

Assessing Household Food Security

Leasina County, American Samoa

Molly Asifoa-Lagai
Food Policy Analyst
Community and Natural Resources Division
American Samoa Community College

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Executive Summary

American Samoa is an unincorporated US territory located south of the equator. It is consisted of two groups of islands, Manu'a and Tutuila. The Tutuila island is the most populated island, where all the main public and private sectors are located. The 2012 population is estimated at 68,000. In the year 2000, 62 percent of individuals or 50% of families from American Samoa were below the national poverty level.¹

The substantial rise in utility and food prices over the past years has significantly increased the number of American Samoans who are affected by food insecurity and poverty. Food availability and access to healthy food are challenges in the territory. About 95% of foods on island are imported, and most of these foods are processed. Perishable or fresh foods are not popular with businesses because of the expiration dates.

The Household Food Security Survey (HFSS) was carried out at the Leasina county, the least populated county. The aim was to understand if food insecurity exists on island. The survey was translated into Samoan. About 44% completed the survey in the Samoan version and 56% completed the English version. An estimated 6% of the households did not have any children under the age of 19.

According to the HFSS findings about 75% of the households are food insecure. Of this food insecure population, about 37% are low food security and 63% are very low food security. Of the households with no children, about 80% are food secure and 20% are food insecure.

Some limitations to the study include how well the participants understood the phrase “balanced meal”. Most understood that balance meal means healthy meal, but how does it look like with everyday local food on the plate. Another limitation is the sample population. Is it really representing the population? The Leasina county is more like a rural area, compared to the most populated urban Tualauta county.

¹ AS DOC Statistical Yearbook 2009

History

The Samoan archipelago was believed to be settled as early as 1000 B.C. Later on it was discovered by European explorers in the 18th century. The Wars and rivalries for colonization in the Pacific Ocean led to the 1899 treaty in which Germany and the US divided the Samoan islands. The Germans claimed the western side of the islands and became known as Western Samoa, and the US formally occupied the Eastern part of the Samoan islands and called it American Samoa.

American Samoa is currently an unincorporated territory of the United States. It is located in the South Pacific Ocean, southeast of the Independent State of Samoa. American Samoa is consisted of Tutuila, Manu'a Islands and Rose Atoll. It is about half way between Hawaii and New Zealand.² Tutuila is the largest and the most populous island in the territory. The total territory land area is 76.1 square miles (197.1 km²), slightly more than Washington, D.C., and it is the southernmost territory of the United States.³ It was estimated that the population in American Samoa's will reach 70,000 by 2009.⁴

In February of 2009, the CNR and Department of Agriculture co-hosted a food security conference "ASIASIAGA" in American Samoa. As a result of this conference, Gov. Togiola issued an Executive order which established the American Samoa Food Policy Council. The overall objective of the council is to advise on critical issue of access to good nutrition for all the people of American Samoa under all conditions. There are 20 issues listed in the executive order, which includes food safety, research on the American Samoa food system, trade and marketing infrastructure, food security, and the effect of policies on local people and economy.⁵

² <https://www.cia.gov/library/publications/the-world-factbook/geos/aq.html>

³ <https://www.cia.gov/library/publications/the-world-factbook/geos/aq.html>

⁴ DOC 2009 Statistical Yearbook

⁵ American Samoa Government. (2009). *Exec. Order No. 011-2009*

The World Food Summit of 1996 defined food security as existing “when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life”. Food Insecurity is when there is limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable way.⁶ Commonly, the concept of food security is defined as including both physical and economic access to food that meets people's dietary needs as well as their food preferences. In many countries, health problems related to dietary excess are an ever increasing threat.

During 2010, over 17 million households in the United States struggled to put enough food on the table. For many of these children, a school meal is the only nutritious source of food they can count on.⁷ If a child learns to eat healthy at an early age it can lead to prevention of obesity and NCD's in the future. In the year 2000, 62 percent of individuals or 50% of families from American Samoa were below the national poverty level.⁸

Poverty is the main cause of food insecurity and hunger in the world. Child food insecurity and hunger are extremely harmful during the first three years of life.⁹ In American Samoa, a good number of the population relies on federal food assistance programs. This includes the SNAP, WIC, and the School Lunch Program. All these programs are based on the USDA nutritional guidelines, and most of these programs are for children.

Food insecurity has been defined as the 'limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire acceptable foods in socially acceptable ways’.

