

Role of Extension in Improving the School Food Environment

Abstract

University of Minnesota (UMN) Extension has assisted schools in making policy, systems, and environmental (PSE) changes to improve the school food environment. UMN Extension's involvement in the Project breakFAST program demonstrates how Extension can provide training and technical assistance to support school staff in making PSE changes that improve teens' access to school breakfast. Intervention schools increased participation in school breakfast by 56%, whereas comparison schools increased participation by only 7%. Background on and details of the project will be useful to others in Extension interested in assisting schools in implementing PSE changes.

Keywords: [breakfast](#), [schools](#), [food environment](#), [policy](#), [systems](#)

Mary Schroeder
Extension Educator,
Health and Nutrition
University of
Minnesota Extension,
Marshall Regional
Office
Marshall, Minnesota
hedin007@umn.edu

Kate Grannon
Project breakFAST
Intervention
Coordinator
Department of Family
Medicine and
Community Health
University of
Minnesota
Minneapolis,
Minnesota
youn1286@umn.edu

Amy Shanafelt
Project breakFAST
Project Manager
Department of Family
Medicine and
Community Health
University of
Minnesota
Minneapolis,
Minnesota
shanafel@umn.edu

Marilyn S. Nanney
Principal Investigator
Department of Family
Medicine and
Community Health
University of
Minnesota
Minneapolis,
Minnesota

Introduction

Schools are making policy, systems, and environmental (PSE) changes to improve the food environment for students (Story, Nanney, & Schwartz, 2009). Many schools, however, need training and technical assistance to implement PSE changes (Larson et al., 2017). The involvement of University of Minnesota (UMN) Extension in the Project breakFAST (Fueling Academics and Strengthening Teens) program demonstrated how Extension can provide training and technical assistance to support high schools in making PSE changes that increase school breakfast participation.

Project breakFAST was a 4-year, multiwave intervention study in 16 rural Minnesota schools led by the UMN Department of Family Medicine and Community Health (FMCH), with UMN Extension as a partner. The primary goal of Project breakFAST was to increase high school breakfast participation by (a) increasing availability of school breakfast via a grab-and-go cart and breakfast offered later in the day (second chance breakfast), (b) marketing breakfast, and (c) providing opportunities for positive interactions that encourage breakfast participation (Nanney et al., 2016). Results of the intervention contribute to existing evidence suggesting that Extension can assist schools in making PSE changes to improve school food environments (Bergman et al., 2018).

UMN Extension's Role in Project breakFAST

FMCH selected UMN Extension as a partner because of its strong history of working with local schools through Supplemental Nutrition Assistance Program Education and Expanded Food and Nutrition Education Program efforts. In addition, certain UMN Extension personnel are skilled in training school food service staff as demonstrated by training programs and materials they developed for the nationally acclaimed Great Trays program (Minnesota Department of Health, 2012).

UMN Extension's role in Project breakFAST was to provide training and technical assistance and assist in the research process. Implementation and monitoring tasks associated with each aspect of UMN Extension's role are listed in Table 1 and described in more detail in the paragraphs following the table.

Table 1.

Role of University of Minnesota Extension in Project breakFAST

Aspect of role	Implementation	Monitoring
Training	<ul style="list-style-type: none"> • Conduct an in-person training of school staff • Provide ongoing training and networking through spring and fall webinars • Develop a Project breakFAST resource manual for schools to use when implementing the expanded breakfast program 	<ul style="list-style-type: none"> • Monitor and document best practices to address in future trainings and versions of the resource manual • Assist in adapting the in-person training as a hybrid in-person/video-recorded training
Technical assistance	<ul style="list-style-type: none"> • Connect school staff with resources (training materials, food service equipment, food items, etc.) • Assist in ongoing marketing of breakfast • Collect intervention implementation data and communication tracking data • Coordinate meetings of school breakfast expansion team • Assist in updating policies to 	<ul style="list-style-type: none"> • Monitor program implementation through regular on-site visits and phone calls • Troubleshoot implementation by providing feedback, guidance, resources, and ideas • Monitor and document best practices identified through intervention implementation

allow students to eat breakfast
in the halls and classrooms

- Ensure that a communication plan is developed

Research

- Act as liaison between schools and university for scheduling, student cohort recruitment, and data collection
- Collect intervention fidelity data
- Troubleshoot protocol for data collection by bringing school community perspective to discussions
- Participate in dissemination through papers and presentations

Training

UMN Extension staff provided an in-person training for school staff on how to implement a grab-and-go breakfast. Topics included formation of a school breakfast expansion team (SBET), marketing, U.S. Department of Agriculture school breakfast requirements, and use of the Project breakFAST resource manual developed by UMN Extension. UMN Extension provided ongoing training through booster webinars where school staff had the opportunity to share successes and work together to brainstorm solutions to challenges that arose when implementing the grab-and-go breakfast.

Technical Assistance

Each school food service director was assigned a UMN Extension staff member who provided technical assistance. A key role of this person was to assist the food service director in forming the SBET, which was made up of various staff and students from the school. The UMN Extension staff member worked with the SBET to determine the best location for the grab-and-go breakfast, select portable equipment, and develop a communication plan for informing staff, students, and parents about the new breakfast program. Additionally, the UMN Extension staff member worked with the SBET and school administrators to make policy changes to support the success of the grab-and-go breakfast program, such as modifying policy to allow students to eat in halls and classrooms.

