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FORMATIVE RESEARCH ON NUTRITION, PHYSICAL ACTIVITY, AND ELECTRONIC MEDIA USE IN THE CHILD AND ADULT CARE FOOD PROGRAM

Final Report

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¹ Appendix 1, the Environmental Scan; Appendix 2, the Structured Qualitative Interview materials; and Appendix 3, the Focus Group materials, are separate documents.

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I. EXECUTIVE SUMMARY

The USDA commissioned FCB², Weber Shandwick, and KRC Research to conduct original formative research for the Child and Adult Care Food Program (CACFP) to inform the development and implementation of training, technical assistance, guidance, and education materials related to nutritional requirements and wellness recommendations in three technical areas: nutrition, physical activity, and electronic media use.

This report summarizes results from two phases of this formative research:

- Phase 1 Survey: KRC Research conducted 1,402 structured qualitative interviews (SQIs) of a diverse population of child care providers (child care centers and family day care homes) who receive CACFP funding, CACFP sponsoring organizations, and State agencies who administer the program. We examined the three technical areas in great depth to quantify knowledge of existing recommendations or guidelines, challenges related to promoting positive nutrition and wellness practices, and areas of interest for guidance and assistance.
- Phase 2 Focus Groups: We conducted seven follow-up telephone focus groups among the same audiences to elaborate and explore unanswered questions. In each focus group, KRC explored the three technical areas in detail, including the utility of existing recommendations or guidelines, challenges related to promoting favorable nutrition and wellness practices, and areas of interest for guidance and assistance. KRC explored these topics generally as well as specific questions that arose in Phase 1 research.

The remainder of this Executive Summary summarizes key findings by topic, beginning generally with nutrition and wellness and then turning to the three technical areas (nutrition, physical activity, and electronic media use), and ending with technical assistance and training.

The Executive Summary is followed by key learnings by audience (State agency staff, sponsoring organizations, and providers). At a glance, the primary findings from this research are:

1. There is widespread awareness of the *2010 Dietary Guidelines* among State agency staff, sponsoring organizations, and providers. Familiarity is greatest among State agency staff, but most sponsoring organization and providers are at least *somewhat* familiar

² At the time of contract award, FCB was known as DraftFCB.

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with these guidelines. Importantly, providers not only say they are familiar with the guidelines but also report serving food and beverages that correspond with them. Still, while the guidelines have been mainstreamed across audiences, there is interest in topics that would make meeting the guidelines easier.

2. Among the three technical areas, nutrition presents the biggest opportunities for providing information and training to all three audiences. These audiences express more varied levels of interest in physical activity and electronic media use topics, but nutrition-related topics are where need and interest are greatest and most aligned.
3. The challenges related to favorable nutrition practices are more numerous than those around physical activity and electronic media use. These include challenges related to meal planning, circulating new recipes, and managing food costs, all while trying to meet nutrition guidelines. Self-reporting of challenges related to the other two technical areas are both fewer and less burdensome, which may partly be due to lower levels of awareness around best practices.
4. There is no consensus on the preferred format for receiving information and training about nutrition, physical activity, and electronic media use. Rather, audiences discuss the benefits of varied formats, such as in-person, which is interactive; DVDs or online videos, which staff can watch at meetings; or webinars, which are interactive but do not require travel. Email is well-received as a way to convey information, but providers, and family day care homes specifically, also see some utility to print materials.
5. While not the focus of this research, all three audiences share concerns about the role of parents in promotion and adoption of favorable health and wellness practices. Specifically, all three audiences cite parents as an obstacle to consistently fostering positive nutrition and wellness practices. They are not an obstacle within child care settings, per se, but all audiences participating in this research believe that parents often send conflicting messages to their children at home about nutrition and wellness.

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Nutrition and Wellness in Child Care Settings

Audiences defined “healthy habits” in terms of nutrition, physical activity, and what one child care provider characterized as “self-health” behaviors (primarily tied to hygiene, such as hand washing). Nutrition, in particular, was seen as integral to “healthy habits,” and was mentioned early on in focus groups by all audiences. Electronic media was mentioned with less frequency; only the focus group among sponsoring organizations and the two groups of providers who have higher levels of familiarity with nutrition guidelines raised it.

Audiences primarily agree on the role of providers in promoting healthy habits, but they do *not* agree on how well this role is being performed.

1. Across groups, there is agreement that providers have a role to play around nutrition and wellness habits. These audiences focus on how providers can educate the children they care for and encourage them to adopt healthy habits, including by modeling healthy habits.
2. Providers also see educating and encouraging parents as a large part of their role in promoting healthy habits so that positive nutrition and wellness behaviors are reinforced outside of the child care setting. State agency staff and sponsoring organizations also raise the need to communicate more with parents on these topics.
3. Views among the different audiences do not diverge on the role of providers but do on assessments of providers’ actual practices: State agencies believe that some providers are doing a poor job adopting and modeling healthy habits for the children they care for, while providers in the focus groups spoke in detail about the importance of favorable nutrition habits in general, and the different ways they model healthy eating to make it appealing to children.

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Nutrition

Familiarity with the *2010 Dietary Guidelines for Americans* varies somewhat by audience, but most say they are at least *somewhat familiar*. Knowledge of the guidelines is universal among State agency staff who administer the CACFP. Levels of familiarity, particularly those who say they are *very familiar* with the guidelines, also vary by audience. State agency staff, followed by sponsoring organizations, are most likely to say they are *very familiar* with the guidelines, while knowledge is lower among providers (both child care centers and family day care homes).

Despite differing levels of familiarity, all audiences are supportive and appreciative of having nutrition guidelines and recommendations that are specific to particular age groups. These guidelines and recommendations inform the food and beverage decisions of many providers and sponsoring organizations. Further, while some providers participating in the focus groups report they are comfortable with their own knowledge of how to feed the children they care for, they like being able to reference the guidelines when communicating with parents. The guidelines serve as support for the choices that they are making when talking to parents as well as a way to educate parents about good nutrition habits.

