

## **Transcript: Household Food Security in the United States in 2018**

**Slide 1:** Good day everyone and welcome to our webinar, Household Food Security in the United States in 2018. My name is Kellie Burdette and I will be your host. As a reminder, this webinar is being recorded and will be posted on the ERS website next week. At any time during the webinar you may type a question into the chat feature, at the bottom left-hand corner of your screen, and our speaker will answer at the end of the presentation. Our speaker today is Alisha Coleman-Jensen. Alisha joined USDA's Economic Research Service in 2009. She is a Social Science Analyst in the Food Assistance Branch of the Food Economics Division. She earned her PhD in Rural Sociology and Demography from the Pennsylvania State University. In addition to leading ERS' annual report on Household Food Security in the United States, Alisha's work includes research in understanding determinants and outcomes of food insecurity, and methodological research on food security measurement. I think we're ready to start, so Alicia, you may begin your presentation.

Thank You Kellie, I'm Alisha Coleman-Jensen of ERS. Good afternoon everyone and thank you for joining us today. First, I'd like to acknowledge my colleagues on the report, Matthew Rabbitt and Christian Gregory of ERS, and Anita Singh of USDA's Food and Nutrition Service. So, the report released last week describes the food security of U.S. households during calendar year 2018, and is based on USDA's most recent annual food security survey, which was conducted in December 2018. ERS's annual food security report provides information on how many U.S. households had difficulty putting enough food on the table in 2018. Those food security statistics reflect the extent to which difficult economic conditions result in material hardships in U.S. households.

**Slide 2:** I'm going to start now with some key findings from our annual report and then we'll go on from there. So, food insecurity in 2018 was down from 2017 to 11.1 %, and the food insecurity rate in 2018 had declined to the 2007 pre-recession levels for the first time, which has been a point of interest that we've been monitoring. In 2018 children were food insecure in 7.1 % of U.S. households. That was not statistically different from 2017, but that number had also returned to pre-recessionary levels.

**Slide 3:** Here's our outline. The key question where we're trying to answer with these statistics is, how many U.S. households were consistently able to put adequate food on the table? So we'll start talking about first how food security is measured, talking about our food security survey, then I'll go into the main findings of our annual food security report, and then I'll have some closing remarks and open it up for questions.

**Slide 4:** First, here are USDA's definitions of food security. Food security means households have access at all times to enough food for an active, healthy life for all household members. Food insecurity refers to households that are unable, at some time during the year, to provide adequate food for one or more household members due to a lack of resources. A subset of food insecurity is very low food security, when normal eating patterns of some household members were disrupted at times during the year and their food intake reduced below levels they considered appropriate. I'm going to back up now and talk about some key points of these definitions.

So, when we talk about food insecurity, you'll note that it says "sometime during the year". So some households may be food insecure just once during the year. For example, if they experience a spell of unemployment, or something like that. Whereas other households may be food insecure more chronically throughout the year. But just one instance of food insecurity would classify a household of being food insecure.

"To provide adequate food for one or more household members", so this is a household level measure. So, if just one member reports that they're unable to get enough food, then the entire household will be classified as food insecure. We don't always know how food insecurity may be affecting different members within the household differently.

And finally, "due to a lack of resources". So, these are food security survey questions are all predicated on not having enough money or other resources for food. So, this is not about dieting, or fasting for religious reasons or anything like that.

Now very low food security is the severe range of food insecurity. When we talk about normal eating patterns being disrupted, we're referring here to households that report skipping meals, or in more severe situations going a whole day without eating, with the thought, that you know, typically, households will report eating three meals a day or something like that, and these households are reporting skipping meals and even going a whole day without eating. And food intake was reduced below levels they considered appropriate. So, these households are just telling us that they're not able to get enough to eat.

**Slide 5:** So, how is food security measured? Early on, the research on food security measurement and how we measure food insecurity showed that food insecurity was a managed process. So, food insecurity, like many things, is a continuum (and we hope that all households are fully food secure, that they can afford enough healthy food for all their members) but as food security deteriorates, households may become anxious about the household food supply, they may try to stretch their food and their food budget. They might try to juggle household spending to maintain food security, for example, trying to put off paying a certain bill so that they can afford to purchase enough food for their family. As food insecurity worsens, households may reduce the quality and variety of food, or rely on low-cost foods to feed their family members. As food insecurity becomes even more severe, adults may reduce their own food intake while trying to ensure children get enough to eat. In the most severe situations we see reductions in food intake among children.

