



Missoula County Public Schools: BMI for Age Pilot Study

Kuntz, S., Pittaway, M., Tims, L. and Bratches, K., (Spring, 2005). *Missoula County Public Schools BMI for Age Pilot Study*. Research conducted through the City County Health Department, Maternal Child Health Advisory Council.

The Missoula City County Health Department Maternal Child Health Advisory Council conducted a pilot study to determine if the body mass index of Missoula Children was lower, high or similar to national trends. All children in 1st through 5th grade at three elementary schools (n=867) were measured unless they returned an "Opt-Out" form or were absent. A stadiometer was used to measure height and a calibrated digital scale was used to weigh children (kg). After electronic calculation of the BMI, the results were transferred to a CDC (2000) gender specific BMI for age charts.

Results:

- É Approximately two-thirds (68%) of all pilot program children measured are within the *healthy* BMI-for age range.
- É Approximately one-third (32%) of all pilot program children measured are in the *unhealthy* BMI-for-age range (underweight, at risk for overweight, or overweight).

SUMMARY of RESULTS Missoula Elementary BMI Pilot(2004-2005) (Number of students and percent)

Measure	School 1	School 2	School 3	TOTAL
Underweight (BMI-for-age <5th percentile)	2 (.5%)	2 (.7%)	5 (2%)	9 (1%)
Healthy Weight (BMI-for-age 5th to <85th percentile)	259 (72.5%)	178 (65%)	154 (65%)	591 (68%)
At Risk of Overweight (BMI-for-age 85th to <95th percentile)	52 (14.6%)	40 (14.5%)	43 (18.2%)	135 (15.5%)
Overweight (BMI-for-age ≥ 95th percentile)	44 (12.3%)	54 (19.7%)	34 (14.4%)	132 (15.2%)
TOTAL MEASURED	357	274	236	867

Opt Outs	7	4	5	16
Absences	9	30	14	53

Discussion

- Overweight in Montana children and adults is increasing; at one pilot school the national percentage of children overweight surpassed the national rate (pilot data only)
- Approximately one-third (32% of all pilot program children measured are in the unhealthy BMI-for-age range (underweight, at risk for overweight, or overweight)
- Boys in the pilot study had a slightly higher percentage of overweight (>95th percentile) than girls
- 2nd and 3rd graders in the pilot study had a slightly higher combined prevalence of at risk of overweight (85th-95th percentile) and overweight (>95th percentile) than 1st, 4th, and 5th graders.