Severe food insecurity and hunger can lead to food intakes that are continuously insufficient to meet dietary energy requirements. Less severe food insecurity is associated with reduced quality and variety

⁶ Cook, J. & Jeng, K. “Child Food Insecurity: The economic impact on our nations”

⁷ Memo Code: SP 10-2012

⁸ ASDOC.Statistical Yearbook 2009

⁹ Cook & Jeng. Child food insecurity

of dietary intakes possibly associated with obesity in adults, and a range of adverse developmental, psychological and health outcomes in children.

Studies have shown that food insecurity without hunger is common in both adults and adolescents. For instance, hunger is an invisible sight in American Samoa. In Third World Countries, children are skinny and malnutrition, but in American Samoa people are overweight or obese. This might due to cheap low-quality processed food in the diet. The people in American Samoa are eating but the question is how nutritious are the foods.

In fact, there is an increase in cases of obesity and Non-Communicable Diseases (NCD) in American Samoa. The majority of the population depends on federal nutrition assistance program, the Supplemental Nutrition Assistance Program, to help meet some of their household food needs. But in spite of the increase in Supplemental Nutrition Assistance Program funding, many families still have to make tough choices between a meal and paying for other basic necessities.¹⁰ In 2010 nearly half of the households seeking emergency food assistance in the US reported having to choose between paying for utilities or heating fuel and food. Nearly 40 percent said they had to choose between paying for rent or a mortgage and food. More than a third reported having to choose between their medical bills and food. Research shows that hunger costs the US at least \$167.5 billion due to the combination of lost economic productivity per year, more expensive public education because of the rising costs of poor education outcomes, avoidable health care costs, and the cost of charity to keep families fed¹¹.

¹⁰ Brandeis University (2011, October 5). Social and Economic cost of hunger and food insecurity in US 2010 was 167.5 billion.