Importantly, while only a minority of providers report being *very familiar* with the *2010 Dietary Guidelines*, based on self-reported food service patterns, many are already serving healthful and nutritious food in their facilities. And, though they face some challenges to meeting the guidelines, those participating in the focus groups seem comfortable with how to integrate the guidelines into food service. Specifically, providers are most frequently serving children in their care whole grains, fruits, vegetables, and milk. In the focus groups, providers detail that milk is the primary beverage served and that water is offered throughout the day.

Providers report practices that seem in compliance with nutrition guidelines in Phase 1, a finding confirmed by those participating in the Phase 2 research. Still, staff representing State agencies in the Phase 2 focus group were concerned that providers may not be aware of or utilizing the guidelines in an appropriate manner. Their assessment of providers' practices tends to be less favorable than the self-reporting by both child care centers and family day care homes.

Additionally, the Phase 1 research revealed a perception gap between what State agency staff believe impacts food and beverage choices and what providers report impacts these choices. Nutritional value is top of mind for providers while State agency staff identify cost as a leading

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factor. State agency staff and providers also have different views on challenges to meeting nutrition guidelines. In contrast to the views of State agency staff, providers' self-reported obstacles do not center on knowledge of the guidelines. Instead, some providers discuss difficulties relative to the practical realities of adopting guidelines with an audience like young children, who may be picky or averse to certain foods. Thus, more education about the guidelines is not a leading topic of interest for the providers in our groups; few child care providers and sponsoring organizations selected staff knowledge as a challenge in the Phase 1 research. Based on conversations with providers in the focus groups, it seems this audience is more interested in making it easier to implement and sustain guidelines they feel they know fairly well.

Although providers do not rank cost as a top factor in the decisions they make related to food and beverage service, cost is a challenge to meeting nutrition guidelines. This finding from Phase 1 was reaffirmed in the focus groups among providers and is consistent with findings among State agency staff and sponsoring organizations on what obstacles exist around nutrition guidelines. State agency staff participating in the focus groups, in particular, are concerned about how the cost of food can make it harder for providers to make the most nutritious and healthful choices for the children in their care. Unaided, most providers participating in the focus groups did not raise cost as a challenge, but when it was presented to them, they, too, discussed how food costs make meeting guidelines more difficult. Providing information on cost-effective strategies related to meeting nutrition guidelines will be helpful for all audiences.

All audiences also identified assistance in menu planning and recipe and snack ideas as key opportunities, in addition to training on how to encourage parents to adopt healthy eating at home. Providers are especially interested in and enthusiastic about tools and information, including recipe ideas to facilitate menu planning and allow for greater diversity of food served. Guidance about how to communicate and work with food vendors may also be useful, as some providers and State agency staff recognize that vendors can often make meeting nutrition guidelines difficult by advertising unhealthy foods as healthy. Lastly, State agencies suggested the USDA address food marketing of unhealthy products by educating providers about the marketing used to encourage the purchase of unhealthier foods over healthier options.

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Physical Activity

As with nutrition guidelines, the different audiences in our focus groups believe physical activity guidelines for specific ages are beneficial. Some providers are not very familiar with what children are capable of at each point in their development. Guidelines also make it easier to impose structure in provider environments, with physical activity regularly part of a daily routine. Sponsoring organizations are particularly concerned that providers may not have enough information about what is possible and acceptable for younger children under their care. State agencies point out that classes within child care centers are usually separated by age, so having separate guidelines is practical. Providers feel confident about their ability to provide opportunities for structured and unstructured play to children.

Respondents were asked to identify the amount of time different age cohorts *should* have for physical activity. Providers were also asked how much time different age cohorts in their care typically do have for physical activity. In both instances, the amount of time is directly proportional to the child's age—the older the child, the more time audiences report they should and do have physical activity. Still, the time reported by providers that is available for physical activity is not always consistent with existing recommendations for children by age, so more information on this topic may allow more providers to adopt physical activity practices that more closely match existing recommendations.

Overall, challenges to providing opportunities for physical activity do not appear as common or numbered as challenges related to meeting nutritional guidelines. This is first revealed in Phase 1 research but then confirmed in the focus groups among providers, as well as the other audiences included in the Phase 2 focus group research. In focus groups, when providers are asked about the kind of physical activities occurring in their centers and homes, they usually mention outdoor activities. For centers, outdoor activities often involve a playground. Those representing family day care homes mention games, such as hopscotch. All providers say that weather is the primary barrier to encouraging increased physical activity. Because centers report having more indoor space to encourage physical activity in the case of inclement weather, family day care homes report this as a greater challenge. Homes address this limitation by encouraging dancing, an activity that is reportedly both common and popular with the children in their care.

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Given the barriers associated with limited space for indoor physical activity, centers and homes both requested additional training on how to run physical activity indoors (including ideas for games in general and age-appropriate games), with State agencies agreeing that this was an opportunity for improvement. Providers could also benefit from activity modifications for less able-bodied children (due to special needs or weight concerns), or training to learn how to modify physical activity. State agencies and sponsoring organizations are concerned that ability or embarrassment may be keeping providers from personally modeling the activity for the children in their care. On the other hand, providers in the Phase 2 focus groups did not bring up this issue at all.

Electronic Media Use

Most providers say that some type of electronic media is used at their centers or day care homes. The length of time electronic media is used, regardless of a child's age, is higher in family day care homes than in child care centers. Over half of child care centers say that children under age 2 have no time with electronic media in a typical day. By comparison, only one-third of family day care homes give the same answer. Similarly, the amount of time older children spend using electronic media also varies by setting: 84% of child care center providers say that children ages 2 and older use electronic media for less than 30 minutes or not at all, compared to 56% of those in family day care homes.

State agency staff and sponsoring organizations believe that electronic media is used in most child care settings. Views about the acceptability and importance of electronic media use for young children are considerably varied by audience, though. In the Phase 1 research, the majority of, but not all, State agency staff say children under age 2 should not have any time for electronic media use. Fewer hold this view about children ages 2 through 5. However, State agency staff participating in the focus group say that young children of any age should not be exposed to electronic media at all. They are resistant to electronic media because they are not convinced it is appropriate or necessary and because they are concerned about it serving as a "secondary caregiver."

