

# Food Insecurity

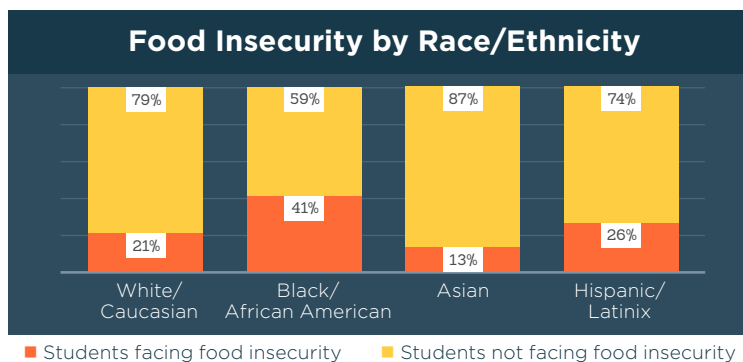
Partners in Prevention (PIP) is Missouri's higher education substance misuse consortium dedicated to creating healthy and safe college campuses. Every spring, PIP administers the Missouri Assessment of College Health Behaviors (MACHB) survey. In 2020, two new questions were added to the MACHB to determine food insecurity prevalence statewide among college students. As defined by the United States Department of Agriculture, food insecurity is a household-level economic and social condition of limited or uncertain access to adequate food.

This brief will examine different subpopulations with higher rates of food insecurity and their substance use and mental health concerns. In this brief, students with low food security responded sometimes, very often, or always to the following questions on the MACHB:

- In the last 30 days, the food that I bought just didn't last, and I didn't have money to get more.
- In the last 30 days, I couldn't afford to eat balanced meals.

## Subpopulations

In 2020, 22% of Missouri students face food insecurity statewide. Among students that reported food insecurity, 55% were over 21. The table below shows the racial/ethnic background of students facing food insecurity versus students not facing food insecurity.



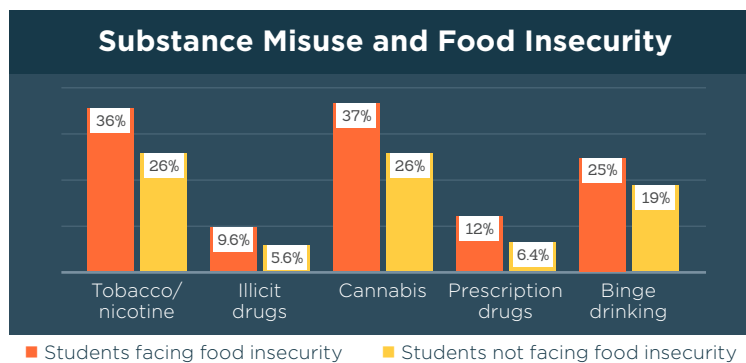
Food insecurity is prevalent among students living on and off-campus; the two most common living

arrangements for students facing food insecurity include off-campus housing without parents (42%) and on-campus residence halls (36%). Food insecurity is also higher among first-generation students and students who qualify for the Pell Grant, a federal grant awarded to students who display financial need. Thirty-seven percent (37%) of students facing food insecurity are first-generation college students. Nearly half (47%) of students facing food insecurity qualify for the Pell Grant. Thirty-one percent (31%) of students facing food insecurity have a disability.

## Substance Use Behaviors

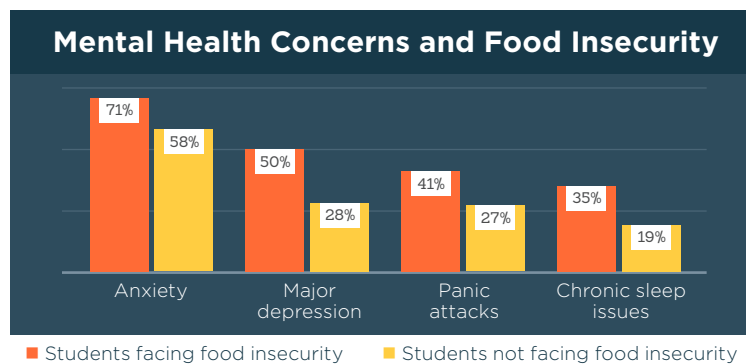
Statewide, substance use is higher among students facing food insecurity. Seventy-five percent (75%) of students facing food insecurity have consumed alcohol in the past year, compared to 68% of students not facing food insecurity. Binge-drinking is defined as consuming 5 or more drinks in a 2-hour period within the past two weeks of taking the MACHB survey. Twenty-five percent (25%) of students facing food insecurity and 19% of students not facing food insecurity reported binge-drinking. The percentage of students facing food insecurity who use prescription drugs without a prescription is nearly twice the percentage point of students with higher food security: 12% vs. 6.4%. Thirty-seven percent (37%) of students facing food insecurity and 26% of students not facing food insecurity have used a cannabis product at least once in the past year. Aside from cannabis, the illicit drug use rate is 9.6% among students facing food insecurity and 5.6% among students not facing food insecurity. Lastly,