**Slide 6:** These are some examples of our food security survey questions. So, households are asked a series of ten questions about food insecurity for the household as whole and adults in the household. Households with children are asked an additional eight items about children's food insecurity. These questions follow the full range of severity of food insecurity that we talked about on the previous slide, going from low food security, down to very low food security. Households must respond affirmatively to at least three items indicating food insecurity to be considered food insecure. So for example, the first item on this slide, "we worried whether our food would run out before we got money to buy more". Was that often sometimes or never true for you in the last 12 months? A household that reported that this was often or sometimes true, would be classified as having an affirmative response, and if they have three or more of these affirmative responses, they would be classified as food insecure.

So, another question, “we couldn't afford to eat balanced meals in the last 12 months”. Did you ever cut the size of your meals or skip meals because there wasn't enough money for food? And finally, in the last 12 months did you ever not eat for a whole day because there wasn't enough money for food? And I want to point out that these questions match our definitions of food insecurity and that they all refer to the last 12 months, any time in the last 12 months. And they all include a resource constraint, so saying we were running out of money, there wasn't enough money for food. Things of that nature. So, that is what we're talking about when we're saying that the food security items are predicated on not having enough resources for food.

**Slide 7:** These questions are part of the annual food security survey. The current population survey you might be familiar with because it's also the source of federal employment and poverty statistics. So when you hear monthly unemployment statistics, those are coming from the current population survey. The survey is conducted by the U.S. Census Bureau, it's about 40,000 households each month, its representative of all U.S. civilian households, and it is a high quality survey. The Economic Research Service sponsors the food security supplement to the CPS. That's [CPS] been conducted annually, in December since 2001. From 1995 to 2000 it was in different months during the year. So the survey is going on 25 years of annual data collection about food insecurity in U.S. households. In 2018, the food security survey interviewed about 37,300 households. If you want more information on the survey, including technical documentation, you can find that on our website.

**Slide 8:** So let's move on now to the findings from the annual food security report. This slide shows all U.S. households by food security status in 2018. 88.9 % of U.S. households were food secure throughout the year in 2018. Again, that means that they had consistent access to adequate food for active healthy living for all household members throughout the year. 11.1 % of households were food insecure, that's about 14.3 million households. And again, these food insecure households were unable, at some time during the year, to provide adequate quantity or quality of food, for one or more household members due to a lack of resources. For a majority of food insecure households, inadequate food meant primarily inadequate in quality, variety, or desirability, but not in a quantity of food. These households reported some food acquisitions but few indications of reduced food intake.

So, these 6.8 % of all households are labeled low food security on the chart and are represented by the gold slice of the pie chart. But in a little more than a third of food insecure households, inadequate food meant actually not having enough food. This subset of food insecure households in the more severe range of food insecurity, described as very low food security, is represented by the red slice in the chart. 4.3 % of all U.S. households had very low food security in 2018, that's 5.6 million households. Households classified in their report as having had a very low food security reported that normal eating patterns of some household members were disrupted at times during the year, and their food intake reduced below levels they considered appropriate. Most of these households with very low food security reported that an adult in the household had been hungry at times but did not eat because there wasn't enough money for food.

**Slide 9:** Turning now to trends in food insecurity and very low food security over the past several years, you can see what that with the onset of the recession food insecurity had increased from

11.1 % in 2007 to 14.6 % in 2008. So this is the top blue line on our trend chart labeled food insecurity (including low and very low food security). In 2011 food insecurity peaked at 14.9 % of U.S. households and by 2017 food insecurity had declined to 11.8 %. In 2018 there was a statistically significant annual decline in food insecurity to 11.1%.

