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Reducing Student Exposure to Digital Food and Beverage Marketing

Policy and Practice Recommendations



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Reducing Student Exposure to Digital Food and Beverage Marketing: Policy and Practice Recommendations

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Executive Summary

Digital marketing of unhealthy foods and beverages to children and adolescents is pervasive and undermines healthy eating. Expanded use of electronic devices and remote learning during the COVID-19 pandemic likely contributed to increased rates of childhood obesity, greatly impacted student learning, and exacerbated pre-existing racial, ethnic, and socioeconomic disparities. As schools continue using educational technology, policy interventions to limit digital food marketing in schools and on school-issued devices are needed. The United States Department of Agriculture's (USDA) policy for food marketing in schools provides little guidance for how to address digital food marketing, and federal and state privacy protections for children are inadequate.

This report highlights four areas where state and local education authorities can intervene to reduce digital food marketing through their own policies (Table 1) and provides model policy language for each. Almost all school districts conduct internet filtering for inappropriate content, and food-related content can be blocked on school networks and school-issued devices. School wellness policies and school-approved lists of digital instructional materials can exclude materials with unhealthy food marketing. Almost all high schools and middle schools have a cellphone policy governing the use of student-owned devices during the school day that can be expanded to prohibit device use

Table 1: Policy and Practice Recommendations to Reduce Student Exposure to Digital Food Marketing

Content Filtering

- Include food-related content as a content filter category on school networks and school-issued devices
- Utilize ad-blocking technology on school networks and school-issued devices

Digital Instructional Materials

- Do not use digital materials with food and beverage marketing or recommend their use by students
- Minimize the collection of student data by digital materials

Student-Owned Device Use

- Expand student-owned device use policies to prohibit use during lunch

Communication with Parents & Students

- Communicate school-related and student activity-related information to parents and students on school-dedicated platforms

during lunch to support healthy eating behaviors.

Most schools have social media policies that can ensure that students and families are not obligated to use commercial social media platforms to access school-related information. These policy approaches leverage existing policy mechanisms and can be used to address digital food marketing from a variety of sources.



Introduction

Digital marketing of unhealthy foods and beverages to children and adolescents is pervasive and undermines healthy eating. Expanded use of electronic devices and remote learning during the COVID-19 pandemic accelerated an ongoing shift towards educational technology and increased the urgency for policy interventions to limit digital food marketing in schools and on school-issued devices. The USDA requires schools participating in the National School Lunch Program to restrict advertising to products meeting its minimum nutrition requirements for foods sold in schools, but provides little guidance for how to address digital food marketing.¹ Federal child and student privacy protections, and state

student privacy laws are inadequate to shield students from harmful food and beverage marketing. In light of these policy gaps, this report describes ways state and local education authorities can incorporate limits on digital food marketing into school policies for:

- Content filtering on school networks and on school-issued devices
- Digital instructional materials
- Student-owned device use
- Use of social media to communicate with parents and students

Model policy language is provided that can be incorporated into new or existing school policies.

Background

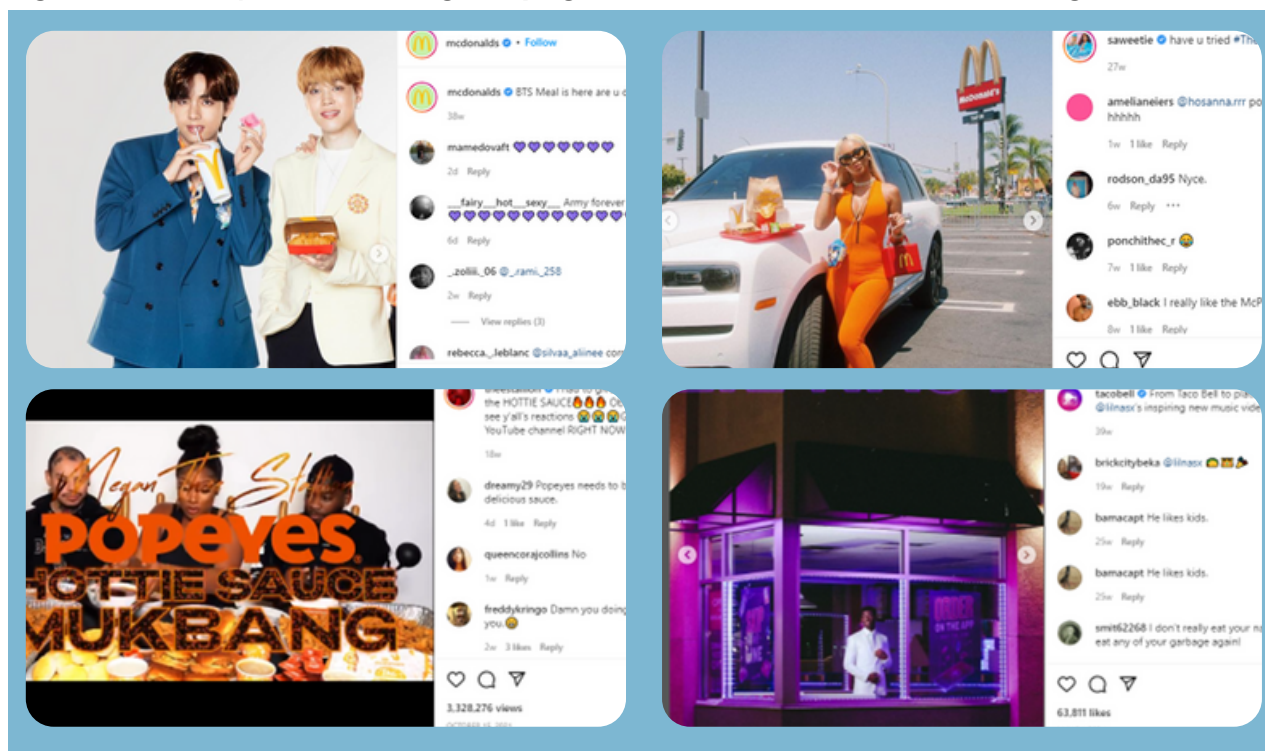
Digital Food and Beverage Marketing to Children

Digital food and beverage marketing to children and adolescents poses an even greater public health challenge than traditional forms of advertising alone. Overwhelmingly, food and beverage marketing targeting this age range is highly obesogenic, with companies almost exclusively promoting nutrient-poor, calorie-dense products.²⁻⁴ Digital marketing campaigns can include product packaging that becomes interactive when viewed through a smartphone, celebrity brand ambassadors (Figure 1), adult social media influencers, child “kidfluencers” who promote products via YouTube, brand partnerships with popular gamers, in-game ads, and food and beverage product placement within electronic games.⁵ These tactics are targeted,

interactive, often unidentified as marketing, and are often accessed when children are unsupervised.⁶

Food and beverage companies use vast datasets and sophisticated algorithms to target youth and communities already experiencing higher rates of chronic diseases with unhealthy product advertising.⁵ For example, beverage companies aggressively target African Americans, Latinos, Native Americans, and Asian-Pacific Islanders with marketing for foods and drinks (such as sugary drinks and foods low in nutrition and high in sugars, salt, and fats) that contribute to chronic diseases.⁷

