



Public Perceptions of Pesticides & Produce Consumption

APRIL 2024



METHODOLOGY



The International Food Information Council (IFIC) commissioned an online survey among U.S. consumers to measure knowledge, attitudes, and beliefs about pesticides and their application in food production. One thousand adults ages 18 years and older completed the online survey from February 9-13, 2024, and were weighted to ensure proportional results. Totals may not equal 100% due to rounding.

The Bayesian confidence level for the survey sample (n=1000) is 3.5, which is roughly equivalent to a margin of error of ± 3.1 at the 95% confidence level. Callouts of statistically significant results are included where appropriate on slides displaying results. Something is statistically significant if the result cannot be attributed to random chance. Statistical significance in this report is only compared within each demographic group (e.g. age, race, gender, etc.).

SUGGESTED CITATION:

International Food Information Council (IFIC). 2024 IFIC Spotlight Survey: Public Perceptions of Pesticides & Produce Consumption. April 2024.

EXECUTIVE SUMMARY

While the [IFIC Food & Health Survey](#) shows that taste drives American food purchasing decisions, interest in the origin of our food continues to grow. Along with this interest in food origin come concerns about the safety of our food supply and the use of pesticides. Yet at the same time, Americans have never been more removed from the farm.

Farmers choose tools for their operations based on the unique demands of their crops and growing conditions. Still, consumers may not fully understand how, why, and when farmers use pesticides to grow food. In many ways, pesticide application on farms are similar to uses at home, places of work, and elsewhere: controlling pests is essential to protecting public health, which includes ensuring safe and adequate food production.

Pesticides are regulated by [several government agencies worldwide](#). Both organic and conventional produce are grown with the use of pesticides and detectable pesticide residues for each growing method are in minute amounts not shown to cause adverse health effects. In the U.S., the [Department of Agriculture \(USDA\) Agricultural Marketing Service](#) confirms that overall pesticide residues found on foods are at levels below the tolerances established by the [Environmental Protection Agency](#) (EPA). As such, the EPA and USDA confirm that pesticide residues occurring within acceptable limits do not pose a health or safety concern.

Despite this fact, consumers may believe that organic fruits and vegetables are safer to consume than conventionally grown produce, and that some conventionally grown produce are safer to eat than others. [Research](#) has shown that inaccurate reports about pesticide residues on fruits and vegetables, and the positioning of organic growing methods as superior to conventional, may adversely impact overall fruit and vegetable consumption.

IFIC commissioned this *IFIC Spotlight Survey: Public Perceptions of Pesticide & Produce Consumption* to study U.S. consumer mindsets related to pesticides, including their application in food production and the potential impact on diet quality.



KEY FINDINGS

The majority of Americans consider how food is grown when making food and beverage decisions.

When consumers are asked how often they consider how their food is grown when making food and beverage decisions, 35% say “often” or “always”; 36% say “sometimes”; and 20% say “rarely”. Less than one in ten (8%) say they never consider how food is grown.

Keeping food safe and the use of pesticides are top concerns when considering how food is grown.

Of the 91% of people who report that they consider how food is grown at least rarely, nearly 70% report “keeping food safe to eat” and 60% note the use of pesticides as top concerns. Nutrition content, use of agricultural technology, environmental sustainability, animal welfare, use natural resources, and farm worker welfare are also of concern.

Rinsing fresh produce and trusting farmers to responsibly use pesticides are the top reasons for not being concerned about pesticide use.

For those who are *not concerned* with pesticide use, 35% say they are not concerned because they rinse their fresh produce and 29% say they trust farmers to use pesticides responsibly. Nearly one in four (23%) say they trust the Federal government to monitor safe pesticide use.

Twenty-one percent believe that science demonstrates the approved safe use of pesticides. Nearly 20% say they do not trust information about pesticides that “seems too extreme or instills fear.”

Consumers that are concerned with pesticide use report that they avoid foods because of this concern.

For those that *are concerned* with the use of pesticides in growing food, nearly 60% believe consuming foods grown with pesticides is bad for their health; 36% believe that pesticides used today are more toxic than they have ever been; and 35% believe that pesticides are bad for the environment. The quantity of pesticides used is also a concern with 32% reporting that the amount used to grow foods is higher than ever before. When asked if they have ever decided not to consume or purchase food because of pesticide concerns, nearly 60% said, “yes”; nearly 30% said “no”; and others were “not sure.”

Vegetables and fruits are the top food groups avoided due to pesticide concerns.

For the people who say they have avoided food because of pesticide concerns, 71% report that they avoided vegetables and 59% avoided fruits. Nearly 20% or more reported avoiding additional food groups due to pesticide use.

