

Good morning everyone and welcome to our webinar, Household Food Security in the United States in 2017. My name is Nancy McNiff, and I will be your host. This webinar is being recorded and will be posted on the ERS website multimedia page. At any time during the webinar, you may enter a question into the chat feature at the bottom left-hand corner of your screen, and we will ask our speaker to answer your questions at the end of the presentation. Our speaker today is Alicia Coleman Jensen. Alicia is a social science analyst with the food assistance branch at the Economic Research Service, U.S. Department of Agriculture. Her research focuses on the measurement and determinants of food insecurity in the United States. She is the lead author of USDA's annual report on household food security analyzing the prevalence and severity of insecurity in U.S. households. This report includes changes in food and security from previous years, the prevalence of food insecurity by selected household characteristics, and food insecurity among children. I think we're now ready to start, so Alicia you can begin your presentation.

Thank you, Nancy. Good morning and thanks to all of you for joining us today. I'd like to acknowledge my colleagues on the report, Matthew Rabbit and Christian Gregory of ERS and Anita Singh of USDA's Food and Nutrition Service. The report released this morning describes the food security of U.S. households during calendar year 2017, and is based on USDA's most recent annual food security survey which was conducted in December 2017. The report provides information on how many U.S. households had difficulty putting enough food on the table in 2017. These food security statistics reflect the extent to which difficult economic conditions result in material hardship in U.S. households. The percentage of U.S. households that were food insecure in 2017 was down significantly from 2016.

So, this slide shows an outline of what we'll be talking about today. The primary question we're answering is how many U.S. households were consistently able to put adequate food on the table. So, we'll be talking about how food security is measured, some of the main findings from the report, and some information about the food security survey itself. I'll summarize those main findings and then point you to some new ERS data visualizations that will be released later today.

First, statistics for all U.S. households. So, in 2017, 88.2 percent of U.S. households were food secure throughout the year. Food secure means that they had consistent access to adequate food for active healthy living for all household members throughout the year. We measure food insecurity at two levels of severity. So, I'll talk first about the relatively less severe low food security. In 2017, 7.3 percent of U.S. households experienced low food security, and these households primarily reported inadequate quality, variety, or desirability of their food. They did not report reductions in the quantity of food overall. These households reported food acquisition problems, but few if any indications of reduced food intake. And, again these 7.3 percent of households are labeled with low food security on the chart and are represented by the gold slice of the pie chart. The more severe range of food insecurity is labeled very low food security, and these households inadequate food actually meant not getting enough food. So, this subset of food insecure households was in the more severe range of food insecurity that is described as very low food security, and that's represented by the red slice in the pie chart. Four and a half percent of all U.S. households had very low food security in 2017. That's about 5.8 million households. And these households classified as having had 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 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. The two categories of low and very low food security make up the broader category of food insecurity, so 11.8 percent of all U.S. households were food insecure, which translates to 15 million households. So, the definition of these food insecure households is that they were unable at some time during the year to provide adequate quantity or quality of food from one or more household members due to a lack of resources.

This slide shows the definitions of food insecurity. Food insecurity is a household level economic and social condition. While hunger is an individual-level physiological condition that is not measured directly. Very low food security describes the severe range of food insecurity, which is a condition that may lead to hunger. So, food insecurity refers to households unable at some time during the year to provide adequate food for one or more household members due to a lack of resources. A couple of things about this definition. You'll note that it says "at sometime during the year," so these households if households report one instance of food insecurity, they would be classified as food insecure. While, some other households may be experiencing food insecurity more often during the year. All the food insecurity survey questions are predicated on being unable to afford enough food, or not having enough resources for food. So, this is not about fasting or dieting or things like that. So, the definition of very low food security, normal eating patterns of some household members were disrupted at times during the year and their food intake reduced below levels they considered appropriate. This idea of having just disrupted eating patterns refers to skipping meals or, in more severe situations, going a whole day without eating. So, these households are just telling us that one or more of their members just isn't able to get enough to eat.

