



# 2021 SNAPshot

## Food Insecurity in Virginia during COVID-19

**Eat Smart • Move More**

Virginia Cooperative Extension • Family Nutrition Program



**Virginia Cooperative Extension**

Virginia Tech • Virginia State University

# ACKNOWLEDGEMENTS

**Authors:** Sonal Sathe, PhD Student, Department of Human Nutrition, Foods, & Exercise, Virginia Tech, Blacksburg, Virginia 24061-0430

Sarah Misyak, Virginia SNAP-Ed, Virginia Cooperative Extension, Virginia Tech, Blacksburg, Virginia 24061-0228

Elena Serrano, Virginia SNAP-Ed, Virginia Cooperative Extension, Virginia Tech, Blacksburg, Virginia 24061-0228

**Contributors:** Andrea Gregg, Elizabeth Leftwich, and Duke Storen, Virginia Department of Social Services, SNAP, Richmond, Virginia 23219

The U.S. Department of Agriculture (USDA) is an equal opportunity provider and employer. This material is partially funded by USDA's Supplemental Nutrition Assistance Program – SNAP which provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact your county or city Department of Social Services or to locate your county office call toll-free: 1-800-552-3431 (M-F 8:15-5:00, except holidays). By calling your local DSS office, you can get other useful information about services.

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/ affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg.







## OVERVIEW

The COVID-19 pandemic strained the food system and increased economic uncertainty for families and communities. The purpose of this report is to provide a SNAPshot of changes in food insecurity status during the onset and then peak of the pandemic across the Commonwealth in order to inform a systematic response by Virginia SNAP-Ed and DSS.

## METHODOLOGY

The survey was developed by Virginia SNAP-Ed in partnership with the Virginia Department of Social Services. Survey questions included socio-demographic information, participation in nutrition assistance programs, and food security status. Food security status was assessed using the USDA Economic Research Service (ERS) Household Food Security Module questions. The survey was pre-tested and launched in two rounds.

The survey was initiated by Qualtrics (Orem, Utah) with respondents recruited through existing panels with the aim to recruit a representative cross-section of Virginian low-income residents. Survey respondents were required to live in Virginia and be 18 years or older. Two independent, cross-sectional surveys were launched: the first administration of the survey took place in March and April of 2020, during the onset of the pandemic. The second administration of this survey took place November and December of 2020 when infection rates were peaking.

Survey results were analyzed from both rounds independently, with data cleaning conducted prior to any formal analysis by Qualtrics and by the research team. Food security status was determined separately for adults (individuals) and households with children using USDA ERS coding, scoring, and the following classifications.

### Food Secure

- High food security: no reported indications of food-access problems or limitations.
- Marginal food security: one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.

### Food Insecurity

- Low food security: reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
- Very low food security: reports of multiple indications of disrupted eating patterns and reduced food intake.

Descriptive statistics were computed for all socio-demographic factors and food security status among adults and households with children, in addition to food security status among adult and household respondents who reported receiving SNAP benefits.

## FINDINGS

### Respondents

A total of 1,328 individuals completed the survey in March, April 2020 and 973 in November, December 2020. Respondents were younger, predominantly female, white, non-Hispanic/Latino, had “some college” or less, and earned less than \$30,000/year. Overall, response by race and ethnicity corresponded to state levels with 69.4% of Virginians reporting being white (alone), 19.9% black (alone), and 9.8% Hispanic/Latino (alone) (CDC, 2021). The only socio-demographic factor statistically associated with food security score was income level.

