

MATCH

Motivating Adolescents with Technology to CHOOSE Health™



Suzanne Lazorick and Tim Hardison
Department of Pediatrics, ECU

The problem of childhood obesity 1971 to 2014: percent of children at each BMI percentile ≥ 85

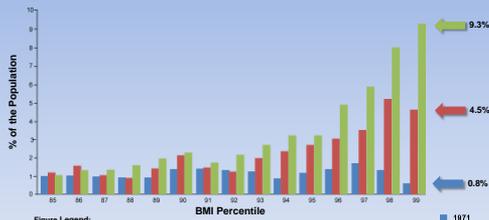


Figure Legend:
 Figure: The percentage of the US pediatric population aged 7 to 18 years at body mass index (BMI, calculated as weight in kilograms divided by height in meters squared) percentiles within the overweight/obese range. The blue bars represent percentages based on National Health and Nutrition Examination Survey (NHANES) data from 1971 to 1978, before the obesity epidemic in the United States, and the red bars represent percentages based on the most recent NHANES data from 2009 to 2010. The green bars represent percentages from MATCH, 2013 and 2014. The largest increases have occurred at the extremes of the BMI percentile range (85th to 99th percentiles). The percentages are weighted percentages that account for the complex survey design of the NHANES. n=2,633

Comparing CHAMP TELEPHONE Surveys to MEASURED data from MATCH in Eastern NC

Group	% Overweight	% Obese	% Severe Obese	% All OWOB
CHAMP (N=713)	18	18	No Data	36
MATCH (n=1656)	18	30	9.3	57.3

What is MATCH?



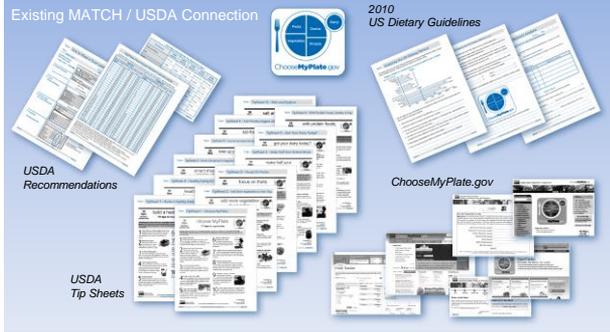
Why MATCH?

- Plain and Simple... *It Works!*
- Most successful published school-based childhood obesity invention
- Improves BMI in 7 of 10 overweight adolescents
- Developed by a teacher, not researchers
- Produces sustainable results years later
- Teaches individual behavior change skills
- Based on Social Cognitive and Self-Determination Theories
- Web-based curriculum and real-time data management for evaluation

Essential Elements of Curriculum

Essential Elements	Examples of Intervention Components
Conceptual Knowledge (Learn "why")	Interdisciplinary Wellness Kickoff Unit, lessons and activities embedded within standard curricula
Health Skills (Learn "how")	<ul style="list-style-type: none"> • Daily Physical Activity, pedometers • Self tracking of physical activity in PA Log • Food intake record and analysis • Energy Balance activities
Individualized Tasks (Apply the skill)	<ul style="list-style-type: none"> • Calculate BMI, determine weight category • Fitness testing • Self-evaluation of health behaviors
Motivational Strategies (Reinforce the skill)	<ul style="list-style-type: none"> • Individual goal setting with action plans • Graphical dashboard of personal performance • Recognition through leaderboards and clubs • Earn badges in MyTrophy Case, gamification

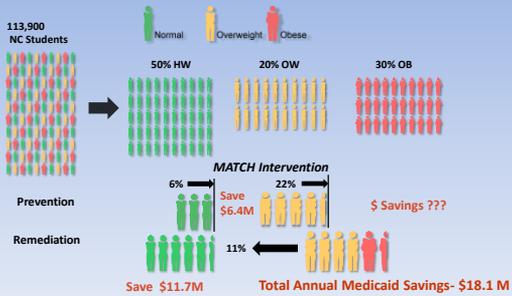




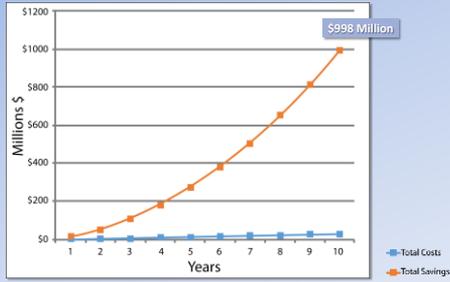
Consistent Results Over Time:

	2008-09 BCBS	2009-10 BCBS	2010-11 BCBS	2011-12 BCBS	2012-13 KBR	2013-14 KBR/FF
# Schools	4	5	5	6	12	17
# Reached	274	634	660	789	1065	1308
% OWOB Success*	60	56	58	69	68	66
% Improving from obese to overweight	10% (8/82)	9% (14/159)	10% (20/208)	7% (12/168)	10% (31/314)	13% (51/400)
% Improving to healthy weight	14% (7/51)	17% (18/105)	10% (15/155)	24% (23/95)	20% (38/192)	24% (61/253)
% Converting: Healthy Weight to overweight (undesirable change)	(5%) 5/103	(5%) 16/292	(3%) 10/337	(4%) 11/269	(3%) 15/500	(5%) (29/629)

MATCH OUTCOMES vs. CONTROL after 4 years



NC Medicaid and Other Payer Cost vs Savings Over 10-year MATCH Implementation



Latest Accolade...

MATCH is the ONLY middle school-based childhood obesity intervention that has received the "research tested" designation.

Center for Training, Research and Translation (Center TRT) at the UNC Prevention Research Center, (a center approved by the Centers of Disease Control to evaluate obesity interventions prior to consideration for dissemination).

Note: "Research-tested" is the highest of three possible designations and is achieved by less than 20% of reviewed interventions

Existing Funding Source for NC MATCH Model