Figure 1: Celebrity-Led Marketing Campaigns for Fast Food Restaurants on Instagram (2021)



Food and beverage companies also promote their own mobile applications (apps) and websites through traditional television ads. For example, a study conducted by the UConn Rudd Center for Food Policy & Health found that in 2019 the 27 largest fast food restaur-

ant chains spent \$119 million on digital ads (a 74 percent increase from 2012), and an additional \$181.5 million on television ads to promote their mobile apps and websites (Table 2).⁸

Table 2: Fast Food Restaurant Spending on Digital Marketing (2019) (in millions)⁸

Rank	Digital Ads	TV Ads for Mobile Apps and Websites
1	McDonald's (\$39.3)	Domino's (\$121.1)
2	Subway (\$11.5)	Little Caesars (\$31.8)
3	Wendy's (\$7.3)	McDonald's (\$8.8)
4	KFC (\$6.4)	Pizza Hut (\$7.7)
5	Pizza Hut (\$6.3) Starbucks (\$6.3)	Wendy's (\$5.4)

COVID-19 and Student Device Use

Children and adolescents have easy access to digital content. Roughly 95 percent of teens own a smartphone and the average age for a child to receive their first smartphone is 11 years old.^{9,10} Half of children have a social media account by the age of twelve.¹¹ As the COVID-19 pandemic transitioned school-aged children out of their classrooms and into remote learning, curricular content and social interactions were facilitated via screens, further increasing the amount of time children already spent on devices daily. A national survey of adolescents ages 12-13 years old

found that during the pandemic, in addition to time spent online for school, average recreational screen time nearly doubled from 3.8 to 7.7 hours per day.¹²

Many schools acquired and distributed digital devices, such as Chromebooks, to students to facilitate remote learning during the pandemic.¹³ However, not all school-issued devices were properly equipped with measures to protect students from digital marketing. In a national survey of parents with children in grades K-12, nearly 40 percent of parents reported that their child's school-issued device had functions enabled beyond those needed

to facilitate remote learning.¹⁴ Increased screen time, coupled with these inadequate protections, has the potential to further expose children to digital food marketing.

COVID-19 and Childhood Obesity

The COVID-19 pandemic exacerbated the childhood obesity epidemic.^{15,16} With school closures and stay-at-home orders, access to nutritious food and opportunities for physical activity were limited. Children and adolescents gained weight more rapidly than pre-pandemic, and rates of obesity increased^{15,16} with tandem widening of preexisting racial, ethnic, and socioeconomic health disparities.¹⁷ Concern over the rise of childhood obesity rates led the American Academy of Pediatrics (AAP) to release interim guidance for pediatricians, offering healthy lifestyle maintenance recommendations for families and children during the pandemic.¹⁸ Even as schools have returned to in-person learning, the impacts of COVID-19 on childhood obesity endure. Given that food and beverage marketing overwhelmingly promotes obesogenic foods and beverages, it is critical to address harmful food and beverage digital marketing in schools and on school-issued devices.

Methods to Develop Policy and Practice Recommendations

We reviewed the literature and published reports online to update our information on schools' and students' use of devices, educational technology industry practices, and school standards for devices and digital instructional materials since the onset of the COVID-19 pandemic. We obtained input via telephone interviews from non-profit stakeholders knowledgeable about educational technology in schools and healthy eating as policy and practice recommendations were being developed. We reviewed federal laws and existing policy compendia of state school policy (e.g., National Association of State Boards of Education, School Health Policy Database; National Conference of State Legislatures, State Internet Filtering Laws, Student Privacy Compass, State Student Privacy Laws) to determine how existing policies apply to digital food marketing exposure during educational activities and via school-issued devices. We used this information to identify policy gaps, areas for policy intervention, and to develop model policy language.

Policy and Practice Recommendations

This section describes four potential areas for school policy intervention to reduce student exposure to digital food marketing (Table 3). These recommendations were identified after completing legal research, reviewing recent journal articles and reports, and consulting with experts. The four areas were selected because they can be carried out by state and

local education authorities, and can be incorporated into written policies (e.g., social media policy) and standard practices (e.g., school-owned device settings) that already exist in many school districts. Background information is provided for each recommended practice followed by model policy language.

Table 3: Policies and Practices to Reduce Digital Food Marketing

Recommendations	Existing Policy or Standard Practice for Incorporation
<p>Content Filtering</p> <ul style="list-style-type: none"> • Include food-related content as a content filter category on school networks and school-issued devices. • Utilize robust ad-blocking technology on school networks and all school-issued devices 	<ul style="list-style-type: none"> • Acceptable Use Policy • Content Filtering Policy • School-Issued Device Settings • School Nutrition Policy • School Wellness Policy
<p>Digital Instructional Materials</p> <ul style="list-style-type: none"> • Do not use digital materials with food and beverage marketing or recommend their use by students • Utilize a robust student privacy policy to minimize the collection of student data by digital materials 	<ul style="list-style-type: none"> • Approved List of Digital Materials • Private Contracts with Vendors • School-Issued Device Settings • School Nutrition Policy • School Wellness Policy • Student Privacy Policy
<p>Student-Owned Device Use</p> <ul style="list-style-type: none"> • Expand student-owned device use policies to prohibit use during lunch 	<ul style="list-style-type: none"> • Cell Phone or Electronic Device Use Policy • School Wellness Policy
<p>Communication with Parents and Students</p> <ul style="list-style-type: none"> • Communicate school-related and student activity-related information to parents and students on school-dedicated platforms 	<ul style="list-style-type: none"> • Electronic Communication or Social Media Policy • School Wellness Policy

Content Filtering

Include food-related content as a content filter category on school networks and school-issued devices

Utilize robust ad-blocking technology on school networks and all school-issued devices

Content filtering limits material students can access on school networks in school and can also limit content students access on school-issued devices when used outside of school. Virtually all schools conduct some form of content filtering.¹⁸ Content filtering is achieved in part by using ad-blocking software or services that block ads, and content filtering services that maintain categories of URLs that a school can block (black list) or allow students to access (white list). Filter categories commonly include topics like “Alcohol/Tobacco,” “Gambling,” “Games,” “Porn/Nudity,” and “Restaurants/Food.” Schools select which categories to block in compliance with federal and state laws. Appendix A provides an example of a school content filtering policy for school-issued devices. Remote learning on school-issued devices during the COVID-19 pandemic clarified the need to have effective content filtering when devices are being used on school networks as well as outside of school.¹⁹ Several states have received federal COVID-19 relief funds specifically for internet filtering.^{20,21} Below we describe relevant federal and state policies and provide model language for content filtering of food-related content.