¹¹ www.ers.usda.gov/briefing/foodsecurity

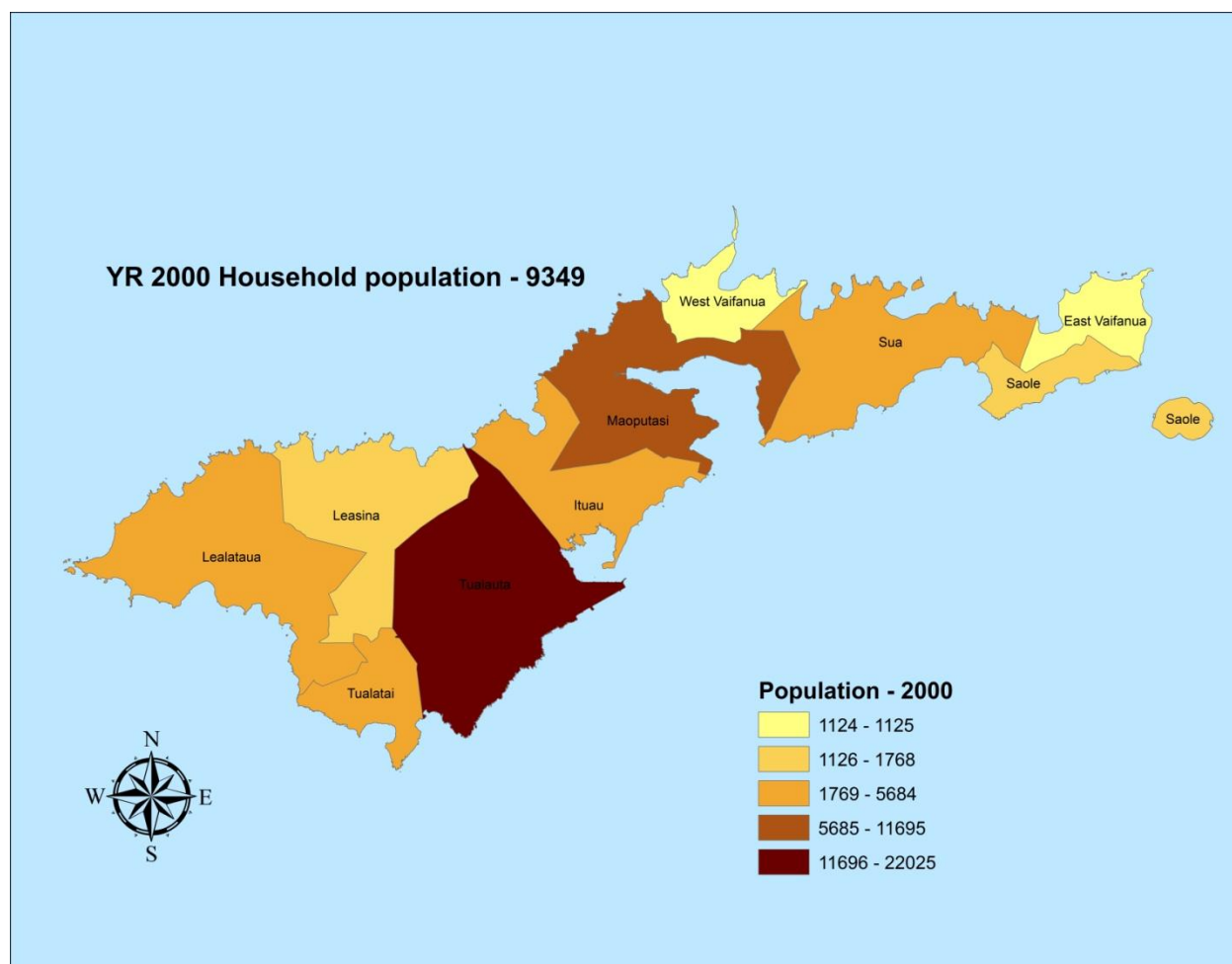


Figure 1 Tutuila, American Samoa

Methods

Subjects

The Household Food Security Survey (HFSS) was distributed to the head of households in the Leasina County. This is the least populated county on the island of Tutuila. A total of 77 surveys were completed. The sample of 77 households was drawn by counting every 3rd house in the villages. The selection was started at the beginning of the village.

Survey

The 18-item food security measure is referred to as the Household Food Security Survey (HFSS) module. The 18 items include ten questions concerning the experiences of adults and eight concerning

respondents' experiences of providing food to children in their households. The food security items have been included in the US Current Population Survey (CPS) since 1995. CPS data revealed that overall some 12% of US households are food insecure, including 3.3% with marginal hunger and 0.8% with severe hunger.¹² There are considerably higher proportions of food insecure households in inner-city and ethnic minority communities.

The head of each household were asked to complete the survey questionnaire in either self-completion format or orally by the surveyor. The questionnaire was written in both English and Samoan. The questionnaire included the 18 HFSS items. Respondents were required to complete every item with no items skipped or screened out.

Limitation

The goal is to ensure the survey results were properly and reliably reflect the food security situation in American Samoa. However, some limitations to the survey have to be acknowledge and should be taken into consideration when reading the report and interpreting the results.

- The main language in the territory is Samoan. Even though the questionnaire was translated, some people were confused when reading it. The 'balanced meal' item is known to present difficulties of interpretation by the respondents. There are questions on what exactly is a balanced meal. How does it look it? Is eating fruits alone a good enough balanced meal? What is a balanced meal in Samoa using everyday food, like processed food?
- The Samoan culture practices the extended family system. The system help families take care of each other in time of need. Admitting to not having enough food is hard for some people. “Even if we do not have any money, I make sure I have my kids fed.”

¹² ibid

- The sample population only surveyed one county. The Leasina county is a rural area with three villages. These villages do a lot of farming, but the number of farmers had decreased because more people found jobs in the public and private sector. For future research, it would be more reliable to include all counties in the study.

Results

There were 77 completed surveys from the Leasina county. Only 6% households did not have any children under the age of 19. 44% of questionnaires returned were completed in the Samoan version, and 56% in the English version.

Figure 2

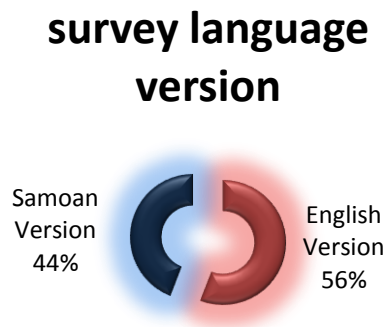


Figure 3

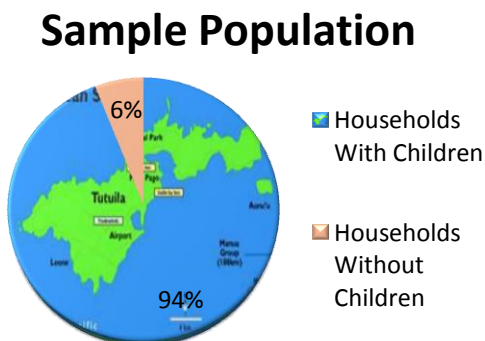


Figure-4 shows the percentage of participant answers for each survey questions. For instance, in question 1 about 26% of the participants answered “often”, 58% answered “sometimes”, and 16% chose “never true”.

