



# Fast Forward to Better Health

TV/Screen Time Obesity Report: Causes, Consequences and Remedies



Office of Statewide Health Improvement Initiatives  
Minnesota Department of Health  
PO Box 64882  
St Paul, MN 55164



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## **Introduction**

There is a positive relationship between obesity and the amount of television a person watches.<sup>1,2</sup> While the exact reasons and the extent of the problem remain unclear, we must keep this in mind as we discuss the relationship between TV/screen time and the ongoing epidemic of obesity now affecting Minnesota and our nation.

Great challenges remain when we consider this relationship, both in unclear and inadequate research and insufficiently proven interventions. In this report, we will look briefly at the obesity situation in Minnesota and nationally, what we know and what we don't about TV/screen time, what we can do based on the information we have, and finally what resources exist to help inform next steps.



## Considerations/limitations

The effects of television viewing and other screen time activities—computers, video games, hand-held devices such as games, cell phones and computing devices—on adults, youth, the community and social norms is a subject of much interest, research and opinion. Linkages between these media and violence have garnered a great deal of attention, and the relationship between TV/screen time and test scores has been the subject of interesting research. Also of interest to many are the possible effects on socialization and civility as well as the time taken away from other activities many opine to be more productive or worthwhile. While all may be areas of interest or concern, they rest beyond the scope of this report. For more information about possible relationships between violence and TV/screen time, see “Media Violence Facts and Statistics: Prevalence of Media Violence” from the National Youth Violence Prevention Center (<http://www.safeyouth.org/scripts/faq/mediaviolstats.asp>). Regarding test scores, see “Characteristics associated with older adolescents who have a television in their bedrooms,” *Pediatrics*, 2008,<sup>3</sup> and for the trade off with time spent with children, see “The Media Family: Electronic Media in the Lives of Infants, Toddlers, Preschoolers and their Parents,” Menlo Park: Henry J. Kaiser Family Foundation.<sup>4</sup>

Unfortunately, as we limit the scope to obesity, we are confronted by the paucity of research on the topic. Indeed, once we move beyond either specifically television or specifically youth, there is scant data available from which we can draw conclusions. Little research has been done regarding adults, TV/screen time and obesity. Plus, research is slow to encompass screen time usage beyond television regardless of the age group. While the Internet is two decades old, its usage is ever evolving and poses a problem for researchers hoping to publish relevant, and current, data. In addition, given the recent proliferation of hand-held devices and the nature of the technology, it may be difficult to characterize any relationship with obesity due to the struggle for currency and the difficulty in defining the parameters. For example, if one is to study handheld devices, is it the act of talking, texting, checking email, listening to music, or using an “app” that is of concern?



## Methodology

This report is the result of three strategies. On May 6, 2009, the Minnesota Department of Health and the National Institute on Media and the Family jointly sponsored a videoconference titled “TV Viewing and Childhood Obesity: Minnesota Initiative in the Child Care Setting.” The purpose of the videoconference was to provide information about the connection between television viewing and childhood obesity in order to examine policies and practices in child care settings and how they could influence children’s habits in the areas of nutrition, physical activity and TV viewing time. A total of 142 people at 11 sites across Minnesota participated in the videoconference. The target audience for the videoconference was professionals who work with and have influence on child care providers in a variety of settings, including health educators working in local public health or tribal settings, child care licensers, child care resource and referral professionals, and others working in child care, public health or a closely related field. Information generated from the attendees was used to inform the preparation of this report and its recommendations and is summarized in the appendix.

Second, key informant interviews were conducted with four experts on the effects of TV/screen time:

- Dr. David Walsh, National Institute on Media and the Family
- Jean Rystrom, Kaiser Permanente
- John Sirard, PhD, Assistant Professor, Division of Epidemiology & Community Health, University of Minnesota School of Public Health
- Mary Story, Ph.D., R. D., Professor and Associate Dean for Student Life, Division of Epidemiology & Community Health, University of Minnesota School of Public Health

Third, 30 research articles and reports examining various aspects of the relationship between TV/screen time and obesity were reviewed.



