Color Me Healthy (CMH)

North Carolina Cooperative Extension, NC State University AND Community and Clinical Connections for Prevention and Health Branch, NC Division of Public Health

Overview

Color Me Healthy (CMH) is a direct education intervention designed to improve fruit and vegetable intake and increase physical activity (PA) among 4 and 5 year old children in child care and preschool settings by increased exposure to nutrition education and opportunities for PA. CMH includes a developmentally appropriate curriculum that is highly visual and interactive. It uses color, music, dance and imaginary play to provide opportunities for PA and to teach children about fruits and vegetables. Target Behavior: Healthy Eating, Physical Activity Intervention Type: Direct Education

Intervention Reach and Adoption

Color Me Healthy (CMH) is designed to improve fruit and vegetable intake and increase PA among 4 and 5 year old children in child care, home day care, Head Start, and preschool settings. Some kindergarten classrooms use Color Me Healthy. Early dissemination of CMH was funded by the Supplemental Nutrition Assistance Program – Education (SNAP-Ed) and implemented in low-income, under-resourced childcare centers participating in the Child and Adult Care Food Program (CACFP) and the Expanded Food and Nutrition Education Programs (EFNEP). Setting: Child care Target Audience: Preschool (<5 years old), Parents/Mothers/Fathers Race/Ethnicity: All

Intervention Components
The main intervention components of CMH include the following:

1. **Curriculum and Teaching Materials for Teachers:** The CMH curriculum includes 12 lessons designed for use during Circle Time; 6 imaginary trips that allow the children to use their imagination to travel to different places and events; 4 sets of picture cards; 3 classroom posters; a CD with 7 original songs; and a hand stamp to reward participation in CMH.

2. **Developmentally Appropriate Lessons:** CMH includes 12 lessons that are highly interactive and that integrate developmentally appropriate learning activities. The lessons are taught during Circle Time, a part of the day when children gather to learn and interact. In addition, Color Me Healthy includes six imaginary trips.

3. **Color Me Healthy Music:** Color Me Healthy includes 7 original songs; children love to sing and dance to these upbeat tunes. These engaging, stick-with-you songs enhance the lessons and can reinforce messages throughout the day.

4. **Reinforcing Classroom Environment:** Lessons are reinforced by making the classroom a colorful, inviting environment that supports the messages taught to children. The Color Me Healthy Kit includes classroom posters, ideas for bulletin boards, and teacher tips for ways to enhance the classroom.

5. **Training for Child Care Providers:** NC uses the train-the-trainer model and direct delivery. CMH staff provides training to Cooperative Extension Family & Consumer Sciences Agents and county Health Promotion Coordinators who in turn conduct trainings for local child care providers. Color Me Healthy for SNAP-Ed provides direct delivery of the curriculum by Family and Consumer Sciences Agents in pre-K settings. The education includes the Color Me Healthy lessons as well as taste tests and take home materials for families.

**Intervention Materials**

Color Me Healthy Kit CMH provides 18 lesson plans for teachers along with supporting instructional materials needed to implement the curriculum including: four sets of picture cards, three color classroom posters, a CD with seven original songs, 14 reproducible parent newsletters, and two color posters designed for parents. Selected materials are available in Spanish. To order the Color Me Healthy kit, visit colormehealthy.com. Color Me Healthy for SNAP-Ed **To implement CMH for SNAP-Ed you need the CMH kit and the CMH for SNAP-Ed manual.** The CMH for SNAP-Ed manual contains nine sequential lessons chosen from CMH and incorporates components allowable with SNAP-Ed funds. Simple, low-cost taste tests have been added to enhance the multi-sensory learning experience. Additionally, supplemental Story Time with books related to the lesson have been integrated. Parent Handouts in English and Spanish reinforce the messages presented in the classroom. The CMH for SNAP-Ed manual includes: complete lesson instructions, a parent letter describing the program, a graduation certificate, an attendance roster to collect SNAP-Ed demographic data, and teacher and parent evaluation forms to capture behavior change outcomes. Color Me Healthy for SNAP-Ed can be used for train-the-trainer or direct education. The CMH for SNAP-Ed manual is available electronically free of charge when you purchase a CMH kit. Contact Lindsay Goolsby at lnhecht@ncsu.edu. Color Me Healthy Website The CMH web site ([www.colormehealthy.com](http://www.colormehealthy.com)) provides information to parents, including copies of newsletters, and CMH songs available for free download.