Turning now to the red line near the bottom of the chart, these are the percentage of households classified as having very low food security. Again, this is the more severe range of food insecurity. Very low food security increase from 4.1 % in 2007 to 5.7 % in 2008. By 2017 very low food security had declined to 4.5 %. In 2018, 4.3 % of U.S. households were very low food secure. The difference between 4.5 % and 4.3 % is not statistically significant. So that small decline from twenty seven to eighteen, sorry 2017 to 2018, was not statistically significant for very low food security.

**Slide 10:** Okay, so there's a lot in this chart, it may be hard for you to read but there are sort of two things to take away from the chart. So this is the prevalence of food insecurity for 2017 and 2018 by selected household characteristics. So the first thing to take away is that it shows those household characteristics related to a relatively higher prevalence of food insecurity. The patterns of groups with a relatively higher prevalence of food insecurity tends to be the same from year to year. In 2018, food insecurity rates were highest for single mother families and single father families. These are labeled near the top of the chart as households with children, female had no spouse or single mother households, and male had no spouse or single father household. Food insecurity rates were also higher for households headed by black non-Hispanic adults and Hispanic adults, and for low income households.

The household income to poverty ratio is the income relative to the federal poverty line. So Under 1.00 means that those households had income below the federal poverty line. Under 1.85 means that households had incomes below 185 % of the federal poverty line, which is relevant for participation in federal nutrition assistance programs. And finally, food insecurity was higher in principle cities within metropolitan areas. So those are some of the key characteristics that are related to a higher prevalence of food insecurity from year to year.

The second thing to take away from this graph is that it shows changes in the prevalence of food insecurity by household characteristics between 2017 and 2018. Bars marked with an asterisk show a statistically significant decline. I want to note that this little significance is related both to the size of the change in the coefficients, and the margins of error around the estimates.

So food insecurity declined significantly for households with children, households headed by white and Hispanic adults, households with incomes below 185 % of the federal poverty line, and households in metropolitan areas. And again, the statistically significant declines are marked with an asterisk. And there were no statistically significant increases in food insecurity for any of these groups.

**Slide 11:** This slide shows food insecurity by state. You'll note that this is average 2016 to 2018. Data for three years were combined to provide more reliable state-level statistics for all states. The prevalence of food insecurity vary considerably from state to state. Estimated prevalence of food

insecurity in 2016 to 2018 range from 7.8 % in New Hampshire to 16.8 % in New Mexico. On this map that you have in front of you, the state's shade light blue have food insecurity that's below the U.S. average. So in terms of food insecurity, these states are better off because they have lower than average food insecurity rates. States that are shaded white have food insecurity that's near the U.S. average, and states shaded darker blue have food insecurity above the U.S. average. So in terms of food insecurity, these states are worse off because their food insecurity rates are higher than the national average.

There were no statistically significant increases in food insecurity for any states from the prior three-year period, but there were statistically significant declines in a number of states listed there on the slide. I also want to mention, this is not shown on the map, but very low food security ranged from a low of 2.8% in New Hampshire from 2016 to 2018, to a high of 6.8% in Alabama and Louisiana. There are a number of factors that can account for interstate differences in food security, those are related to the characteristics of the households within the state. So for example, states that have higher income on average, higher employment rates, higher education, are likely to have lower food insecurity rates. The state-level economy and policies also matter, so the average wages of the state level cost of housing, participation in Nutrition Assistance Programs, the unemployment rate, all of those things matter at the state level and affecting state-level food insecurity rates.

**Slide 12:** I want to turn now and talk more specifically about households with children. Food insecurity in households with children is somewhat more complex than it is and households without children because food insecurity is measured for the household overall, and then among adults and among children separately. We know from some early research on food insecurity, and some more recent research as well, that parents will often protect their children from food insecurity even when the parents themselves experience reduced dietary quality and intake. So in some cases, in food insecure households, only adults are food insecure. So we also look at the food security status of children specifically to understand the extent to which children are experiencing reductions in food intake.

So food insecurity among children means that households were unable, at some time during the year, to provide adequate, nutritious food for their children. And again, this mirrors our definitions that we talked about earlier, relating to “anytime during the year” and being “unable due to lack of resources”. And again, it refers to any children in the household or any child that is food insecure, the house will be classified as food insecure. Very low food security among children means that caregivers reported that children were hungry, skipped a meal, or did not eat for a whole day, because there was not enough money for food.