So, how is food security measured? Like many things, food security is a continuum. Early research showed that food insecurity was a managed process, which means that as food security deteriorates, households have some control over how food insecurity is experienced. They may become anxious about the household food supply and try to stretch their food and their food budget. They may try to juggle household spending to maintain their food security. As food insecurity worsens, households may reduce the quality and variety of food, or rely on low-cost foods to try to maintain having enough to eat. And, as food insecurity becomes even more severe, adults may reduce their own food intake while trying to ensure children get enough to eat. And then, in the most severe situations, we see reduced food intake among children.

This slide shows some of the examples of the food security survey questions. Households are asked a series of 10 questions about food insecurity for the household as a whole and adults in the household. And households with children are asked in additional eight items about children's food security. The questions cover the full range of severity of food insecurity that we talked about on the last slide. So, for example, "we worry 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? Down to more severe items about cutting the size of your meals or skipping meals and not eating for a whole day because there was enough money for food. Like the definition, these questions refer to the last 12 months, having experienced these issues at any time the last 12 months. And, you'll note that they refer to not having enough money for food or not being able to afford

enough food or being able to afford to eat balanced meals. Households must respond affirmatively to at least three items indicating food insecurity to be considered food insecure.

Now, let's turn and talk about some of the findings in the report. This slide shows trends in food insecurity and very low food security over the past several years. The top blue line shows the prevalence of food insecurity overall, which as I mentioned before includes both low and very low food security. And, the bottom red trend line shows the prevalence of very low food security. I've added here this yellow shaded bar to indicate the Great Recession and I've also included some numbers on the chart to indicate the key prevalence rates for food insecurity over the last several years. So, with the onset of the recession, food insecurity had increased from 11.1 percent in 2007 to 14.6 percent in 2008 (and, again here I'm talking about the blue line at the top) and remained near that level through 2010. In 2011, 14.9 percent of U.S. households were food insecure and by 2014 food insecurity had declined to 14 percent. In 2015, food insecurity declined significantly to 12.7 percent, and that decline from 2014 to 2015 is the biggest year on your decline since the end of the recession. In 2016, 12.3 percent of U.S. households were food insecure and food insecurity declined significantly to 11.8 percent in 2017, and this was the second year largest year-to-year decline since the end of the recession. Turning now to very low food security (at the bottom), the percentage of households classified as very low food secure, again that's the more severe range of food insecurity, increase from 4.1 percent in 2007 to 5.7 percent in 2008. Very low food security declined significantly to five percent in 2015 and was essentially unchanged at 4.9 percent in 2016. In 2017, very low food security declined to 4.5 percent.

This graph shows changes in the prevalence of food insecurity by household characteristics between 2016 and 2017. If you have the annual food security report in front of you, or you want to refer back to it later, these statistics are from Table 2 in that report. Bars marked with an asterisk show a statistically significant decline. So, food insecurity declined significantly for households overall and then for households in non-metropolitan or rural counties, labeled here as outside metropolitan area near the bottom of the graph. And, food insecurity declined in those areas from 15% in 2016 to 13.3% in 2017. Food insecurity rates were highest for single mother families and single father families and women and men living alone. You can see on the chart that for female-headed households with children or single-mother households labeled here as female head, no spouse, food insecurity rates were 30.3 percent. Food insecurity rates were higher for households headed by black non-Hispanics and Hispanic households. In 2017, 21.8 percent of households headed by black non-Hispanics were food insecure, and 18 percent of households headed by Hispanic adults were food insecure. And then, we also see higher food insecurity rates for low-income households. So, on this chart, household income to poverty ratio under one means of these households had food insecurity below the federal poverty line. Their food insecurity was below 100 percent of the federal poverty line. And in these households, 36.8 percent we're food insecure. We see much lower prevalence rates for those households with incomes over 185 percent of the poverty line. In those households, 5.8 percent were food insecure. In general, we see higher food insecurity rates for households in principal cities and households in non-metropolitan areas compared with households not in metropolitan areas, not in principal cities, excuse me, within metropolitan areas and those households would be considered suburban households.