#### Respondents of the Virginia Food Security Survey (2020) March, April (n=1,328)

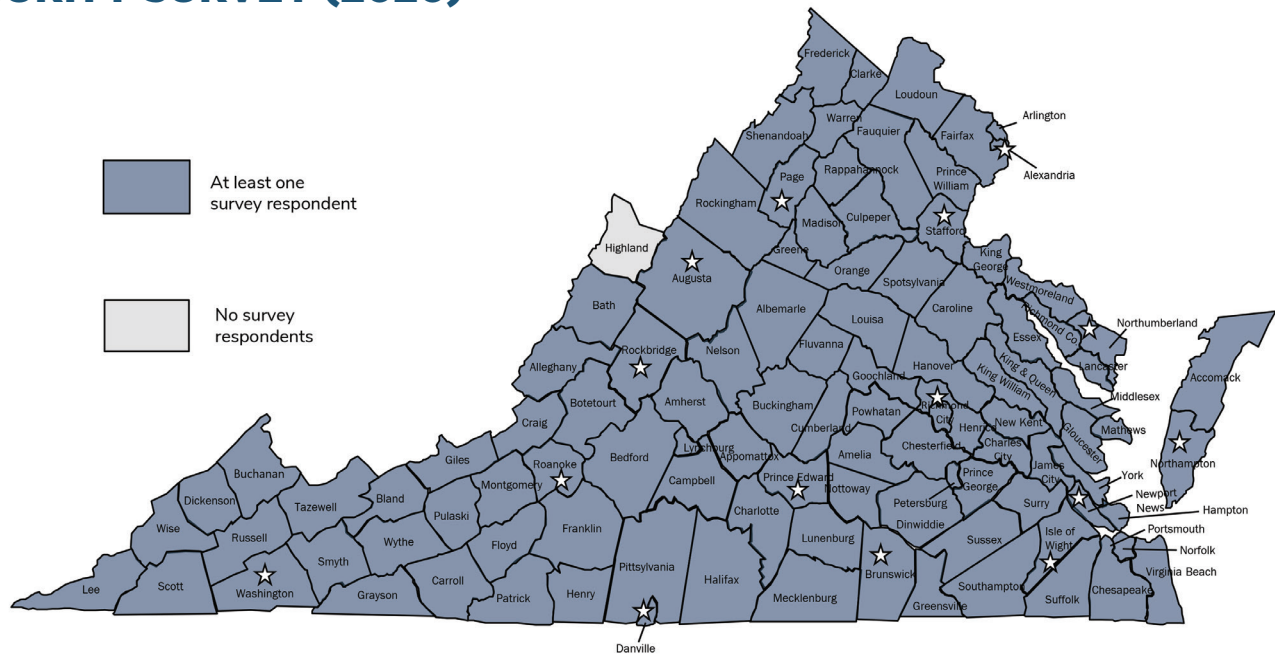
Socio-Demographic Information		n (%*)
Age	18-29 years old	590 (44.5)
Gender	Female	955 (72.0)
Race	White	6845 (63.7)
	Black	364 (23.5)
Ethnicity	Hispanic/Latino	107 (8.1)
Education	Some college or less	906 (68.3)
Income	Less than \$30,000/year	812 (61.3)

#### Respondents of the Virginia Food Security Survey (2020) November, December (n=973)

Socio-Demographic Information		n (%*)
Age	18-29 years old	389 (40.0)
Gender	Female	694 (71.3)
Race	White	620 (63.7)
	Black	221 (22.7)
Ethnicity	Hispanic/Latino	83 (8.5)
Education	Some college or less	684 (70.3)
Income	Less than \$30,000/year	601 (61.8)

\*percentages computed from complete responses

## MAP OF LOCATIONS OF RESPONDENTS FROM THE VIRGINIA FOOD SECURITY SURVEY (2020)



Highland county was the only county/city within Virginia with no respondents in both rounds of data collection.

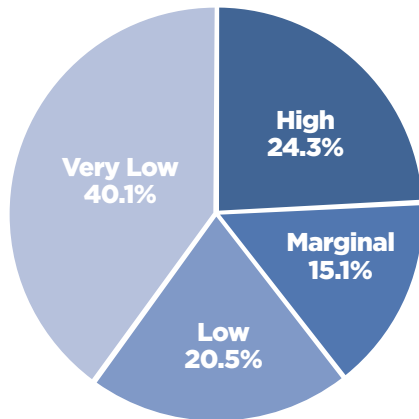
## Food Security Status of Adults

The results from both surveys highlighted the dramatic increase in food insecurity as a result of COVID-19 within Virginia for adults and households with children, with more than 60% (nearly 2/3) of adults and households with children reported being low or very low food secure. Further, food insecurity rates increased from March, April 2020 to November, December 2020 during the second peak of COVID-19 among survey respondents.

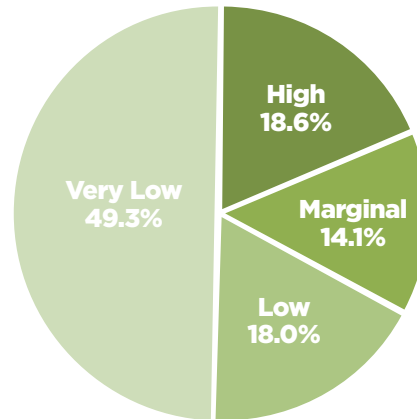
Food Security Status of Adults in Virginia March, April 2020 (n=1,328)	
Food Security Status	n (%*)
Very Low	533 (40.1)
Low	272 (20.5)
Marginal	200 (15.1)
High	323 (24.3)

Food Security Status of Adults in Virginia Nov., Dec. 2020 (n=973)	
Food Security Status	n (%*)
Very Low	480 (49.3)
Low	175 (18.0)
Marginal	137 (14.1)
High	181 (18.6)

**March/April  
2020**



**November/December  
2020**



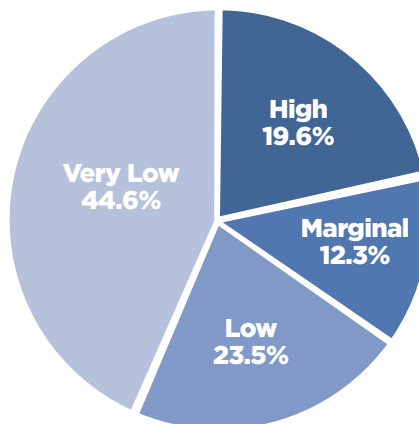
### Food Security Status of Households with Children

Almost three-quarters of households with children in both surveys reported food insecurity compared to 9.2% based on USDA ERS data for Virginia in 2019. Additionally, rates of very low food security were substantially higher among households with 44.6% in March, April 2020 and 46.5% in November, December 2020, compared to 3.9% statewide in 2019.