Figure 4

Questions used To Assess the Food Security of Households in the CPS Food Security Survey				
1	“We worried whether our food would run out before we got money to buy more”	Often = 26%	Sometimes = 58%	Never True = 16%
2	“The food that we bought just didn’t last and we didn’t have money to get more.”	Often = 25%	Sometimes = 45%	Never True = 30%
3	“We couldn’t afford to eat balanced meals.”	Often = 20.8%	Sometimes = 50.6%	Never True = 28.6%
4	Did you or other adults in the household ever cut the size of your meals or skip meals because there wasn’t enough money for food?	Yes = 38%	No = 62%	
5	If yes to Question 4, how often did this happen?	Almost every month = 14%	Some months, not every months = 62%	1 or 2 months = 24%
6	Did you ever eat less than you felt you should because there wasn’t enough money for food?	Yes = 38%	No = 62%	
7	Were you ever hungry, but didn’t eat, because there wasn’t enough money for food?	Yes = 35%	No = 65%	
8	Did you lose weight because there wasn’t enough money for food?	Yes = 25%	No = 75%	
9	Did you or other adults in your household ever not eat for a whole day because there wasn’t enough money for food?	Yes = 20%	No = 80%	
10	If yes to question 9, how often did this happen?	Almost every month = 9%	Some months, not every months = 49%	1 or 2 months = 42%
11	“We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food”	Often = 21%	Sometimes = 51%	Never True = 28%
12	“We couldn’t feed our children a balanced meal, because we couldn’t afford that”	Often = 24%	Sometimes = 41%	Never True = 35%
13	“The children were not eating enough because we just couldn’t afford enough food”	Often = 13%	Sometimes = 47%	Never True = 40%
14	Did you ever cut the size of any of the children’s meals because there wasn’t enough money for food?	Yes = 37.5%	No = 62.5%	
15	Were the children ever hungry but you just couldn’t afford more food?	Yes = 32%	No = 68%	
16	Did any of the children ever skip a meal because there wasn’t enough money for food?	Yes = 32%	No = 68%	
17	If yes to question 16, how often did this happen?	Almost every month – 0	some months, not every months - 74%	1 or 2 months - 16%
18	Did any of the children ever not eat for a whole day because there wasn’t enough money?	Yes - 12.5%	No - 87.5%	

The overall results shows that 25% of the population are food secure and 75% are food insecure. As defined by the USDA Economic Research Services:¹³

- High food security – Households had no problems, or anxiety about, consistently accessing adequate food.
- Marginal food security – Households had problems at times, or anxiety about, accessing adequate food, but the quality, variety, and quantity of their food intake were not substantially reduced.
- Low food security – Households reduced the quality, variety, and desirability of their diets, but the quantity of food intake and normal eating patterns were not substantially disrupted.
- Very low food security – At times during the year, eating patterns of one or more household members were disrupted and food intake reduced because the household lacked money and other resources for food.