Providers' views and, to a lesser extent, sponsoring organizations' views, are more nuanced, noting the importance of exposure and access to electronic media so that the children they care for, particularly those in lower income brackets, are not at a disadvantage when they start

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attending school. At the same time, they do recognize the need to prevent against too much electronic media use and be deliberate about how and why it is used. Those participating in the focus groups discussed strategies they use to limit screen time for the children in their care and did not raise any significant or ongoing challenges to their current efforts. Child care providers and sponsoring organizations pointed out the educational benefits to electronic media use, as well, but share State agency staff concerns about electronic media replacing actual social interaction.

Child care providers say a variety of factors influence how much time children in child care settings have for electronic media use, and that they do not have any challenges related to electronic media use for children in their care. The most common challenge for family day care homes is finding activities for mixed-age groups. For child care centers, the belief that electronic media can be educational is the primary challenge.

In contrast, half of State agency staff believe perceptions that electronic media use is educational and lack of staff training on what is appropriate are top challenges. Sponsoring organizations also see these as key challenges, though to a lesser extent. In addition, a sizable minority of State agency staff think staff resistance for reduced electronic media use and lack of clear definition and guidelines for electronic media use present challenges.

Providers and sponsors are open to receiving guidelines about the appropriate use of electronic media for different age groups, but they are less interested in information on this topic than they are in information related to nutrition and physical activity. Some State agency staff do not believe this area relates to their CACFP responsibilities, and so might benefit from more information about how this topic, along with physical activity, ties in to their CACFP-related responsibilities.

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Technical Assistance and Training

Among those participating in the Phase 2 focus groups, there is no clear consensus among audiences about the most challenging technical assistance area. Most emphasize that they understand the relationship between the three topics. Some representing State agencies were less clear on why physical activity and electronic media use are in their purview. They point out that their already-strained resources are directed towards nutrition and food practices, and that they lack formal training on physical activity and electronic media use.

Across the three technical areas, all audiences show an interest in receiving assistance and training on a variety of different topics. There is also an overlap between the factors and challenges that most influence creating a healthier child care setting (cost, preferences, staff knowledge) and the specific assistance and training topics requested. Regardless of the technical area, there is consistent interest in learning more about both age-specific guidelines and recommendations, and best practices that support guidelines, to encourage children to eat more nutritiously, be more physically active, and choose alternatives to electronic media. Providers also want to learn more about cost-effective ways to prepare nutritious snacks and meals.

There is no consensus on a preferred format for receiving information, assistance, and training on these technical areas. Rather, all agree that receiving information in a variety of formats is essential to ensuring that training and assistance are accessible, socialized, and digestible – not just to providers but also to parents. All audiences like interactive, discussion-based trainings involving demonstrations, which allows for questions and more effective sharing of information.

Videos (via a DVD or accessible online), webinars, and in-person trainings are all useful in different circumstances. Videos seem particularly instructive for information about physical activity, especially when trying to demonstrate specific activity types (rather than communicating this in written materials). Print materials in various formats were considered valuable by most audiences. Providers can share brochures or handouts with parents and can hang posters within their facilities. Still, there is some concern among State agencies that print materials are not read by provider staff, confirmed by some of the providers themselves, suggesting the need to provide information via a different medium to make it more likely to be consumed. Providers also mention social media as a way to pass along information as well as encourage more positive nutrition and wellness practices.

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II. EXECUTIVE SUMMARY BY AUDIENCE

State Agencies

Nutrition

There is universal knowledge of the *2010 Dietary Guidelines for Americans* among State agency staff responsible for administering the CACFP. State agency staff believe that the healthfulness of each meal in a child care setting is determined by the knowledge and skill of the caregiver preparing it. However, there is a sense among this audience that providers are either not aware of nutrition guidelines or not implementing and modeling them consistently and effectively. Their perception of providers' food service practices is generally negative, though they acknowledge that providers have made progress in serving more healthful beverage choices. Perceptions about food service in child care settings conflicts with the reported behaviors of providers themselves. Cost is also perceived to be a top factor related to the types of food and beverages served in child care settings, since healthy food options are often believed to be more expensive than processed foods. State agency staff say that raising the CACFP reimbursement would allow providers to better meet nutrition guidelines. Furthermore, according to State agency staff, providers are often swayed by food vendors who market food as healthy, regardless of whether it meets nutrition guidelines. In this way, some State agency staff worry, caregivers are unknowingly serving meals with low nutritional value. In keeping with the perceived obstacles to healthful eating in child care settings, State agency staff are most interested in practical training on cost-effective ways to integrate more nutritious options into meals and snacks. They also express interest in ways to facilitate menu planning among providers.

Physical Activity

State agency staff worry that caregiver involvement can influence the amount and quality of physical activity in child care settings as providers may be reluctant to engage in physical activity alongside the children in their care. This unwillingness to participate may be related to caregiver concern for child safety, according to State agencies. Space limitations are another obstacle related to the time devoted to physical activity, which can vary by provider group. For instance, a child care facility may not have the equipment or space to organize indoor structured play. Interest in information and training on physical activity is secondary to interest in information and training on nutrition among State agencies. In the focus group among this audience, questions

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were raised about why physical activity would even fall under their agency, and then about their individual responsibilities, with most having nutrition-related expertise.

Electronic Media Use

While views among the larger sample of State agency staff participating in the Phase 1 survey research tend to vary regarding the amount of time young children should have with electronic media, those representing this audience in a focus group have much more pronounced viewpoints on the topic. The smaller subgroup of State agency staff participating in the second phase of the research insist that electronic media is never appropriate for young children. However, many think that providers are lacking knowledge to limit screen time. Specifically, this audience says lack of staff knowledge about the need to limit electronic use or provide more age-appropriate activities is *very important* in driving the amount of electronic media use at child care centers and day care homes. Factors which present the greatest challenges to controlling electronic media use in child care settings, according to State agencies, are lack of staff training about age-appropriate electronic media use and perceptions that electronic media use is educational. This latter variable is validated in the focus groups, with providers emphasizing that they mostly integrate electronic media for educational purposes and that they have a responsibility to do so, given the electronic media skills children will need when they enter formal schooling.