## **Background: overweight and obesity**

The obesity epidemic appears in both boys and girls, men and women, and among all racial and ethnic groups. National data demonstrate that certain groups, including Hispanics, non-Hispanic Blacks, Native Americans and individuals in low socioeconomic groups are particularly affected by obesity.

Body mass index (BMI) is used to express the relationship of weight-to-height. BMI is calculated using weight in kilograms and height in meters (i.e., weight/height). Overweight is defined as a BMI between 25 and 29.9 and obese as a BMI of 30 or higher.<sup>5</sup>

Among youth, BMI is plotted using sex-specific BMI-for-age growth charts. These charts generate a percentile relative to growth patterns of children in the United States. “Overweight” means having a BMI at or above the 85th percentile for age and sex but less than the 95th percentile, and “Obese” means having a BMI at or above the 95th percentile.

Overweight and obesity are generally caused by an ongoing imbalance in the body’s energy intake and expenditure. Lack of physical activity and unhealthy eating patterns in our daily lives contribute to weight gain over time. Genetics play a role in determining weight; however, dramatic changes in the world over time have altered our daily lifestyle, resulting in a decrease in physical activity and an increase in caloric intake in the population.

Nationally<sup>6</sup>:

- An estimated 97 million adults in the U.S. are overweight or obese
- Nearly one-third of U.S. adults are obese
- About 18 percent of school-age children and about 17 percent of teens are at-risk for overweight
- About 19 percent of school-age children and about 17 percent of teens are overweight

Minnesota:

- Nearly 63 percent of Minnesota adults are overweight or obese<sup>7</sup>
- In 2004, 13.8 percent of children 2-5 years of age enrolled in Women, Infants and Children (WIC) were overweight<sup>8</sup>

The increasing rate of overweight and obesity threatens the health of our children, youth, adults and seniors, placing them at much greater risk for development and early onset of a wide variety of chronic diseases and health conditions. Being overweight or obese increases the risk of premature death and many diseases and health conditions, including<sup>5</sup>:

- Hypertension (high blood pressure)
- Hyperlipidemia (high cholesterol)
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Depression
- Osteoarthritis
- Sleep apnea
- Some cancers

Obesity is also associated with:

- Pregnancy complications
- Menstrual irregularities
- Presence of excess body and facial hair
- Stress
- Incontinence
- Irregular surgical risk
- Increased mortality



## TV/screen time usage

It is hard to imagine a more ubiquitous appliance in American households over the last half century than the television. Around 1950, only two percent of households in the United States had television sets; by the early 1990s, 98 percent of households owned at least one and over 60 percent had cable television.<sup>9,10</sup> Some would argue it has brought into our living rooms both the highs and lows of our culture and our history. While what constitutes a “high” or a “low” is clearly subjective, the effects on our culture, and perhaps its ability to reflect and even at times define it, will keep theorists, authors, and media studies professors busy into the future. However, this is not of concern here; what is relevant for the scope of this report is the amount of usage and how it affects obesity rates.

Fifty-nine percent of U.S. adults report watching more than two hours a day of television.<sup>11</sup> However, when it comes to media usage, most of what we know centers on television use by children:

- On a typical day, 75 percent of children watched television for an average of approximately one hour and 20 minutes.<sup>12</sup>
- 27 percent of 5- to 6-year-olds used a computer for an average of 50 minutes on a typical day.<sup>12</sup>
- 61 percent of children under age two use screen media and 43 percent watch TV every day.<sup>4</sup>
- 41 percent of 2- to 3-year-olds and 43 percent of 4- to 6-year-olds use screen media for 2 hours or more on an average day.<sup>4</sup>
- Nearly a third of children who are six years or younger live in households where the television is on all (13 percent) or most (19 percent) of the time.<sup>4</sup>