36% of students facing food insecurity have used a tobacco/nicotine product in the past year, compared to 26% of students not facing food insecurity.



## Well-Being & Mental Health

Students facing food insecurity reported higher levels of stress, mental health concerns, and suicide ideation. Nearly half (48%) of students facing food insecurity reported that their stress is overwhelming or unbearable, compared to 29% of students not facing food insecurity. On average, students facing food insecurity sleep 6.3 hours on a typical school night. They spend 11 hours on studying and 14 hours on working each week. Compared to their peers, students facing food insecurity sleep 0.5 hours less per night and spend 3.7 more hours working per week. Be associated with this, academics and financial concerns are the top two sources of their stress. In addition to the food insecurity questions, a Flourishing Scale was added to the MACHB in 2020. A Flourishing Scale is an 8-item questionnaire that measures respondents' attitudes on relationships, self-esteem, purpose, and optimism. It is scored from 8 to 56; higher scores translate to having a more positive self-image and higher psychological well-being. The average score of the Flourishing Scale is lower among students facing food insecurity: 43.71 versus 46.78.



Eighty-four percent (84%) of students facing food insecurity reported having a mental health concern in the past year, compared to 66% of students not facing food insecurity. The “Mental Health Concerns and Food Insecurity” chart highlights the differences among specific mental health concerns.

## GPA and Retention

Students facing food insecurity have a lower GPA than their peers (3.30 versus 3.50). Students facing food insecurity feel less connected to their campuses. Fifty-six percent (56%) of students facing food insecurity agree or strongly agree that they feel a sense of belong to their campus, compared to 70% of students not facing food insecurity. Thirty-four percent (34%) of students facing food insecurity and 23% of students not facing food insecurity have considered transferring from their college or university. Similar to the consideration of transferring, the consideration of discontinuing one's education is higher among students facing food insecurity. Thirty-one percent (31%) of students facing food insecurity considered discontinuing their education, compared to 15% of students not facing food insecurity. The chart below highlights the reasons for wanting to transfer or discontinue education among students facing food insecurity and students not facing food insecurity.

	Facing food insecurity	Not facing food insecurity
Do not have enough money	46%	25%
Lack of friends/loneliness	38%	40%
Difficulties keeping up with academics	36%	29%
Do not feel as if I belong on campus	32%	27%

## Takeaway

Food insecurity disproportionately affects different subpopulations and is correlated socioeconomic status. First-generation and Pell Grant eligible students have higher rates of food insecurity. Students facing food insecurity are more likely to consider transferring or discontinuing their education, and their reasons differed from students not facing food insecurity. Substance use and mental health concern prevalence are higher among students facing food insecurity; this

could be a possible effect of food insecurity. Alcohol consumption, tobacco use, and drug use are higher among students facing food insecurity. Students facing food insecurity reported mental health concerns at a greater rate than students not facing food insecurity, including anxiety, major depression, panic attacks,

and chronic sleep issues. For more information about Partners in Prevention and to explore our research, visit [pip.missouri.edu](http://pip.missouri.edu).

Contact Partners in Prevention at (573) 884-7551.

Report prepared 7/17/2020 by Kennedy Brown, Research Assistant. Data prepared by Kennedy Brown, Research Assistant. Published August 2020.

---

For more information, visit [pip.missouri.edu](http://pip.missouri.edu)

Funded by the Missouri Department of Mental Health, Division of Behavioral Health