State agency staff consider electronic media use to be outside their area of expertise. Therefore, while they believe that providers would benefit from training in this area, out of the three audiences, State agency staff are the least interested in information they could relay to providers around limiting screen time.

Technical Assistance and Training

There was no clear preference for one communications channel through which State agencies would most like to receive information and training on the three technical areas. Rather, a varied approach to sharing information, dependent on target audience and technical area, is believed to be beneficial. Staff would primarily like to receive information online, particularly through email, and they are most interested in receiving guidance and training by participating in webinars and online trainings.

Currently, communication between this audience and child care providers on the technical areas in focus is relatively limited. They are most likely to communicate information to promote healthy habits related to nutrition. Communications about physical activity and electronic media are sent much less often. Communications between State agency staff and both sponsoring organizations

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and providers about the three technical areas are also relatively infrequent. Increased communications may help bridge the disconnect in perceptions among State agency staff and the reported nutrition and wellness practices of child care providers. It would also allow State agencies to convey information and technical assistance on the three topics in focus on a more consistent basis.

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Sponsoring Organizations

Nutrition

Familiarity with and support for nutrition guidelines is high among sponsoring organizations. They appreciate having the guidelines and recognize their value for providers.

Cost is the most frequently cited challenge to following nutrition guidelines, followed by the time needed to prepare more nutritious meals. As such, sponsoring organizations recognize that cost and convenience intersect as obstacles, since processed foods are likely to be less expensive, and require less time to prepare, than healthier options. Sponsoring organizations also consider child preferences an obstacle to serving healthy meals, as they believe providers have difficulty encouraging children to eat healthy foods and try new, unfamiliar foods. While providers participating in the focus groups discuss some challenges related to child preferences, this does not seem like a primary obstacle for either centers or homes.

In keeping with perceived obstacles, there is strong interest in assistance and training about cost-effective ways to integrate more nutritious options into meals and snacks, menu planning, and techniques to counter child preferences. Sponsoring organizations say that nutrition information should be available in commonly-spoken languages, rather than exclusively in English, to ensure adherence to guidelines in child care settings.

Physical Activity

Sponsoring organizations say that physical activity is a key element in promoting healthy habits among younger children and that the amount of time spent on physical activity should correspond with age. Specifically, older children should be allowed more time to be active.

This audience thinks that limitations with indoor or outdoor space pose the greatest challenge to providing opportunity for physical activity. Recognizing that caregiver involvement and role modeling greatly influence physical activity, sponsoring organizations are also concerned that providers are not active participants alongside the children. In fact, sponsoring organizations are most interested in technical assistance and training related to increasing provider knowledge and comfort with physical activity.

Electronic Media Use

For sponsoring organizations, electronic media use guidelines are useful and important but less of a priority than nutrition or physical activity guidelines. Most sponsoring organizations accurately report the ways in which child care providers are currently using electronic media and

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say older children should be allowed more screen time than younger children. While they think that screen time should be limited, sponsoring organizations recognize that electronic media has educational value, especially for children without access to such devices at home. Their views on electronic media for young children are more closely aligned with providers than State agency staff.

Sponsoring organizations say that lack of provider knowledge about the need to limit electronic media use or do more age-appropriate activities is the most important factor facing providers when they make decisions regarding electronic media use. With the lack of clear definition and guidelines for electronic media use, sponsoring organizations are interested in training and assistance on best practices surrounding screen time.

Technical Assistance and Training

Topics of interest for information and training for sponsoring organizations align with the perceived top challenges for each technical area. There is no clear preference for how sponsoring organizations would like to receive information on the three technical areas. Rather, a varied approach to sharing information, dependent on target audience and technical area, is believed to be beneficial. Sponsoring organizations prefer to receive information about all three technical areas via email, including e-newsletters. Online formats are also the preferred mode for guidance and training. Print materials, local in-person trainings, and video clips are secondary preferences, though the usefulness of videos was mentioned frequently in focus groups.

Sponsoring organizations report that they communicate more frequently with providers about nutrition and wellness topics than State agency staff do. Still, the frequency of communications between sponsoring organizations and providers is not consistent across the three technical areas: communications about nutrition are the most frequent, followed by communications about physical activity and electronic media use.

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Child Care Providers

Nutrition

Familiarity with nutrition guidelines is high, though there is an opportunity to increase the proportion who report being *very familiar* with these guidelines. Nutrition guidelines and recommendations are well-received and characterized as useful. Providers understand the importance of both introducing and adopting healthy habits for the children in their care as well as modeling healthy behaviors. Accordingly, nutrition is seen as a primary way to promote healthy habits, and providers are eager for ways to make meeting nutritional guidelines easier. Providers' familiarity with nutrition guidelines may partially explain the types of food and beverages served in child care settings and family day care homes, with whole grains, fruits, vegetables, and lean meats served frequently by both provider types. Less healthful foods, such as fried foods, are much less likely to be served. Milk and water are the beverages served most frequently in child care settings. Drinking water throughout the day is encouraged by making it accessible and, for some providers, more appealing to children.

Nutritional value is of top importance to providers when deciding what to prepare and serve, though practical limitations, such as availability and cost, also play a role. While not always raised unprompted as an obstacle to meeting nutrition guidelines, cost can limit the variety and freshness of foods served. As such, providers are interested in both menu planning and recipes that would help them meet nutrition guidelines, diversify what they are serving, and control costs. Additionally, providers also identify child preferences as a challenge to promoting positive nutrition practices, and strategize to encourage children to eat unfamiliar but nutritious foods. Caregiver role modeling and the implementation of a "two-bite rule" have proven successful techniques in engaging young children with nutritious foods.

Most providers serve meals family style, and providers experienced with this approach enthusiastically endorse this approach in the focus groups. Providers participating in the focus groups who serve pre-plated meals are concerned about meeting nutritional guidelines with family style service, but they express a clear interest in guidance to implement family style service while also ensuring nutrition guidelines (namely portion size) are met.

