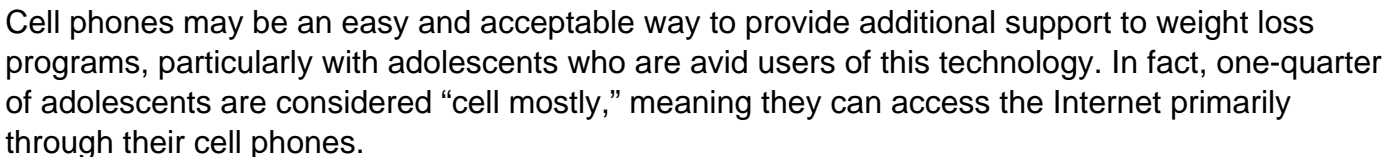


Who's calling for weight loss? Messages from the current literature

One-third of adolescents in the U.S. are overweight or obese. This is a significant public health concern because obese children are more likely to develop conditions once seen only in adults, including high blood pressure, type 2 diabetes, sleep apnea, and joint problems. Children who are overweight or obese may also experience social and psychological problems such as low self-esteem, bullying, and discrimination. In addition, adolescents who are overweight or obese are at risk for adult overweight/ obesity.

Many different types of weight loss programs have been designed for adolescents with varied success. More intensive programs (those with more contact hours/week) that focus on modifying everyday behaviors -- such as how and what someone eats or the amount and type of physical activity a person does -- appear to provide better results. Adolescents are also more likely to stick to weight loss plans that provide personal feedback and opportunities for social interaction.



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it is hard to make direct comparisons across all studies and identify any specific impact of the cell phone component. However, some useful trends were discovered. All eight studies used a behavioral approach and three used theory to help guide the development of all or part of their programs. In addition, cell phones were used for text messages in five studies, to provide coaching and counseling in four, and track food intake and physical activity in two. All studies tracked BMI (a formula that uses weight in kilograms divided by height²) or BMI z-score (a measure of BMI used for children and adolescents). Other indicators of weight included waist and/or hip circumference, waist-to-height ratio, and body fat percentage. Weight loss, reduced BMI and/or reduced BMI z-score were reported in all but one study. Despite these positive changes, only two of the eight studies showed *significant* changes in weight or weight-related outcomes. The remaining six (all randomized controlled trials) showed no significant differences between intervention and control groups for any weight loss outcome.

What does this all mean for the use of cell phones in weight loss studies? It's hard to tell. In all studies, cell phone usage was embedded within larger weight loss programs; no study tested the use of cell phone components separately. Therefore, there is no way to determine the direct impact of this technology on weight loss. However, previous research suggests that successful weight loss and long-term weight maintenance can be improved with self-monitoring. Cell phones may be ideally setup to allow self-monitoring in the form of continuous tracking of food intake, daily weighing and monitoring of physical activity.

There's no doubt about it - cell phones are everywhere and based on the high degree of usage among adolescents, they may be a perfect match to help increase adherence to weight loss programs. As the field of technology advances and the digital natives of today move forward, so too should research in this area.

Publication

[Who's calling for weight loss? A systematic review of mobile phone weight loss programs for adolescents.](#)

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