This slide shows the prevalence of food insecurity for the states. And, I will mention here that we use data for three years for our state-level estimates. To this point, all of those statistics have been based on a single year of data, but to ensure that we have large enough sample size for each of the states, we combined three years of data and use those averages for state level estimates. So, I've included on here some of the types on the right hand side is from Tables 4 and 5 in the annual food security report if you want to look those up for more information. The prevalence of food and security vary considerably from state to state. The estimated prevalence of food insecurity in 2015 to 17 range from 7.4 percent in Hawaii to 17.9 percent in New Mexico. Estimated prevalence rates of very low food security range from 2.9 percent in Hawaii to 7.1 percent in Louisiana and Alabama. So, on the map, states shaded in green have food insecurity rates below the national average. So, in terms of food insecurity, these states are better off. States shaded yellow have food insecurity rates that were near the national average and on the map shown states shaded red had higher than average food insecurity rates. So, in terms of food insecurity, these states were worse off. There are a number of factors that account for interstate differences in food security. For example, characteristics of households within the state are related to state food insecurity rates, such as state level poverty and employment, and the state level economy and policies at the state level also matter, such as average wages, cost of housing participation in food assistance programs, and the state level unemployment rate.

So, we're turning now to talk about children's food insecurity. And, these on the slide are the USDA definitions of food insecurity among children. Food insecurity in households with children is somewhat more complex than it is in all households, because we measure food insecurity for the household as a whole, and then among adults and children separately, so parents will often try to protect their children from food insecurity to the extent that they can, even when the parents themselves experience reduced dietary quality and intake. So, in some food insecure households with children, only the adults are reported to be food insecure. But, in households with food insecurity among children, households reported that they were unable at some time during the year to provide adequate nutritious food for their children. And, in households with very low food security among children, again this is a subset of households with food insecurity among children, 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. And this is the most severe category of food insecurity that we measure and report on in the annual food security report.

So, this pie chart shows U.S. households with children by food security status in 2017. So, in 2017, 15.7 percent of households with children were food insecure. That translates to about 6 million households. And, in about half of these households only adults were food insecure, and the rest, 7.7 percent of households with children, or about 2.9 million households, children were also food insecure at times during the year. Food insecurity among children was unchanged from 8.0 percent in 2016. So, in this group of households, the quality and/or quantity of children's diets was affected by food insecurity. As I mentioned, adults often shield children from experiencing very low food security. That's the more severe range of food insecurity, characterized by disrupted eating patterns and reduced intake. But children along with adults experienced very low food security in 0.7 percent of households with children. That's about 250,000 households. In this group of households, parents reported that children were hungry. Very low food security among children was unchanged from 0.8% in 2016.

So, this slide shows trends in food insecurity in household with children. Again, we show food insecurity in households with children at the household level. That's the top dark blue line. Food insecurity among children, where children in the households are reported to be food insecure is the red line in the middle of the chart. And, very low food security among children is the darker red maroon line at the very bottom of the chart. One important thing to point out about these statistics, when we look at trends from last year, is that these are not statistically significant, significantly different from 2016. However, for all of these different measures of food insecurity among children, at the household level and then among children, those rates had returned to pre-recession levels that we saw in 2007. And that's been a point of interest to know, or to see when food insecurity has returned to those pre recessionary levels. So, as I did on the previous trend chart, I've added some key numbers here. So you can see for food insecurity in households with children that prevalence peaked at 21.3 percent and we're now down to a prevalence rate of 15.7 percent. Food insecurity among children peaked at 11 percent and it's now returned to 7.7 percent. And, very low food security among children peaked at 1.3 percent and is now at 0.7 percent in 2017.