Source: 2024 IFIC Spotlight Survey: Public Perceptions of Pesticide & Produce Consumption

KEY FINDINGS

Nearly half of Americans believe organic agriculture does not use pesticides to grow food.

When Americans were asked if they agreed with the statement, "Organic agriculture does not use pesticides to grow food," 47% agreed with this statement and nearly 26% said it is false. However, almost the same number (27%) were unsure.

Approximately two in three Americans believe pesticides are used to decrease pest bacteria, bugs, mold, and weeds.

Sixty-four percent of Americans believe that pesticides are used to decrease pest presence, followed by 34% who believe they are used to increase the amount of food grown and 17% who believe they are used to reduce the amount of food wasted. Fewer Americans believe that pesticides are used to increase the safety of food (15%). Of note, 15% of Americans believe pesticide use is not necessary to grow food; nearly one in ten are not sure why pesticides are used to grow food.

Nearly three in ten Americans agree the health benefits of consuming fruits and vegetables that are grown with pesticides outweigh the risks.

While 29% of Americans agree the health benefits of consuming fruits and vegetables that are grown with pesticides outweigh the risks, 30% of Americans are ambivalent about this statement while an additional 30% disagree. Nearly one in ten Americans report being unsure what they believe.

Government agencies, health professionals, and farmers are the most trusted sources about the safety of pesticides to grow food.

Consumers report that they trust a variety of sources to inform them about the safety of using pesticides to grow food. The most trusted sources are U.S. government agencies (44%), health professionals (40%), and farmers (32%). Still, Americans also trust internet searches (18%), news outlets (17%), and social media (12%) about pesticide safety, yet to a lesser degree. Consumer advocates, agriculture companies, food companies, family and friends, as well as colleges and universities are trusted by approximately 20% or less of Americans.

Source: 2024 IFIC Spotlight Survey: Public Perceptions of Pesticide & Produce Consumption

IMPLICATIONS

Results from the *2024 IFIC Spotlight Survey: Public Perceptions of Pesticide & Produce Consumption* show that the majority of Americans consider how their food is grown when making food and beverage decisions, and their biggest concerns about food production are keeping food safe to eat and the use of pesticides.

Of those who are concerned about pesticide use, the majority note that they have avoided purchasing or consuming vegetables (71%) and fruits (59%) due to this concern. Avoidance of fruits and vegetables has significant negative health implications because the overwhelming majority of Americans already do not consume the recommended amounts of fruits and vegetables established by the [Dietary Guidelines for Americans](#).

There are numerous well-documented health benefits related to eating the recommended amounts of fruits and vegetables, including reducing the risk for heart disease, protecting against certain types of cancers, and addressing American deficiencies in fiber and potassium intake. A [recent expert comprehensive narrative umbrella review](#) noted “fruits and vegetables have potential health-promoting effects beyond providing basic nutrition needs in humans, including their role in reducing inflammation and their potential preventive effects on various chronic disease states leading to decreases in years lost due to premature mortality and years lived with disability and morbidity.”

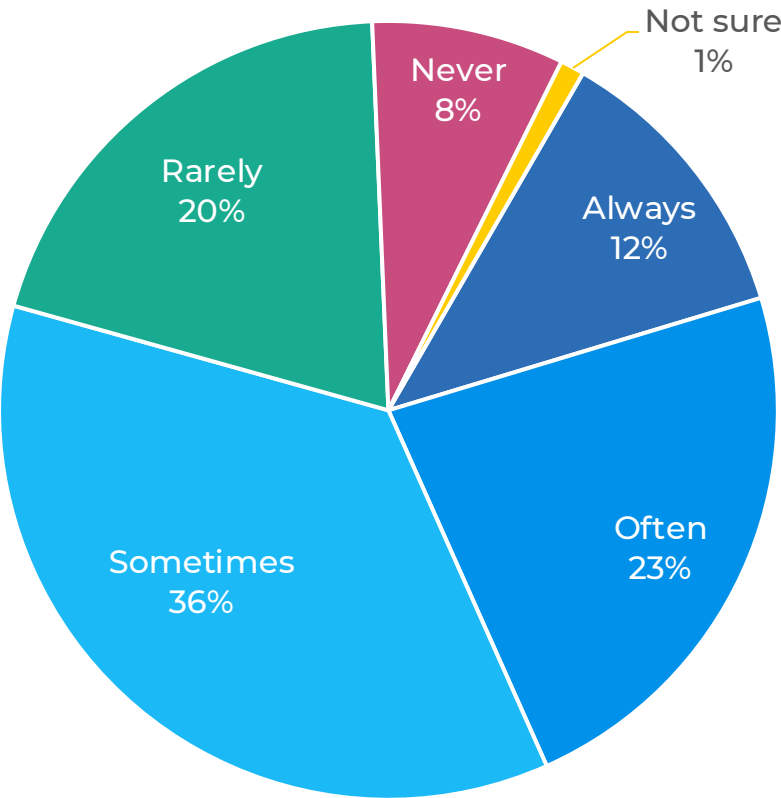
Low intake of fruits and vegetables by Americans is not a new phenomenon—it’s been chronically low for decades. This new consumer research from IFIC highlights gaps in consumer understanding and provides key insights for developing effective messaging that reminds and reassures the public that consuming a variety of fruits and vegetables, in all forms and from all production methods, is safe, nutritious, and an important component to achieving and maintaining good health.