Physical Activity

In focus groups, some physical activity (along with nutrition) is top of mind when providers are asked to define "healthy habits." Providers believe that older children should have more time for

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physical activity as compared to younger children. However, they are not universally following recommendations that children ages 1 and 2 get at least 90 minutes of physical activity daily and preschool-aged children (ages 3, 4, and 5) get at least two hours of physical activity a day. This may at least be partly explained by existing perceptions of how much time children *should* be spending on physical activity.

In the Phase 1 research, providers identified safety as the most important factor in making decisions about physical activity. This safety consideration did not come up unaided in the focus groups. Other important factors they report addressing include caregiver to child ratio, weather, and children wearing inappropriate clothing and/or footwear. Space limits opportunities for physical activity, especially in instances of inclement weather when outdoor activity is impossible.

Anecdotally, physical activity tends to be associated with outdoor activities. Specifically, in the focus groups, when providers are asked to describe what physical activity at their centers or homes typically include, most default to outdoor activities. Physical space and specific amenities seem to determine what types of indoor and outdoor activities are possible in each child care facility. To overcome weather and indoor space limitations, providers plan creative structured and unstructured play, such as dancing and stretching, or otherwise moving indoors. Providers are interested in learning about new indoor activities and games, as well as ideas that could be modified for children with special needs.

Electronic Media Use

Providers believe that screen time should increase with age. By and large, providers follow electronic media recommendations for preschool-aged children. However, child care centers are more likely than family day care homes to follow the existing recommendation from the American Academy of Pediatrics that children 2 and under should not use electronic media at all. In focus groups, providers prove hesitant to eliminate electronic media use altogether as they believe that young children need to be familiar with electronic media to be adequately prepared for elementary school. This sentiment is shared by both centers and homes participating in the focus groups.

Despite the expressed belief that exposure has some utility for young children, providers participating in the focus groups are limiting electronic media use in their facilities by closely monitoring the amount of screen time for each child and/or exclusively using electronic media for educational purposes. Interest in technical assistance and training related to electronic media use

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falls into a lower tier, after nutrition and then physical activity. Still, there is interest in learning more about guidelines and ways to limit screen time (per the Phase 1 research) and in electronic media use recommendations that can be easily shared with parents (per the Phase 2 research).

Technical Assistance and Training

Providers welcome getting more practical guidance on the three technical areas, though information and training on nutrition and physical activity topics are higher priorities than any types of assistance related to electronic media use. Topics of greatest interest tend to align with reported barriers. For example, the monotony of menu planning and the challenges of connecting meals to nutrition guidelines, seem to prompt widespread interest in information and training on this topic. Providers also expressed interest in recipe ideas that meet nutrition guidelines as well as a technology-enabled app to facilitate meal planning, among other information to ease both meal planning and preparation in centers and homes. Similarly, regular experience trying to promote physical activity indoors when the weather is bad seems to generate higher levels of interest in ways to make this easier for providers.

There is no clear preference for how providers would like to receive information on the three technical areas. Offering information and trainings in various formats can help ensure that technical assistance is accessible, sharable, and memorable. Videos, webinars, and in-person trainings are all popular. Trainings – both in-person or otherwise – that allow for interaction and questioning and offer demonstrations are described as especially beneficial. Audiences recognize that there are scheduling and financial constraints related to providing training and technical assistance, so they understand that these cannot and will not always be interactive (or in-person). Further, sometimes print materials are best so that information can be displayed around a center (such as posters describing and encouraging physical activity) as well as shared with parents.

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III. INTRODUCTION AND METHODOLOGY

USDA’s Child and Adult Care Food Program (CACFP) commissioned FCB, Weber Shandwick, and KRC Research to conduct original formative research to inform the development and implementation of its training, technical assistance, guidance, and education materials for CACFP related to nutritional requirements and wellness recommendations in three technical areas: nutrition, physical activity, and electronic media use.

Specifically, the purpose of the formative research was to:

Overall	Nutrition	Physical Activity	Electronic Media
<ul style="list-style-type: none"> • Determine attitudes, perceptions, knowledge, experience, skills, and available resources that may either promote or inhibit successful implementation of the three key technical assistance areas • Determine the most effective ways to overcome barriers within targeted audiences, and associated needs for doing so • Identify best practices and helpful resources • Determine the preferred communications and delivery channels 	<ul style="list-style-type: none"> • Determine the extent to which providers’ menus, use of food labels, food preparation, and food purchasing reflect: <ul style="list-style-type: none"> — Meals and snacks that are consistent with Dietary Guidelines and recommendations by the IOM, especially foods and food components that need to be (a) increased and (b) limited — Meals and snacks that promote this population’s health through a feeding environment that reflects best practices and recommendations for infants and children 	<ul style="list-style-type: none"> • Determine the extent to which opportunities for play time and physical activity are available several times per day, both structured and unstructured 	<ul style="list-style-type: none"> • Determine the extent to which the amount of time children spend with electronic media (TV, DVD, video games, recreational computer use, cell phones) is limited to appropriate levels

This report summarizes results from this formative research, which was conducted in two phases. There are four key audiences for the formative research: child care centers, family day care homes, sponsoring organizations, and State and tribal agency staff.³ Throughout this report, child care centers and family day care homes are referred to as “child care providers” or “providers.”

³ Because no state-level staff from tribal agencies participated in this research, future references to this audience will refer only to State agency staff.

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The table that follows outlines parameters set prior to conducting the research to ensure that we achieve a diverse mix of each key audience.

