

Kids, TV, and BMI: Fatter But No More Inactive

By ACSH Staff — March 4, 2008

Various facets of modern life (e.g., snack foods, television, unbalanced school food selections, etc.) have been blamed for the increasing prevalence of obesity and obesity-linked diseases in the young. A recent study by Leonard H. Epstein and colleagues in *Archives of Pediatric and Adolescent Medicine* (vol. 162:239-245) lends credence to the relevance of sedentary activities -- TV and computer use -- in contributing to youthful obesity.

In an innovative two-year study, the researchers examined the effects on BMI (body mass index, an obesity index based on body weight and height) of the amount of time spent watching TV and using computers by youngsters who were initially between the ages of four and seven. The TVs and computers were attached to monitors that could tabulate the amount of time they were in use and could be programmed to turn off the TVs and computers after a set amount of time. All the family members had individualized codes that allowed them to watch TV or use a computer.

The thirty-five children in the intervention group were encouraged to decrease the amount of time they spent on computers or watching TV through an offer of 25 cents per half hour decrease (up to a maximum of \$2.00 per week). A control group was simply paid \$2.00 per week without being told to decrease viewing and computer time.

Parents in both groups were instructed to praise their children for reducing viewing time, and the parents also received advice about how to decrease sedentary behaviors in their children.

Over the course of the study, the intervention group's viewing time was gradually decreased to 50% of its starting level. The children's activity levels and food intake were also monitored.

The Action-Packed Conclusion

By six months into the study, both groups had decreased viewing and computer time, significantly more in the intervention group -- and this difference continued for the remainder of the study. Energy intake also decreased in both groups over the course of the study -- significantly more in the intervention group than the control group. Surprisingly, though, activity levels did not differ between the groups -- even though sedentary behavior did.

Most important, the researchers found that the BMIs of the children in both groups decreased over the course of the study -- to a greater extent and more quickly in the children in the intervention group. There were no significant differences in BMI between the two groups, however, until the researchers divided the groups based on socioeconomic status (SES). In the lower SES children, the intervention group's BMIs were significantly lower than that of the control group.

The researchers concluded that reducing the availability of sedentary behaviors -- TV viewing and computer use -- decreased the children's energy intake and their BMIs, even though activity levels

didn't seem to increase (that is, roughly speaking, the kids were still sitting but were doing less snacking while they were at it if they weren't looking at a screen). The researchers noted that the intervention was most effective in children from families of lower SES and pointed out that this is important because these children are at greater risk of becoming obese adults than are children from higher SES families.

In an accompanying editorial, Dr. S.L. Gortmaker of the Harvard School of Public Health noted that the results of the study support the concept that TV viewing affects diet and thus can have an impact on body weight. He also applauded the use of innovative technology to reduce sedentary behavior and thus help prevent overweight.

If these data are replicated by other studies, they clearly point to a way that parents can help their children attain and maintain a healthful body weight: by controlling sedentary behaviors and encouraging more activity and healthful diets -- thus reducing the occurrence of obesity-linked disease.

Ruth Kava, Ph.D., R.D., is Director of Nutrition at the American Council on Science and Health (ACSH.org [1], HealthFactsAndFears.com [2]).

COPYRIGHT © 1978-2016 BY THE AMERICAN COUNCIL ON SCIENCE AND HEALTH

Source URL: <https://www.acsh.org/news/2008/03/04/kids-tv-and-bmi-fatter-but-no-more-inactive>

Links

[1] <http://ACSH.org>

[2] <http://HealthFactsAndFears.com>