TARGET AUDIENCE
This program is for students who are in 3rd through 5th grade.

SUMMARY
Food, Math, and Science Teaching Enhancement Resource (FoodMASTER) Intermediate, a school-based program, uses food to teach math and science skills to youth.

EVIDENCE
Two quasi-experimental studies have been conducted to examine the impact of the program on nutritional outcomes. In one study, nutritional knowledge of 4th grade students was examined before and after the program. Fourth graders in the intervention group had a significant increase in nutritional knowledge compared to the control group. In the other study, third grade students' nutritional intake was measured before and after the program. This study found no significant differences in macronutrients, specific nutrients, or food groups between a pretest and posttest examination of nutritional intake when the intervention group was compared to a control group. There were also no significant differences in consumption of macronutrients when examined by gender.

COMPONENTS
FoodMASTER Intermediate is a computer-based and experiential program that teaches youth about math and science through food and nutrition-based content. All lessons meet at least one national science education standard for grades 3 to 5, and these lessons align to the state-mandated National Science Foundation content standard Science in Personal and Social Perspectives to integrate science and nutrition concepts. The program consists of 10 chapters that cover the following:

- Measurement;
- Food Safety;
- Vegetables;
- Fruits;
- Milk and cheese;
- Meat, poultry, and fish;
- Eggs;
- Fats and oils;
- Grains; and
- Meal management.

PREVIOUS USE
The program was first pilot tested in 10 3rd grade classrooms in southeast Ohio, and it has also been tested in 9 classrooms in North Carolina. The extent to which the program has been used outside of this use is unknown.
**TRAINING**

Teachers facilitate the program and must complete a 4-day workshop offered through the program. The training provides teachers with an introduction to program content and an opportunity to work through lessons in a kitchen. Teachers are also provided with all the materials they need to implement the program including a teacher's manual, a classroom set of student workbooks, and online access to curricular materials. Program materials are available for free from [https://www.foodmaster.org/grade3-5.html#WfO-vmhSy71](https://www.foodmaster.org/grade3-5.html#WfO-vmhSy71).

**CONSIDERATIONS**

Considerations for implementing this program include acquiring buy-in from school administrators and teachers, finding time in an existing curriculum to deliver program lessons, ensuring that students have access to a computer to complete computer-based lessons, and understanding there will be some costs associated with acquiring program materials.

The Clearinghouse can help address these considerations. Please call 1-877-382-9185 or email Clearinghouse@psu.edu.

**IMPLEMENTATION**

If you are interested in implementing FoodMASTER Intermediate, the Clearinghouse is interested in helping you! Please call 1-877-382-9185 or email Clearinghouse@psu.edu.

- The program includes 24 lessons that last approximately 45 minutes each. It is expected that teachers will cover all lessons within 1 academic year.
- Program materials are free on the website listed under the Source section. The program estimates that equipment costs will be at least $500, but most of the materials can be reused each year.

**EVALUATION PLAN**

To move FoodMASTER to the Promising category on the Clearinghouse Continuum of Evidence, at least one evaluation should be performed demonstrating positive effects lasting at least six months from program completion.

The Clearinghouse can help you develop an evaluation plan to ensure the program components are meeting your goals. Please call 1-877-382-9185 or email Clearinghouse@psu.edu.

**CONTACT**

Contact the Clearinghouse with any questions regarding this program. Phone: 1-877-382-9185 Email: Clearinghouse@psu.edu

You may also contact Melani Duffrin by mail Department of Nutrition Science, East Carolina University, Health Sciences Building 2307B, Greenville, NC 27834, phone 1-252-744-1005, email duffrinm@ecu.edu, or visit [www.foodmaster.org/contact-us.aspx#WfO-LmhSy70](http://www.foodmaster.org/contact-us.aspx#WfO-LmhSy70).

**SOURCE**

[www.foodmaster.org/grade3-5.html#WfO-vmhSy71](https://www.foodmaster.org/grade3-5.html#WfO-vmhSy71) and Carraway-Stage, Hovland, Showers, Diaz, and Duffrin (2015).