Figure 5

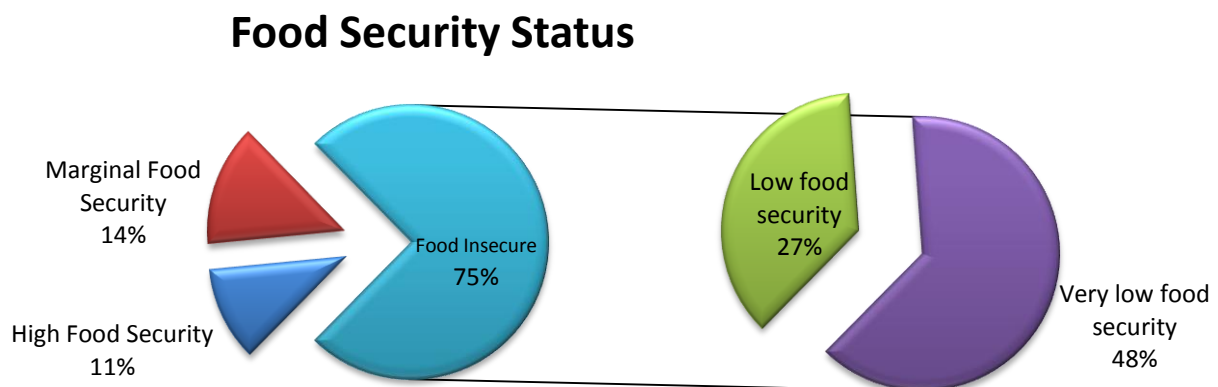
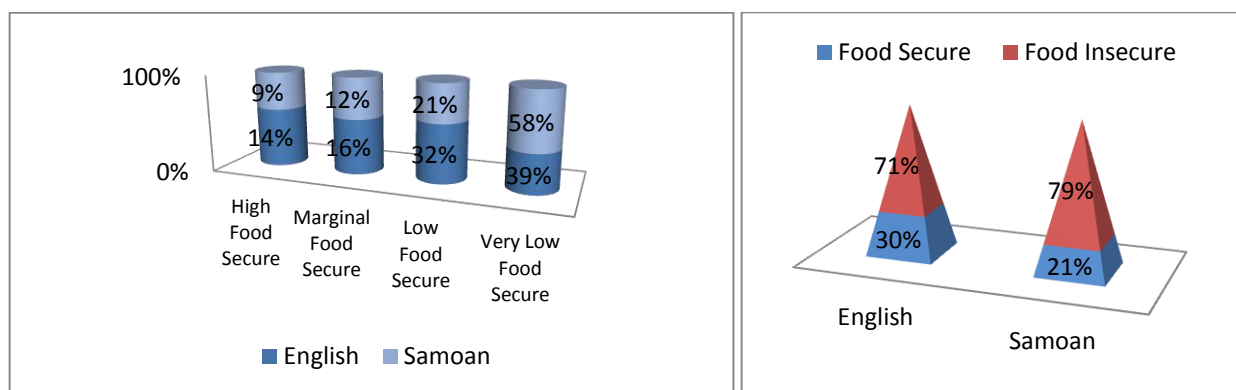


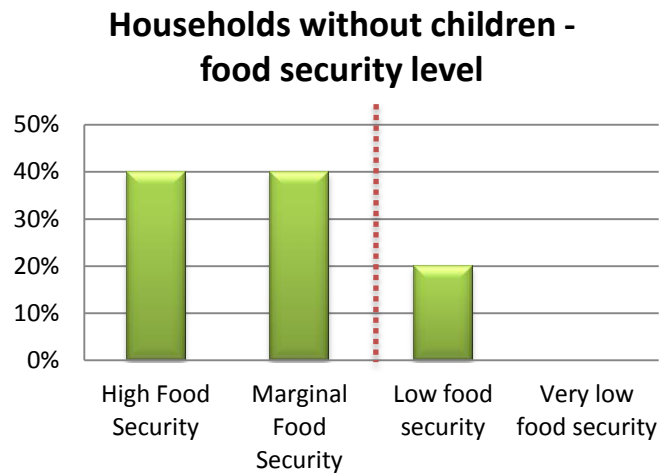
Figure 6 Differences between surveys completed in the English and Samoan version



¹³ www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx

Of the households without children, about 80% are food secured (40%-high food security/40%-marginal food security) and 20% are low food security.

Figure 7



Of the Food Insecure population, about 37% are low food security and 63% are considered very low food security.

