

## Color Me Healthy



### Goals

The goals of Color Me Healthy are the following: 1) to introduce children at an early age to nutritious foods, 2) to help children explore opportunities for physical activity, and 3) to have young children share nutrition and activity messages with those living in their homes.

### Program Features

Color Me Healthy is a program delivered in child care centers, home child care programs, and Head Start classrooms. This curriculum is used with 4- and 5-year-olds and is designed to show children that healthy food and physical activity are fun. This is accomplished through the use of activities designed to stimulate all of the child's senses (North Carolina Division of Public Health, 2012).

The Color Me Healthy curriculum includes a teacher's guide, picture cards, classroom posters, a compact disk, and cassette tape with seven songs, and reproducible parent newsletters. The teacher's guide contains 12 lessons designed to be used during "circle time" that last 15 to 30 minutes and can be taught daily or weekly. Also included in the kit are six "imaginary trips" that allow children to use their imagination to travel to different places or events. The newsletters are written on a fifth-grade reading level and are designed to provide families with information about healthy eating and physical activity. They also provide suggestions about how the family can be active together and ways to encourage more fruit and vegetable consumption.

Color Me Healthy uses a train-the-trainer approach to support child care provider directed implementation of the program. In the North Carolina counties that offer Color Me Healthy, staff training is provided by N.C. Cooperative Extension agents and a local community partner, usually the county health department.

For more information regarding Color Me Healthy use this link:  
<http://www.colormehealthy.com>.

### Color Me Healthy Snapshot

- **EC Profile Indicator:** H60 - Percent of low income children age 2-4 who are at a healthy weight
- **Clearinghouse rating:** None
- **Research supports** use with children in child care 4 to 5 years of age and their families
- **Related Smart Start outcomes:**
  - Increase in child practice of healthy behaviors
- **Purveyor training required:** Yes
- **Staff qualifications:** Smart Start funded Technical Assistance staff must meet TA Practitioner Qualifications
- **Frequency:** Minimum weekly
- **Dosage:** 15-30 minutes per session
- **Implementation Guidance:**  
<http://www.colormehealthy.com>.

## Target Audience

Children in child care 4 to 5 years of age and their families.

## Documented Outcomes

Type of Study		Child Outcomes		
		Increased healthy eating habits*	Increased knowledge related to healthy eating*	Increased physical activity*
Witt & Dunn (2012) <sup>i</sup>	Experimental	✓	✓	
Dunn et al (2006) <sup>ii</sup>	Non-experimental	✓	✓	✓

*This table contains outcomes found to be associated with the program or approach. Individual studies may contain additional outcomes that were tested and not found to be associated with the program or approach.*

\*Aligned with Smart Start outcome *Increase in children's practice of healthy behaviors*

## Research Evidence for Color Me Healthy

- This program is linked to increases in healthy practices of children including healthful eating and physical activity.

## Review of Experimental and Quasi-Experimental Studies

<b>Citation</b>	<b>Witt, K. F., &amp; Dunn, C. (2012). Increasing fruit and vegetable consumption among preschoolers: Evaluation of <i>Color Me Healthy</i>. <i>Journal of Nutrition Education and Behavior</i>, 44(2), pp. 107-113.</b>
<b>Population and Sample</b>	Seventeen preschool classrooms located in Boise, Idaho participated in the study. Child care centers were randomly assigned to one of two conditions: children (n=165) in 10 centers received the <i>Color Me Healthy</i> (CMH) curriculum and children (n=98) in 7 centers served as a comparison group and did not receive the curriculum. A total of 83 CMH and 70 comparison preschool children received fruit for snack at three time periods and 70 CMH and 52 comparison preschool children received vegetables for snack at three time periods.
<b>Methodology</b>	Experimental
<b>Purpose</b>	To determine whether <i>Color Me Healthy</i> increases fruit and vegetable consumption.
<b>Measures &amp; Assessments</b>	<ul style="list-style-type: none"> <li>• Teacher Surveys</li> <li>• Pre/post (before and after serving snack to children) weights of fruit and vegetable snacks at baseline, one week after the curriculum, and three-months after the curriculum.</li> </ul>
<b>Study Implementation</b>	<ul style="list-style-type: none"> <li>• The study conducted a process evaluation to ensure fidelity of program implementation.</li> <li>• Color Me Healthy was implemented for 6 weeks; 2 circle-time lessons and 1 imaginary trip were taught to the children each week. Lessons were 15-30 minutes in duration.</li> <li>• Color Me Healthy comes in a "toolkit" that includes a teacher's guide, 4 sets of picture cards, classroom posters, a music CD that contains 7 original songs, a hand stamp, and reproducible parent newsletters.</li> <li>• The process evaluation assessed delivery of lessons to the children, children's attendance at the lessons, and the completion of take-home activities.</li> </ul>

