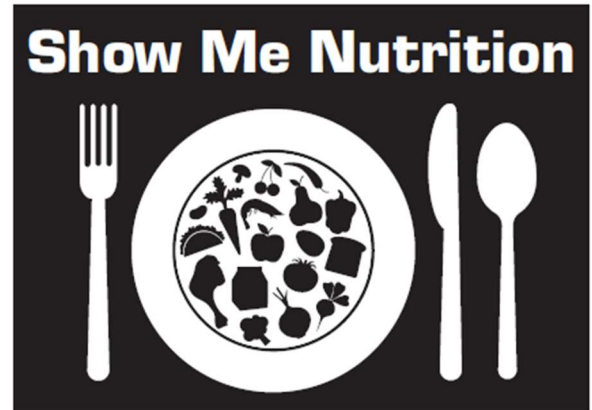


Show Me Nutrition Evaluation Summary Report

Kimberly Keller, PhD
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What is Show Me Nutrition?

Show Me Nutrition (SMN) is a pre-kindergarten through eighth grade curriculum series developed by University of Missouri Extension. It is an experientially-based nutrition education curriculum that uses behaviorally focused activities that are developmentally appropriate for each grade level. The curriculum focuses on healthy eating and an active lifestyle. An additional component of *Show Me Nutrition* is a family newsletter targeted to parents or caregivers in grade levels pre-k through five. These family newsletters provide an additional channel to convey behaviorally-focused nutrition education messages. Theoretical constructs from social learning theory were used in *Show Me Nutrition*'s development.

Show Me Nutrition uses an evidence-based approach for nutrition education. The curriculum integrates the best research evidence, based on the 2020-2025 Dietary Guidelines for Americans, with the best available practice-based evidence. It uses meaningful interventions for the target audience based on more than 25 years of program delivery in Missouri. Behaviorally-focused activities engage students in the classroom, and they have opportunities to taste both unfamiliar and familiar foods that are prepared in new ways.

Relevant motivators and reinforcements are used. The intensity and duration of the *Show Me Nutrition* curriculum provides an opportunity for multiple exposures to nutrition education messages. In Missouri, we have found that this level of intensity and duration helps educators to positively change the overall school environment, including teachers' behaviors.

Each grade level is based on knowledge objectives and behavior objectives that meet the grade level expectations developed by the Department of Elementary and Secondary Education in Missouri, as well as National Health Education Standards. All grade levels went through the same rigor of pilot testing, which included gathering feedback from educators, students and teachers, revisions and finally, completion with ongoing feedback and adjustments continuing to be made in the curriculum as necessary. Adjustments are ongoing as USDA changes the guidance and as new nutrition information and/or teaching techniques emerge.

Evaluation Methods

Evaluation data were collected from SNAP-Ed (Supplemental Nutrition Assistance Program Education) programs that taught a series of the *Show Me Nutrition* curriculum in Missouri. Youth completed the USDA Expanded Food and Nutrition Education Program (EFNEP) Grades 3-5 Youth Survey (2018) or the Grades 6-8 Youth Evaluation (2012), both before and after participating in the curriculum series. Data were collected during SNAP-Ed programming occurring between October 1, 2022 through January 28, 2025, and analyzed through independent samples *t*-tests.

Evaluation Results

Evaluation results are arranged according to the indicators listed in the *SNAP-Ed Evaluation Framework*. The indicators that were assessed are MT1 (Healthy Eating), MT3 (Physical Activity and Reduced Sedentary Behaviors) and MT 4 (Food Safety). Results for each grade-level curriculum in *Show Me Nutrition* are analyzed separately.

MT1: Healthy Eating

The measures for MT1 focused on vegetable and fruit consumption. Results for vegetable consumption are presented in Table 1. Participants receiving each grade-level curriculum demonstrated statistically significant improvement in the frequency they consumed fruits and vegetables.

Table 1. Fruit and vegetable consumption

	N		Pretest		Posttest		Change, pre-post		
	Pre	Post	Mean	SD	Mean	SD	<i>t</i>	<i>df</i>	<i>p</i>
<u>Fruit</u>									
<i>I eat fruit...¹</i>									
Building My Body (3rd Grade)	2627	2640	3.01	-0.91	3.14	-0.91	-5.333	5265	0.000
Choosing Food for Me (4th Grade)	2187	2195	3.07	-0.90	3.22	-0.91	-5.444	4380	0.000
Exploring the Food Groups (5th Grade)	1224	1218	3.05	-0.87	3.21	-0.88	-4.624	2440	0.000
<i>Yesterday, how many times did you eat fruit, not counting juice?²</i>									
Digging Deeper (6th Grade)	394	379	2.61	1.26	2.89	1.29	-3.108	771	0.002
Choices and Challenges (7-8th Grades)	82	77	2.23	1.05	2.81	1.35	-3.008	157	0.003
<u>Vegetables</u>									
<i>I eat vegetables...¹</i>									
Building My Body (3rd Grade)	2662	2641	2.50	-0.89	2.70	-0.89	-7.962	5301	0.000
Choosing Food for Me (4th Grade)	2198	2202	2.51	-0.87	2.71	-0.88	-7.519	4398	0.000
Exploring the Food Groups (5th Grade)	1227	1234	2.58	-0.87	2.81	-0.85	-6.921	2459	0.000
<i>Yesterday, how many times did you eat vegetables, not counting French fries?²</i>									
Digging Deeper (6th Grade)	369	376	2.32	1.25	2.63	1.23	-3.495	770	0.001
Choices and Challenges (7-8th Grades)	83	77	1.99	1.02	2.70	1.16	-4.143	158	0.000