- 30 percent of children who are six years old or younger live in households where the TV is on during meals all (16 percent) or most (14 percent) of the time.<sup>4</sup>
- Children 8-18 years of age average three hours of television every day.<sup>13</sup>
- Many young children (one fifth of 0- to 2-year-olds and more than one third of 3- to 6-year-olds) also have a television in their bedroom.<sup>12</sup>
- Other screen time activities beyond television are also common in youth. Children ages six months to six years use a computer (27 percent), play console video games (13 percent), and play handheld video games (8 percent) several times a week.<sup>4</sup>

Children of course are not in charge of their TV/screen time usage. The more time parents watch television and use other media, the more likely children are to watch television themselves. For example, children whose parents use television and other screen media for more than two hours in a day are much more likely to watch television that day than children whose parents spend less than an hour using TV/screen media (81 percent vs. 64 percent), and they average 28 more minutes of TV time per day.<sup>4</sup> This issue affects certain populations more than others. More time is spent watching television by African American and Hispanic children than white children and, among children six years old and under, by those in households with lower socio-economic status.<sup>4, 13, 14</sup>



## TV Viewing/screen time and obesity

There is much we do know about the link between television and overweight and obesity. Studies have found a positive association between the number of hours children and adults watch television and the prevalence of overweight and obesity.<sup>13, 15, 16, 11</sup> Conversely, the prevalence of overweight for youth is lowest among those watching one or less hours a day.<sup>16</sup> Video game use, much less studied than television, seems also to be associated with childhood obesity.<sup>17</sup> Furthermore, there appears to be a link between television viewing in childhood and obesity in adulthood.<sup>1, 2</sup>

Television sets in children's bedrooms:

- Many young children (one fifth of 0- to 2-year-olds and more than one third of 3- to 6-year-olds) have a television in their bedroom.<sup>18</sup>
- Having a TV in the bedroom is more strongly associated with increased risk of child overweight than the child's weekly TV/video viewing hours.<sup>19</sup>
- Girls with a television in their bedroom reported less time spent in vigorous activity (1.8 vs 2.5 hours/week) and more time spent watching television (20.7 vs 15.2 hours/week).<sup>20</sup>
- Compared with girls without a bedroom television, girls with a bedroom television reported lower vegetable intake (1.7 vs 2.0 servings per day), greater sweetened beverage consumption (1.2 vs 1.0 servings per day), and fewer family meals (2.9 vs 3.7 meals per week).<sup>20</sup>
- Compared with boys without a bedroom television, boys with a bedroom television reported more time spent watching television (22.2 vs 18.2 hours/week), lower fruit intake (1.7 vs 2.2 servings per day), and fewer family meals (2.9 vs 3.6 meals per week).<sup>20</sup>

While the fact that there is a relationship between obesity and television usage seems clear, the reasons remain unclear.<sup>21</sup> Five theories are commonly postulated:

- Decreased metabolism when watching television
- Television supplants physical activity
- Increased snacking during television viewing
- Dietary behavior among heavier television users
- Reduced or disrupted sleep

In order to be most effective in designing interventions to address obesity, it would be helpful to understand these relationships.

### **Metabolism**

In one study, television was found to be associated with lower metabolic rates and thus TV viewers burned fewer calories than if they were doing other activities. In “Physical Activity and Television Viewing in Relation to Risk of Undiagnosed Abnormal Glucose Metabolism in Adults,”<sup>22</sup> researchers reported a “deleterious effect of TV time on the risk of abnormal glucose metabolism in adults.” However, this study has not been replicated and it is unclear if this effect is real.<sup>23</sup>

### **Physical activity**

It would seem intuitive that watching television would result in less physical activity, and this is often cited in the public discussion as a major reason for overweight and obesity. However, studies have yet to confirm the effect. Instead, the mere act of turning off the television in and of itself does not seem to result in increased physical activity. Most research indicates that time spent with media does not displace time spent in physical activities. In one study, children who watched less television seemed to be pursuing “relatively sedentary activities such as reading books, talking on the phone, or playing board games instead.”<sup>17</sup>

