## Guidebook to Aid in the Management of Gestational Diabetes Mellitus (GDM) among Hispanic Agricultural Farmworkers Nataly Aceves, Virginia Gray, Roudabeh Roy, Reina Engle-Stone **Department of Family & Consumer Sciences**

### Introduction

It is estimated that 69% of U.S. agricultural farmworkers are of Mexican descent and 28% of farmworkers are female, with a majority being of child-bearing age.

The agricultural work environment brings many challenges to managing overall health and wellness. This is especially true for underserved populations that are at higher risk of disease.

Hispanic women are 2-4 times more likely to develop Gestational Diabetes Mellitus (GDM) over the course of their pregnancy due to genetics, socioeconomic status, and environmental factors.

The literature reflects a lack of resources tailored for Hispanic farmworkers to manage health conditions in an autonomous manner.

The purpose of my directed project is to increase health equity by creating a guidebook that aids in the overall management of GDM in an agricultural work environment.

### Methods

The development of this guidebook included 11 steps:

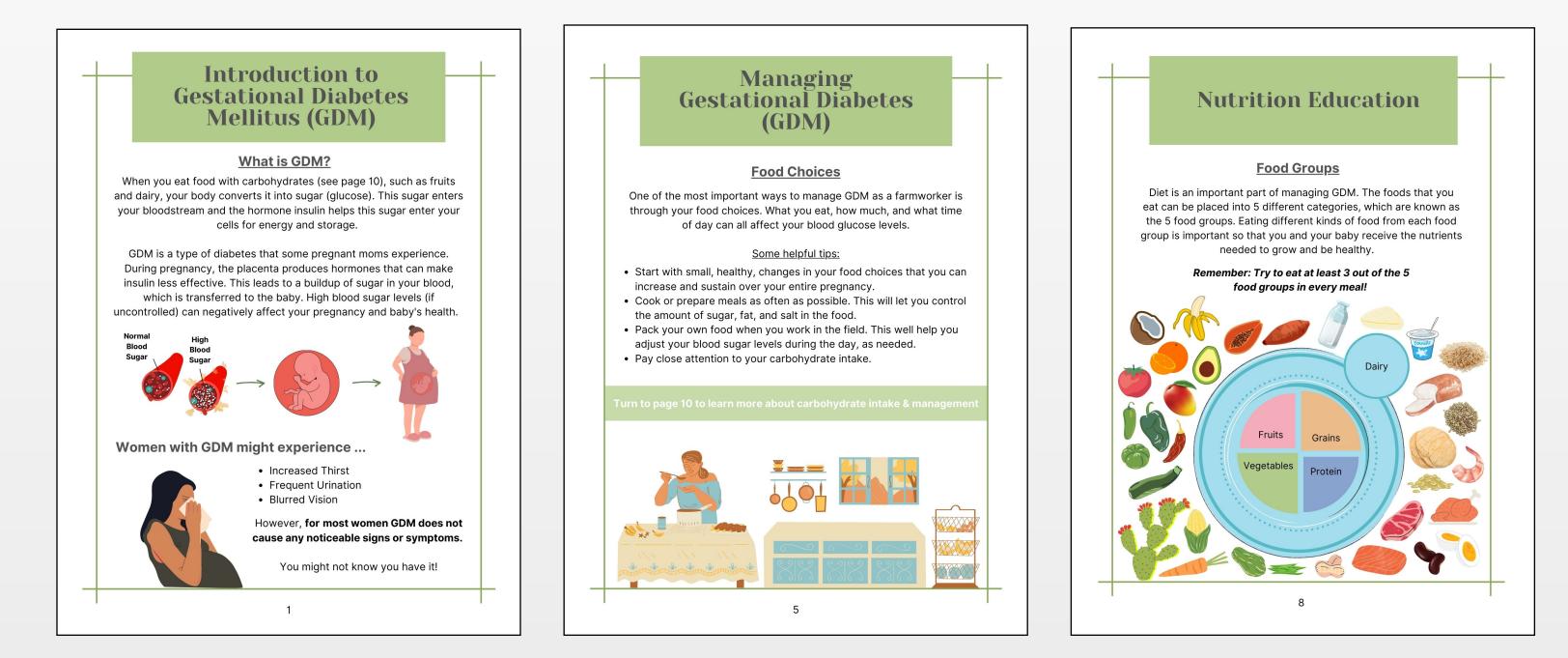
- 1. Locate and review literature specific to Hispanic farmworkers and GDM.
- Group literature into subtopics.
- Connect literature to guidebook objectives and components.
- 4. Gather evidence-based guidelines of nutritional management of GDM.
- 5. Gather external resources for better management of GDM (WIC, CalFresh, stress management).
- 6. Tailor intervention strategies to farmworker lifestyle, Hispanic eating habits, California-specific resources, USDA and US DOL guidelines.
- 7. Develop strategies for farmworker employers to support employees in the agricultural work environment.
- 8. Compile information and develop guidebook using design software, Canva.
- 9. Provide guidebook to expert review panellists for feedback.
- 10. Review expert suggestions and make appropriate revisions prior to distribution.
- 11. Distribution to target population via prenatal clinics, promotoras, CalFresh/WIC centers, farmer's markets, etc.