I'm turning now back to talk about all households, not just households with children, but all households. And, most of our statistics in our annual food security report are based on the annual measure. This first set of bars you see here of 11.8% food insecurity and 4.5% very low food security. We also assess food insecurity in the last 30 days before the survey, so this would be from about mid-November to mid-December 2017. And, in that 30-day period, 6.3 percent of U.S. households experienced food insecurity and 2.6 percent experienced very low food security. Both of those rates were down from 2016. In 2016, 6.7 percent of households were food insecure in the 30 days before the survey. We also estimate the average daily prevalence of very low food security. And, we estimate that to be between 0.7 and 0.8 percent of U.S. households. That would be the percentage of U.S. households that is experiencing very low food security on an average day. We do not estimate the average daily occurrence of food insecurity, because information was not collected on the number of days the less severe food insecure conditions occurred.

This slide shows use of federal food assistance programs by food insecure households in 2017. About 58 percent of food insecure households participated in one of the three largest USDA nutrition assistance programs, and those are SNAP, or formerly food stamps, the free reduced-price school lunch program, and WIC. The largest share, about 43 percent, participated in SNAP. Know that these are based on self-reported survey data, and we know that there is some under reporting of program participation.

We also estimate the percent of households using community food assistance programs in 2017. And those are food pantries and emergency soup kitchens. About 4.7 percent of U.S. households used food pantries in 2017. Use of food pantries was more common among those that were food insecure. You can see that 26% of food insecure households use food pantries. Use of soup kitchens was much less common overall, but similarly more common among those that are food insecure.

We also estimate median weekly food spending. We do this in two ways. We measure food spending by median weekly food spending per person, and also we measure by relative to the cost of the Thrifty Food Plan. This accounts for age and gender specific cost of a market basket of goods in a nutritious minimal cost diet. So, that's a better way to account for differences in household composition between food secure and food insecure households. When we look at median weekly food spending per person, food secure households spend about \$50 per week per person on food, while food insecure households spend about \$40. And, then relative to the cost of the Thrifty Food Plan, food secure households spent about 28 percent more than the Thrifty Food Plan for their household size and composition, and food insecure households spend about 4 percent more than the cost of the Thrifty Food Plan for their household size and composition. So, taking into account the differences in estimated food need, the typical food secure household spent about 23% more for food than the typical food insecure household.

Here's some information on the data underlying these numbers. So, the U.S. Census Bureau conducts a food security survey for USDA's Economic Research Service. We sponsor the data collection. And, the survey is conducted in December each year as a supplement to the Census' monthly Current Population Survey. You may be familiar with the Current Population Survey, as it's the source for federal employment and unemployment statistics as well as poverty statistics. About 40,000 households are interviewed annually, and it's a representative sample of the U.S. civilian population. And, you can find the survey questions on the ERS website along with any other food insecurity information that you're looking for.

Here's a summary of our main findings related to trends and food insecurity. The percentage of U.S. households that were food insecure in 2017 – 11.8 percent – was down from 2016 and continued a downward trend from a high of 14.9 percent in 2011. The overall prevalence of food insecurity was still above the 2007 pre-recession level of 11.1 percent. Children were food insecure at times during the year in 7.7 percent of U.S. households with children. That number is essentially unchanged from 8.0 percent in 2016. As in 2016 and 2015, the 2017 prevalence of food insecurity among children and prevalence of very low food security among children we're near the 2007 pre-recession levels.

At about 3 p.m. today, we will be releasing our data visualizations. We'll be updating the data visualizations that are on our website, and we'll also be releasing a new data visualization on food insecurity and education, employment, disability, and SNAP. So, look for that data visualization later today.

And, if you're looking for any other information please go to our website you can always email me or call me for questions. And, I think that at this point, we'll open the webinar up for questions, so I'll turn things over to Nancy. Thank you for your attention.

Thank You, Alicia. And, I wanted to remind everyone, if you have questions for Alicia, please enter it into the left-hand bottom corner chat feature in the bottom left-hand corner of your Screen. And, we have a few questions already for you. The first question is, how many people, specifically children, are food insecure?

