

Table 1. Recalled lunch intake mean (\pm SD) and contribution of school-consumed lunch to lunch standard of WV cohorts before and after implementation of standards and PA comparison cohort

Dietary Component By Gender		WV Lunch Standards ^a By gender	Mean \pm SD WV Before Cohort	WV Before Cohort Mean as % of Standard	Mean \pm SD WV After Cohort	WV After Cohort Mean as % of Standard	Mean \pm SD PA Cohort	PA Cohort Mean as % of Standard
Calories and Nutrients with RDA Standards^b								
Calories	M ^{C***}	833.3	731.9 \pm 217.0	88	547.0 \pm 164.0	66	662.0 \pm 122.0	80
	F ^{C ***}	733.3	606.9 \pm 201.5	83	377.0 \pm 159.0	51	607.0 \pm 179.0	83
Protein (g)	M ^{**}	15.0	30.8 \pm 10.1	205	26.0 \pm 8.0	173	29.0 \pm 7.0	193
	F ^{**}	15.3	24.2 \pm 10.4	158	18.0 \pm 9.0	118	25.0 \pm 8.0	163
Vitamin A (μ g RE)	M	333.3	498.8 \pm 494.3	147	447.0 \pm 794	134	282.0 \pm 207.0	85
	F	266.7	292.3 \pm 188.9	110	320.0 \pm 546.0	120	212.0 \pm 116.0	80
Vitamin C (mg)	M	16.7	21.6 \pm 18.3	129	19.0 \pm 12.0	114	19.0 \pm 13.0	114
	F	16.7	23.8 \pm 19.8	120	22.0 \pm 15.0	132	18.0 \pm 16.0	108
Thiamin (mg)	M ^{**}	0.43	0.58 \pm 0.36	135	0.40 \pm 0.20	93	0.5 \pm 0.10	116
	F ^{***}	0.37	0.48 \pm 0.27	130	0.30 \pm 0.20	81	0.50 \pm 0.20	135
Vitamin B ₆ (mg)	M	0.57	0.49 \pm 0.21	86	0.40 \pm 0.20	70	0.40 \pm 0.1	70
	F ^{***}	0.47	0.46 \pm 0.22	98	0.30 \pm 0.10	64	0.30 \pm 0.10	64
Calcium (mg)	M	400.0	401.0 \pm 136.8	100	401.0 \pm 150.0	100	466.0 \pm 132	117

Comparison of Consumed Lunch Nutrient Profiles of 6th-Grade Students Before and After Implementation of the West Virginia School Nutrition Standards
 Nucci and Stuhldreher

	F***	400.0	346.4 ± 130.6	87	269.0 ± 134.0	67	426.0 ± 170.0	107
Iron (mg)	M***	4.0	3.8 ± 1.1	95	2.7 ± 1.2	68	3.8 ± 1.1	95
	F***	5.0	3.3 ± 1.4	66	1.8 ± 0.8	36	3.3 ± 1.3	67
Zinc (mg)	M**	4.0	3.5 ± 1.4	88	2.7 ± 1.3	67	2.5 ± 0.8	63
	F***	4.0	3.1 ± 1.5	78	1.7 ± 0.9	43	2.2 ± 0.9	55
Nutrients with Dietary Guideline Goals^d								
Fat (% of Calories)	M***	≤ 30	39.5 ± 8.3	132	33.6 ± 7.3	113	32.7 ± 6.8	176
	F*	≤ 30	37.2 ± 9.3	124	31.6 ± 9.3	105	33.3 ± 7.9	111
Saturated Fat (% of Calories)	M*	< 10	12.2 ± 3.1	122	12.5 ± 5.2	109	9.9 ± 3.6	99
	F	< 10	11.6 ± 3.5	116	11.4 ± 5.9	114	11.2 ± 3.6	112
Cholesterol (mg)	M***	≤ 100	76.2 ± 31.9	76	54.0 ± 20.0	54	55.0 ± 17.0	55
	F**	≤ 100	61.1 ± 56.0	61	37.0 ± 29.0	37	47.0 ± 20.0	47
Fiber (g)	M	≥ 6	3.15 ± 1.3	53	2.5 ± 1.8	42	3.1 ± 1.8	52
	F**	≥ 6	3.0 ± 1.5	50	2.2 ± 1.4	37	2.1 ± 1.2	35
Sodium (mg)	M	≤ 1100	1404.4 ± 530.3	128	1162.0 ± 369.0	145	1130.0 ± 398.0	103
	F***	≤ 1100	1245.3 ± 527.4	113	812.0 ± 392.0	102	1167.0 ± 529.0	107

^aWest Virginia Board of Education (1994)

^bStandards are based on 1/3 of the 1989 Recommended Dietary Allowances for children 11 to 14 years of age (NRC, 1989)

^c *Females, n=45 (before) and 51 (after); Males, n=28 (before) and 45 (after)*

^d *Standards are based on National Research Council's Diet and Health Recommendations (USDA, 1990) and fiber goal is: age + 5 grams/day, as recommended by the American Health Foundation (Williams, Bollella & Wynder, 1995)*

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$