Source: 2024 IFIC Spotlight Survey: Public Perceptions of Pesticide & Produce Consumption



The majority of Americans consider how food is grown when making food and beverage decisions.

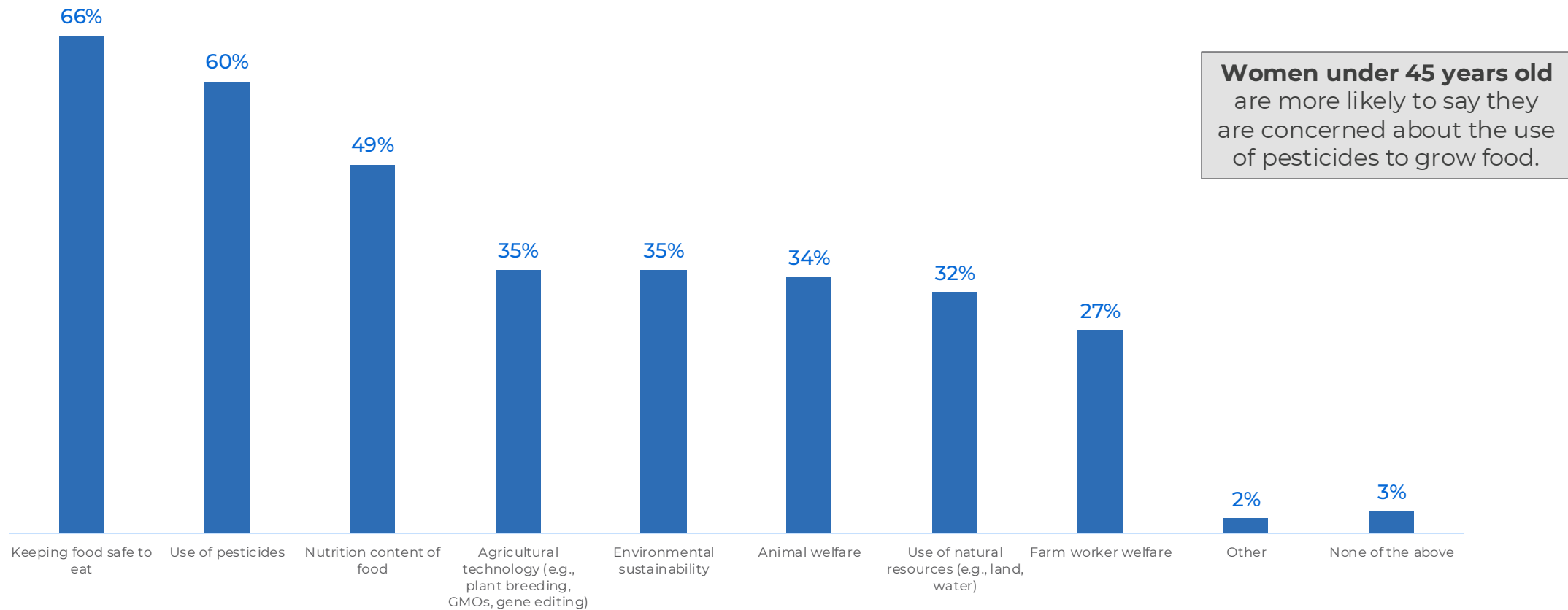
Less than one in ten never consider how food is grown.



Men 65+ years old
are more likely to say they
“rarely” think about how
food is grown.

