Advertising junk food on television has enticed children into eating massive amounts of unhealthy food, leading to a sharp increase in obesity and diabetes, according to a report issued today by a prestigious national science advisory panel.

The Institute of Medicine, a government chartered institution that studied the health effects of food advertising on children for Congress, said most foods and beverages introduced and marketed to children are high in calories, sugar, salt and fat and low in nutrients.

"There is strong evidence that exposure to television advertising is associated with" obesity, the report said.

The institute called on food and beverage manufacturers and restaurants to create more healthful products -- and shift their advertising emphasis to promote them. If these companies fail to, the report added, Congress should step in and mandate changes, especially for ads aired on TV. The institute also called on Congress to enhance nutritional standards and create incentives, including awards and tax breaks, to encourage companies to develop and promote healthful products for children and adolescents.

"There is growing evidence that the early life environment is an important determinant of obesity later in life" so significant changes are needed to reshape children's attitudes and practices, the report said.

The report is in response to a congressional directive to review the influence of food marketing on the diets and health of children, after the government reported a sharp increase in the number of obese children and teens. Childhood obesity has more than tripled in the past 40 years and the prevalence of Type 2 diabetes among children and youth has more than doubled in the past decade.

"The dietary patterns of our children and youth put their health at risk," the report said. These patterns "have been reinforced if not encouraged by prevailing marketing practices" and any turnaround has to depend on aggressive and sustained leadership from the
government, parents, schools and the food and beverage industries the report said. "This is a public health priority of the highest order."

The institute found that children between age two and 15 currently influence about $500 billion of purchases a year, compared with $295 billion in 1993. In 2004, food and beverage companies spent an estimated $10 billion to market foods to America's youth. The number of new food products aimed at kids is growing at a far faster rate than new food products in general, and for the most part these new kids' products were high in total calories, sugar or fat, the report found.

The long-awaited report represents a consensus of a panel of 16 members who came from varied backgrounds: nutritionists, advertising and marketing experts, child and adolescent development professionals and entertainment executives. Panel members, in interviews, said they were surprised they were able to agree on their strong findings, given that wide divergence of backgrounds.

The American Advertising Federation, which represents food marketers, advertising agencies and media firms, criticized the report for failing to note many of the changes food companies have taken in the past year. Some fast-food restaurants such as McDonald's, have added more healthful alternatives to their menus, including milk and apples in kids meals. Pepsico Inc. has mandated that half of its new products be healthy, while Kraft Foods Inc. announced this year that it would stop advertising its less nutritious products on television and radio and in magazines aimed at children under 12. Many food companies have also sponsored fitness campaigns and curriculum at schools and youth clubs.

"It's disconcerting that the report doesn't bother to recognize the specific industry initiatives that have been under way for the past year to combat childhood obesity," said Wally Snyder, the federation's president.

Sen. Tom Harkin (D-Iowa), who pushed Congress to approve $1 million for the institute's study, said, "This landmark study comes as no surprise to me, and it will come at no surprise to the junk food industry." Harkin said the industry doesn't spend billions a year "marketing junk food to kids in order to waste money." They do it "because it works brilliantly.

The institute's report was based on a review of more than 120 studies of the effects marketing may have on children's diets and health. It noted that most of these studies focused on television ads, although every year they account for a smaller proportion of marketing as manufacturers turn to other strategies, including Internet marketing, mobile phone ads, product placement in movies and video games and viral marketing, or trying to create buzz about their products. In fact, the study said, only 20 percent all food and beverage marketing in 2004 was devoted to traditional TV, radio, print and billboard marketing. Many marketing dollars are instead going to product placement, in-school marketing, special events marketing and licensing popular characters to sell products -- for instance, Sponge Bob Squarepants in ads for candy, Spiderman in ads for Pop-Tarts and Winnie-the-Pooh in ads for sugared cereal.

The institute said that such popular characters should only be used to promote products that support healthful diets. At the same time, television and other entertainment media should incorporate storylines that promote healthful eating, the report said.