### **Snacking behavior**

There appears to be conflicting evidence as to whether increased snacking during TV viewing contributes to obesity. One study found that the more TV children watch, the more unhealthy their food choices, and that children who watched more than two hours of TV a day not only ate more unhealthy foods, but they were also less likely to eat two or more servings of fruits and vegetables a day.<sup>24</sup> However, “Television Viewing and Snacking Behaviors of Fourth- and Eighth-Grade Schoolchildren in Texas”

found “Television viewing, frequency of snack consumption and consumption of foods advertised on television were all positively related to one another,”<sup>25</sup> but that “In general, both consuming more snacks and foods advertised on television were associated with reduced odds of overweight regardless of the amount of television watched.” The researchers were forced to conclude “The results suggest that the relationships between weekday snacking behaviors and television viewing in a multiethnic population are complicated.”

### **Dietary behavior**

Perhaps more promising to our understanding the relationship between television and obesity is the relationship between television and poor diets in general. Adolescents who watch more television consume higher fat foods<sup>26</sup> and more fast food and soft drinks while eating less fruits and vegetables.<sup>27</sup> In homes that have the television on during meals, children consumed more red meat, pizza and snack foods and less fruits and vegetables.<sup>28</sup>

One reason suggested for this may be the content of television commercials. In the late 1970s, children viewed an average of about 20,000 commercials aired on television per year. The number increased to 30,000 per year in the late 1980s and more than 40,000 per year in the late 1990s.<sup>29</sup> 35-45 percent of commercials during children’s shows are food ads, and on Saturday morning children’s TV, 78 percent are food ads.<sup>30</sup> Multiple studies have found that children’s television programs frequently advertise high-fat or high-sugar foods.<sup>31, 32, 33</sup> and in one study, 91 percent of the food ads were for foods high in fat, sugar and/or salt.<sup>34</sup>

### **Reduced or disrupted sleep**

Also quite promising to our understanding of the connection between TV/screen time and obesity is television’s effects on the number of hours a person sleeps, especially when considering televisions in bedrooms and youth. Television in bedrooms is associated with getting less sleep, and getting less sleep is associated with increased risk for overweight and obesity. Twice as many youth with a television in their bedroom were heavy television users watching more than five hours a day when compared with youth without a television in their bedroom (16 percent vs 8 percent). Both girls and boys with televisions in their bedrooms reported more time spent watching television, 20.7 versus 15.2 hours per week for girls, and 22.2 versus 18.2 hours per week for boys.<sup>3</sup> Preschoolers who have a television in their bedroom watch 4.8 more hours per week than children without.<sup>19</sup>

In “Short Sleep Duration and Weight Gain: a Systematic Review,”<sup>35</sup> Sanjay R. Patel MD, MS and Frank B. Hu MD, Ph.D considered 36 publications and found that “Short sleep duration is strongly and consistently associated with concurrent and future obesity.” In 11 studies identified assessing the association between sleep duration and weight in children, all 11 reported a positive association between short sleep duration and increased obesity. Of four studies of adolescents, all four found a positive relationship for boys and all but one found a positive relationship for girls. Adult studies have been less clear. Of nineteen studies, eleven reported a clear association between short sleep duration and increased weight, two studies reported mixed findings with an association found in one gender but not the other, and five found no relationship. The authors suggest that these results may indicate the correlation may decrease with age.

Four reasons for this effect have been postulated. First, increased hours awake mean increased hours available for snacking. Second, sleep deprivation may lead to altered thermoregulation, or a drop in core body temperature, suggesting decreased energy expenditure. Third, decreased sleep may increase fatigue and possibly lead to decreased physical activity. Evidence for these three postulates, however, is lacking or study results have been inconsistent. The fourth, and perhaps most promising, is that there is some evidence of increased hunger from decreased sleep, and one study found that the increase in appetite was particularly notable for high fat and carbohydrate foods.<sup>36</sup>



## Recommendations

While the exact relationship between obesity and TV/screen time remains unclear, the fact that there is a connection gives us impetus for action. This is especially true in the case of children. One school-based intervention has shown that children who reported a decrease in time watching television also had a decrease in body mass index (BMI).<sup>37</sup>

The American Academy of Pediatrics recommends no screen time for children under two years of age and no more than 1-2 hours per day for children two and over.<sup>38</sup>

### **At a glance:**

- Decrease TV/screen time usage.
- Do not have televisions in children's bedrooms.
- Limit TV/screen time in childcare programs.
- Limit the amount of high caloric food advertising aimed at children.
- At community centers and other organizations serving youth, offer any of several proven programs designed to reduce obesity.
- Create a social marketing campaign to inform the public about the connection between screen time and obesity.