**Slide 13:** This pie chart shows U.S. households with children by food security status in 2018. So this differs from our earlier pie chart because that earlier pie chart was for all U.S. households, while this [pie chart] is just for households with children. So in 2018, 13.9% of households with children were food insecure; that's about 5.2 million households. In about half of these households, only adults were food insecure, and the rest 7.1% of households with children or about 2.7 million households, children were also food insecure at times during the year. So in this group of households labeled on the chart, “food insecurity among children,” the quality or quantity of children's diets was also affected by food insecurity.

As I mentioned, adults often shield children from experiencing very low food security to the extent that they can, but children along with adults experienced very low food security in 0.6 % of households with children, about 220,000 households. Again, this is the more severe range of food insecurity characterized by disrupted eating patterns and reduced intake. In this group of households with children, parents reported that children were hungry.

**Slide 14:** This trend chart shows food insecurity in households with children over time, from 2001 to 2018. The top blue line shows food insecurity in households with children, where adults or children, or both, were food insecure. The middle red line is food insecurity among children, where there was reported reduced food intake among children. And the very low food security among children, shows households that had reported very low food security among children. So similar to the overall trends, we see an increase in food insecurity in households with children from 2007 to 2008. In 2007, looking at the top blue line, 15.8% of U.S. households with children were food insecure, and that peaked at 21.3%. In 2017, 15.7% of households with children were food insecure, and that declined significantly to 13.9% in 2018. So that change, for household food insecurity in households with children, that changed from 15.7% to 13.9%, was statistically significant.

Turning now to food insecurity among children, the middle red line, where children are experiencing reductions in dietary quality, or variety, or intake. We see 8.3 % of food insecurity among children in 2007, peaking at 11 %. In 2017, 7.7 % of households with children reported food insecurity among children. And in 2018, 7.1% of households with children reported food insecurity among children. That change from 2017 to 2018 was not statistically significant. Very low food security among children is at the bottom of the chart, in 2007 0.8% of households with children had very low food security among children. And you can see there was a little movement over time increasing to 1.3 % and now we're down to 0.6 % . It's important to note that for all of these levels of food insecurity, food insecurity in households with children, food insecurity among children, and very low food security among children, those are all down to pre-recession levels, and they have been, and they were last year as well.

**Slide 15:** Okay, moving on now to talk about the prevalence of food insecurity and very low food security by reference period. So all the statistics to this point represented food insecurity measured over the past year, but when we measure food insecurity over a shorter period, such as 30 days, the prevalence is lower. So the prevalence of food insecurity in the 30-day period, from mid November to mid December 2018. As you'll recall our food security survey was conducted in December, so when we're talking about 30 days before the survey we're talking about mid November to mid December. In 2018 5.9 % of households were food insecure in the 30 days before the survey. Very low food security affected 2.4 % of households, again in that 30 day period from mid-november to mid December. And an estimated 0.6 to 0.8 % of U.S. households experienced very low food security on any given day in that 30-day period in 2018. We don't estimate the average daily prevalence of food insecurity because that information is not collected. On the number of days with those less severe food insecure conditions occurred.

**Slide 16:** So if you're familiar with our annual food security report, or you look at it, you will see that there are three sections: food insecurity by household characteristics and at the state level, and

then we also examine food and insecurity by food spending, and food insecurity by participation in Nutrition Assistance Programs. So I'm going to turn now and talk about median weekly food spending by food security status. We measure food spending in two ways, and those are shown here on the slide, by median weekly food spending per person and relative to the cost of the thrifty food plan, which accounts for age and gender specific costs of a market basket of goods and a nutritious minimal cost diet. So taking into account estimated food need, the typical food secure households spent 21 % more for food than the typical food insecure households. So this is what we expect given what we know about food insecurity. We expect that food insecure households would spend less on food, and that is confirmed in these data.

**Slide 17:** Let's turn now to talk about the use of federal nutrition assistance programs by food insecure households. About 56 % of food insecure households participated in one of the three largest federal nutrition assistance programs in 2018, those are SNAP or Food Stamps, they're free reduced-price school lunch program, and WIC (Women Infants and Children). About 41 % use snap. I want to note that these are based on self-reported survey data, so there is some under reporting of program participation here.