That's an important question. Let me start by saying that food insecurity is measured at the household level. We asked about if there was any adult or any child that experienced food insecurity in the household. So, we tend to talk about people living in food insecure households rather than food insecure people. And that's because we don't know whether or how individual household members might experience food insecurity differently within the household. But, in 2017, 40 million people lived in food-insecure households, six and a half million children lived in households in which children experienced food insecurity, and 540,000 children lived in a household in which children experienced very low food security. Again, we can't say that each and every child in those households was affected by food insecurity in the same way. Rather, that's the number of children living in households with food insecurity among children are very low food security among children.

Okay, we have another question. It seems as though food security has improved for most households, but child food insecurity is essentially unchanged. Can you explain that, why that is?

It's true that child food insecurity was essentially unchanged from 2016, but food insecurity among children has continued that downward trend since the recession, and food insecurity among children has recovered to that pre recessionary level in 2007. Whereas, overall food insecurity has not. We saw a greater decline in food insecurity among children previously. Whereas this past year, we saw food insecurity decline overall but again not from 2016. But I think it's important to note that food insecurity among children has returned to that pre-recessionary level, just as it was last year.

Okay, we have some questions I believe in relation to slide number nine with the map.

Sure.

The first one is, do you have any ideas why there was a significant change in food security outside of metropolitan areas or rural areas?

At this point, I can't say definitively why food insecurity declined in metropolitan areas and non-metropolitan areas specifically. That's certainly an area for future research, and it will be interesting to see if when the poverty statistics are released, if we'll see decline in poverty. I don't know at this point, but that's certainly an area for future research.

Okay, and here's another question. What is the data on the average size of the households that are being surveyed?

I do not have the number off the top of my head. Food insecure households tend to be a little larger on average than food secure households. And you can see that by looking at, I know you don't all have the food security report in front of you, but if you get a chance to look at some point, in Table 1a, we present statistics on the prevalence of food insecurity at the household level, which is where that 11.8 percent of U.S. households comes from. And then we present the prevalence for all individuals in the food insecure households. And, in 2017, 12.5 percent of all individuals lived in food-insecure households. And the reason is, that person-level prevalence is a little bit higher than the household-level prevalence is because those food insecure households

tend to be a little larger on average than food secure households. But I don't have a number off the top of my head of the average number of people in those households.

Okay, we have a question about whether someone can get food security information that shows food insecurity among female head of households disaggregated by race. So, is there a way to see different races of female-headed households that are food insecure? Is there a way to get that information?

We don't have that information in the annual food security report. We only present by the household composition and race separately. We may have that information in the data visualizations that have to check to be sure. So, no we don't have that right now in the annual food security report. It is possible to do that analysis. It's difficult with a single year of survey data, because when you start looking at single mother or female-headed households with children, sample sizes get relatively small, and then when you disaggregate by race, the numbers are smaller still. So, we do not have that information available published.

Okay, our next question is, is there any significant rise in food insecurity during the summer months when school lunch is not available?

We have seen that in earlier years, since 2001, the survey has been conducted consistently in December every year. In the early years of survey, in the late 1990s, food insecurity or the food security survey was conducted in different months throughout the year, and we did see some somewhat of a seasonal increase in food insecurity in the summer months, related to when school was out. And, you may be familiar with some work that the Food and Nutrition Service has done on a demonstration project or an evaluation of a program called the summer EBT that gave additional benefits during the summer months when children were out of school. And, they found that those benefits were helpful in reducing food insecurity the summer months for those households with children.

Okay, we have a question about the slide on food expenditures per person, if you can bring that slide up.

Sure.

So, the question is, does the slide mean that families that are food insecure could afford to eat a nutritious diet if they followed the Thrifty Food Plan or what does this mean exactly?

I wouldn't go so far as to say that that's what this slide is saying. The point that this slide is making is that food insecure households report spending less for foods than food secure households, which we'd expect given what we're measuring with the food security questions. So, this validates those questions to some extent. It's important to note that the Thrifty Food Plan is a minimal cost diet, so even spending very close to a Thrifty Food Plan, it's a very low level of food spending for those food insecure households.