Figure 8



Figure 9

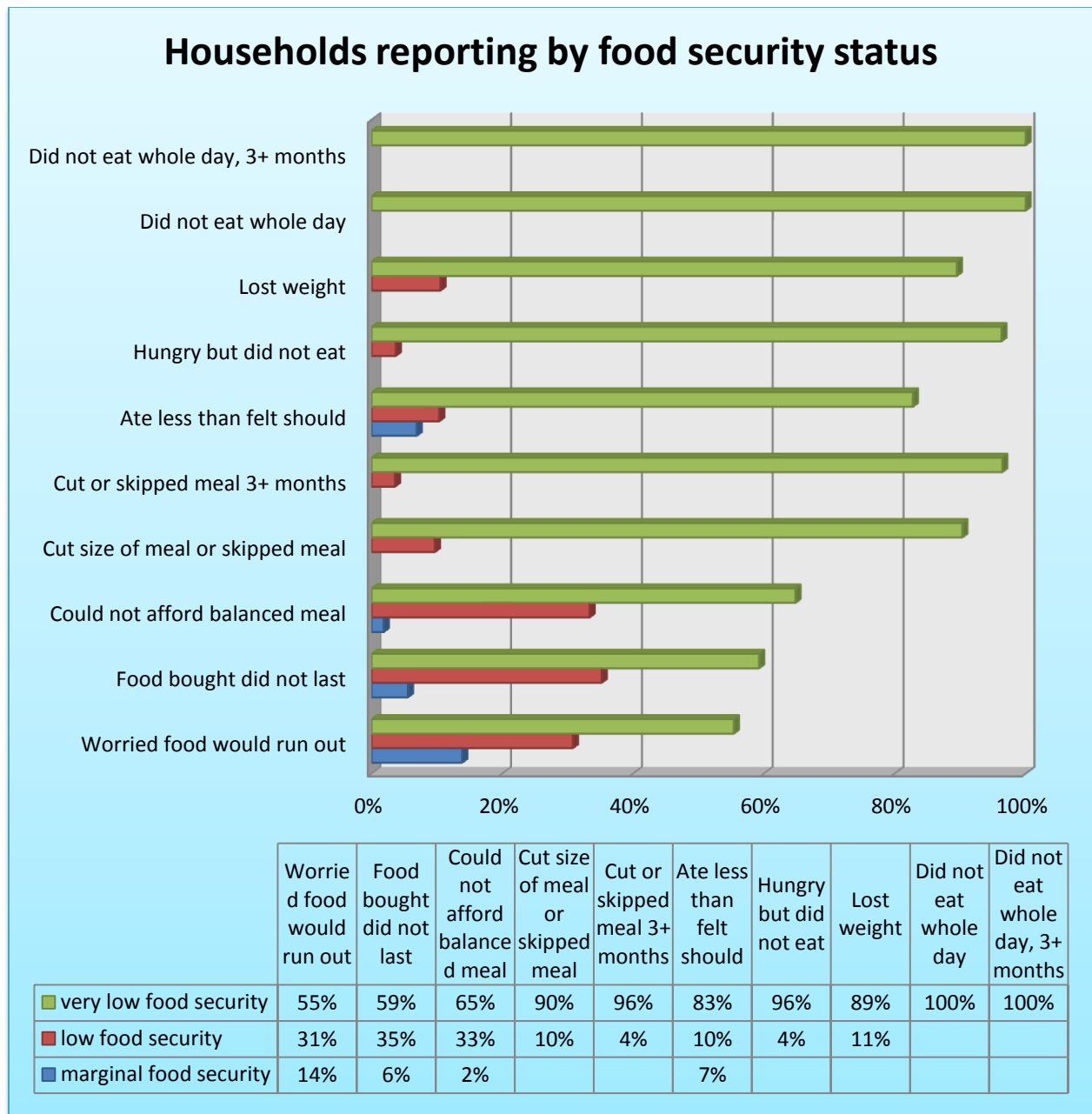
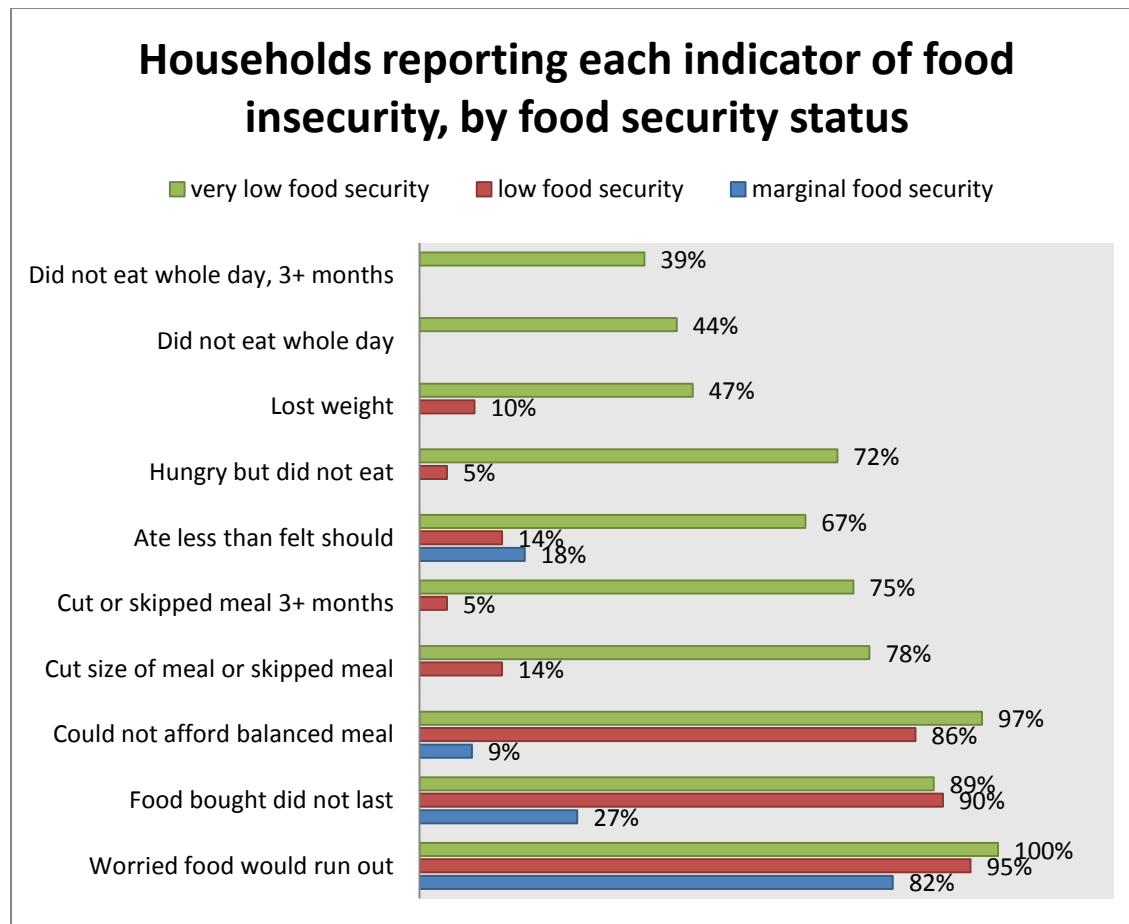