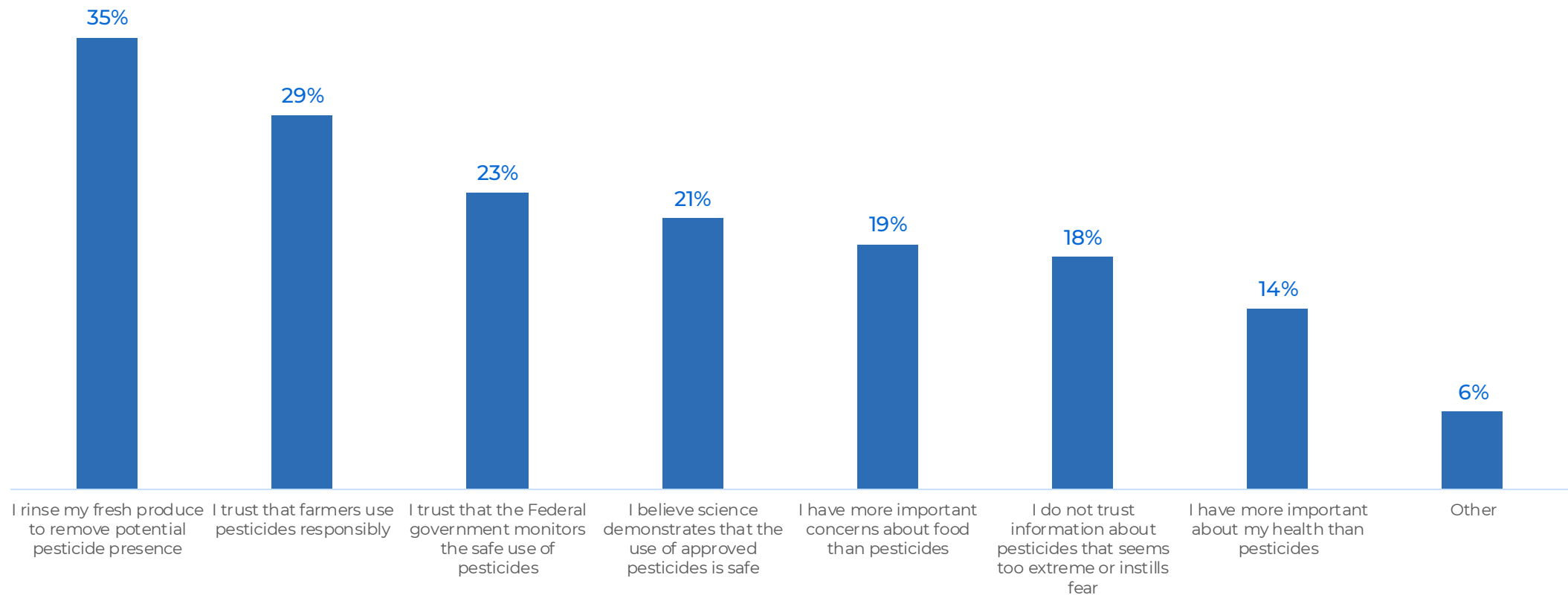
Keeping food safe and the use of pesticides are top concerns when considering how food is grown.

Nutrition content, use of agricultural technology, environmental sustainability, animal welfare, use natural resources, and farm worker welfare are also of concern.



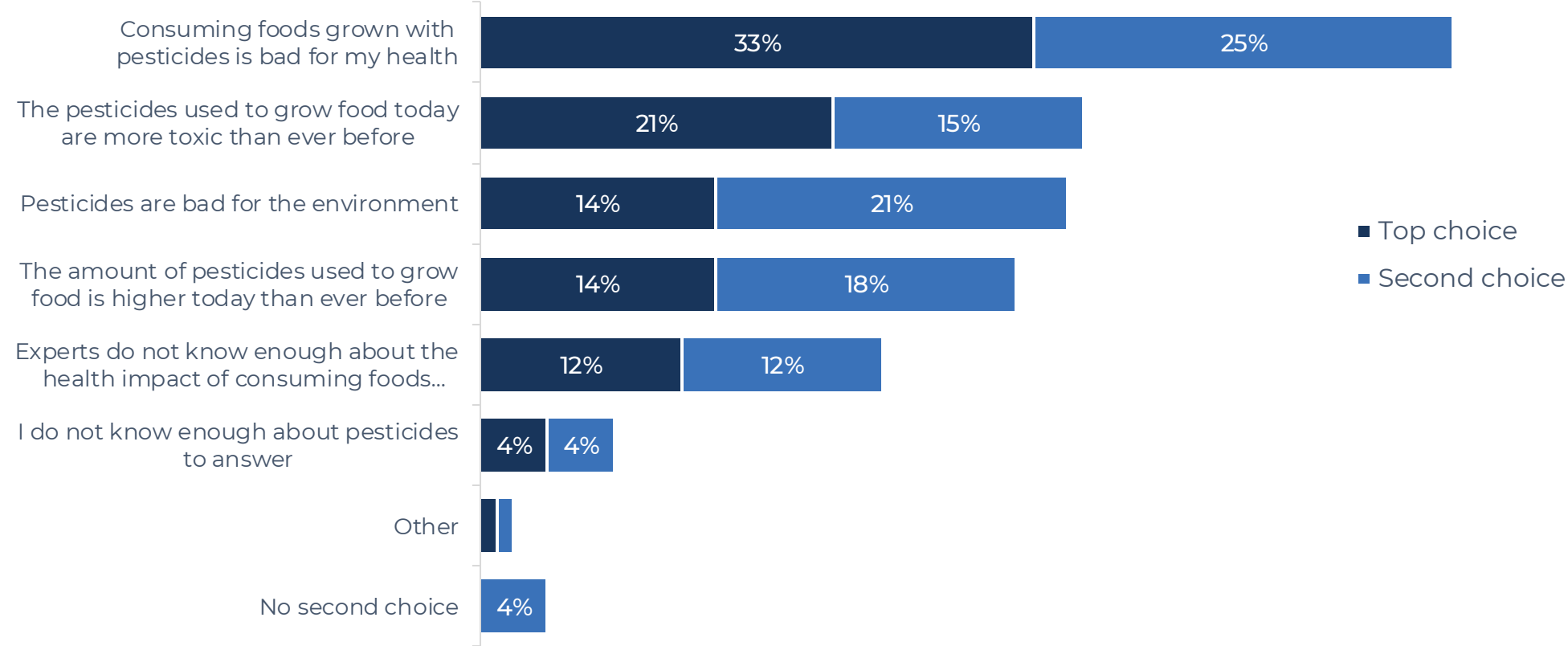
For those not concerned with pesticides, 35% report that rinsing fresh produce keeps them from being concerned.