Criteria	Provider Groups		Sponsoring Organizations	State and Tribal Agency Staff
	Child Care Centers (CCC)	Family Day Care Homes		
Language(s)	Both primarily English- and primarily Spanish-speaking		Both primarily English- and primarily Spanish-speaking	English
Ethnicity/Race	Diverse populations		Diverse populations	
Communities	Urban, suburban, and rural, including tribal communities			
Regions/States	Multiple, to include each of the seven FNS regions		Seven FNS regions	All states, DC, and territories
Income of Providers	Varying, to include those of low income (185% of the poverty level or less)			
Education of Providers	Varying, to include those with a high school diploma or less			
Enrollment	Varying numbers of children enrolled (small to large)		Various sizes, based on number of centers and homes	
Other	Representatives of both foodservice and non-foodservice staff (directors, assistant directors, teachers), where differentiated		Affiliated (sponsor-owned) and unaffiliated (not sponsor-owned)	
	Independent vs. associated with sponsoring organizations			

As part of the Phase 1 research, KRC Research conducted 1,402 structured qualitative interviews (SQIs) of a diverse population of child care providers who receive CACFP funding, CACFP sponsoring organizations, and staff at State agencies who administer the program. As part of Phase 2, KRC Research conducted seven focus groups among the same key audiences. The groups explored the three technical areas in detail, including the utility of existing recommendations or guidelines, challenges related to promoting favorable nutrition and wellness practices, and areas

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of interest for guidance and assistance. Additional questions raised during the groups were based on hypotheses that came out of the Phase 1 research.

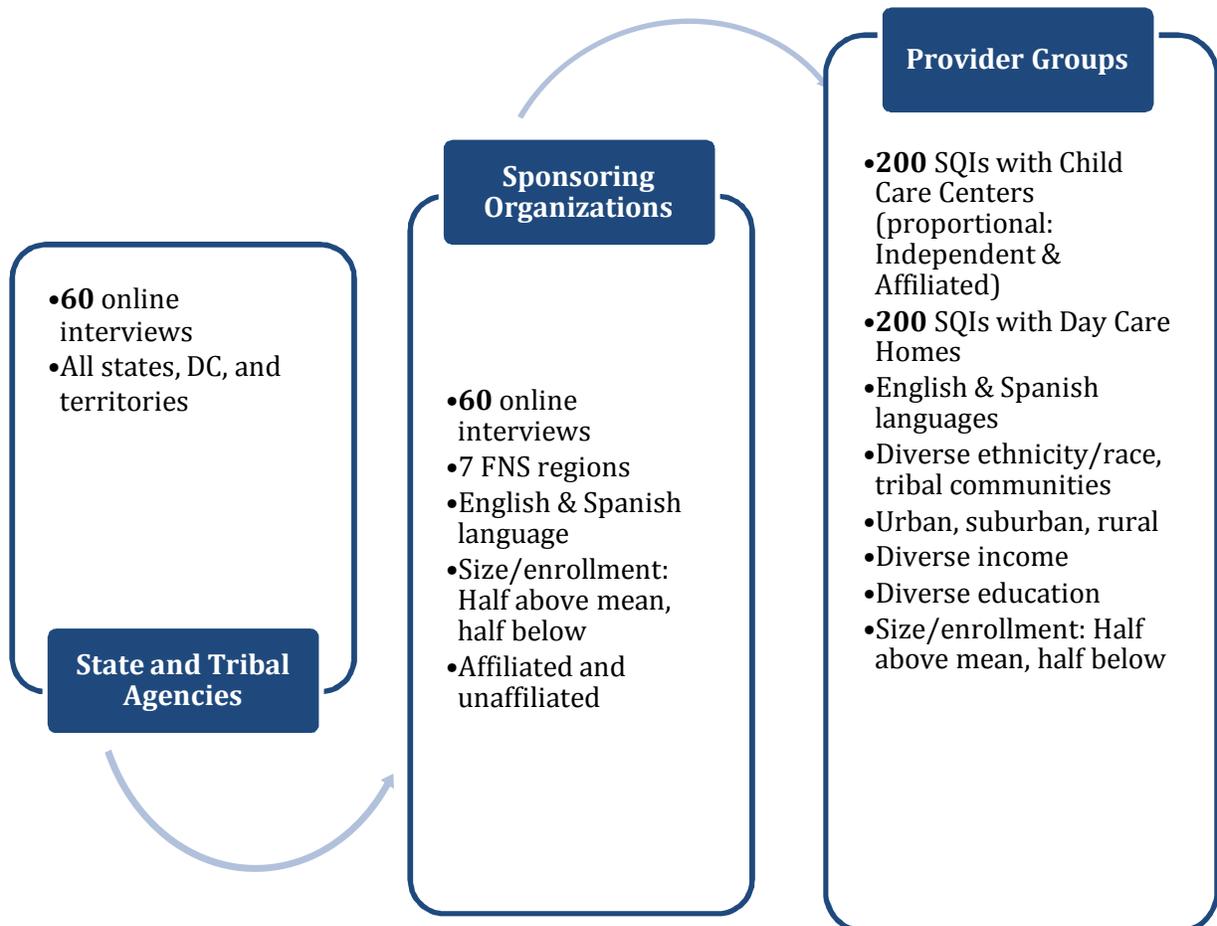
Phase 1: Structured Qualitative Interviews

Survey Fielding

The survey was accessible online for all three audiences and by phone for both types of child care providers. A Spanish-language version of the survey was made available by phone and online for providers and sponsoring organizations. After answering a series of screening questions to confirm that they qualified for this research, all three audiences responded to a range of questions about: their knowledge of current nutrition, physical activity, and electronic media use guidelines; current nutrition, physical activity, and electronic media use practices in child care; and what kinds of technical assistance might be useful in helping providers, their sponsoring organizations, and State agencies implement these guidelines.

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Our goal was to complete, at a minimum, the following number of interviews and demographic mix⁴:



⁴ The total number of interviews for sponsoring organizations and both types of provider groups exceeded these minimums.

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Response Rate

Including both email and postal mail communications, over 13,000 invitations were released for this research. Accounting for invalid emails, a response rate of 12.0% was attained.⁵

	Total	State/Tribal Agencies	Sponsoring Organizations	Child Care Centers (Sponsored)	Child Care Centers (Independent)	Family Day Care Homes
Pre-test completed questionnaires	7	0	1	2	1	3
Post-launch completed questionnaires	1,395	52	247	235	482	379
Total completed questionnaires	1,402	52	248	237	483	382
Sample released⁶	13,105	87	1,750	2,421	3,307	5,540
Completes	1,395	52 ⁷	247	235	482	379
Terminates	807	6	309	199	219	74
Email Invitations	11,322	87	1,750	2,136	3,173	4,176
Mail Invitations	1,783	-	-	285	134	1,364
Email reminders	9,634	55	1,595	1,994	2,893	3,097
Non-working emails	635	0	105	153	189	188
Incidence rate⁸	63%	90%	44%	54%	68%	83%
Response rate⁸	12.0%	64.2%	18.5%	11.4%	16.6%	7.2%

For detailed survey methodology, please see Appendix 2.