Examples of Federal COVID-19 Relief Funding for Internet Filtering

Delaware:

\$1.6 million for content filtering on all school-issued devices regardless of location²⁰

Kentucky:

\$2.9 million to expand its content filtering services on school-issued devices to protect students “at school or at home”²¹

Federal Children’s Internet Protect Act

The Federal Children’s Internet Protection Act (CIPA) requires that schools receiving discounts for internet access through the Federal Communication Commission’s E-Rate program maintain an Internet Safety Policy or an Acceptable Use Policy.²² The policy must include content filtering for obscene and pornographic content;²³ and address “(a)ccess by minors to inappropriate matter.”²⁴

CIPA does not define “inappropriate matter” to minors, and expressly states that only school boards, local education agencies and other state or local authorities can make that determination.²⁵ In 2021, the Federal Communications Commission issued an order clarifying that CIPA “applies to the use of any computers owned by a school” regardless of whether or not the school-issued device is being used in school or out-of-school.²⁶

State Content Filtering Policies

According to the National Conference of State Legislatures, eighteen states have policies that address school internet filtering or content restrictions to protect students.²⁷ These policies typically mirror CIPA and focus on content filtering of pornographic and obscene content, but also grant schools discretion to filter out other inappropriate material.²⁷ Appendix B summarizes which devices these policies apply to. None of the state policies contain an express preemption provision that would prevent filtering for food-related content. This means that local education authorities can filter content in addition to the minimum requirements of the state content filtering policy.

School Wellness Policies

The USDA requires that all local educational authorities (typically school districts) participating in any federal food program (e.g., National School Lunch Program) develop a school wellness policy.²⁸ Policies are typically written by school district boards of education, and successful implementation requires the engagement of leaders across all of the schools within the district. Since 2016, school wellness policies have been required to include language that prohibits marketing any foods “on the school campus during the school day” that do not meet the USDA’s minimum nutrition requirements for foods sold in schools.¹ In response to increased device use for educational purposes during the COVID-19 pandemic, public health advocates have requested that the USDA issue clearer guidance on digital food marketing to support school efforts to reduce unhealthy food marketing to students.²⁹

Model Policy Language for Filtering of Digital-Food Related Content

The following language can be used by schools and school districts to restrict access to digital food-related content in an Internet Safety Policy, Acceptable Use Policy, Internet Filtering Policy or School Wellness Policy. Implementing a limitation on food-related content will vary depending on the content filter services used and the amount of filter category customization permitted. Not all content filter providers will have food-related categories, and

this should be a consideration when procuring a content filtering provider. This model policy is meant to be an example of a comprehensive approach that can be compared against the filtering service provider's content categories and modified accordingly. The language in [brackets] provides different options or explains the type of information that needs to be inserted to customize the policy.

Rationale

Restricting access to food-related content except for educational purposes such as Health, Media Literacy, Family and Consumer Sciences and Culinary Arts does not violate a student's academic freedoms. Digital food marketing serves little to no educational purpose, and undermines school nutrition education. The American Academy of Pediatrics, American Public Health Association, and the American Heart Association recommend restricting food marketing to children or designating schools as "food advertising-free zones."³⁰⁻³²

Increased exposure to food marketing generally increases unhealthy food intake in children.³³ Child-targeted food marketing promotes unhealthy, calorie-dense foods, and digital marketing tactics encourage children to engage with marketing campaigns to further influence their nutrition behavior and beliefs.²⁻⁴

The federal Children's Internet Protection Act (CIPA) expressly authorized state and local education authorities to determine which "inappropriate" material, beyond that specified by CIPA, should be subject to internet filtering.²⁵ [[Insert name of state internet filtering policy] does not expressly preempt local education authorities from selecting categories of content to include in school internet filtering policies.] US Department of Agriculture regulations for the marketing of foods in schools that participate in the National School Lunch Program set minimum requirements for food marketing restrictions that can be expanded upon by state and local education authorities.

Definition of Electronic Device

"Electronic device" means a device that is used for audio, video, or text communication or any other type of computer or computer-like instrument that is capable of connecting to the internet.

Definition of School Network

“School network” is a network that provides access to the internet subject to control by a school or school district.

Definition of Food-Related Content

“Food-related content,” is digital material accessible to students that, at a minimum, includes URLs [and mobile applications (apps)] for:

- food and beverage brands
(e.g., <https://us.coca-cola.com/>)
- individual food and beverage products
(e.g., <https://www.sprite.com/>)
- restaurants and dining
(e.g., <https://order.subway.com/>)
- food and beverage-related loyalty or rewards programs
(e.g., <https://www.chick-fil-a.com/one>)
- food and beverage ordering
(e.g., <https://www.grubhub.com/>)
- food and non-alcoholic beverage preparation (e.g., <https://www.chopchopfamily.org/recipes/>)

Food-related content does not include content about seeds, agriculture, food cultivation or gardening.

Electronic Devices Subject to this Content Restriction

This content restriction shall apply to:

- Electronic devices owned, provided, issued, or lent by the school to a student

- Electronic devices owned, provided, issued, or lent by the school to a student, wherever the devices are used

Prohibited Content

Food-related content shall be blocked for all students [in grades __-__] on school networks and electronic devices owned, provided, issued or lent by the school to a student. Food-related content shall be permitted for educational purposes such as Health, Media Literacy, Family and Consumer Sciences, and Culinary Arts.

Device Settings and Software

All electronic devices owned, provided, issued or lent by the school to a student shall:

- Be equipped with internet filtering [and] [or] ad-blocking software or services to block food-related content on all installed web browsers [and apps]
- Disable the use of location services for non-school purposes

Penalties for Non-Compliance or Circumvention

Students who access food-related content shall not be subject to any punishment or disciplinary action.

Digital Instructional Materials

Do not use digital instructional materials with food-related marketing or recommend their use by students

Utilize a robust student privacy policy to minimize the collection of student data by digital instructional materials

Digital instructional materials (hereinafter “digital materials”) are “materials available online for teachers and students that do not constitute a full course of study.”³⁴ Teachers typically use digital materials to supplement comprehensive curriculum.³⁴ Commonly used digital materials are found on YouTube, Kahoot!, Quizlet, Nearpod, Kahn Academy and ABCya!.³⁵ Digital materials differ substantially from printed materials because many are offered at no monetary cost, are ad-supported, and/or collect data about students. “Free” digital materials often do not go through a formal procurement or contracting process,³⁶ and can contain commercial content that changes over time unlike printed instructional materials. A 2019 national survey of teachers found that 52 percent of respondents believed that the use of technology products brought commercial advertising into the learning experience either very frequently (6 percent), frequently (15 percent) or occasionally (33 percent).³⁷ For example, researchers reviewed ads on the popular educational website ABCya! in 2020 after receiving complaints from parents about unhealthy food marketing on the site.³⁸

Ads for sugary cereals, fast food kids meals, and packaged lunch products were observed. These food ads were present when the website was accessed by a child user, but adult users received ads for products like computer software.³⁸

While some school districts maintain a list of approved digital materials, the most common approach used to determine whether digital materials such as educational apps were safe for use with students was for teachers to simply preview the app by trying it themselves (47 percent).³⁷ It is unclear how the presence of digital ads fits into teachers’ decisions to use digital materials, especially since ads served to an adult may differ substantially from ads served to a child.³⁸ A 2017 survey of middle schools found that 56 percent of teachers who assigned specific websites to students for homework never reviewed them for the presence of advertising.³⁹

Reducing exposure to harmful food and beverage marketing in digital materials can be addressed by avoiding the use of digital

materials with commercial content altogether or adopting state or local-level policies about acceptable commercial content in ad-supported digital materials. Schools should also adopt policies to minimize data collected about students that can be used for commercial purposes.

