



# Food Security at the Duck Valley Indian Reservation

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## Highlights

- Food insecurity is persistent at Duck Valley; over 77 % of survey respondents reported that they had to skip meals or eat less because of lack of food almost every month in the last year.
- Most people at Duck Valley purchase a majority of their food away from Duck Valley, primarily in Boise, and supplement from purchases at Our Store.
- There are a number of food attributes that are important to Duck Valley residents, including price, taste, nutrition, freshness and convenience.
- Duck Valley residents are unsatisfied with the quality, availability and affordability of food on the reservation.
- There is interest in utilizing more nutritious, local foods, including traditional foods like game, fish, and wild plants.
- Many barriers prevent tribal members from accessing affordable and quality food, including price, distance and transportation. While food assistance programs play an important role in improving food security for Duck Valley residents, there are also barriers which prevent people from utilizing food assistance programs, particularly the EBT (food stamp) program. Knowledge and storage act as barriers to making greater use of local and traditional foods to improve food security.
- The study revealed a number of promising avenues for improving food quality and access, including introducing a mobile food bank, promoting gardening by supporting hoop house initiatives, promoting educational programs focused on gardening, nutrition and the use of traditional foods, supporting the development of a farmers' market, and providing greater support for accessing food assistance programs.

## **Study Background and Purpose**

The Duck Valley Indian Reservation is located in southern Idaho and northern Nevada, and 1,700 Shoshone-Paiute members reside at Duck Valley. Like many tribal communities in the United States, concerns have been raised about food security at Duck Valley. According to the World Health Organization, people are food secure when they have “sufficient, safe, [and] nutritious food and can maintain a healthy, active life.” American Indians in particular experience some of the highest rates of food insecurity in the United States. Persistent poverty, geographic isolation, and the historical legacy of dispossession and displacement have contributed to the disadvantaged health status and lack of infrastructure for American Indians and many reservation communities. Understanding the food needs and desires of members of the Duck Valley community could importantly help in program and policy development related to food security, something that effects childhood development, mental and physical health, and overall community well-being.

Data for this project was generated from the Food Quality and Availability survey conducted between September 2014 and February 2015. The survey was designed specifically to gather information about community food concerns and desires at the Duck Valley Indian Reservation. In total, 101 surveys were completed by Duck Valley residents, and included in analysis. In addition to the survey, a focus group was conducted in February 2015 with 22 members of the Duck Valley community. The focus group was designed to gain additional information about community member’s thoughts, practices, and opinions about food quality and availability on the Duck Valley Indian Reservation, as well as ideas for how to improve the food system in the community.

## **Survey Results**

### ***What is the status of food security at Duck Valley?***

Results from the survey suggest that food insecurity is persistent at Duck Valley. 77% of survey respondents reported that they had to skip meals or eat less because of lack of food almost every month in the last year. Not surprisingly, those who report experiencing food insecurity tend to have lower incomes. It also appears that being younger, as well as having children both increase the chances of households experiencing food insecurity.

These findings were confirmed by the focus group. All focus group participants asserted that they or someone they knew had run out of food at some point in the last year. People were more likely to run out of food at the end of the month. People also reported that they were more likely to run out of food during holidays, and in the winter time. In sum, the results indicate that Duck Valley residents have an above average level of food insecurity, as compared to other communities in the United States.

### ***Where and how do people get food?***

Nearly 50% of respondents reported that they purchase the majority of their food from Boise, Idaho, which is 145 miles away from the Duck Valley Indian Reservation. 30% of respondents

reported getting the majority of their food from Mountain Home, Idaho, which is 95 miles away from the reservation. Food is also purchased from Elko, Nevada, with 17% of people reporting that they get a majority of their food there; Elko is 95 miles away from the Reservation. According to the survey and the focus groups Winco is the store in Boise that people most frequently shop at, while Walmart is the most frequented store in both Mountain Home and Elko.

Our Store, located on the reservation, is frequently used to supplement food purchased elsewhere. While only 18% of people reported getting most of their food from Our Store, 38 % of people reported getting a little bit of their food from Our Store, while 39% of people reported that they get some of their food from Our Store.