**Slide 18:** This slide shows percent of households using community food assistance programs. So those are food pantries and soup kitchens. About 4.4% of U.S. households used food pantries in 2018. Use of food pantries was more common among those who were food insecure. 26 % of food insecure households use food pantries, and 34 % of very low food secure household use food pantries. Use of soup kitchens was much less common overall but similarly more common among those that were food insecure.

**Slide 19:** So just to close, I want to reiterate that downward trends and food insecurity continued in 2018, even returning to pre-recession levels from 2007. I want to point you to some interactive data visualizations on the ERS website you may be interested in. Some of those are based straight off some of the tables in our annual food security report, but there is also some other information that's not included in an annual report, showing food insecurity by education, employment, disability, and snap participation that you might be interested in. Also check out some other ERS food security research. I have here an image of a report cover from a report titled, Food Security and Food Purchase Quality Among Low-Income Households: Findings From the National Household Food Acquisition and Purchase Survey. So in this report that we published in August, we examined differences in food spending and food purchase quality between households that are food secure and food insecure. So I just want to refer you to those if you are looking for any more information.

**Slide 20:** So those things along with other reports and other graphics are on our website that you can see here. Here's my contact information should you have any further questions I'm always willing to answer them. And I think I'm going to turn it back to Kellie now for questions. Thank you.

Thanks Alisha, we do have some questions for you. Here's one, is there a way to see more granular geographic distribution of food insecure households, specifically census tracts or at least city level?

I think this is one of the most common questions we get about our food security statistics. Unfortunately, all that we publish are food insecurity rates at the state level, and as you can see we use three years of data just to ensure we have large enough sample sizes for each of the states. Unfortunately, the current population survey can't support statistics of the Census block group and things like that. For a lot of geographic areas, geographic information is suppressed for confidentiality reasons. So the only statistics that we publish are at the state level. And then nationally we separate by metropolitan, non-metropolitan residents, but that's at the national level.

Thanks here is another question. Are there stats that show food insecurity within the college/university student population?

Not at this time. That's another frequent question that we're getting, especially lately on food insecurity among college students, a topic that's been in the news lately, and there are lots of universities that are doing some research on the topic. But, we do not have any national level data on food insecurity among college students. Partly, this is related to a data issue because this is a household level survey, and for some college students, they would be considered part of their parents household in the survey, if their parents are in the current population survey. But we don't think that we could necessarily assign parent's food insecurity status. For example, college students who are away at college, even if they're still technically part of their parents household. So no, there is no federal data at this time on college student food insecurity rates.

Thanks, here's another question. What was happening nationwide economically in 2004, there was a spike in food insecurity that year?

I can't answer that right now, I'd have to go back and look. You know, some more recent research, not not looking at 2004 specifically, but research after the Great Recession showed that food insecurity in terms of other macroeconomic conditions, is most closely related to the national unemployment rate, to the national CPI or inflation, and the cost of food relative to other goods. So we know that food insecurity nationally is closely related to those conditions, but I can't say specifically what what was going on in 2004.

Alright, this question is, did you include recent Syrian refugees in your sample? If so, do you think that the survey you use for the general population is valid for Refugees?

The sample is nationally representative and would include all household. So there probably are some refugees in the sample. We did not look at them specifically. The sample sounds large when you think about 37,000 households, but when you start to look at more specific race or ethnic or immigration groups it's hard to look at a very fine level of detail. So we haven't looked at that. But you may be able to identify some of those refugees and in the data, if you were willing to combine multiple years to get enough of a large enough sample.

Thanks how do you get the data you worked with, or what's the process of data collection?

We partner with the U.S. Census Bureau, which makes us more efficient because the Census Bureau is already conducting the current population survey each month. The current population survey is primarily a labor force survey, but in December we pay for census to add-on the food



security supplement to the current population survey. And when I say that's more efficient it's because they're already, Census already has a sample for the CPS, and they're already collecting a lot of basic demographic and income information that we use for our report and other research. So that we can ask questions about food insecurity, and relate food insecurity to that, to those labor force questions, and income questions and things that the census is already collecting.