School Wellness Policies

Food marketing in educational materials has been addressed through school wellness policies. As discussed previously, school districts participating in USDA food programs, such as the National School Lunch Program, are required to develop a school wellness policy that, at a minimum, prohibits marketing of foods “on the school campus during the school day” that do not meet the USDA’s nutrition standards for foods sold in schools.¹

However, only one-third of school district wellness policies addressed food marketing “through electronic educational materials.”²⁹

We reviewed state policies for food marketing in schools using the National Association of State Boards of Education’s State Policy Database and found that California and Alaska have taken some leadership in the area of food marketing in educational materials.⁴⁰

California’s state school nutrition law prohibits advertising of “any food or beverage during the school day unless the food or beverage product...can be served or sold on the school campus during the school day,” and expressly prohibits such advertising via “educational material.”⁴⁰ The State of Alaska Obesity Prevention and Control Program published guidelines for school wellness policies that encour-

age school districts to prohibit the use of “supplemental educational materials” with sponsored advertising for food and beverage products that cannot be sold in schools (Figure 2).⁴¹

Figure 2: Alaska Gold Standard for School Wellness Policies



Student Privacy Policies

Requiring that all digital materials collect minimal user data is another way that schools can reduce harmful digital food marketing, because, as noted by the World Health Organization, “digital advertising is intrinsically linked to online privacy.”⁴² Federal child and student privacy laws protect individual student data from disclosure,^{43,44} and many states have adopted student privacy policies.⁴⁵ While these policies can address targeted advertising based on individual student data, they do not address the use of de-identified data to generate categories of consumers (e.g., high school students) used for digital ad placement.⁴⁶ There are a variety of resources available to schools on how to minimize collection of data

in the first place to provide protection beyond the minimal requirements of federal and state privacy policies.^{45,47}

Assessing the Quality of Digital Materials

The COVID-19 pandemic may lead to much needed improvements in quality and privacy standards for digital materials. A 2019 teacher survey found that less than half of teachers nationwide (43 percent) had an approved list of digital products to use when selecting digital materials for use in their classrooms, and less than half (42 percent) matched digital products against requirements of their school's "technology acceptable" or "responsible use" policy.³⁷ By contrast, during the pandemic, 58 percent of school leaders surveyed about the impact of remote learning and COVID-19 on their school systems reported that providing high quality instructional resources for all students was an area of greatest need for

additional resources or guidance for their school districts.⁴⁸ This ranked just behind the need for additional guidance and resources to address students' social and emotional learning and mental health (61 percent).⁴⁸

More states and individual school districts have begun to systematically review digital materials for compliance with applicable privacy policies and other criteria. During this review process, commercial content should always be assessed for compliance with applicable federal and state school nutrition policies and the school district wellness policy. Ad-free digital materials should be clearly denoted, and digital materials that contain ads for unhealthy foods and beverages should be prohibited from use by teachers and should not be recommended to students or families to supplement learning at home.

Model Policy Language for Food and Beverage Advertising in Digital Instructional Materials

The following language can be included in guidelines used to generate approved lists of digital materials, state school nutrition policies, and school wellness policies. The language in

[brackets] provides different options or explains the type of information that needs to be inserted to customize the policy.

Rationale

Children have the fundamental right to access information and be educated free from economic exploitation, including exposure to harmful food marketing.⁴²

Digital Instructional Materials*

Definition of Digital Instructional Materials:

Instructional materials available online for purchase or at no monetary cost that do not constitute a full course of study.

Definition of Digital Food and Beverage

Advertising:

“Digital Food & Beverage Advertising” means digital content that is made for the purpose of promoting the sale of a food or beverage product by the producer, manufacturer, seller, or any other person or entity with a commercial interest in the product. Digital food and beverage advertising includes but is not limited to company logos, trademarks, display ads, sponsored content, influencer advertising, product placement, and branded content.

Food and Beverage Marketing in Digital Instructional Materials is Prohibited

Digital instructional materials that contain [or may contain] digital food & beverage

advertising of:

- food and beverage products [that do not meet the minimum nutrition standards for foods sold in schools], or
- a corporate food, beverage or restaurant brand [unless every food and beverage product manufactured, sold, or distributed under the corporate brand name meets the minimum nutrition standards for foods sold in schools]

shall not be used for school purposes or recommended to students or parents for use at home to supplement school-based learning. Nothing in this policy shall prohibit the use of materials derived from digital materials with food and beverage marketing so long as all food and beverage marketing has been removed or is inaccessible to students.**

*Note: Some states refer to digital instructional materials as “electronic educational materials” and the appropriate term can be substituted throughout to align with state or local policy.

**For example: YouTube videos can be used so long as they are excerpted from the website or app itself; and links to YouTube videos that can be played outside of YouTube in a web browser can be shared with students.

Student-Owned Device Use

Expand student-owned device use policies to prohibit use during lunch

Student-owned devices are another potential source of digital food marketing exposure in schools. Student-owned devices can access the internet through data plans that are not subject to school content filters. Effective policies for the use of devices in schools are important because schools are uniquely positioned to “create predictable screen-free time for children.”⁴⁹ Most middle (97 percent) and high schools (91 percent) have a “cell phone policy,”³⁷ and some schools may be required by state law to have a policy that sets parameters for the use of privately-owned devices.⁵⁰⁻⁵² Many schools permit students to use devices during the lunch period. Twenty-nine percent of middle schools, 90 percent of high schools, and 89 percent of combined schools (grades 6-12) permitted cell phone use during lunch or recess.⁴⁹ The following is an example of a middle school policy permitting device use during lunch:

Cell phones, electronic tablets, iPods/MP3 players and any other electronic devices are prohibited from being used and/or charged during the school day. Electronic devices are to remain out of sight. These devices must be turned off before the beginning of first period class (7:19 am). The only time these devices may be used during the school day is during the lunch period. These devices may not be used at after

school activities, unless permitted by the teacher with which the student is working. Tablets and laptops may be used in the classroom for academic reasons, such as note taking, only at the discretion of the teacher (emphasis added).⁵³

The impact of screen use during mealtimes should be considered by schools when crafting a student-owned device use policy.

The use of screens while eating promotes unhealthy nutrition behaviors such as distracted eating and overeating, both of which contribute to weight gain and the development of childhood obesity.^{54,55} Eating while using screen media also is associated with increased consumption of low quality food and beverages due to the influence of digital food and beverage marketing.⁵⁶ Dedicating the lunch period as predictable screen-free time in schools at all grade-levels may be beneficial to the health and wellbeing of students by decreasing exposure to digital marketing and dissociating meals from screen time.

Model Policy Language for Electronic Device Use During Lunch

The following language can be included in state policies requiring schools to have an electronic device use policy, in-school cell phone or electronic device policies, and school wellness policies. Taking away the privilege of using electronic devices during lunch will not be popular with students. Where feasible, schools can consider gradual implementation of this policy by annually increasing the grade level or

levels of the restriction until all grades are subject to the policy. Implementation strategies such as through lockable pouches (e.g., yondr pouches) could also be considered if feasible. The language in [brackets] provides different options or explains the type of information that needs to be inserted to customize the policy.

