

Body Mass Index (BMI) reports do not improve student health

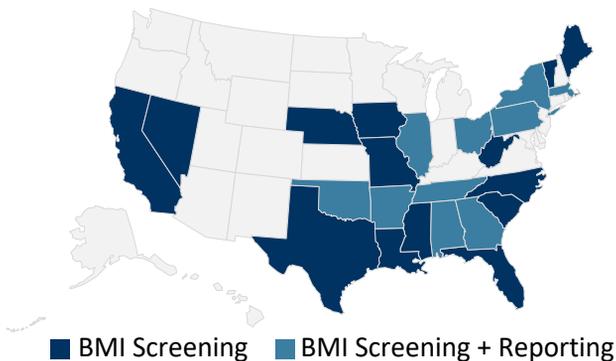
The Fit Study was a 3-year randomized controlled trial designed to help schools make evidence-based decisions about the practice of school-based body mass index (BMI) screening and reporting. **We found that sending BMI reports to parents did not improve students' weight status and may increase students' body dissatisfaction.**

What is BMI Screening?

BMI screening in schools means measuring the height and weight of all students in a particular grade and calculating BMI: weight (in kilograms)/[height (in meters)²]. Elevated BMI is a risk factor for developing diabetes and heart disease.

BMI Screening & Reporting is widely used, despite a lack of evidence

In an effort to reduce childhood obesity, 25 states require BMI screening, 9 of which also require reporting results to parents.



Although BMI screening and reporting in schools is widespread, it has been criticized because of its potential to stigmatize overweight children. *The Fit Study* was the first study to rigorously evaluate the impact of BMI screening and reporting on both childhood obesity and related stigmatization.

How the study worked

Over 30,000 students in grades 3-8 in 79 California elementary and middle schools were randomly assigned to 1 of 3 groups:

- Group 1: BMI screening and reporting
- Group 2: BMI screening only
- Group 3: No BMI screening or reporting

Study participants were diverse, including 59% Latinx, 15% White, 15% Asian, and 8% Black students. At the start of the study, 3% of students were underweight, 57% were at a healthy weight, 18% were at risk for overweight and 22% were overweight.

Each fall, we surveyed students about their weight-related perceptions and behaviors. School staff assessed student BMI each spring in Groups 1 and 2. Parents of students in Group 1 were sent a BMI report each fall and were later surveyed about their recall of the BMI reports.

We worked with a diverse group of California parents to create the best possible BMI report. The report showed where a child's BMI fell on an easy-to-interpret scale:



BMI Reports included an infographic suggesting actions that families could take.



Key Study Findings

- **BMI reports from schools do not reduce pediatric obesity among 3rd through 8th grade students.**

Only half of parents remembered receiving the BMI report, and only 22% of parents were surprised by the information, suggesting the reports were not particularly meaningful and were not providing new information to most parents.

- **The practice of weighing students at schools is not without harm.**

Just over one-third of students reported being bothered by being weighed at school, with heavier students being more uncomfortable.

- **Weight satisfaction decreased more among students who were weighed at school than among students not weighed at school.**

However, reports of weight-based teasing did not increase and concerning weight control behaviors (like skipping meals) actually decreased among students weighed at school, relative to students not weighed at school.

- **The setting matters in BMI screening.**

Students were more comfortable being weighed by a school nurse than by a teacher (including physical education teachers). Students were also more comfortable when they had greater privacy while being weighed (more than half of students reported their classmates could see them being weighed).

Implications for Schools and Policy Makers

- ✓ Schools should not send home BMI reports to parents. BMI reports are not effective in improving student's weight status, and thus are not a good use of school resources.
- ✓ Weighing students in schools may cause harm to students. While some schools may continue to assess students' BMI to monitor the prevalence of childhood obesity, schools need to take greater precautions in ensuring privacy when measuring student weight.
- ✓ Schools should consider alternative interventions – specifically programs that have proven to be effective – if they wish to improve student health.