UMN Extension staff tailored the technical assistance to meet the needs of each school. For example, some schools needed assistance with logistics such as where to locate the grab-and-go breakfast cart or how to obtain enough bandwidth for the wireless point-of-sale system to work. Other schools needed assistance with marketing school breakfast to students and communicating information about the grab-and-go breakfast to teachers and custodians. UMN Extension staff participated in biweekly phone calls with our research team during which successes and challenges were shared. UMN Extension used the knowledge gained during the calls to provide ongoing technical assistance to each school food service director.

Research

UMN Extension staff assisted in the research process by serving as a liaison between our campus-based researchers and school staff and students. UMN Extension staff coordinated student and school data collection and conducted fidelity checks to ensure that the PSE changes were being implemented according to the research protocol.

Results and Discussion

UMN Extension's role in assisting school staff in making PSE changes to school breakfast programs was critical to improving teens' access to school breakfast. Findings reported by FMCH (2017a) indicated that intervention schools increased school breakfast participation by 56%, whereas participation at comparison schools increased by only 7%. In addition, the Project breakFAST team followed a cohort of 904 students who did not eat breakfast on a regular basis prior to the study. Cohort students who were at intervention schools increased school breakfast participation by 105%, whereas students at the comparison schools increased participation by only 24% (FMCH, 2017a). Moreover, Project breakFAST had a positive impact on school food service budgets, with cost-benefit analyses indicating daily profits in intervention schools ranging from \$90 to \$489 (Shanafelt, Magliocco, Milbrath, Nanney, & Caspi, in press).

Qualitative interviews conducted by FMCH (2017b) indicated that school staff found the UMN Extension-developed training manual useful and valued UMN Extension's technical assistance offerings, such as coordinating meetings, sharing ideas on how to implement the grab-and-go breakfast, and keeping school staff on track. School staff also appreciated UMN Extension's being a liaison between the school staff and the university-based researchers (FMCH, 2017b).

Following the successful implementation of Project breakFAST, UMN Extension updated the training manual to include additional best practices and adapted the in-person trainings as online video trainings. These materials, and additional resources, are available in an online Project breakFAST tool kit at <https://extension.umn.edu/project-breakfast-toolkit/access-toolkit>.

Conclusion

School staff continue to look for ways to improve the school food environment. Extension can play a vital role in assisting schools with PSE changes by providing training and technical assistance. Additionally, the Project breakFAST tool kit is an example of how Extension can disseminate products from research studies to support PSE changes.

Acknowledgments

This article is dedicated to the memory of Marilyn "Susie" Nanney, principal investigator of the BreakFAST Study, who passed away suddenly on June 15, 2018. Susie's commitment to cross-disciplinary work brought life and energy to this important Extension and research study collaboration. She appreciated Extension's reach in rural areas and believed that Extension's ability to build relationships and trust with school staff was critical to the success of Project breakFAST. Susie's spirit lives on in those who continue to carry on this work, though her loss is one that will be felt forever.

We would like to acknowledge the time and efforts of the staff and students at the 16 Minnesota Project breakFAST research schools. The funding for Project breakFAST was provided by the National Heart, Lung and Blood Institute of the National Institutes of Health (5R01-HL113235-03).

References

- Bergman, J. J., Linnell, J. D., Scherr, R. E., Ginsburg, D. C., Brian, K. M., Carter, R., . . . Zidenberg-Cherr, S. (2018). Feasibility of implementing a school nutrition intervention that addresses policies, systems, and environment. *Journal of Extension*, 56(1). Available at: <https://joe.org/joe/2018february/a6.php>
- Department of Family Medicine and Community Health. (2017a). *Project breakFAST final report*. Retrieved from https://www.healthdisparities.umn.edu/sites/healthdisparities.umn.edu/files/project_breakfast_report_web.pdf
- Department of Family Medicine and Community Health. (2017b). *Project breakFAST qualitative interview summary report*. Retrieved from https://www.healthdisparities.umn.edu/sites/healthdisparities.umn.edu/files/final_summary_qualitative_interviews.pdf
- Larson, N., O'Connell, M., Davey, C. S., Caspi, C., Kubik, M. Y., & Nanney, M. S. (2017). Disparities in supports for student wellness promotion efforts among secondary schools in Minnesota. *The Journal of School Health*, 87(2), 90–97. <https://doi.org/10.1111/josh.12471>
- Minnesota Department of Health. (2012, July). *Great trays annual report*. Retrieved from http://www.health.state.MN.us/divs/hpcd/chp/cdrn/nutrition/greattrays/pdfs/Great_Trays_Annual_Report_2012.pdf
- Nanney, M. S., Shanafelt, A., Wang, Q., Leduc, R., Dodds, E., Hearst, M., . . . Harnack, L. (2016). Project breakFAST: Rationale, design, and recruitment and enrollment methods of a randomized controlled trial to evaluate an intervention to improve school breakfast program participation in rural high schools. *Contemporary Clinical Trials Communications*, 3, 12–22. <https://doi.org/10.1016/j.conctc.2015.12.009>
- Shanafelt, A., Magliocco, B., Milbrath, K., Nanney, M. S., & Caspi, C. (in press). An economic analysis of updating and expanding school breakfast program offerings in high schools. *The Journal of School Health*.
- Story, M., Nanney, M. S., & Schwartz, M. B. (2009). Schools and obesity prevention: Creating school environments and policies to promote healthy eating and physical activity. *The Milbank Quarterly*, 87(1), 71–100. <https://doi.org/10.1111/j.1468-0009.2009.00548.x>

Copyright © by Extension Journal, Inc. ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the [Journal Editorial Office, joe-ed@joe.org](mailto:joe-ed@joe.org).

If you have difficulties viewing or printing this page, please contact [JOE Technical Support](#)