<b>Staff Qualifications</b>	<ul style="list-style-type: none"> <li>The lead teachers were responsible for teaching the CMH curriculum.</li> <li>The lead teachers from the 10 CMH classrooms attended a training session that was held prior to program implementation. The teachers learned about the curriculum and were instructed on how to teach each lesson and imaginary trip.</li> </ul>
<b>Key Findings</b>	<ul style="list-style-type: none"> <li>Ninety percent of CMH teachers thought children were eating more fruits and vegetables and all CMH teachers thought children were recognizing more fruits and vegetables since initiating the program.</li> <li>The study found that children who received CMH increased their consumption of fruit snack by 31.2% and vegetable snack by 24.2% between baseline and the immediate follow up (one week after the program) and increased their consumption of fruit snack by 20.8% and vegetable snack by 33.1% between baseline and the three-month follow up.</li> <li>The study found a statistically significant difference in the percentage of fruit and vegetable snack consumed between CMH and comparison children at both the immediate (Fruit: CMH=89.9% and Comparison=58.3%; Vegetable: CMH=62.1% and Comparison=33.2%) and three-month follow up (Fruit: CMH=79.5% and Comparison=64.9%; Vegetable: CMH=71.0% and Comparison=34.0%).</li> <li>Hierarchical linear modeling determined that group assignment (i.e., CMH or comparison) was the only significant predictor of fruit and vegetable consumption.</li> </ul>

### Review of Meta-Analyses

None

### Review of Descriptive and Non-Experimental Studies

<b>Citation</b>	Dunn, C., Thomas, C., Ward, D., Pegram, L., Webber, K., & Cullitan, C. (2006). Design and implementation of a nutrition and physical activity curriculum for child care settings. <i>Preventing Chronic Disease, 3(2)</i> , pp. 1-8.
<b>Population and Sample</b>	An 8-week follow up survey was sent to 1,023 child care providers in North Carolina who participated in a Color Me Healthy Training. A total of 486 child care providers completed the survey.
<b>Methodology</b>	Non-experimental
<b>Purpose</b>	To evaluate the <i>Color Me Healthy</i> curriculum.
<b>Measures &amp; Assessments</b>	Child care provider surveys
<b>Study Implementation</b>	<ul style="list-style-type: none"> <li>There was a “Train-the-Trainer” session to teach county representatives how to teach the program to local child care providers. Representatives came from North Carolina Cooperative Extension and the North Carolina Division of Public Health.</li> <li>Child care providers were asked to rate the training and the materials, after attending a local training session.</li> <li>More than 85% of providers responding to a follow-up survey reported using 6 out of the 7 program components. 67% of survey respondents reported using the parent newsletters. This may have been due to the cost of duplicating the newsletters for distribution.</li> </ul>
<b>Staff Qualifications</b>	<ul style="list-style-type: none"> <li>The article did not provide details on specific qualifications for trainers. The program is designed to be implemented by child care providers.</li> </ul>
<b>Key Findings</b>	<p>Following 8 weeks of implementing the curriculum:</p> <ul style="list-style-type: none"> <li>92% of providers indicated that using the curriculum increased the physical activity of their students and increased the children’s knowledge about movement.</li> <li>93% indicated that it increased children’s knowledge about healthy eating.</li> <li>79% indicated that children were more willing to try new foods.</li> <li>82% reported that the curriculum improved children’s fruit and vegetable recognition.</li> </ul>

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## End Notes

<sup>i</sup> Witt, K. F., & Dunn, C. (2012). Increasing fruit and vegetable consumption among preschoolers: Evaluation of Color Me Healthy. *Journal of Nutrition Education and Behavior*, 44(2), pp. 107-113.

<sup>ii</sup> Dunn, C., Thomas, C., Ward, D., Pegram, L., Webber, K., & Cullitan, C. (2006). Design and implementation of a nutrition and physical activity curriculum for child care settings. *Preventing Chronic Disease*, 3(2), pp. 1-8.

## Additional Resources

North Carolina Division of Public Health. Color Me Healthy. 2012. Retrieved from <http://www.colormehealthy.com/>.

San Bernardino County Department of Public Health. Healthy San Bernardino: Promising Practices database. 2006. Retrieved from <http://www.healthysanbernadinocounty.org/modules.php?op=modload&name=PromisePractice&file=index>.

Note: Research summaries could include verbiage directly reproduced from the research literature. Quotes and italics may be used to show a direct quote but not always.

*Published: July 2018*