**Table 1: Where do people acquire food?**

	None	A Little	Some	Most
<b>Boise</b>	11%	9%	33%	48%
<b>Mountain Home</b>	3%	15%	52%	30%
<b>Elko</b>	16%	27%	40%	17%
<b>Our Store</b>	5%	38%	39%	18%
<b>Fast Food Restaurant</b>	24%	48%	23%	6%
<b>Sit Down Restaurant</b>	24%	41%	29%	6%
<b>Farmers' Market</b>	67%	22%	7%	4%

Food and nutrition programs appear to be an important way that Duck Valley residents acquire food. 30% of survey respondents utilize the FDPIR program (known as commod), 34 % reported using food stamps to purchase food, and 19 % reported using Women, Infant and Children (WIC) program coupons. Focus group participants asserted the importance of food assistance programs. When asked how important food assistance programs are for households, one person stated “it’s very important.” Another person stated “they all play a good role in everybody’s lives around here I think.” When asked what makes them important, one person stated “because it puts food in our bellies.”

Some people in the community get food by gardening. 30% of respondents reported that they currently garden. Of those who garden, most have their own garden (77 %), while a few people share a garden with someone (23%). An even smaller number of people use a community garden (7%). A number of focus group participants also reported gardening. In addition, research participants reported getting food through fishing, hunting and gathering wild foods.

***What factors are important with regards to food purchases?***

The quality of food was reported as important to people when choosing what to purchase. 97% of people reported that quality was either somewhat or very important to them when purchasing food. Another important factor respondents reported when purchasing food was

taste, with 75% of people reporting that taste was a very important factor. Proximity to work or home was also important; 42% of people reported that this was somewhat important, and 42% of people reported that this was very important. Other factors that were important when purchasing food included nutrition (66%), cost (65%), and the preferences of family members (63%). Nutrition appeared to be more important for those with higher incomes, while distance, quality, and the preferences of others appeared to be more important for those with lower incomes.

**Table 2: Survey respondent’s views on important factors when purchasing food**

	Not Important	Somewhat Important	Very Important
<b>Quality</b>	3%	29%	68%
<b>Nutrition</b>	4%	30%	66%
<b>Taste</b>	1%	25%	75%
<b>Distance</b>	16%	42%	42%
<b>Cost</b>	3%	32%	65%
<b>Preferences of Family Members</b>	4%	33%	63%

The focus group confirmed many of these factors as important, and also brought to light other factors that are also important. For instance, price was consistently identified as an important factor when deciding what to purchase and where. When asked why people traveled to Boise, Mountain Home, or Elko to purchase food, people asserted that cost was a major factor. As one person stated, “[I shop there] cause I get more for my money (everyone laughs).” Related to cost was the ability to buy in bulk at these locations. Variety and freshness were also identified as important attributes of food during the focus group, and people reported that they would shop in Boise, Mountain Home and Elko because they believed they could get better variety and fresher food at these locations. Convenience was also an important attribute, but was less important than price, freshness and variety. People would shop at Our Store for the convenience.

***Defining quality food***

Survey respondents and focus group participants reported a number of attributes that could be used to define quality food. The data suggested that the most important attribute people associated with quality food was freshness. Other attributes that people used to define quality food included taste, healthfulness, locally produced, homemade, variety, appearance, flavor, and affordability.

***Satisfaction with food in the community***

A majority of survey respondents reported that they were not satisfied with the quality, availability and affordability of food at Duck Valley. 57% of people reported that they were unsatisfied with the quality of food, 61% reported that they were unsatisfied with the

availability of food, and 79% of people reported that they were unsatisfied with the affordability of food. A simple food cost comparison was conducted, comparing Our Store on the Reservation and Winco in Boise. Some foods were comparably priced. For example, the cost of bananas was the same at both stores (.59 cents per pound). Some food was less expensive on the reservation, like gala apples, which cost \$1.48 at Winco, and \$1.39 on the Reservation. However, many staples were more expensive at Our Store, such as eggs, which cost \$1.78 at Winco and \$1.99 at Our Store. Milk in particular was much more expensive at Our Store; a gallon of 2% milk cost \$1.92 at Winco, but cost \$3.59 at Our Store. Regarding quality, produce also appeared to be fresher at Winco, and there was greater variety.