Rationale

Electronic device use during mealtimes fosters poor nutritional habits by increasing distracted eating and overeating, student exposure to digital marketing for unhealthy foods and beverages, and habituates students to screen use while eating.⁵⁴⁻⁵⁷ Eating while using screen media can lead to increased consumption of low quality food and beverages due to the influence of digital food and beverage marketing.⁵⁶

Definition of Electronic Device*

"Electronic device" means a device that is privately owned or provided, issued, or lent by the school to a student that is used for audio, video, or text communication or any other type of computer or computer-like instrument, [including, but not limited to, cell phones, electronic tablets, gaming devices,

and MP3 players].

Definition of Lunch Period

"Lunch period" means the period of the school day routinely dedicated to consumption of the lunchtime meal in a cafeteria, classroom, or any other area of the school campus.

Electronic Device Use During [Lunch]

Prohibited

Students shall not [possess or] use electronic devices during the lunch period.

*Note: The definition of electronic device is more expansive here to capture all screen-based devices that children may have with them in school, including devices that do not connect to the internet.

Communication with Parents and Students

Communicate school-related and student activity-related information to parents and students on school-dedicated platforms

Social media platforms like Meta’s Facebook and Instagram are funded by advertising and are designed to keep users engaged for as long as possible. Schools utilize these services because they are free of charge and are already widely adopted by the public. Schools may be required by state law to maintain a social media or electronic communication policy, and 71 percent of teachers reported that their school has a “social media policy.”^{37,58}

These policies were initially motivated by concerns about inappropriate student-teacher relationships and to prevent controversial online speech and behavior by teachers.⁵⁹

More recently, parents and teachers have become concerned about the impact of social media exposure on children’s well-being. Fifty-eight percent of parents believe that social media has a negative impact on their child’s health, while 67 percent are concerned that their child is addicted to social media.⁶⁰

Over 90 percent of teens aged 13-17 report having used a social media platform, with 75 percent having at least one active social media profile.⁶¹ Increases in social media use have been linked to body image concerns and disordered eating,⁶² increased depressive symptoms,⁶³ and cyberbullying.⁶⁴

Figure 3. Meme posted to AriZona Iced Tea’s Instagram account (Sept. 26, 2021).



Social media platforms also contain a wide range of food advertising including influencer advertising, memes designed to be shared peer-to-peer (Figure 3), and elaborate celebrity led marketing campaigns for fast food restaurant chains (Figure 1). The Screen Time Action Network at Fairplay has called for schools to discontinue the use of social media platforms for school-related communication to students.⁶⁴ Schools can address social media exposure by ensuring that students and families are not obligated to use social media platforms laden with harmful content like unhealthy food marketing in order to access school-related information. Instead, they can use any of the various communication platforms and social networking tools that are designed specifically for schools.^{66,67}

Model School Social Media Policy Language

Schools and school districts can support their nutrition education efforts by including the following language in their social media or electronic communication policies for staff and students. State education agencies can incorporate this language into model policies and

guidance for crafting a social media or an electronic communication policy. The language in [brackets] provides different options or explains the type of information that needs to be inserted to customize the policy.

Rationale

The use of social media platforms increases child and adolescent exposure to digital food and beverage marketing via tactics such as “influencers” and celebrity-generated content.⁸⁴ Increased exposure to unhealthy food and beverage products promotes their consumption and influences child dietary preferences, ultimately increasing the risk of obesity and other non-communicable diseases.³ Increases in social media use have also been associated with other concerning adverse mental health effects, such as body image concerns and disordered eating.⁶²

Use of Social Media Shall Not Be Required to Access School and School-Sponsored Extracurricular Activity Information

Students and families shall not be required to utilize any non-school-dedicated social media platform (e.g., Facebook, Instagram or Snapchat). All [essential] written public and non-confidential information about school and school-sponsored extracurricular

activities shall [only]* be communicated to students and families via a means of communication provided by or otherwise made available by the school such as [fill in name of school-dedicated social media platform, website or information portal], school email or a combination of communication channels provided by or otherwise made available by the school.

*Note: Inclusion of the term “only” would prohibit any use of non-school dedicated communication platforms to distribute school-related information. This limitation should be in place for all schools serving children under 13 years old because students under 13 are not permitted to have accounts on social media platforms like Facebook and Instagram. Given the concerns about social media's impact on teen's wellbeing, schools that primarily serve students 13 and over might want to consider this limitation as well.

Conclusion

As schools continue using educational technology, policy interventions to limit digital food marketing in schools and on school-issued devices are needed. The USDA's policy for food marketing in schools provides little guidance for how to address digital food marketing, and federal and state privacy protections for children are inadequate. In the absence of effective federal policies, state and local education authorities can: block food-related content on school networks and school-issued devices; provide school-approved lists of digital instructional materials without unhealthy food marketing; expand student-owned device policies to restrict device use during lunch to support healthy eating behaviors; and prohibit the use of social media to access school-related information. In many school districts, existing policies and standard practices can be used to incorporate these recommendations to reduce harmful digital food and beverage marketing to students.

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References

1. 7 CFR § 210.31(3)(iii).
2. Buchanan L, Kelly B, Yeatman H, Kariippanon K. The effects of digital marketing of unhealthy commodities on young people: a systematic review. *Nutrients*. 2018;10(2):E148. doi:10.3390/nu10020148
3. Sadeghirad B, Duhaney T, Motaghipisheh S, Campbell NR, Johnston BC. Influence of unhealthy food and beverage marketing on children's dietary intake and preference: a systematic review and meta-analysis of randomized trials. *Obes Rev*. 2016;17(10):945-959. doi:10.1111/obr.12445
4. Federal Trade Commission. *Marketing Food to Children and Adolescents: A Review of Industry Expenditures, Activities, and Self-Regulation: A Report to Congress*; 2008. Accessed March 9, 2022. <https://www.ftc.gov/reports/marketing-food-children-adolescents-review-industry-expenditures-activities-self-regulation>
5. Chester J, Montgomery K, Kopp K. *Big Food, Big Tech, and the Global Childhood Obesity Pandemic*. Center for Digital Democracy; 2021. Accessed February 16, 2022. https://www.democraticmedia.org/sites/default/files/field/public-files/2021/full_report.pdf
6. Obesity Policy Coalition. *Policy Brief: How Unhealthy Food Is Marketed to Children through Digital Media*; 2018. Accessed March 10, 2022. <https://www.opc.org.au/downloads/policy-briefs/how-unhealthy-food-is-marketed-to-children-through-digital-media.pdf>
7. Harris JL, Frazier W III, Kumanyika S, Ramirez AG. *Increasing Disparities in Unhealthy Food Advertising Targeted to Hispanic and Black Youth*. UConn Rudd Center for Food Policy & Obesity; 2019. Accessed March 18, 2022. <https://media.ruddcenter.uconn.edu/PDFs/TargetedMarketingReport2019.pdf>
8. Harris J, Frances FM, Phaneuf L, et al. *FAST FOOD FACTS 2021. Fast Food Advertising: Billions in Spending, Continued High Exposure by Youth*. UConn Rudd Center for Food Policy & Obesity; 2021. <https://media.ruddcenter.uconn.edu/PDFs/FACTS2021.pdf>
9. Robb M. *Tweens, teens, and phones: what our 2019 research reveals*. Common Sense Media. Published 2019. Accessed March 9, 2022. <https://www.commonsensemedia.org/articles/tweens-teens-and-phones-what-our-2019-research-reveals>