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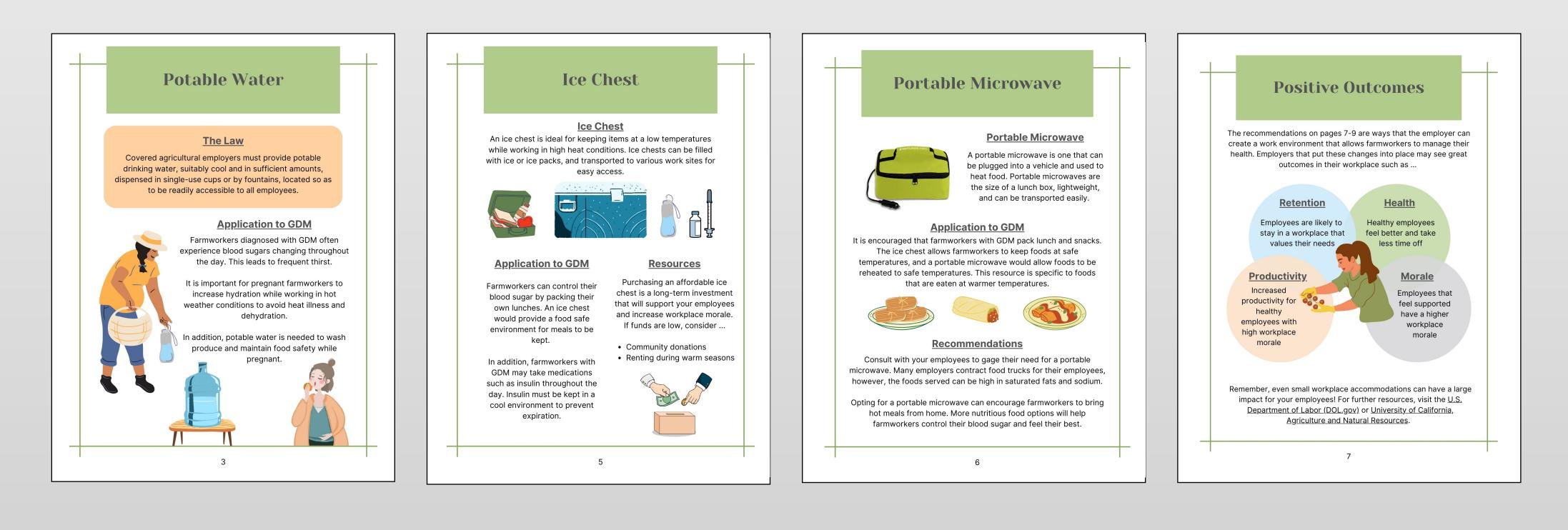
### Results

The guidebook was created with two main components, the Farmworker and Employer sections. The graphic design software, Canva, was used to create each guidebook. Both sections of the guidebook are available in English and Spanish.

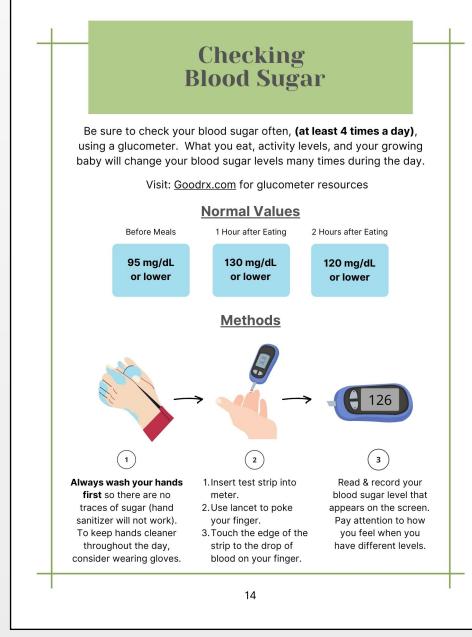
The Farmworker section provides insight on the following: Components of GDM, Managing GDM, Nutrition Education, Food Choices, Food Resources, Checking Blood Sugar, Stress Management, and Sample Meal Plans.



The Employer section provides insight on farmworkers diagnosed with GDM and how employers can best support their employees in the workplace. This section reviewed the standards and practices under the Occupational Safety and Health Act (OSHA) regarding hand washing, potable water, and proximal restrooms. This section also highlighted recommendations for covert blood glucose measurements and maintaining food safety. The final section highlighted positive outcomes associated with employer support in the workplace.







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A majority of the guidebook was created utilizing the existing literature and reflecting on personal experiences with the target population.

Expert review feedback focused on clarifying concepts related to GDM, including additional resources surrounding blood sugar values, and further tailoring recommendations for the target population. Revisions were made accordingly.

Due to COVID-19, the guidebook was electronically distributed to larger farming communities within California. Distribution was focused towards WIC clinics, prenatal clinics, farmer's markets, and community centers.

This project was limited to California-specific factors such as food availability and health resources. Health conditions outside the scope of GDM were not taken into account.

Navigating pregnancy as a Hispanic farmworker can be a challenging experience, especially if you are diagnosed with GDM.

Continued efforts and resources are needed to address the health disparities among this underserved population.

I am forever grateful for the unwavering love and support from my family: Sergio, Patricia, Gabriel, Adrian, and Nicholas.

I would also like to thank my amazing Chair, Dr. Gray, and committee members Dr. Roy and Dr. Engle-Stone. This directed project would have not been possible without the expertise and guidance from each member.

### Discussion

### Conclusion

### Acknowledgements

### For more information

Please contact *Nataly.aceves@student.csulb.edu*. More information on this and related projects can be obtained at www.csulb.edu/university-library.