### **Decrease TV/screen time usage**

Given the weight of the evidence, two recommendations for families seem clear. First, while the cause remains to be seen, it is clear that overweight and obesity are related to television viewing and possibly other screen time. Therefore, people should restrict the amount of time spent with these activities.

### **Do not have televisions in children's bedrooms**

Second, parents should not allow televisions in their child's bedroom, especially young children. While the exact cause remains speculative, the link between a child having a television in the bedroom and overweight and obesity seems clear.

### **Limit TV/screen time in childcare programs**

There is growing consensus that regulators should take steps to limit screen time in child care programs. In "Child Care as an Untapped Setting for Obesity Prevention,"<sup>39</sup> the authors suggest that "...state licensing regulations of child-care facilities may provide an effective opportunity to prevent childhood obesity."

As of 2008, 17 states regulate screen time in child care centers and 15 in family child care homes.<sup>40</sup> For child care centers, seven states limit the number of screen time hours:

- Three states do not allow more than one hour a day, one 1½ and two states two hours
- One state limits screen time to less than five hours per week
- One state does not allowed any screen time for children less than two years of age
- One state does not allow screen time for infants
- Six states set limits on daily screen time for family child care

When considering the design of regulations for child care programs, the following model standards, developed by the National Policy & Legal Analysis Network to Prevent Childhood Obesity (NPLAN),<sup>41</sup> based on the recommendations of both the American Academy of Pediatrics and the National Association for Sport and Physical Education, may serve as useful examples:

- Infants shall not watch television, video, or other visual recordings or view computers.
- Toddlers under the age of 24 months shall not watch television, video or other visual recordings or view computers.
- Toddlers age 24 to 36 months shall not watch television, video or other visual recordings or view computers for more than 60 minutes per day of child care.
- Preschool-age children shall not watch television, video or other visual recordings or view computers for more than 60 minutes per day of child care.

- Any screen time programming shall be limited to educational programs or programs that actively engage child movement.

While turning off the television alone does not appear to lead to increased physical activity, there remains the core message: more physical activity is associated with less overweight and obesity. The 2008 Physical Activity Guidelines for Americans ([www.health.gov/paguidelines](http://www.health.gov/paguidelines)) from the Department of Health and Human Services recommends children and adolescents should do 60 minutes or more of physical activity daily, and adults should do at least 150 minutes a week of moderate-intensity or 75 minutes a week of vigorous-intensity aerobic physical activity.

Similarly, when it comes to nutrition, one should understand the role of portion size, nutrient density and individual caloric needs and should decrease sugar-sweetened drinks, hydrogenated fats and added sodium to achieve a healthy, balanced diet ([www.mypyramid.gov/pyramid](http://www.mypyramid.gov/pyramid)).

### **Limit advertising aimed at children**

Since the negative effects of heavy television viewing on diet seems clear, some control on the content of advertising targeting young children should be considered. At present, many in the food industry have stated their intent to self-regulate food marketing to children. However, it has been suggested that this self-regulation has been inadequate, inconsistent and ultimately ineffective. According to Margo G. Wootan, Director, Nutrition Policy Center for Science in the Public Interest, “Despite industry efforts to self-regulate, several recent studies have found that there has been only a small decrease in the marketing of unhealthy foods to children.”<sup>42</sup> Therefore, regulatory remedies may need to be considered. It has been estimated that a ban on fast-food restaurant advertising would reduce the number of overweight children ages 3-11 in a fixed population by 18 percent and would reduce the number of overweight adolescents ages 12-18 by 14 percent.<sup>43</sup>