10. Anderson M, Jiang J. Teens, Social Media & Technology 2018. Pew Research Center; 2018. Accessed March 9, 2022.
<https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/>
11. Lauricella AR, Cingel DP, Beaudoin-Ryan L, Robb MB, Saphir M, Wartella EA. The Common Sense Census: Plugged-in Parents of Tweens and Teens. Common Sense Media; 2016. Accessed March 9, 2022.
https://www.commonsensemedia.org/sites/default/files/research/report/common-sense-parent-census_whitepaper_new-for-web.pdf
12. Nagata JM, Cortez CA, Cattle CJ, et al. Screen time use among US adolescents during the COVID-19 pandemic: findings from the Adolescent Brain Cognitive Development (ABCD) study. *JAMA Pediatr.* 2022;176(1):94-96. doi:10.1001/jamapediatrics.2021.4334
13. Hankerson DL, Venzke C, Laird E, Grant-Chapman H, Thakur D. Online and Observed: Student Privacy Implications of School-Issued Devices and Student Activity Monitoring Software. Center for Democracy & Technology. Accessed March 9, 2022.
<https://cdt.org/insights/report-online-and-observed-student-privacy-implications-of-school-issued-devices-and-student-activity-monitoring-software/>
14. Digital Wellness Lab. Pulse Survey 1: Parents' Perspectives: Media Use & Remote Learning during the COVID-19 Pandemic.; 2021. Accessed March 7, 2022.
<https://digitalwellnesslab.org/research/pulse-surveys/parents-perspectives-media-use-remote-learning-during-the-covid-19-pandemic/>
15. Lange SJ, Kompaniyets L, Freedman DS, et al. Longitudinal trends in body mass index before and during the COVID-19 pandemic among persons aged 2–19 years – United States, 2018–2020. *MMWR Morb Mortal Wkly Rep.* 2021;70. doi:10.15585/mmwr.mm7037a3
16. Woolford SJ, Sidell M, Li X, et al. Changes in body mass index among children and adolescents during the COVID-19 pandemic. *JAMA.* 2021;326(14):1434-1436. doi:10.1001/jama.2021.15036
17. Jenssen BP, Kelly MK, Powell M, Bouchelle Z, Mayne SL, Fiks AG. COVID-19 and changes in child obesity. *Pediatrics.* 2021;147(5):e2021050123. doi:10.1542/peds.2021-050123
18. Black L. American Academy of Pediatrics raises concern about children's nutrition and physical activity during pandemic. American Academy of Pediatrics. Published December 9, 2020. Accessed March 7, 2022. <http://www.aap.org/en/news-room/news-releases/aap/2020/american-academy-of-pediatrics-raises-concern-about-childrens-nutrition-and-physical-activity-during-pandemic/>
19. Andrade D. What Does the Future of Content Filtering Look Like for K–12 Education? EdTech Magazine. Accessed March 9, 2022.
<https://edtechmagazine.com/k12/article/2021/11/what-does-future-content-filtering-look-k-12-education>

20. Delaware Department of Education. Statewide content filtering system to better protect students online. Accessed March 9, 2022.
<https://www.doe.k12.de.us/site/Default.aspx?PageType=3&DomainID=4&PageID=1&ViewID=6446ee88-d30c-497e-9316-3f8874b3e108&FlexDataID=25703>
21. Southern Regional Education Board. CARES Act education funding allocations. Accessed March 10, 2022. <https://www.sreb.org/publication/cares-act-education-funding-allocations>
22. Federal Communications Commission. Children’s Internet Protection Act (CIPA). Published May 5, 2011. Accessed March 7, 2022.
<https://www.fcc.gov/consumers/guides/childrens-internet-protection-act>
23. 47 CFR § 54.520(c)(1)(i).
24. 47 CFR § 54.520(c)(1)(ii).
25. 47 CFR § 54.520(c)(4).
26. Federal Communications Commission. Establishing Emergency Connectivity Fund to Close the Homework Gap.; 2021. Accessed March 9, 2022.
<https://www.fcc.gov/document/fcc-launch-717-billion-connectivity-fund-program-0>
27. National Conference of State Legislatures. State Internet Filtering Laws. Accessed March 9, 2022. <https://www.ncsl.org/research/telecommunications-and-information-technology/state-internet-filtering-laws.aspx>
28. 7 CFR § 210.31.
29. Center for Science in the Public Interest. Letter to USDA requesting guidance clarifying that local wellness policy rules apply to digital food and beverage marketing on school-issued devices. Center for Science in the Public Interest. Accessed March 7, 2022.
<https://www.cspinet.org/resource/letter-usda-requesting-guidance-clarifying-local-wellness-policy-rules-apply-digital-food>
30. Radesky J, Chassiakos YR, Ameenuddin N, Navsaria D. Digital advertising to children. *Pediatr Evancst*. 2020;146(1):e20201681. doi:10.1542/peds.2020-1681
31. American Public Health Association. Food Marketing and Advertising Directed at Children and Adolescents:Implications for Overweight.; 2003. Accessed March 7, 2022.
<https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/24/16/35/food-marketing-and-advertising-directed-at-children-and-adolescents-implications-for-overweight>