Focus group participants affirmed the lack of satisfaction with food on the Reservation. For example, when speaking about the quality of food at Duck Valley, one focus group respondent stated that “the variety is very, well you don’t have very many things to pick from and then on top of that their fruits and vegetables are rotten and sometimes old and moldy in the inside and just real nasty.” Focus group participants also reported that customer service was often poor at Our Store, and that food was only delivered once a week, which meant that food was often not as fresh as they would prefer. Further, survey respondents and focus group participants reported that food was more expensive at Our Store, relative to stores in Mountain Home, Boise, and Elko, and that food purchased outside of Duck Valley was not only less expensive, but there was also more variety, that it was fresher, and that they could purchase in bulk, which further helped lower their food costs.

### ***What do people eat & what do they want to eat?***

While many survey respondents reported that they currently eat a range of fruits and vegetables, most people reported wanting to eat more fresh fruits and vegetables, including fruits and vegetables that are grown organically and that are in season. People reported wanting to eat these foods because they are healthier.

The survey and the focus group also revealed interest in utilizing more local and traditional foods, including deer, elk, bison, fish, wild berries, choke cherries, wild onions, pine nuts, as well as other roots and wild plants.

### ***What prevents people from getting the food they want?***

When we asked people what made it hard for them to get the food they would like to have, price and distance were the most common barriers reported. 71% of respondents reported that the price of food made it difficult to get the food they would like to have, and 66% of respondents reported that distance (or proximity to their work or home) made it hard for them to get the food they would like to have. Price and distance were less likely to be barriers for those with higher incomes. These findings were echoed in the focus group, as many people reported that the food that was most convenient for them to get (at Our Store), was often too expensive. In fact, as noted above, focus group participants reported traveling great distances in order to purchase foods they preferred at more reasonable prices.

20% of people reported that transportation was a barrier for them. Some people in the focus

group said that if they didn't have a car or van of their own, that they could borrow a vehicle from someone else or get a ride. However, the focus group participants asserted that transportation can be a barrier for some of the most vulnerable people at Duck Valley, particularly the elderly.

While food assistance programs in some ways acted as a way to overcome barriers, particularly economic barriers, there were some important ways in which people experienced barriers to accessing food assistance programs. Focus group participants discussed how people may be unwilling to ask for help. Others discussed that you had to travel to Elko to apply for food assistance programs, particularly EBT (the food stamp program), and that you can only get food stamps if you have an established home address where you receive bills.

There were also some barriers that prevented people from making use of fresh, local and traditional foods, including knowledge and storage. For example, many people lacked sufficient freezer space to store food that they acquired through hunting and fishing. Others reported lacking knowledge about where to find traditional foods like wild greens, or how to prepare foods that they perceived as more healthy.

## **Conclusions and recommendations: Working to improve food access and quality at Duck Valley**

The rates of hunger combined with concerns about physical and financial access to foods at Duck Valley suggest that there is room for improvement to the food landscape at Duck Valley. The surveys as well as the focus group revealed a number of promising avenues for improving food quality and access.

### ***Improving food at Our Store:***

While there was a great deal of appreciation for having Our Store on the Duck Valley Indian Reservation, research participants identified a number of areas for improvement. First, while survey respondents and focus group participants would prefer to not travel long distances to get food, they identified price as a significant barrier to making better use of Our Store. Being a small scale isolated grocery store means that Our Store is not able to take advantage of economies of scale, and therefore it cannot offer food at the low prices that stores such as Winco and Walmart can offer. However, it might be worth exploring ways to offer food more affordably. Research participants also identified lack of freshness and variety as a barrier to shopping at Our Store. For these reasons, it might be worthwhile for Our Store to consider a produce box system, where they would take pre-orders for boxes of foods. This would ensure the freshness and variety that consumers desire, and would provide Our Store with the assurance that the food would be sold.

A few focus group participants also asserted that customer service at Our Store was lacking. It is possible that providing better training to staff would encourage more people to use Our Store more frequently. If more people used Our Store, they could potentially lower prices.

### ***Food Bank:***

During the focus group there was discussion about interest in and preparations for a food bank on the reservation. The survey results suggest that there is a need for emergency food assistance via a service like a food bank as well. Given the rurality of Duck Valley, one recommendation would be to consider a mobile food bank which could reach those with the greatest need who may lack transportation. In addition, it would be worthwhile to consider a food bank that offers fresh produce as well as traditional foods.