Figure-9 shows the percentage of security status level for each indicator. For instance, for those who reported having to “worry that their food would run out before they got money to buy more”, about 55% of the respondents are within the “very low food security” level, 31% are within the low food security level, and 14% are within the marginal food security level.

Figure 10



As shown figure 10, Households classified as having very low food security reported the following conditions:

- 100 percent reported having worried that their food would run out before they money to buy more.
- 89 percent reported that the food they bought just did not last and they did not have money to get more.
- 97 percent reported that they could not afford to eat balanced meals.
- 78 percent reported that an adult had cut the size of meals or skipped meals because there was not enough money for food.
- 75 percent that this had occurred in 3 or more months.
- In 67 percent, respondents reported that they had eaten less than they felt they should because there was not enough money.
- In 72 percent, respondents reported that they had been hungry but did not eat because they could not afford enough food.
- In 47 percent, respondents reported having lost weight because they did not have enough money for food.
- 44 percent reported that an adult did not eat for a whole day because there was not enough money for food.
- 39 percent reported that this had occurred in 3 or more months.

Conclusion

Overall, the collected data indicates an existence of food insecurity in the households. About 75% are considered food insecure, and only 25% are food secure. The limitations in the study also show a need for more research in the area of household food security. The interviewees felt that the respondents did not fully understand the term “balanced meal”. Maybe there should be more awareness about some terms like processed food, balanced diet, what is healthy and unhealthy, and quality food. There were also individuals who seem offended about question 18 “child not eating a whole day”. Some stated that “no matter how poor they are, her kids will always have something to eat”. In a Samoan extended family system, children are always taken care.

As revealed in existing research, people including children in American Samoa are suffering more from obesity and NCD's. There is a need for more research on the eating habits and the types of food in American Samoa. The people should be more educated in what they are eating or feeding the children. They should also understand where the foods originate from because 95% of the foods on island are imported. Overall, there is a lot more than needs to be researched in order to fully understand food security and food system in American Samoa.

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Questions Used To Assess the Food Security of Households in the CPS Food Security Survey

Please all your answers should be based on the last 12 months. Circle one answer for each questions.

ANSWERS

1	"We worried whether our food would run out before we got money to buy more."	Often	Sometimes	Never True
2	"The food that we bought just didn't last and we didn't have money to get more."	Often	Sometimes	Never True
3	"We couldn't afford to eat balanced meals."	Often	Sometimes	Never True
4	Did you or other adults in the household ever cut the size of your meals or skip meals because there wasn't enough money for food?	YES	NO	
5	If yes to Question 4, How often did this happen?	Almost every month	Some months, not every months	1 or 2 months
6	Did you ever eat less than you felt you should because there wasn't enough money for food?	YES	NO	
7	Were you ever hungry, but didn't eat, because there wasn't enough money for food?	YES	NO	
8	Did you lose weight because there wasn't enough money for food?	YES	NO	
9	Did you or other adults in your household ever not eat for a whole day because there wasn't enough money for food?	YES	NO	
10	If yes to Question 9, How often did this happen?	Almost every month	Some months, not every months	1 or 2 months

(Questions 11-18 are asked only if the household included children 0-18)