32. American Heart Association. Summary Policy Position of the American Heart Association Food Marketing and Advertising to Children in Schools May 2012.; 2012. Accessed March 10, 2022. https://www.heart.org/-/media/Files/About-Us/Policy-Research/Prevention-Nutrition/Food-Marketing-to-Children-in-Schools-ucm_467649.pdf
33. Boyland EJ, Nolan S, Kelly B, et al. Advertising as a cue to consume: a systematic review and meta-analysis of the effects of acute exposure to unhealthy food and nonalcoholic beverage advertising on intake in children and adults^{1,2}. *Am J Clin Nutr*. 2016;103(2):519-533. doi:10.3945/ajcn.115.120022
34. Tosh K, Doan S, Woo A, Henry D. Digital Instructional Materials: What Are Teachers Using and What Barriers Exist? RAND Corporation; 2020. Accessed March 10, 2022. https://www.rand.org/pubs/research_reports/RR2575z17.html
35. LearnPlatform, Inc. EdTech Top 40 Report 2021.; 2021. Accessed March 10, 2022. <https://learnplatform.com/top40/edtech-top40-2021>
36. Mutkoski S. Cloud computing, regulatory compliance, and student privacy: a guide for school administrators and legal counsel. *UIC John Marshall J Inf Technol Priv Law*. 2014;30(3). <https://repository.law.uic.edu/jitpl/vol30/iss3/3>
37. Vega V, Robb MB. The Common Sense Census: Inside the 21st-Century Classroom. Common Sense Media; 2019. Accessed March 9, 2022. https://www.common Sense Media.org/sites/default/files/research/report/2019-educator-census-inside-the-21st-century-classroom_1.pdf
38. Emond J, Fleming-Milici F, McCarthy J, et al. Unhealthy food marketing on commercial educational websites: remote learning and gaps in regulation. *Am J Prev*. 60(4):587-591. doi:10.1016/j.amepre.2020.10.008
39. Polacsek M, Boninger F, Molnar A, O'Brien LM. Digital food and beverage marketing environments in a national sample of middle schools: implications for policy and practice. *J Sch Health*. 2019;89(9):739-751. doi:10.1111/josh.12813
40. National Association of State Boards of Education. Restricts Marketing of Unhealthy Choices. State Policy Database. Accessed March 15, 2022. <https://statepolicies.nasbe.org/health/categories/nutrition-environment-and-services/restricts-marketing-of-unhealthy-choices>; Cal. Ed. Code 49431.9(b)(1)
41. State of Alaska Obesity Prevention and Control Program. State of Alaska Gold Standard School Wellness Policy- Guidance on Advertising and Marketing Food and Beverages in Schools.; 2017. Accessed March 15, 2022. https://dhss.alaska.gov/dph/Chronic/Documents/School/policy/Alaska_FoodAndBeverageMarketing_SchoolGuidelines.pdf

42. Tatlow-Golden M, Boyland E, Jewell J, Zalnieriute M, Handsley E, Breda J. Tackling Food Marketing to Children in a Digital World: Trans-Disciplinary Perspectives. World Health Organization Accessed February 16, 2022.
https://www.euro.who.int/__data/assets/pdf_file/0017/322226/Tackling-food-marketing-children-digital-world-trans-disciplinary-perspectives-en.pdf
43. Student Privacy Compass. Federal Laws- Family Educational Rights and Privacy Act (FERPA). Accessed April 6, 2022.
<https://studentprivacycompass.org/audiences/educators/federal-laws/>
44. Parent Coalition for Student Privacy. Federal Laws Enabling Parents to Protect Their Children's Privacy: FERPA, PPRa and COPPA. Accessed April 6, 2022.
https://studentprivacymatters.org/ferpa_ppra_coppa/
45. Student Privacy Compass. State Student Privacy Laws. Accessed March 18, 2022.
<https://studentprivacycompass.org/state-laws/>
46. Ramirez E, Brill J, Ohlhausen MK, Wright JD, McSweeney T. Data Brokers: A Call for Transparency and Accountability. Federal Trade Commission. Accessed April 6, 2022.
<https://www.ftc.gov/system/files/documents/reports/data-brokers-call-transparency-accountability-report-federal-trade-commission-may-2014/140527databrokerreport.pdf>
47. Stickland R, Campbell M, Golin J, Haimson L, Monahan D. Parent Toolkit for Student Privacy: A Practical Guide for Protecting Your Child's Sensitive School Data from Snoops, Hackers, and Marketers. Parent Coalition for Student Privacy and Campaign for a Commercial-Free Childhood; 2017. Accessed February 16, 2022.
<https://screentimenetwork.org/resource/parent-toolkit-student-privacy-practical-guide-protecting-your-childs-sensitive-school>
48. Schwartz HL, Grant D, Diliberti MK, Hunter GP, Setodji CM. Remote Learning Is Here to Stay: Results from the First American School District Panel Survey. RAND Corporation; 2020. Accessed March 9, 2022. https://www.rand.org/pubs/research_reports/RRA956-1.html
49. Tandon PS, Zhou C, Hogan CM, Christakis DA. Cell phone use policies in US middle and high schools. *JAMA Netw Open.* 2020;3(5):e205183-e205183.
doi:10.1001/jamanetworkopen.2020.5183
50. ORS 336.840 - Policies for Personal Electronic Devices.
https://oregon.public.law/statutes/ors_336.840
51. R277-495. Required Policies for Electronic Devices in Public Schools.; 2019.
<https://www.schools.utah.gov/file/0618b701-ace6-4df5-bf4e-2c2710799a1b>
52. NRS: CHAPTER 392 - PUPILS. Accessed March 10, 2022.
<https://www.leg.state.nv.us/nrs/nrs-392.html#NRS392Sec4637>

53. Urban Science Academy. Cell Phones & Electronics. Accessed March 9, 2022. <https://www.bostonpublicschools.org/Page/3153>
54. Cleveland Clinic. Why We Overeat While Watching TV. Published December 26, 2019. Accessed March 9, 2022. <https://health.clevelandclinic.org/put-down-that-remote-heres-why-we-overeat-in-front-of-the-tv-and-how-to-stop/>
55. Robinson TN, Banda JA, Hale L, et al. Screen media exposure and obesity in children and adolescents. *Pediatrics*. 2017;140(Suppl 2):S97-S101. doi:10.1542/peds.2016-1758K
56. Falbe J, Willett WC, Rosner B, Gortmaker SL, Sonneville KR, Field AE. Longitudinal relations of television, electronic games, and digital versatile discs with changes in diet in adolescents. *Am J Clin Nutr*. 2014;100(4):1173-1181. doi:10.3945/ajcn.114.088500
57. Fang K, Mu M, Liu K, He Y. Screen time and childhood overweight/obesity: a systematic review and meta-analysis. *Child Care Health Dev*. 2019;45(5):744-753. doi:10.1111/cch.12701
58. LA Rev Stat § 17:81 (2016).
59. di Marzo G. Why can't we be friends? The banning of teacher-student communication via social media and the freedom of speech. *Am Univ Law Rev*. 2012;62(1):123-166.
60. Ann & Robert H. Lurie Children's Hospital of Chicago. Parenting Teens in the Age of Social Media. Published 2020. Accessed March 15, 2022. <https://www.luriechildrens.org/en/blog/social-media-parenting-statistics/>
61. American Academy of Child and Adolescent Psychiatry. Social Media and Teens. Published March 2018. Accessed March 9, 2022. https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Social-Media-and-Teens-100.aspx
62. Holland G, Tiggemann M. A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image*. 2016;17:100-110. doi:10.1016/j.bodyim.2016.02.008
63. Odgers CL, Jensen MR. Annual research review: adolescent mental health in the digital age: facts, fears, and future directions. *J Child Psychol Psychiatry*. 2020;61(3):336-348. doi:10.1111/jcpp.13190
64. Hamm MP, Newton AS, Chisholm A, et al. Prevalence and effect of cyberbullying on children and young people: a scoping review of social media studies. *JAMA Pediatr*. 2015;169(8):770-777. doi:10.1001/jamapediatrics.2015.0944
65. Children's Screen Time Action Network. Letter template asking schools to stop communicating with Instagram. Published 2020. Accessed March 9, 2022. <https://screentimenetwork.org/resource/letter-template-asking-schools-stop-communicating-instagram>