### **Programs**

Schools, rec centers and other providers of programming for youth should consider offering programs to decrease television viewing. The CDC has found that four popular interventions designed to reduce TV viewing—Brocodile the Crocodile, Eat Well and Keep Moving/Planet Health, The SMART classroom curriculum and Stanford GEMS—have shown reductions in hours of TV viewing ranging from 3.1 to 5.5 hours per week.<sup>44</sup>

### **Social marketing campaigns**

A social marketing campaign directed at specific target audiences with the goal of implementing individual recommendations and reducing TV/screen time may be fruitful. Particularly, the recommendation for parents to not allow a television in children's bedrooms may be especially likely to succeed, given the clarity of the message, the low personal impact on the parents and the lack of public knowledge about, and clear evidence for, increased overweight and obesity related to televisions in bedrooms.

### **Conclusion**

While completely understanding the relationship between TV/screen time and obesity remains a challenge for public health, this cannot be a barrier to action. Efforts are needed on many fronts if we are to make a meaningful impact on obesity rates and associated chronic diseases, and reducing television viewing clearly has a role. We welcome more research, especially regarding causal relationships, the impact of other screen time activities and the effect of TV/screen time on adult obesity. Until we have more information, we must work with what we do know. Therefore, continued action is needed, especially regarding the role of television and childhood obesity.



## More resources

### Resource list

- TV Viewing & Childhood Obesity Videoconference - May 9, 2009 <http://www.health.state.mn.us/tvscreentime>
- “Has research shown a connection between media and overweight?” at [http://www.cmch.tv/mentors\\_parents/overweight.asp](http://www.cmch.tv/mentors_parents/overweight.asp)
- Strategic Plan for Overweight and Obesity Prevention—New York State Revised September 2005 [http://www.nyhealth.gov/prevention/obesity/strategic\\_plan/television\\_viewing.htm](http://www.nyhealth.gov/prevention/obesity/strategic_plan/television_viewing.htm)
- Active Bodies, Active Minds <http://depts.washington.edu/tvhealth/index.htm>
- Helpful Ways to Reduce Screen Time <http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan/live-it/screen-time.htm>
- State Nutrition, Physical Activity and Obesity Program: Technical Assistance Manual, January 2008, Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity and Obesity [http://www.cdc.gov/obesity/downloads/TA\\_Manual\\_1\\_31\\_08.pdf](http://www.cdc.gov/obesity/downloads/TA_Manual_1_31_08.pdf)



## Appendix

### **Recommendations from the TV Viewing and Childhood Obesity**

#### **Minnesota Initiative in the Child Care Setting Video Conference.**

On May 6, 2009, the Minnesota Department of Health with the National Institute on the Media and Family held a video conference for child care licensers in county agencies, health educators in local public health agencies and tribal government's child care consultants in child care resource and referral (CCR&R), and Minnesota tribal resources for early childhood care (MnTRECC) organizations. The purpose of the training was to introduce a multi-year policy initiative designed to increase Minnesota's capacity to address the impact of TV viewing on childhood obesity in Minnesota. The initiative will begin with a focus on the child care setting. Video conference attendees developed the following recommendations.

#### **1. Best practices**

The most responses by far are in the form of recommendations and/or best practices for child care providers and programs. The largest number of these recommendations concern screen time, many of which recommend limiting TV viewing or computer/videogame playing by time or content or both. Some suggest alternatives to TV viewing, such as games, reading, more active pursuits like biking, service projects and moving inside activities such as art projects outside for added interest.

The next largest group of recommendations concern physical activity, most addressing the advantages of regular, structured and unstructured play, both inside and outside. A number of respondents mention that some forms of media, such as Nintendo

Wii, Dance Dance Revolution and exercise videos, can actually be used to encourage physical activity. A smaller but significant number observe that providers who offer a structured curriculum with little or no TV viewing usually also include daily outside time and, in general, offer the highest quality programs.

Most of the nutrition-related suggestions concern serving healthy meals and snacks and limiting “junk food.”