¹Scale: 1 (never or almost never) to 4 (every day)

²Scale: 1 (none) to 5 (4+ times)

MT3: Physical Activity and Reduced Sedentary Behaviors

Participants receiving each grade-level curriculum demonstrated statistically significant improvement in how often they reported engaging in physical activity (Table 2). They also reported significantly less screen time than prior to participating in SMN.

Table 2. Physical activity and reduced sedentary behaviors

	N		Pretest		Posttest		Change, pre-post		
	Pre	Post	Mean	SD	Mean	SD	t	df	p
Physical Activity									
<i>I do physical activities like walking to school...¹</i>									
Building My Body (3rd Grade)	2639	2652	2.99	-0.91	3.19	-0.92	-7.766	5289	0.000
Choosing Food for Me (4th Grade)	2197	2210	3.17	-0.91	3.35	-0.91	-6.536	4405	0.000
Exploring the Food Groups (5th Grade)	1210	1227	3.23	-0.88	3.45	-0.89	-6.043	2435	0.000
<i>During the past 7 days, how many days physically active for at least 1 hour?²</i>									
Digging Deeper (6th Grade)	387	383	5.27	2.15	5.87	2.05	-3.985	768	0.000
Choices and Challenges (7-8th Grades)	82	78	5.85	2.07	6.37	1.68	-2.636	158	0.009
Reduced Sedentary Behavior									
<i>How many hours a day do you spend watching TV or movies, playing electronic games, or using a computer for something that is not school work?³</i>									
Digging Deeper (6th Grade)	386	380	3.22	1.45	2.73	1.39	4.771	764	0.000
Choices and Challenges (7-8th Grades)	81	77	3.10	1.43	2.65	1.33	2.047	156	0.042

¹ Scale: 1 (never or almost never) to 4 (every day)

² Scale: 1 (0 days) to 8 (7 days)

³ Scale: 1 (1 hour or less) to 5 (5 or more hours)

MT4: Food Safety

Participants demonstrated statistically significant improvement in how often they reported engaging in appropriate food safety behaviors (Table 3).

Table 3. Food safety behaviors

	N		Pretest		Posttest		Change, pre-post		
	Pre	Post	Mean	SD	Mean	SD	t	df	p
<i>I wash my hands before making something to eat¹</i>									
Building My Body (3rd Grade)	2646	2615	3.05	-0.91	3.29	-0.92	-9.473	5259	0.000
Choosing Food for Me (4th Grade)	2186	2184	3.10	-0.91	3.29	-0.91	-6.748	4368	0.000
Exploring the Food Groups (5th Grade)	1230	1218	3.07	-0.87	3.33	-0.88	-7.097	2446	0.000
<i>How often do you wash your hands before eating?²</i>									
Digging Deeper (6th Grade)	388	380	3.75	1.15	3.94	1.11	-2.387	766	0.017
Choices and Challenges (7-8th Grades)	81	78	3.59	1.22	3.97	1.09	-2.073	157	0.040
<i>How often do you wash vegetables and fruits before eating them?²</i>									
Digging Deeper (6th Grade)	389	386	3.52	1.46	3.96	1.24	-4.491	773	0.000
Choices and Challenges (7-8th Grades)	82	78	3.43	1.53	4.03	1.24	-2.712	158	0.007
<i>When you take foods out of the refrigerator, how often do you put them back within 2 hours?²</i>									
Digging Deeper (6th Grade)	386	379	3.76	1.33	1.23	1.05	-5.459	763	0.000
Choices and Challenges (7-8th Grades)	81	77	3.84	1.44	4.08	1.16	-1.142	156	-

¹ Scale: 1 (almost never) to 4 (always)

² Scale: 1 (never) to 5 (always)

They reported increased frequency of handwashing and reported more often washing produce before eating it. For one of the two grade-level curricula assessed, participants reported more often putting cold foods back in the refrigerator promptly when preparing food to eat.

Evaluation Conclusions

The results of these analyses indicate that the *Show Me Nutrition* curriculum is effective at producing self-reported behavior change in youth audiences. Evidence was found for each grade level curriculum assessed for MT1 (Healthy Eating), MT3 (Physical Activity and Reduced Sedentary Behaviors) and MT 4 (Food Safety).