⁵ Response rate is calculated by dividing the number of completed surveys by the number of invitations sent out, minus terminated surveys and invalid email addresses.

⁶ Our lists classified individuals into target audience groups based on the best-available information at the time sample was released. This table is based on that information. In the questionnaire, respondents self-reported the setting in which they work. For the purposes of reporting, we used the updated self-reported information.

⁷ In some instances, the sample list for State agency staff and tribal agencies included more than one contact per state. Out of a total of 52 completed interviews for this audience, 48 states and territories representing all seven FNS regions were represented.

⁸ Incidence and response rates do not include the seven individuals recruited to pre-test the questionnaire. The questionnaire was not modified in any way after the pre-test that would have compromised the pre-test results, and so the pre-test completed questionnaires are included with those completed after the survey was launched full-scale.

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Completing the Survey

For each portion of the survey relating to nutrition, physical activity, or electronic media use, participants were encouraged to ask the person at their organization best-suited to answer the relevant questions to complete that section of the survey. It is possible that multiple people are responsible for each completed interview.

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Phase 2: Focus Groups

Focus Group Recruiting

Following analysis of survey results, KRC Research conducted seven 90-minute focus group discussions by telephone between April 15th and May 15th, 2014. One focus group each was conducted with State agencies and sponsoring organizations. Two were conducted with family day care home providers with varying degrees of familiarity with the *2010 Dietary Guidelines*, and three were conducted with child care center providers with varying degrees of familiarity with the *2010 Dietary Guidelines*.

Audience	Date of Group	Time of Group
State Agency staff	April 17, 2014	1:00 pm ET
Sponsoring Organizations	April 15, 2014	2:00 pm ET
Child Care Centers, higher familiarity with <i>Dietary Guidelines</i>	April 15, 2014	5:00 pm ET
Child Care Centers, lower familiarity with <i>Dietary Guidelines</i>	April 17, 2014	7:30 pm ET
Child Care Centers, mixed familiarity with <i>Dietary Guidelines</i>	May 15, 2014	6:30 pm ET
Family Day Care Homes, higher familiarity with <i>Dietary Guidelines</i>	April 17, 2014	7:00 pm ET
Family Day Care Homes, lower familiarity with <i>Dietary Guidelines</i>	April 15, 2014	7:30 pm ET

Groups were scheduled to encourage as much participation as possible.

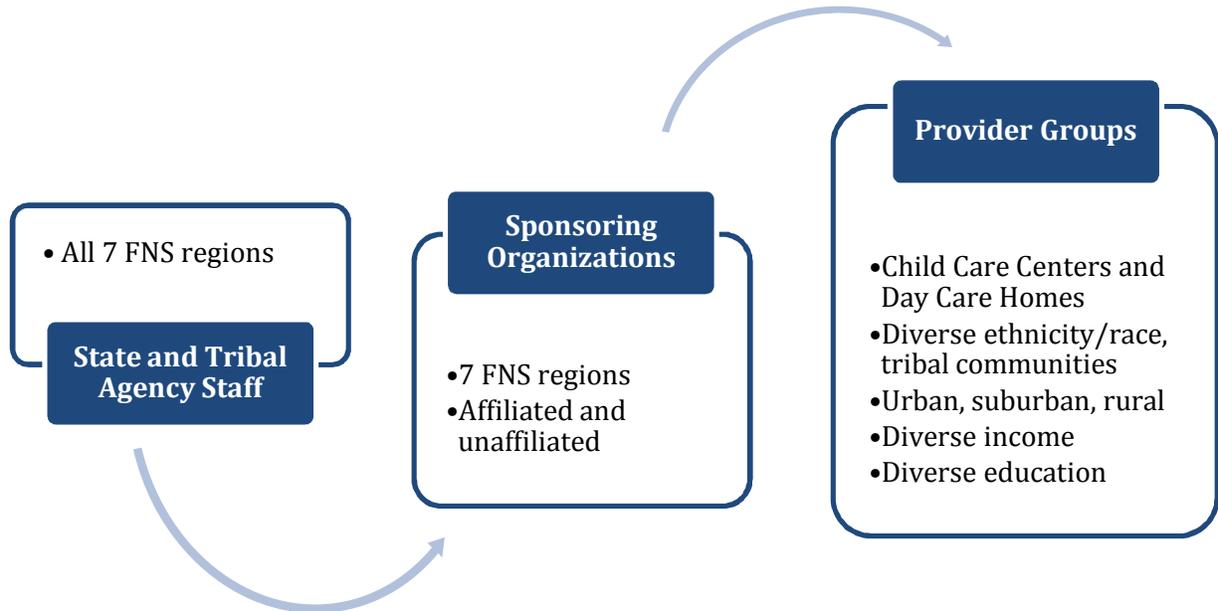
Nine participants were recruited for each focus group. Recruitment occurred out of the pool of Phase 1 respondents who responded “yes” to question 65 in the research instrument, asking respondents if they would be willing to be contacted and asked to participate in future research.

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One more thing. In the future, if we would like to include you in follow-up research on this topic, would you be willing to be contacted and asked if you would like to participate?

	State Agency Staff %	Sponsoring Organizations %	Child Care Centers %	Family Day Care Homes %
Yes, please	77	68	62	58
No, thank you	23	32	38	42

Within each group, participants were recruited to reflect a demographic mix:



To qualify for focus group participation, participants responded to a screening questionnaire to confirm they were members of the appropriate audience group.

To participate in the groups, recruits were asked to dial a particular phone number approximately five to 10 minutes before the group was scheduled to begin and provide a code to the operator. Participants were kept on muted hold until the start of the group, at which time, they were able to interact with each other and the moderator. At that start time, recruits who had not dialed in were contacted by KRC Research to remind them that the group was about to begin.