Participants from three different sites recommend the use of Environmental Rating Scales, which include items on media use, as a way to evaluate and improve the quality of child care programs. Several suggest ways that programs could better meet the needs of older children, whom they indicate tend to be responsible for entertaining themselves, which often results in too much time spent watching TV or playing video games. A variety of other best practices for child care programs are mentioned, including the use of community resources, involvement of parents in child care programming and more active engagement of providers in the children’s daily activities.

## **2. Educate parents**

A large number of the videoconference participants recommend that educating parents is key to addressing the issues of obesity and TV viewing in their children’s lives and in their child care programs. The vast majority think parents need to be better informed about the impact of TV/screen time and appropriate use of media. Many believe that parents must be encouraged to challenge cultural norms and to take their position as role models for their children seriously. They acknowledge that this will be especially difficult for young parents who have grown up in a media culture and will have to change their own habits. Some suggest teaching parents about alternatives to TV viewing, such as family games and activity kits for the car. Others think that the answer lies in parents’ being more willing to make and enforce rules and to be more actively involved in their children’s lives, rather than using TV as a babysitter.

Many of those who advocate for more parent education believe that it should reinforce their role as consumers of child care by giving them the tools they need to choose quality child care and to monitor and give feedback about the programs their children attend. Some encourage parents to become more aware of the issues and use their power to influence TV viewing, nutrition and physical activity practices in child care settings.

Others mention reaching new parents before they even leave the hospital with their newborn, posting relevant information on the Minnesota Department of Education's Parents Know website, and the difficulty for parents of keeping up with rapidly changing technology.

### **3. Strengthen regulations**

Videoconference participants express strong support for more and stricter regulations for child care programs in the areas of screen time (for which rules do not exist in Minnesota at this time), physical activity and nutrition. This desire is coupled with the acknowledgement that compliance would be difficult, if not impossible, to monitor. They assert that the difficulty of monitoring a practice as commonplace as TV viewing is increased by the fact that licensing caseloads make it impossible to visit providers often enough, to spend enough time with them to cover more than the basics of safety and prevention, and to schedule visits only during activity times, rather than naptime, in order to see how a programs really operate.

Even while admitting their concerns about compliance, the child care licensors, more than any other group of participants, express support for regulations to back up their own advice to providers, to put "some teeth" in their recommendations. As long as licensors lack the authority to cite providers who do not follow best practices regarding physical activity, nutrition or TV time, many fear that "providers will not follow through even though it's in the children's best interest."

Desired changes in child care regulations include limiting the amount of time children can watch TV and the types of shows or channels they can watch, requiring a minimum amount of time to be spent in physical activity and active outdoor play each day, and stricter nutrition guidelines.

Given the difficulty of enacting and monitoring stronger regulations, many licensors and others feel that mandatory training in the areas of nutrition, physical activity and especially screen time is a reasonable and workable approach. There seems to be general agreement that appropriate training exists, but should be required rather than optional.

#### **4. Educate providers**

In keeping with the topic of the videoconference, the majority of participants agree that there is not enough awareness among child care providers about the impact of TV viewing/screen time on children's healthy development, particularly as it relates to brain development and obesity. Many believe that further training of child care providers is the best way to ensure better practices in their programs. In addition, a number of them point out that including these topics in the training and orientation of new child care providers could be an effective way to influence child care programs during the development phase, while policies are formulated and daily activities are structured.

A number of people express concern that, given the current focus on school readiness, some providers (and parents) have decided that "learning activities" are more important than play or physical activity; respondents think that providers need to be reminded that play and physical activity are learning activities for young children.

Respondents suggest that even providers who are convinced of the need to make changes in their programs will need training to create alternative activities to TV viewing, design and incorporate physical activities into their daily schedule, include more fruits and vegetables in their menus, and inform and persuade parents of the importance of these new practices.

Several also mention the importance of formulating clear, consistent key messages for providers and parents and of including Family, Friend and Neighbor (FFN) caregivers in these efforts.