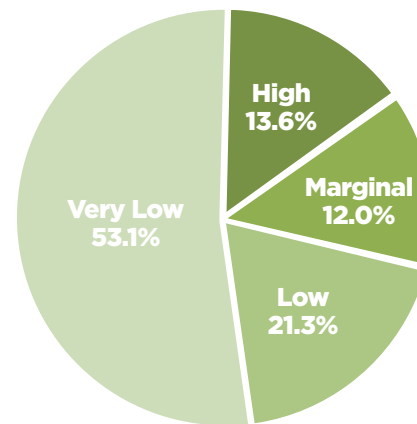
Food Security Status of Households with Children in VA March, April 2020 (n=617)	
Food Security Status	n (%)
Very Low	275 (44.6)
Low	145 (23.5)
Marginal	76 (12.3)
High	121 (19.6)

Food Security Status of Households with Children in VA Nov., Dec. 2020 (n=514)	
Food Security Status	n (%)
Very Low	239 (53.1)
Low	96 (21.3)
Marginal	54 (12.0)
High	61 (13.6)

**March/April  
2020**



**November/December  
2020**



### FOOD SECURITY STATUS OF INDIVIDUALS AND HOUSEHOLDS RECEIVING SNAP BENEFITS

Among individuals receiving SNAP benefits, an astounding proportion reported being food insecure: For adults, between 59.3% to 81.2%, and for households with children, between 71.8% and 83.4%.

Food Security Status of Adults Receiving SNAP Benefits in Virginia March, April 2020 (n=199)	
Food Security Status	Number (%)
Food Insecure	118 (59.3)
Food Secure	81 (40.7)

Food Security Status of Adults Receiving SNAP Benefits in Virginia Nov., Dec. 2020 (n=165)	
Food Security Status	Number (%)
Food Insecure	134 (81.2)
Food Secure	31 (18.8)

Food Security Status of Households with Children Receiving SNAP Benefits in Virginia March, April 2020 (n=170)	
Food Security Status	Number (%)
Food Insecure	122 (71.8)
Food Secure	48 (28.2)

Food Security Status of Households with Children Receiving SNAP Benefits in Virginia Nov., Dec. 2020 (n=225)	
Food Security Status	Number (%)
Food Insecure	188 (83.4)
Food Secure	37 (16.4)

### IMPLICATIONS

The onset and surge of COVID-19 not only represented a public health crisis, but an economic crisis, across the US and in Virginia. The purpose of this study was to determine the impact of COVID-19 on food insecurity status among Virginians, since income is the largest predictor of food insecurity. The findings from these surveys suggest that food insecurity increased drastically as a result of COVID-19, particularly among households with children, who historically are at higher risk of food insecurity. What was most concerning about the findings were the high levels of very low food security reported, indicating potentially lower or disrupted food intake.



Whereas research has shown that SNAP typically has a protective effect against food insecurity, this study suggests that SNAP benefits simply were not enough to offset the drastic negative economic impacts of COVID-19. Given the physical and cognitive implications of food insecurity, expansion of SNAP benefits, food relief, and other outreach efforts are needed to ensure access to safe and affordable foods for food security. Ongoing nutrition education, including food resource management skill development, offered by Virginia SNAP-Ed and EFNEP, are critical, in addition to job trainings and employee assistance programs.

Several limitations to these surveys and results exist. Participation was based on self-selection. A stratified sampling plan was not employed although recruitment strategies aimed to achieve representation across each county of the state.

*Acknowledgements: This project was funded through the Virginia SNAP-Ed with funding from the US Department of Agriculture Food and Nutrition Service and the Virginia Department of Social Services (SNAP).*





Virginia Cooperative Extension • Family Nutrition Program  
[www.eatsmartmovemoreva.org](http://www.eatsmartmovemoreva.org)

The U.S. Department of Agriculture (USDA) is an equal opportunity provider and employer. This material is partially funded by USDA's Supplemental Nutrition Assistance Program – SNAP which provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more, contact your county or city Department of Social Services or to locate your county office call toll-free: 1-800-552-3431 (M-F 8:15-5:00, except holidays). By calling your local DSS office, you can get other useful information about services. This material was partially funded by the Expanded Food Nutrition Education Program, USDA, NIFA.

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/ affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg.