During 1999 the American Academy of Pediatrics recommended that children younger than 2 should not be allowed to watch television for fear that it will stunt the development of their brains.[1] The intellectual and emotional development of young children depends upon interaction with adults, and children watching TV are unlikely to receive the active attention they need from adults, the Academy said.

Specifically, the Academy said, "Pediatricians should urge parents to avoid television viewing for children under the age of 2 years. Although certain television programs may be promoted to this age group, research on early brain development shows that babies and toddlers have a critical need for direct interactions with parents and other significant caregivers (e.g., child care providers) for healthy brain growth and the development of appropriate social, emotional, and cognitive skills. Therefore, exposing such young children to television programs should be discouraged."[1]

The Academy also urged parents, once again, to limit all children's exposure to TV to 1 to 2 hours of "quality programming" per day. (The Academy has issued a series of similar recommendations, based on its concern about youth violence and TV, since 1984.) The national average for all children is now more than 3 hours of TV per day, the Academy said.[1] In other words, children now spend about 20% of their waking hours glued to the tube. This does not include time spent watching movies on videotape, watching music videos, playing computer or video games, or surfing the internet for recreational purposes. "Time spent with media often displaces involvement in creative, active, or social pursuits," the Academy said. By age 70, typical American children will have spent 7 to 10 years of their lives watching TV, the Academy said.

The Academy published a short list of problems associated with children watching TV:

** Children are exposed to more than 14,000 sexual references in a year's time. If children are watching 21 hours of TV per week, this works out to one sexual reference every 5 minutes for the 1100 hours that the average child spends glued to the tube each year.

** The Academy blamed TV for some of the violence exhibited by some children. The Academy said, "More than 1000 scientific studies and reviews conclude that significant exposure to media violence increases the risk of aggressive behavior in certain children and adolescents, desensitizes them to violence, and makes them believe that the world is a 'meaner and scarier' place than it is."[2] In a 1995 statement, the Academy pointed out that by age 18 the average American child has viewed an estimated 200,000 acts of violence on TV alone. Video games increase that number. An average American child has viewed an estimated 200,000 acts of violence on TV alone. Video games increase that number. Video games increase that number. Video games increase that number. "Although media violence is not the only cause of violence in American society, it is the single most easily remediable contributing factor," the Academy said.[2]

** An American child has viewed about 360,000 advertisements before graduating from high school, the American Academy of Pediatrics pointed out in 1995.[3] At that time the Academy said, "In 1750 B.C. the Code of Hammurabi made it a crime, punishable by death, to sell anything to a child without first obtaining a power of attorney. In the 1990s, selling products to American children has become a standard business practice." The Academy went on to say, "The American Academy of Pediatrics believes advertising directed toward children is inherently deceptive and exploits children under 8 years of age" because children who are developmentally younger than 8 "are unable to understand the intent of advertisements and, in fact, accept advertising claims as true."[3]

** But probably the most important information that the Academy published about TV, from a public health perspective, is that watching TV causes weight gain in children. The Academy said in 1999, "Increased television use is documented to be a significant factor leading to obesity...."[1]

This is important for two reasons. First, excess weight is a significant, and worsening, problem among American children.[4] Roughly 25% of U.S. children are overweight or obese. Secondly, children who are overweight turn into adults who tend to be overweight as well, and the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION said in 1999 that excessive weight gain among American adults is an "epidemic" and a major cause of disease and death.[5]

How is "overweight" defined? To find out if you are overweight, you need to know (accurately) your height in inches and your weight in pounds. (Most people overestimate their height and underestimate their weight.) Now convert your weight into kilograms by multiplying pounds times 0.45, and convert your height into meters by multiplying inches times 0.0254. Now square your height (in meters) by multiplying it by itself. Now divide the resulting number into your weight in kilograms. The final result is your Body Mass Index, or BMI. Put most simply, BMI=kg/m[2].

A BMI of 19 to 24.9 is considered "normal." A BMI of 25 to 29.9 is considered overweight, and a BMI of 30 or above is considered obese, according to the American Medical Association and the World Health Organization.[6]

Among U.S. adults, the prevalence (occurrence) of obesity (BMI 30 or greater) has increased rapidly in recent years, according to a study based on telephone interviews with more than 100,000 randomly-selected individuals each year, 1991-1998, who reported their own height and weight. In 1991, 12% of the population was obese; by 1998 17.9% of the population was obese.[5] And these numbers are likely to underestimate the problem because overweight people tend to underestimate their true weight and everyone tends to overestimate his or her true height.

Remarkably this study showed that, from 1991 to 1998, obesity increased in every state, in both sexes, and across all age groups, all races, all educational levels, and among both smokers and non-smokers. As the authors of the study said, "Rarely do chronic conditions such as obesity spread with the speed and dispersion characteristic of a communicable disease epidemic."[5]

A different study, in which peoples' height and weight were actually measured, concluded that 21% of U.S. men and 27% of U.S. women are obese. When this study considered not only obesity but also overweight (a BMI of 25 or greater), then 63% of American men and 55% of American women qualified in 1998, an increase of more than 25% in the past 3 decades.[7] As noted above, at least 25% of U.S. children are overweight or obese.[8]

The BMI of 25 was not chosen arbitrarily to define "overweight." It was chosen because that is the BMI at which weight-related diseases start to increase among the population. As BMI increases above 25, so do high blood pressure, type 2 diabetes, gall bladder disease, and osteoarthritis.[7] About 80% of obese individuals have at least one of these disease conditions, and 40% have 2 or more of these conditions.

A study published in 1999 estimated that in 1991, excess weight killed about 280,000 Americans. That is to say, 280,000 people who died in 1991 would not have died that year if they had not been overweight.[9] Excess weight shortens people lives by about 1 to 3 years.[9]

The currently-accepted medical explanation for the rapidly-increasing epidemic of obesity in the U.S. (and, indeed, in other countries) is starkly simple: we are eating more calories while at the same time burning fewer calories at work and through exercise.[10,11]

However, to us the occurrence of an uncontrollable epidemic of
excess weight is somewhat perplexing in a society that is preoccupied with body weight, fitness, and diet. Nearly one-half of all U.S. women and one-third of all U.S. men report that they are attempting to lose weight.[10] Health clubs and fitness centers abound. Home exercise equipment is a booming business. Walkers, joggers, in-line skaters and bicyclists are visible in every city and town. Low-calorie, low-fat "health foods" are featured in supermarkets and restaurants. Why then are Americans of all ages, races, education levels, sexes, and geographical locations, unable to control their weight?

A hypothesis worth considering has to do with hormones. Clever research this past decade has identified a family of hormones that control both appetite and the way in which the body turns food into fat.[12] One such hormone is called leptin, and leptin injections have recently been shown to reduce weight in humans in a dose-dependent fashion.[13] At least as interesting as leptin is melanocyte stimulating hormone (MSH), which caused such rapid weight loss in obese mice that it "prompted a double-take from the surprised scientists" who conducted the experiments.[14] We know from recent studies of wildlife, laboratory animals, and humans that some industrial chemicals, released into the environment, can interfere with hormones.[15] It is conceivable that something in the environment -- something widely dispersed -- is interfering with the hormones that control appetite and fat metabolism.

But of course these hormone-disrupters would not be acting alone. No doubt fast foods and snack foods, and the barrage of advertisements that induce us to eat them, are having an effect on many of us. And a sedentary lifestyle is taking its toll, too. Just recently a study published in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION showed that children lost weight, and lost inches around the midriff, if they simply watched less TV.[16]

In sum, excess weight is a major public health problem, and television viewing is an important -- and preventable -- contributing factor.

--Peter Montague (National Writers Union, UAW Local 1981/AFL-CIO)


[14] Joan Stephenson and others, "Knockout Science: Chubby Mouse Provide New Insights Into Obesity," reporting on L. Yaswen and others, "Obesity in the mouse model of pro-opiomelanocortin deficiency responds to peripheral melanocortin," NATURE MEDICINE Vol. 5, No. 9 (September, 1999) pgs. 1066-1067, which was commented upon in G. Barsh, "From Agouti to Pomc--100 years of fat blonde mice," NATURE MEDICINE Vol 5, No. 9 (September, 1999), pgs. 984-985.


Descriptor terms: tv; obesity; overweight; weight; diabetes; osteoarthritis; gall bladder disease; violence; children; hormones; leptin; msh; melanocyte stimulating hormone; high blood pressure;