11	"We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food"	Often	Sometimes	Never True
12	"We couldn't feed our children a balanced meal, because we couldn't afford that"	Often	Sometimes	Never True
13	"The children were not eating enough because we just couldn't afford enough food"	Often	Sometimes	Never True
14	Did you ever cut the size of any of the children's meals because there wasn't enough money for food?	YES	NO	
15	Were the children ever hungry but you just couldn't afford more food?	YES	NO	
16	Did any of the children ever skip a meal because there wasn't enough money for food?	YES	NO	
17	If yes to Question 16, How often did this happen?	Almost every month	Some months, not every months	1 or 2 months
18	Did any of the children ever not eat for a whole day because there wasn't enough money?	YES	NO	

(Samoan Version)

O fesili e fa'aaoga e iloilo ai Tulaga o le Lava, Maloloina, ma le Saogalemu o taumafai i aiga i le sailiiliga le CPS

Fa'amolemole ia fua au tali uma i le 12 masina ua tuana'i. Ia fa'alapotopoto le tali e tasi mo fesili ta'itasi.

1	“Sa matou popole po o le a uma a matou mea'ai ae le i maua mai tupe e fa'atau ai nisi mea'ai.”	Tupu so'o	Nisi taimi	E le sa'o/moni
2	“O mea'ai sa matou fa'atau maia sa le lava ma sa leai foi se matou tupe e toe fa'atau ai nisi mea'ai.”	Tupu so'o	Nisi taimi	E le sa'o/moni
3	“Sa matou le gafatia le tau o mea'ai paleni, maloloina, ma le tatau.”	Tupu so'o	Nisi taimi	E le sa'o/moni
4	Sa fa'aitiitia ea le tele o taumafataga pe na fa'agafua fo'i taumafataga a lau Susuga po o se isi tagata matua o lou aiga ona ua le lava le tupe e fa'atau ai meataumafa?	loe	Leai	
5	Afai e “ioe” lau tali i le fesili 4, O le a tele o taimi sa tupu ai lenei mea?	Toeitiiti lava masina uma	O nisi masina ae le o masina uma	1 pe 2 masina
6	Sa fa'aitiitia lau taumafa ae e te le i laulelei ona sa le lava le tupe e fa'atau ai meataumafa?	loe	Leai	
7	Sa iai se taimi sa e fia taumafa ai, peita'i ua e le taumafa ona sa le lava le tupe e fa'atau ai meataumafa?	loe	Leai	
8	Sa fa'aitiitia lou mamafa ona sa le lava le tupe e fa'atau ai meataumafa?	loe	Leai	
9	Sa iai se taimi sa le taumafa ai lau Susuga po o se isi tagata matua o lou aiga i le aso atoa ona ua le lava le tupe e fa'atau ai meataumafa?	loe	Leai	
10	Afai e “ioe” lau tali i le fesili 9, O le a tele o taimi sa tupu ai lenei mea?	Toeitiiti lava masina uma	O nisi masina ae le o masina uma	1 pe 2 masina
(E fa'atoa fai ia fesili e 11-18 pe afai e iai fanau e 0-18 tausaga le matutua i le aiga)				
11	“Sa matou fa'alagolago i nai mea'ai itiiti ma le taugofie e fafaga ai a matou fanau ona sa leai se tupe e fa'atau ai mea'ai.”	Tupu so'o	Nisi taimi	E le sa'o/moni
12	“Sa le mafai ona fafaga a matou fanau i mea'ai paleni, maloloina, ma le tatau ona sa matou le gafatia le tau o mea'ai.”	Tupu so'o	Nisi taimi	E le sa'o/moni
13	“Sa le lava mea'ai e a'ai a matou fanau ona sa matou le gafatia le tau mo nisi mea'ai”	Tupu so'o	Nisi taimi	E le sa'o/moni
14	Sa iai se taimi sa e fa'aitiitia ai le tele o meataumafa a ou alo ona ua le lava le tupe e fa'atau ai meataumafa?	loe	Leai	
15	Sa fia taumamafa ea ou alo i se aso/taimi ae peita'i sa le lava le tupe e fa'atau ai meataumafa?	loe	Leai	
16	Sa iai ea se taimi sa le taumamafa ai ou alo ona ua le lava le tupe e fa'atau ai meataumafa?	loe	Leai	
17	Afai e “ioe” lau tali i le fesili 16, O le a tele o taimi sa tupu ai lenei mea?	Toeitiiti lava masina uma	O nisi masina ae le o masina uma	1 pe 2 masina
18	Sa iai se isi o ou alo sa le taumafa i se aso atoa ona sa le lava le tupe?	loe	Leai	