as less processed food, ethically produced, healthful qualities, and fair labor treatment also influenced their buying behavior. Although one would have expected price to remain the leading factor when shopping for food and beverages during the pandemic because of a negatively impacted economy, “price was no object” to the U.S. consumer, because the primary concern during the early stages was to secure groceries and supplies, according to The Hartman Group. People stockpiled, creating shortages. A report published in August 2020 in the journal *Food Security* explained that stockpiling or hoarding is an indicator of panic buying in response to risks that, while they may not even be known, have potentially catastrophic results.
Interestingly, the pandemic caused an increase in disposable income for the U.S. consumer, especially for those whose jobs and wages were not affected by the virus; this is likely due to reduced spending on food and beverages outside the home, fewer options in recreational activities, and restricted travel. Thus, “trading up” to food and beverage with health and wellness qualities becomes possible and is seen as justifiable; food is treated as medicine. Romanian consumers in the quarantined area of Suceava mirrored this buying behavior of fresh and less-processed food, opting for the online purchase of fresh vegetables delivered directly by producers.

According to The Hartman Group study, the most important considerations for the predominant number of eating occasions during the pandemic are “fresh and less processed,” followed by “convenience.” Approximately a third of eating and drinking occasions are focused on basic health and well-being issues, particularly snacks before and after breakfast. This results in an increased demand for functional foods and beverages that address weight management, energy, hydration, digestion, and the cardiovascular system, especially those products benefiting the immune system. The focus diminishes, however, from lunch to afternoon snack to dinner and to after-dinner/late night snack.

By July 2020, after several months of the pandemic, the enthusiasm for cooking subsided and “cooking fatigue” set in. The U.S. consumer is now searching for new ways to plan meals and foods that are convenient to serve, reasonable in price, and have new, exciting flavors without compromising quality. There is increased interest in new cooking methods, culinary skills, flavors, and sauces. Foods, other than those usually consumed for a particular eating occasion, are now served at other times. For example, macaroni and cheese instead of eggs and bacon is breakfast. Millennials, more than the other generations, are searching for these new flavors.

Where Do We Go from Here?

A Nielsen Company study of consumers in 100 countries reported that changes in consumer behavior occur in six common stages. Consumers first focus on strengthening their health and immunity. Next, they purchase protection products to manage their health, prepare for isolation and quarantining, and hoard certain supplies in anticipation of additional restrictions. Consumers then try to live their now drastically altered daily life. When the presence of the coronavirus is finally considered manageable, consumers enter the sixth stage, which is the return to some semblance of pre-pandemic living conditions familiar to them. Although moving from one stage to another occurs at different speeds from country to country, worldwide consumer behavior seems to follow these stages.

Living through the crisis brought on by COVID-19, the highly destructive invisible pathogen, taught us ways to manage the illness through health and well-being practices. But, are we developing behavior that is crisis-specific only? Or are we learning that at least some of these practices are lifelong behaviors that we must keep for everyone’s safety? If so, which practices would those be?
Let’s see what the consumer will do.