Okay, the next question I believe has to do with slide number 12, which I'll bring up. Is the rate of very low food security, oh maybe not this one, is the rate of very low food security in 2017



back to pre-recession levels, or is it still significantly above? I think it's a previous slide, might be 7.

That is a statistical difference, that 4.5 percent and the 4.1 point one percent, so, we have not returned down to those pre-recession levels for food insecurity or very low food security overall.

And, we have a question about the food insecurity of adults age 50 to 65. Do you have any statistics on that particular group?

We do not have that group in particular. We have food security statistics on households with elderly adults and elderly living alone. That's age 65 plus, and you can see on this slide that with the elderly, about 7.9 percent were insecure in 2017. Among elderly living alone 8.6 percent were food insecure in 2017. But we don't separate, I can't remember what you said, 50 to 65 or something, this is just 65 plus.

Okay, can you elaborate on the food quality features of low food security? Is there any correlation with poor nutrition in this category?

Yes, so early on in the development of the food security measure and continuing, there has been research to show that people in food insecure households are more likely to have poor diets and have nutrient deficiencies, their effects on health. There was a research report that a colleague and I, Christian Gregory at ERS, published last year that examined chronic disease and other health outcomes by food security status. And, we separated households into low and very low food security and across the full gradient of food security status. We saw effects or relationship with chronic disease, where we saw, you know, as food insecurity worsened the incidence of chronic disease worsened, but we saw that there were effects for low food security as well, not just very low food security. So, there is evidence that even households with low food security have lower dietary quality than food secure households.

Okay, do you have any information on how the food insecurity among seniors is changing? Do you anticipate any changes related to health care and/or aging the aging baby boomer generation? Do you see any trends as far as food insecurity changing among seniors?

That's an interesting question. I think that's an important research question, but I can't speculate offhand about how, you know, aging baby boomers might affect food insecurity. Of course, it would be strongly related to the resources available to them and their expenses and things of that nature as food insecurity is generally, but I can't speculate on the specifics for that generation.

Could you go over how the median weekly food spending was broken down by individual? For example, by gender?

The Thrifty Food Plan bases a market basket of goods based on gender and age. So, for example, the assumption is that working age men will consume more food than young children or women of a similar age based on their caloric and nutrient needs, so that this weekly food spending relative to the cost of the Thrifty Food Plan takes into account those differences in needed food spending based on the assumed needs of family members based on their age and their gender.

Okay. where can people access the data that went into this report?

ERS sponsors the survey and it's conducted by Census Bureau, and Census houses the survey data this of a household level survey data is on their website. I don't believe it's posted yet but it should be posted today or soon. And there's also information on how to access the data on the ERS website, along with some of the technical notes insert and survey questionnaire. Those are all the sort of underlying data going into these estimates of that publicly available survey data would require some expertise and how to analyze the numbers. If you're looking for the statistics in the report, many are posted on our website as graphics. If you go to our website and as I mentioned, later today, there will be additional data visualizations posted, and you can download an excel file there that includes many of these statistics that are reported in the report. So that's a way to access it if your main interest is in the statistics that I'm reporting here, rather than between your own analysis you can find those statistics in Excel files on our website.

Okay, is there any data on households with children that have elderly or senior head of the household?

I'm just flipping through the report now and in Table 3 in our report we include statistics specifically on households with children, but we did not divide it by whether or not the head of the household is elderly. We examine their household composition, married couple families, female head no spouse, male head no spouse, and then other households with children, but we do not divide it by age of the householder.

Okay, I think that's all the questions we have. I wanted to thank you Alicia for joining us and thank all of you for joining us for this webinar. Again, I am reminding you that the webinar is being recorded and will be posted on the ERS website at [www.ers.usda.gov/multimedia](http://www.ers.usda.gov/multimedia) in a few days. Thank you again, Alicia, and thank you everyone, and hope you have a good rest of your day!