

# RIDGE PROGRAM SPOTLIGHT

## Research Finds that Breakfast After the Bell Decreases Infractions, Especially for Students Receiving Free and Reduced Price Meals



Only 50 children participate in the School Breakfast Program for every 100 children that participate in the National School Lunch Program. Because starting the day with an empty stomach could impact a child's health, behavior and interpersonal relationships, some schools have implemented breakfast after the bell (BAB), a program that serves breakfast after classes begin. This approach aims to reach children who do not participate in the breakfast program because they are not able to arrive to school early enough, before school starts.

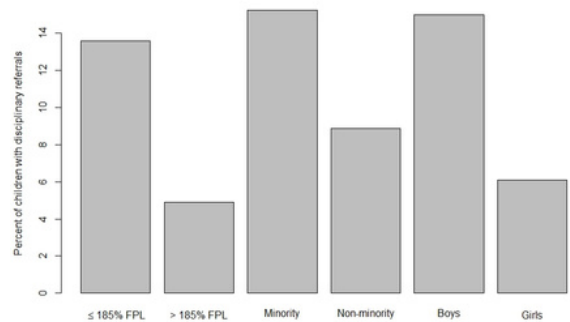
Dr. Michael Thomsen and Dr. Rodolpho Nayga Jr., 2019 grantees of the RIDGE Partnership program, explored this question using data from the Arkansas Department of Education between the 2008-2009 through 2018-2019 academic years. In 2012-2013, about 13% of schools adopted BAB delivery, and this progressively increased to about 40% of schools in 2018-2019. Using a difference-in-differences approach, the authors found robust evidence that BAB decreases infractions, and those who were charged with infractions committed fewer of them after their school adopted BAB.

Panel A shows the percentage of children with disciplinary referrals by different demographics. The authors found that those under 185% of the federal poverty line, minority children and boys had the highest percentage of disciplinary referrals, that is, above 12%. Panel B reports estimates and 95% confidence intervals for the effect of BAB on the number of disciplinary referrals among children who were in trouble at least once during the study period. Interestingly, significant effects were found for children under 185% of the federal poverty line, minority children, and girls. Because the number of infractions was higher among lower income and minority children, these effects were more pronounced for these groups. While the effects in Panel B might look small, they were meaningful. The authors estimated that in the academic year 2018-2019, there were about 18,000 fewer infractions in BAB schools than in non-BAB schools in grades 3 to 7. The authors concluded that "BAB may be one way to reduce disparities in school discipline over the socioeconomic gradient."

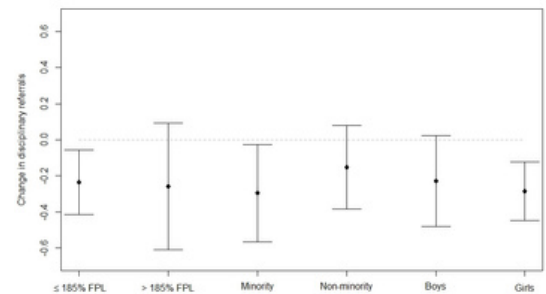
This research has important policy implications as it provides evidence that an alternate type of delivery of the school breakfast program, different from arriving early at school and taking breakfast in the cafeteria, can be successful. The most used BAB modes of delivery in Arkansas were "grab and go" and in the classroom. The latter was the most effective in reducing infractions.

This RIDGE-funded small grant indicated how USDA programs are working and also was a first step to continued work on this topic through a larger grant. Dr. Thomsen noted that "this RIDGE grant and the AJAE paper provided the preliminary data that helped me secure an R01 from NIMH. We are looking at breakfast after the bell and universal free meals as a way to help those with common childhood behavioral disorders like ADHD."

Cuadros-Meñaca, A., Thomsen, M. R., & Nayga Jr, R. M. (2023). School breakfast and student behavior. *American Journal of Agricultural Economics*, 105(1), 99-121. doi: [10.1111/ajae.12312](https://doi.org/10.1111/ajae.12312)



Panel A: Children from racial or ethnic minorities, lower income families, and boys had the most disciplinary referrals.



Panel B: Estimates and 95% confidence intervals for the effect of breakfast after the bell on number of disciplinary referrals among children who were in trouble at least once during the study period.