



Military REACH's review of  
**ASSOCIATION BETWEEN FOOD INSECURITY, MENTAL HEALTH,  
AND INTENTIONS TO LEAVE THE U.S. ARMY IN  
A CROSS-SECTIONAL SAMPLE OF U.S. SOLDIERS**

Beymer, M. R., Reagan, J. J., Rabbitt, M. P., Webster, A. E., & Watkins, E. Y. (2021). Association between food insecurity, mental health, and intentions to leave the U.S. Army in a cross-sectional sample of U.S. Soldiers. *The Journal of Nutrition*, 151(7), 2051-2058. <https://doi.org/10.1093/jn/nxab089>

**BRIEF SUMMARY:** This study examined the prevalence rates of [marginal food insecurity](#) (i.e., concern about having enough food to eat) in a sample of 5,677 Soldiers from a single US Army installation. Researchers also examined associations among food insecurity, mental health symptoms (i.e., depression, anxiety, and suicidal thoughts), and intentions to leave the U.S. Army after the current service period. Demographics (e.g., age, rank, marital status) and financial security were also accounted for in the model. Marginal food insecurity was linked with higher odds of depression, anxiety, and suicidal thoughts.

### KEY FINDINGS

- 33% of Soldiers reported marginal food insecurity in the previous 12 months.
- When accounting for relevant demographic variables and financial security, marginal food insecurity was **not** directly associated with intentions to leave the military.
- Marginal food insecurity was significantly associated with higher odds of having depression or anxiety, as well as suicidal thoughts.
- Having depression or anxiety or having suicidal thoughts were all associated with higher intentions to leave the Army.

### IMPLICATIONS FOR FAMILIES

- Understand that marginal food insecurity appears more commonly than people realize. Given the physical and mental health implications of food insecurity, consider reaching out to [local resources](#) to ensure all family members have access to sufficient food.

### IMPLICATIONS FOR HELPING PROFESSIONALS

- Food insecurity will likely not be the presenting problem for most Service members and families seeking support, yet given the prevalence and the health implications of food insecurity, consider screening individuals and families for basic needs such as access to sufficient, high-quality food.
- Create service plans that address both food insecurity and the mental health needs of Service members and their families. Partner with other providers (e.g., social workers, food banks, financial counselors) to address food insecurity directly.

### IMPLICATIONS FOR POLICY MAKERS AND MILITARY LEADERSHIP

- Promote legislation that makes it easier for Service members to qualify for government resources such as the [Supplemental Nutrition Program](#).
- Educate military leadership about the prevalence of food insecurity as well as resources to refer Service members to if they are experiencing food insecurity, and encourage a culture where the use of these resources is supported (e.g., talk about how nutrition is part of readiness, have someone who is comfortable share how these resources made a difference for their family).

## SAMPLE CHARACTERISTICS

- ✓ 5,677 Soldiers (83.1% men); 43.7% junior enlisted (E1 to E4)
- ✓ 56.3% White; 49.3 % younger than 25 years old; 48.3% married; 62.4% had no children
- ✓ 58.8% were financially comfortable or able to meet financial needs with few challenges

## METHODOLOGY

- Participants were Soldiers at a single U.S. Army installation. Data were collected as part of a larger study designed to better understand suicidality and preventable deaths.
- Soldiers responded to two items measuring food insecurity over the past 12 months: 1) “We worried whether our food would run out before we got money to buy more” and 2) “The food we bought just didn’t last and we didn’t have money to get more.” Marginal food insecurity was indicated by endorsing either of the two items. Soldiers reported their intentions to leave the military after the current service period using a single item.
- Soldiers also provided information on demographic variables (i.e., age sex, rank, and race/ethnicity), financial security (i.e., extent to which family can pay for expenses), as well as depression, anxiety, and suicidal thoughts.
- Several multivariable logistic regressions were conducted to examine relationships among variables, including a) food insecurity with intentions to leave the military; b) food insecurity with depression, anxiety, and suicidal thoughts; and c) depression, anxiety, and suicidal thoughts with intentions to leave the military.

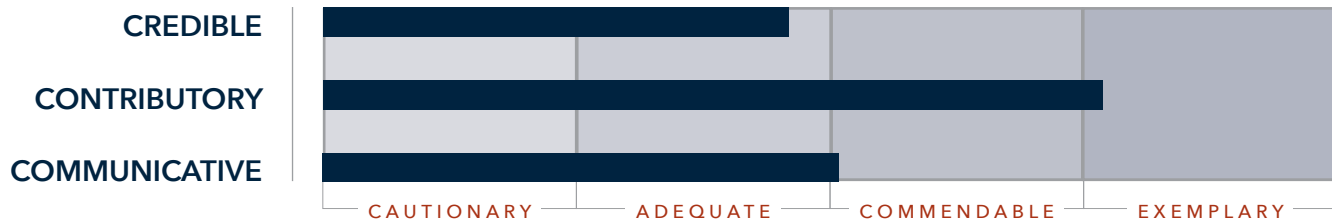
## STRENGTHS

- This study provides insightful information about the prevalence of food insecurity for Soldiers, a sensitive and timely topic about which it can be difficult to gather information.

## LIMITATIONS

- It was hypothesized that food insecurity would be related to mental health outcomes, which, in turn, would be related to intentions to leave the military. However, the analyses needed to establish these subsequent links between the variables were not conducted.
- Limited information is provided on the measures (e.g., sample items, reliabilities, cutoffs for probable diagnosis), limiting the credibility of the analyses.
- Most of the sample were enlisted personnel (63.4%), and another 26.9% did not report their rank. Consequently, the prevalence of food insecurity among Soldiers of differing ranks remains unknown.

## ASSESSMENT OF THE STUDY



### DIMENSIONS OF ASSESSMENT

- CREDIBLE: Research that is rigorous, transparent, consistent, and generalizable. This dimension reflects an evaluation of the study’s scientific methodology.
  - CONTRIBUTORY: Research that is original, applicable, and has the potential to enhance the well-being of military families. This dimension examines the impact of the study.
  - COMMUNICATIVE: Research that is coherent, understandable, and readable. This dimension assesses how effectively the authors convey the content of the study.
- \* These dimensions are adapted from the work of Mårtensson et al. (2016). For more information on the REACH evaluation framework and rubric visit: [MilitaryREACH.org](https://militaryreach.org)

### ADDITIONAL INFORMATION

Underlined terms in [red font](https://militaryreach.auburn.edu/DictionaryResult) are linked to the definition in the Military REACH Dictionary. To explore more terms visit: <https://militaryreach.auburn.edu/DictionaryResult>. Terms in blue font are linked to additional resources.

### PARTNERSHIP

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