Nearly 30% of those not concerned with pesticides, trust farmers to use them responsibly.



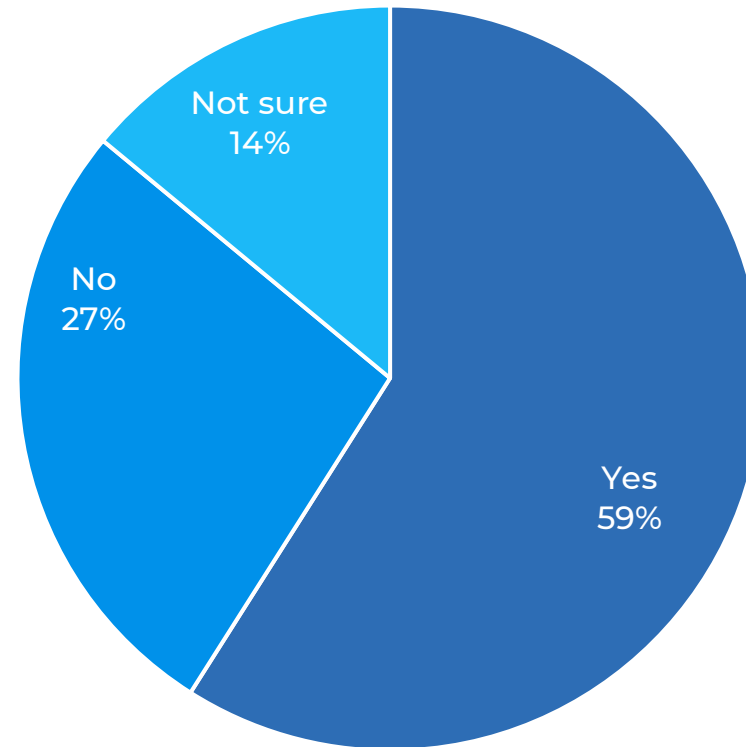
For those concerned with pesticides, more than half say consuming foods grown with pesticides is bad for their health.

Many believe the pesticides used today are more toxic than in the past and are bad for the environment. The pesticide amount used is also a concern.



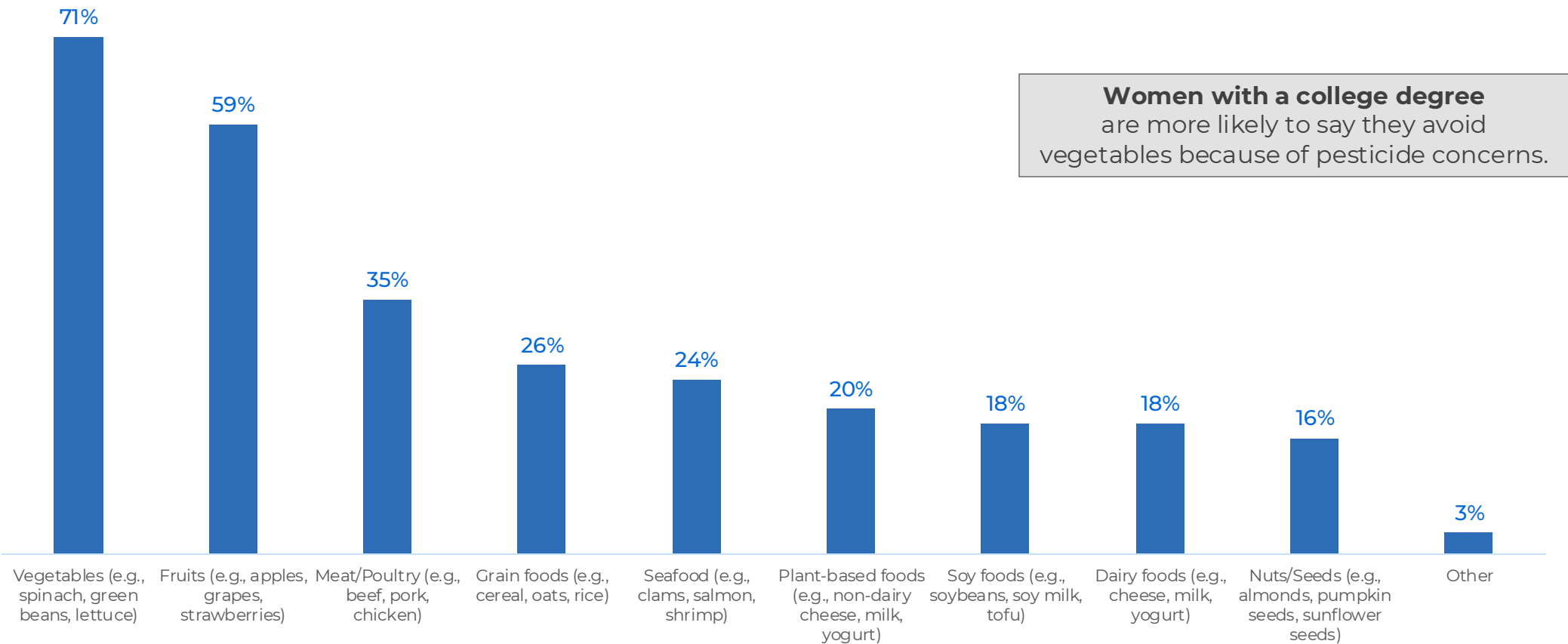
For those concerned with pesticides, nearly 60% have avoided foods due to their concern.

Nearly one in four say they have taken no action despite pesticide concerns; 14% are unsure if they have stopped consuming or purchasing foods due to pesticide use.



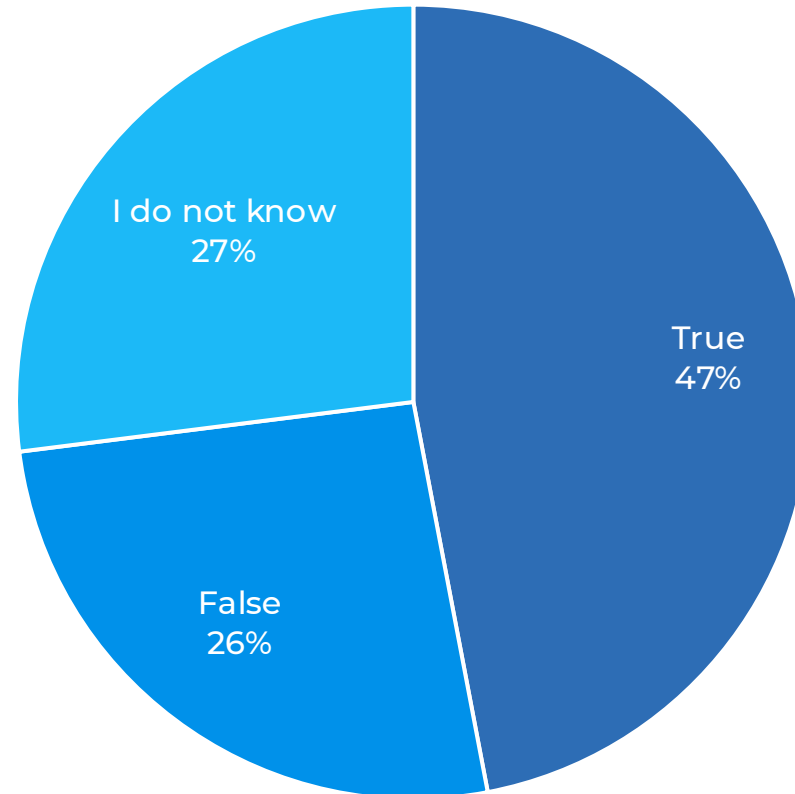
Of those who have avoided foods due to pesticide concerns, vegetables and fruits are the top two food groups avoided.

Nearly 20% or more reported avoiding additional food groups due to pesticide use.



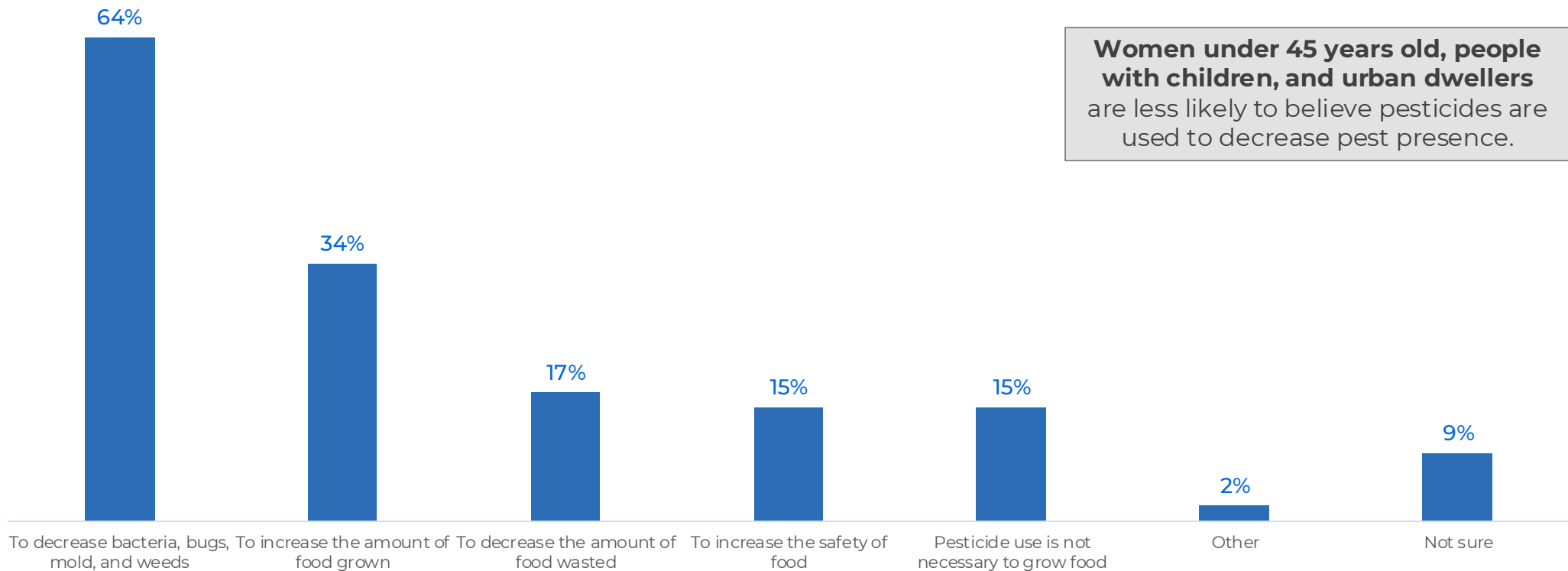
Nearly half of Americans believe the statement, “Organic agriculture does not use pesticides to grow food.”

Another approximately 25% of Americans report that they do not know if organic agriculture uses pesticides.



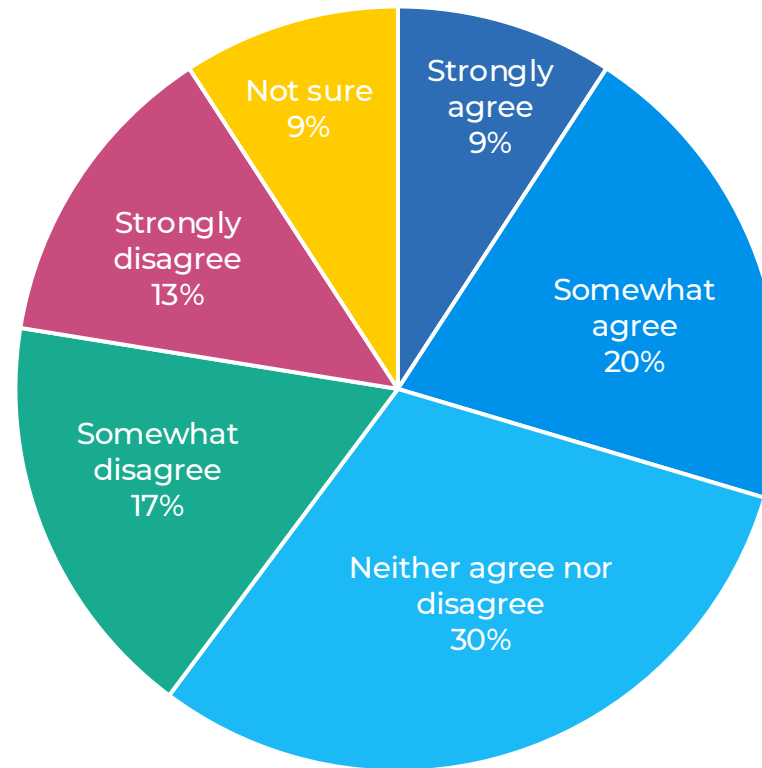
Approximately two in three Americans believe pesticides are used to decrease pest bacteria, bugs, mold, and weeds.