### ***Gardening and Hoop Houses:***

One way to enhance access to food is to improve access to gardening. Of the 69% of people who reported that they do not currently garden, only 10% of people reported not being interested in gardening. In other words, many people report that they want to garden, but do not currently garden. The barriers reported to gardening included knowledge (49%), time (36%), and money (29%). This suggests that providing workshops on gardening in order to increase knowledge, and providing resources, such as seeds and equipment could increase the number of people at Duck Valley who garden.

An additional barrier to gardening at Duck Valley is the climate, which makes for a short growing season. However, equipment like hoop houses<sup>1</sup> can extend the growing season, making gardening more viable. Given this, it is not surprising that 78% of respondents reported that they would like to learn more about hoop houses and gardening. Thus, an additional way to improve food security at Duck Valley would be to promote programs that enable use of hoop houses, and other gardening techniques.

### ***Farmers' Markets:***

Another way to improve access to fresh, local, nutritious, culturally appropriate and potentially more affordable foods is via a farmers' market. There was tremendous support by survey respondents for the introduction of a farmers' market at Duck Valley. In fact, over 96% of respondents reported that they would like to purchase fresh, locally grown produce at a farmers' market on the reservation. Focus group participants were similarly supportive of the introduction of a farmers' market at Duck Valley. In fact, when asked about whether they would be interested in having a farmers' market, all participants said yes. However, respondents asserted that prices needed to be reasonable, and not "way out there." An additional recommendation is therefore to support the development of a farmers' market on the reservation.

### ***Improving access to food assistance programs:***

Improving access to food stamps and other food assistance programs may also help improve

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<sup>1</sup> A hoop house is a tunnel structure covered in plastic that uses solar radiation to create heat. Hoop houses can extend the growing season, and also enable the growing of plants that require higher temperatures, such as tomatoes, peppers and melons.

food security at Duck Valley. As noted above, a number of people asserted that applying for food stamps was difficult, as it either involved a trip to Elko, or it involved finding access to a computer and figuring out how to navigate the application process on their own. Survey results indicated that only 34 % of people were using EBT. While many people opt to use FDPIR rather than EBT, this number still appears to be quite low. This suggests that having someone dedicated to working with individuals at Duck Valley to help with the application process may be very important.

There were also some concerns about the Food Distribution Program on Indian Reservations (FDPIR). For one, it appears that those who utilize FDPIR are less likely to report satisfaction with the quality of food. Focus group participants expressed appreciation for FDPIR, but also had some concerns with regards to quality. For example, there was concern about the degree of processing of some of the foods, and also concerns about freshness. However, people were hesitant to complain. As one person stated, "You can't be, but you can't be picky, you know you're getting it for free." Another person stated that "You get what you get and you don't throw a fit, is what it is." These findings suggest that it might be good for reservations to have a greater say in what is made available via FDPIR.

### ***Improving nutrition education:***

A number of research participants asserted that they would like to have more cooking classes on the reservation, so that they could learn more about how to prepare fresh foods, including more fresh fruits and vegetables. This would be a relatively low cost program which could improve satisfaction with food consumption and increase the consumption of fresh fruits and vegetables, including local foods, at Duck Valley.

### ***Promotion of local, traditional foods:***

In both the surveys and the focus group people expressed an interest in consuming more locally produced food, including food produced in home gardens and hoop houses, as well as meat produced from ranching. This provides further support for constructing more hoop houses, and for the development of a farmers' market. In addition, it might be worthwhile to consider developing infrastructure, such as processing and storage facilities, which would enable Duck Valley residents to consume the beef that is raised on the reservation.

In addition there was interest in learning more about traditional foods. For example, one person stated that "I think there's also people that know a lot more of, cause we didn't just live off of deer meat, choke cherries and onions, there's a lot of roots and carrots and wild plants that we ate and if somebody knew of those I think and would be willing to share that knowledge I think more people would be interested." This suggests that there would be support for classes/workshops taught by elders educating people more about traditional foods, where to find them, how to harvest them, as well as how to prepare them. It would also be worthwhile to consider investing in long term food storage, like freezer space, which Duck Valley residents could rent. This would enable community members to make better use of wild game as a food source.

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