**Evidence Summary**
Color Me Healthy was developed by professionals in the area of nutrition and health education. Its effectiveness was evaluated and published in the professional literature. It was research-tested using a randomized control design, with random assignment at the child care center level. The intervention group consisted of 10 child care centers (n=165), while the comparison group comprised of 7 child care centers (n=98); all study sites were based in Boise, Idaho. The main outcome was fruit and vegetable snack consumption of the children; however, process evaluation data were also collected, such as children’s attendance and teacher surveys to assess perceptions of fruit and vegetable snack acceptability among children.

- **Intervention Effect (fruit & vegetable behavior):** When presented with a fruit or vegetable snack, children who participated in the CMH program significantly increased fruit snack consumption by approximately 21% and vegetable snack consumption by about 33% within their child care centers, from baseline to 3-months after completion of the CMH program (p<.001)
- **Intervention Effect (child care providers’ perceived impact):** Teacher surveys were completed by all 10 lead teachers who implemented the CMH program. Ninety percent thought the children were more willing to try new foods and the children were consuming more fruits and vegetables, while all the teachers reported improved fruit and vegetable recognition, since program initiation.
- **Practice-based data that were available for this review show similar results in child care providers’ perceived impact** (Dunn et al., 2006). Eight-week follow-up surveys were completed by child care providers from 47 counties and the Cherokee reservation in North Carolina, who attended a CMH training (n = 486). Of those participants, 92% perceived an increase in PA of the children in their care, while 92% indicated that the CMH program increased the children’s knowledge about movement. In addition, 93% perceived UNC Center for Health Promotion and Disease Prevention that using the CMH program increased the children’s knowledge about healthy eating, while 79% indicated that the children were more willing to try new foods and 82% reported that the curriculum had improved fruit and vegetable recognition.

**Classification:** Research-tested

### Evaluation Indicators

Based on the SNAP-Ed Evaluation Framework, the following outcome indicators can be used to evaluate intervention progress and success.

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<thead>
<tr>
<th>Readiness and Capacity – Short Term (ST)</th>
<th>Changes – Medium Term (MT)</th>
<th>Effectiveness and Maintenance – Long Term (LT)</th>
<th>Population Results (R)</th>
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<tbody>
<tr>
<td>Individual</td>
<td>ST1, ST3</td>
<td>MT1, MT3</td>
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<tr>
<td>Environmental Settings</td>
<td></td>
<td>MT5, MT6</td>
<td>LT5, LT6</td>
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<td>Sectors of Influence</td>
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### Evaluation Materials

An evaluation logic model and evaluation plan for the CMH program for childcare centers can be found at the Center TRT website

https://snapedtoolkit.org/interventions/programs/color-me-healthy-cmh/
The logic model is intended to guide the evaluation process (as opposed to the planning process). The evaluation plan focuses on the acceptability, extent of implementation, and effectiveness of the Color Me Healthy curriculum. The evaluation addresses reach, adoption, implementation, and effectiveness of Color Me Healthy in changing outcomes related to fruit and vegetable intake and physical activity in the childcare setting. The evaluation plan provides guidance on evaluation questions and types and sources of data for both process and outcome evaluation. If you are interested in answering questions not listed on the evaluation plan, please refer to a list of additional evaluation questions found on the Center TRT website. We suggest a variety of data collection tools throughout the evaluation plan.

Additional Information

**Website:** The CMH website ([www.colormehealthy.com](http://www.colormehealthy.com)) includes information on the program, recipes, fitness ideas, parent newsletters, and music. **Contact Person:** Carolyn Dunn NC State University Phone: 919-515-9142 Email: carolyn_dunn@ncsu.edu