A number of challenges are identified that make it difficult for providers to make changes in their programs and practices. Among these are the lack of time for training, the huge range of ages in a typical family child care program, young providers for whom screen time is the norm, experienced providers who must be convinced that training is relevant to their needs, the difficulty of keeping up-to-date with technological advances and many providers' practice of using TV as a babysitter while they prepare food or take a break. But there seems to be willingness to attempt to overcome these challenges with creative training and support for child care providers.

## **5. Provide technical assistance**

Technical assistance is mentioned less often than training and is often suggested on the same topics. But there does seem to be a belief that technical assistance can play a role in helping child care providers learn how to change their program practices to support healthier habits. There is agreement that many providers could benefit from ideas and resources to adapt their daily schedule and activities to include less screen time, more physical activity and better nutrition. Once again, there is the thought that this would be most effective for new providers who are setting up their program, but still important for established providers.

Some suggested that licensors encourage providers to use a checklist to report daily activities to parents, as a way of educating parents and holding themselves accountable. A number of licensors in particular think it is appropriate to use their influence to share best practices for TV viewing during site visits. Dakota County practitioners described their use of an annual evaluation by parents of their children's child care programs. Licensors use this feedback to guide the technical assistance they offer to each provider during visits. Many seem interested in adding a question about TV viewing or screen time to this evaluation, to give them an opportunity to advise providers on this subject.

## **6. Provide resources**

Participants see a lack of resources as one cause of inadequate healthy practices in child care programs. They see the need for the state and federal governments to provide more resources, which could be targeted and distributed as grants and incentives by local Child Care Resource and Referral Agencies, among others. These resources could include money for materials, supplies and equipment for provider training and for transportation so providers could take advantage of more community programs, particularly active outdoor summer activities.

Some also see the need for resources such as health facts and statistics and the development, distribution and promotion of guidelines and policies for healthy practices. There is even a suggestion that a chart outlining standards for TV viewing/screen time and physical activity at different developmental stages could be a useful tool in encouraging change.

## **7. Form partnerships**

Some people point out that partnerships with community organizations and initiatives can be a way to maximize services, especially in times of decreased funding.

Suggested partners include:

- Child Care Resource & Referral (CCR&R), public health and child care licensing - for training
- WIC - for parent education about nutrition, physical activity and TV viewing
- Community organizations and programs, such as libraries, parks and schools - for child and family-centered activities
- Corporations, businesses and government agencies - for worksite classes for parents
- Pediatricians - for guidance of parents on health issues, including TV viewing

## **8. Formulate and promote policies**

Participants at several sites call attention to the lack of clear, consistent messages and policies from leading state agencies on issues related to childhood obesity and the role that child care programs can play in its prevention. Some note that even many of the best practices and recommendations are short term solutions and that policies are necessary to cause the system to change.

One suggestion to address this lack is the development of a statewide campaign, with simple, clear messages about these issues, aimed at educating relevant individuals and organizations ranging from the Governor, legislators and staff at state agencies to school and child care personnel to members of parent and community organizations.

## **9. Other**

A number of videoconference participants promote ideas or strategies that don't fit into the above categories.

Educating a variety of groups other than parents and child care providers about these issues is seen as crucial to effecting change. Several suggest that this education begin with the children themselves, from preschoolers through high school students.

Other suggestions to increase knowledge and awareness of these issues include:

- Developing a media campaign to raise public awareness of the effects of too much screen time on children

- Funding elementary schools to take the lead in promoting healthy family and community activities
- Educating licensors, CCR&R staff and others who can influence child care providers and programs
- Making National Health and Safety Standards/Guidelines available to decision and policy-makers, as well as to the providers themselves

Some of the comments address environmental changes that could support healthy practices. These include:

- Pressuring the FCC to regulate adult programming during daytime hours
- Requiring cable companies to offer a la carte channels
- Offering year-round school for young children
- Requiring that PE and health classes be taken in person, not online
- Requiring that advertising designed to encourage screen time be truthful about its impact

Several recommend that school-age care be offered in the schools, possibly in response to concerns expressed that the wide age range in family child care makes it difficult to meet the needs of all the children.

Several cite the need for research and scientific evidence to support requests for programming, funding and changes in regulations.



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