All of the statistics I showed here were from that current population survey data but there are also a number of other federal data collections that include the food security survey items. And a lot of those other data collections focus on other sorts of topic areas. So for example, the National Health Interview Survey includes the food security questions and a lot of other detailed information on health status, and disability, and things like that. And then we've also included the food security questions on surveys like the Early Childhood Longitudinal Study which focuses on children's development in education. And this has been a good approach for research purposes because we can link food insecurity to a lot of, both determinants, or things that may cause food insecurity, or be related to food insecurity. And we can link food insecurity to a number of outcomes, or things that may come about because of food insecurity. So that's sort of the process by where we're collecting food insecurity and able to do research on a number of different topic areas, because we've been adding the food security questions to a number of existing federal surveys.

Alright is there any explanation as to why the agriculture states have the highest food insecurity rates?

That's an interesting question. I don't want to, based on prior research, I can't speak specifically to agriculture States and food insecurity. Somethings we do know for example, are that states that tend to have higher poverty rates, like some of the southern states, may also have higher food insecurity rates. There's other policies at the state level that may make it easier or more difficult to participate in federal nutrition assistance programs. And we know that participation in federal nutrition assistance program helps to reduce food insecurity. While I can't speak specifically to you know, that agriculture savers is not agriculture state, there are characteristics at the state level that may be linked with that that are related to food insecurity.

All right here's another question. Is doing the survey in December, a good indicator of food insecurity for the whole year?

That's an interesting question. there are advantages to doing food insecurity survey in December because when we're asking about the previous 12 months, it can help a household or respondent to think about the last 12 months because it's just the calendar year, right. There may be some issues with December, you know with the holidays, and it's a winter month and things like that may make food insecurity in December a little bit less representative. At this point, we've been asking about food insecurity in December since 2001, and we haven't seen problems with that approach, and we think it's important to keep that continuous time series by asking about December. And as I mentioned, there are advantages to to referencing respondents to the calendar year when we're asking about food insecurity over a whole year.

Okay, how does food security track with GDP?

I don't have that information right off the top of my head, I'd have to look at those numbers and compare them one with another. So I don't want to answer that right now.

All right, here's another question. Do the surveys and analysis take into consideration food preferences, culturally relevant food dimensions in food security.

That's an interesting question. A lot of our questions are not. I wouldn't say they're open-ended, but they're open to their interpretation of the respondents. So for example, when we ask questions about the food that we bought just didn't last and we didn't have money to get more, we're not you know prescribing to respondents that we're talking about a specific type of food, or what they should be eating, or anything like. "We couldn't afford to eat balanced meals". We're not defining for respondents what we think, but what is meant by balanced meal, we're relying on the respondents to give us their own interpretation. And then of course, questions like, "Did you ever eat less than you felt you should". That again, is not dependent on cultural preferences or preferences for certain types of food or another.

We do know, based on research with other data for example, in the recent ERS report that I mentioned at the end, that we see for example food insecure households have poor diets and their quality of their food acquisition, and the quality of food that they're able to purchase, is lower than the quality of food that food secure households are purchasing. So even though these questions are sort of open to the respondents interpretation, quantitative research comparing dietary quality and food purchasing behaviors shows that those food insecure households, based on these items, based on how the households respond, correspond to what we would expect about the quality of the food that they're consuming and purchasing. So I think, you know, we're not specifically taking cultural preferences into account, but we're not, the questions are flexible enough to take into account whatever the respondents preferences are.

All right here's another question. Do you have information on people using both federal and community nutrition assistance, like using SNAP and food pantries at the same time.

Yes. So most, I think all of the statistics I presented today, are from our main food security report. Last week when we publish the food security report, we also publish the statistical supplement to household food security in the United States in 2018. And that report, the statistical supplement, includes information on the combined use of federal and community nutrition assistance. That's in table F-16 if anyone wants to look at that later. But in 2018, of households receiving SNAP, 29% also use the food pantry. Put the other way, among households getting food from a food pantry, 53% reported also getting SNAP.

All right. Thank You Alicia. I think that's all the questions that we have time for. I want to thank everybody for joining us and I hope you will have a good day.

Thank you.