66. Common Sense Education. Best messaging apps and websites for students, teachers, and parents. Published May 25, 2016. Accessed March 9, 2022. <https://www.commonsense.org/education/top-picks/best-messaging-apps-and-websites-for-students-teachers-and-parents>
67. Common Sense Education. Social Networks for Students and Teachers. Published October 7, 2014. Accessed March 9, 2022. <https://www.commonsense.org/education/top-picks/social-networks-for-students-and-teachers>
68. Potvin Kent M, Pauzé E, Roy EA, de Billy N, Czoli C. Children and adolescents' exposure to food and beverage marketing in social media apps. *Pediatr Obes.* 2019;14(6):e12508. doi:10.1111/ijpo.12508

Appendix A

Example of Content Filtering Categories for School-Issued Devices

The following is a description from the website of the Beckman Catholic School in Dyersville, IA of its internet filtering categories and when they are implemented. Food-related content categories have been highlighted. (Source: https://beckman.pvt.k12.ia.us/parents/technology_1_1/i_boss_filter).

iBoss Filter Information

The iBoss filter is used to filter Internet content outside of school network on the chromebooks. Beckman Catholic has two configurations setup for the iBoss, "During School Hours" and "Outside of School Hours". The "During School Hours" is more restrictive, filtering inappropriate content as well as categories such as social media and video streaming. The "Outside of School Hours" continues to filter inappropriate

content but is less restrictive on social media and video streaming. Social Media sites are again filtered after 10 pm on school nights and 11 pm on weekends. iBoss restricts Chromebook login after midnight to 5:00 am every day. Below is a listing of categories and the "Allow/Block" setting in iBoss for both configurations. Chromebooks connected in school on the school network are filtered by the Fortinet internet filter.

"During School Hours" Settings:

Allow/Block	Category Name	Allow/Block	Category Name
Allow	Ads	Block	Dating and Personals
Block	Adult Content	Allow	Dictionary
Block	Alcohol/ Tobacco	Block	Drugs
Allow	Art	Allow	Education
Allow	Auctions	Allow	Entertainment
Allow	Audio and Video	Block	File Sharing
Block	Bikini/Swimsuit	Allow	Finance and Investment
Allow	Business	Block	Forums

"During School Hours" Settings:

Allow/Block	Category Name	Allow/Block	Category Name
Block	Friendship	Allow	Restaurants/Food
Block	Gambling	Allow	Search Engines
Block	Games	Allow	Services
Allow	Government	Block	Sex Education
Block	Guns and Weapons	Allow	Shopping
Allow	Health	Allow	Sports
Allow	Image/Video Search	Allow	Streaming
Allow	Jobs	Block	Radio/TV
Allow	Mobile Phones	Allow	Technology
Allow	News	Allow	Toolbars
Allow	Organizations	Allow	Transportation
Allow	Political	Allow	Travel
Block	Porn/Nudity	Block	Violence and Hate
Block	Porn-Child	Block	Virus and Malware
Allow	Private Websites	Allow	Web-based Email
Allow	Real Estate	Allow	Web Hosting
Allow	Religion	Block	Web Proxies

"Outside of School Hours" Settings:

Allow/Block	Category Name	Allow/Block	Category Name
Allow	Ads	Block	Gambling
Block	Adult Content	Allow	Games
Block	Alcohol/ Tobacco	Allow	Government
Allow	Art	Block	Guns and Weapons
Allow	Auctions	Allow	Health
Allow	Audio and Video	Allow	Image/Video Search
Block	Bikini/Swimsuit	Allow	Jobs
Allow	Business	Allow	Mobile Phones
Block	Dating and Personals	Allow	News
Allow	Dictionary	Allow	Organizations
Block	Drugs	Allow	Political
Allow	Education	Block	Porn/Nudity
Allow	Entertainment	Block	Porn-Child
Block	File Sharing	Allow	Private Websites
Allow	Finance and Investment	Allow	Real Estate
Allow	Forums	Allow	Religion
Allow	Friendship	Allow	Restaurants/Food

"Outside of School Hours" Settings:

Allow/Block	Category Name	Allow/Block	Category Name
Allow	Search Engines	Allow	Toolbars
Allow	Services	Allow	Transportation
Block	Sex Education	Allow	Travel
Allow	Shopping	Block	Violence and Hate
Allow	Sports	Block	Virus and Malware
Allow	Streaming	Allow	Web-based Email
Allow	Radio/TV	Allow	Web Hosting
Allow	Technology	Block	Web Proxies

Appendix B

State Policies for School Internet Content Filtering: Regulated Devices & Preemption of Local Digital Food Marketing Policies

This chart summarizes state internet filtering laws and regulations applicable to public schools identified by the National Conference of State Legislatures. Policies specific to online-only schools or applicable only to a school library are not included. All of these policies permit filtering but not all require filtering. None of these policies contain an express preemption provision that would prevent filtering for food-related content.

State	Regulated Devices (e.g. school-issued devices regardless of location or School-issued devices on school property)	Contains a Provision Expressly Permitting Filtering Content in Addition to What is Required by State Policy
AZ	"Public access computer(s)" available to or visible to minors that are "located in a public school" and "connected to any computer communication system" Ariz. Rev. Stat. § 34-501	
AK	"computers owned by the school district" "Public access computer(s)" available to or visible to minors that are "located in a public school" and "connected to any computer communication system" A.C.A. § 6-21-107	
CO	Not Specified C.R.S. 22-87-104	Yes
GA	"any computer equipment and communication services owned or leased by the school system" O.C.G.A. § 20-2-324	Yes
ID	"school computers and other school owned technology-related services" Idaho Code §§ 33-132	Yes
IN	"computers and other technology related devices owned by the school corporation or charter school" Burns Ind. Code Ann. § 20-26-5-40.5	
KS	Not Specified K.S.A. § 75-2589	
KY	Not Specified Ky. Rev. Stat. § 156.675; 701 KAR 5:120	

State	Regulated Devices (e.g. school-issued devices regardless of location or School-issued devices on school property)	Contains a Provision Expressly Permitting Filtering Content in Addition to What is Required by State Policy
LA	Not Specified La. R.S. § 17:100.7	
MA	Not Specified ALM GL ch. 71, § 93	
MO	“Public access computer(s)” available to or visible to minors that are “located in a public school” and “connected to any computer communication system”* § 182.825 R.S.Mo; 5 CSR 20-100.220	
NH	“school district computer systems and networks” NH RSA 194:3-d	
PA	“any computer equipment and communications services owned or leased by the school entity” (24 P.S. § 4604)	Yes
RI	Not Specified. R.I. Gen. Laws § 16-21.6-1	
SD	“public access computer” provided by a school that is “located in a public school” S.D. Codified Laws § 22-24-55; S.D. Codified Laws § 22-24-59	
TN	“school district's computers having internet access” Tenn. Code Ann. § 49-1-221	
UT	“device that is used for audio, video, text communication, or other type of computer or computer-like instrument that is identified as being owned, provided, issued or lent by the LEA to a student or employee”...“whether on or off school property” U.A.C. R277-495-2; U.A.C. R277-495-4	Yes
VA	School “computers having Internet access” Va. Code Ann. § 22.1-70.2	Yes