Fifteen percent of Americans believe pesticide use is not necessary to grow food. Nearly one in ten are not sure why pesticides are used to grow food.



Nearly 30% of Americans agree the health benefits of consuming fruits and vegetables that are grown with pesticides outweigh the risks.

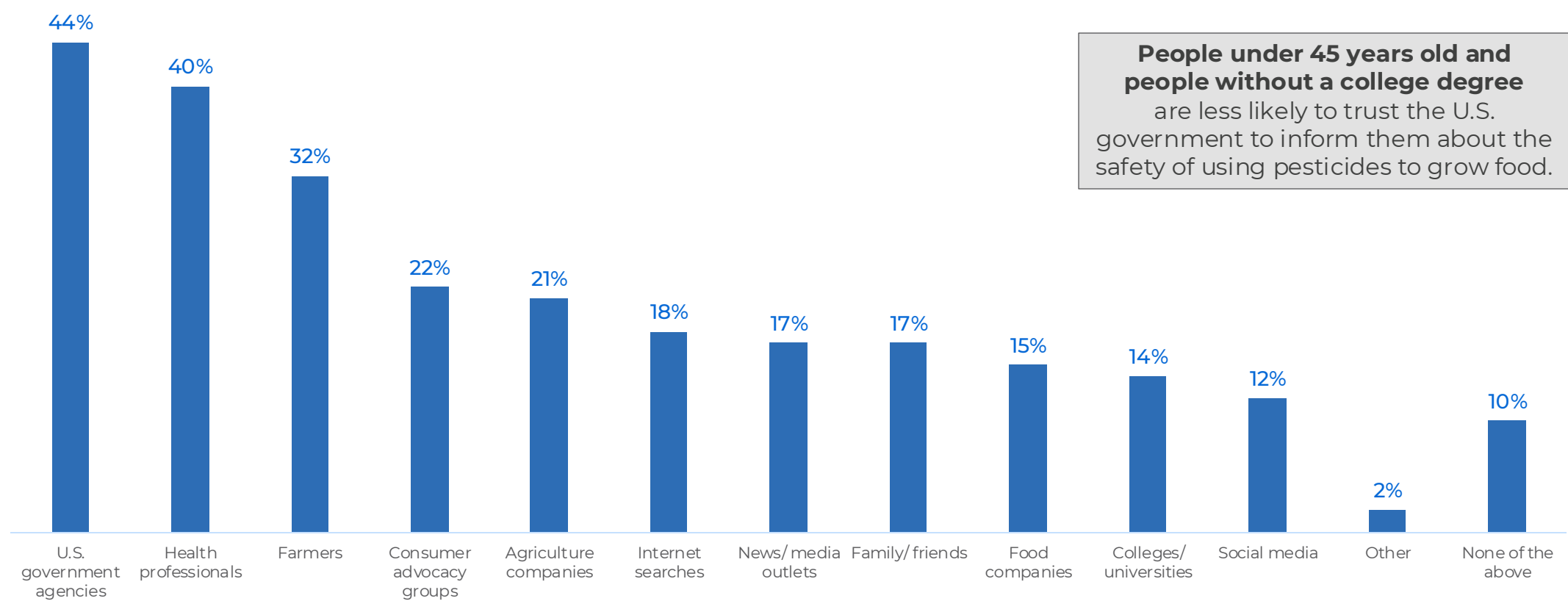
Thirty percent of Americans are ambivalent about this statement while an additional 30% disagree. Nearly one in ten are not sure.



People under 45 years old are more likely to strongly agree that the health benefits of consuming fruits and vegetables that are grown with pesticides outweigh the risks.

Government agencies, health professionals, and farmers are the most trusted sources about the safety of pesticides to grow food.

Still, Americans also trust internet searches, news outlets, and social media about pesticide safety, yet to a lesser degree.





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