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Participation

Several recruits were unable to participate for the full-length of the group or at all, often due to unforeseen obligations or last-minute scheduling conflicts. Ultimately, 40 people participated in these groups.

Audience	Recruited	Total Participating in Some or All of Focus Group
State Agency Staff	9	9
Sponsoring Organizations	9	6
Child Care Centers, higher familiarity with <i>Dietary Guidelines</i>	9	6
Child Care Centers, lower familiarity with <i>Dietary Guidelines</i>	9	3
Child Care Centers, mixed familiarity with <i>Dietary Guidelines</i>	9	6
Family Day Care Homes, higher familiarity with <i>Dietary Guidelines</i>	9	5
Family Day Care Homes, lower familiarity with <i>Dietary Guidelines</i>	9	5
Total Number of Phase 2 Participants	63	40

Because they are qualitative rather than quantitative, the conclusions drawn from these focus groups are descriptive. While they do not help us answer questions that require measurement, they have helped us understand the kinds of ideas and concerns audiences have in greater depth, allowing us to answer questions that start with “how” and “why.” Additional details on the methodology for both phases of the formative research are provided in Appendix 2 and 3.

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IV. KEY FINDINGS

This section highlights key findings by topic from both the Phase 1 and Phase 2 formative research.

Nutrition and Wellness in Child Care Settings

1. In focus groups, audiences tend to define “healthy habits” as activities tied to nutrition, hygiene, and physical activity.

- Nutrition is most likely to be top of mind when all audiences are asked to define “healthy habits.”
- Managing electronic media use is mentioned far less frequently.
- Among the audiences included in the research, sponsoring organizations are the most likely to take a holistic view to this term.

2. All audiences believe child care providers have a role to play in promoting good nutrition and wellness habits.

- This role centers on education, exposure, and modeling for children as well as encouraging healthy habits.
- Providers were particularly discouraged that their efforts to encourage healthy eating, physical activity, and limited screen time were not reinforced in the home. As a result, they see their role as extending beyond their interactions with children in a child care setting to educating and encouraging parents about good nutrition and wellness practices.

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Nutrition

3. Nutrition guidelines are both familiar and useful to all audiences.

- All State agency staff report they are familiar with the guidelines, and most report being very familiar.
- Sponsoring organizations tend to be familiar with these guidelines as well, though the proportion saying they are very familiar lags relative to State agency staff (43% vs. 65%).
- Over seven in 10 providers are familiar with the guidelines, with 27% of child care centers and 34% of family day care homes saying they are very familiar. Importantly, 27% of providers have lower levels of familiarity, and about one in 10 have not heard of them.
- All audiences appreciate the guidelines and recommendations because they clarify what and how much children of different ages should be served.

4. Despite lower levels of familiarity with the 2010 Dietary Guidelines than State agencies, providers and sponsoring organizations point to nutrition as a primary factor in determining what food and beverages are served to children at child care centers and homes, and providers are confident they can meet nutrition guidelines.

- State agencies are more likely to assume that cost is the driving factor in determining what is served in child care settings and are very interested in training on cost-effective ways to integrate nutritious options into snacks and meals. State agencies are also concerned about whether or not providers can operationalize the guidelines, follow through to create nutritious meals and snacks, and encourage children to eat nutritious food by modeling its consumption.
- While a substantial proportion of sponsoring organization respondents and providers do say that cost is *very important*, they say so at lower rates than they say options dealing with nutrition and health are *very important*, demonstrating a gap between the State agencies and child care providers. For providers, cost comes up more frequently in the context of convenience and produce availability.

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- Child preferences play some role, especially for family day care homes. This provider type is also more likely than the other audiences, including child care centers, to say parental preferences play a role. This factor, though, is not cited as an overwhelming one among those participating in the focus groups.

5. Providers report regularly serving beverages and foods that are in line with current nutrition guidelines, including fruits, vegetables, and whole grains.

- Milk is the most commonly served beverage with meals. Water is generally available for children to drink at all times, even if it is not served.
- Whole grains, fruits, vegetables, and lean meat and poultry are served most frequently.
- Low-fat or non-fat dairy foods and beans fall into a second tier of frequently served foods. While provision of these food types is common, there may be room to improve how often both are served in child care settings.
- Processed foods are served far less frequently, and fried foods and sweet snacks are served even less often. Providers make an effort to avoid these foods by replacing them with similar alternatives.

6. Family-style meal service appears preferable, but some providers are concerned about meeting the nutrition guidelines with this type of service and therefore default to pre-plating.

- Most providers (three in five) are serving meals family style, and those who are not (that also participated in the Phase 2 research) are eager for instruction on how to do so while still meeting nutrition guidelines. Those providers who serve pre-plated meals primarily do so because they feel as though they have more capacity to ensure nutrition guidelines are being met, but they are interested in guidance to implement family style service.
- In focus groups, there is widespread acknowledgement by providers of the benefits of family style service, which include encouraging independence, curiosity, and exposure to new foods.

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7. **The biggest challenges that providers face when trying to ensure food and beverages served meet nutrition guidelines are menu planning and the cost of food.**

- The time required to prepare more nutritious meals and snacks and child preferences are also challenges for providers.
- Both sponsoring organizations and State agency staff also identified cost, time, and convenience as top barriers. However, child preferences are about as likely to be identified as a challenge by sponsoring organizations and even more so by providers.
- Sponsoring organizations tend to be aligned with providers about perceived challenges, but they see time needed to prepare nutritious meals and snacks as a bigger challenge than providers do.
- State agency staff see lack of staff knowledge/skills required to prepare nutritious meals and snacks as a major challenge, along with the convenience of using processed and pre-packaged foods. Their perception does not align with providers.

8. **Providers welcome the opportunity to learn more about menu planning and new recipes and snacks that meet nutrition guidelines.**

- Additional menu planning options will help break the monotony of tried, tested, and often overused recipes while at the same time making it easier for providers to follow nutrition guidelines and recommendations and control costs.
- When thinking about both menu planning and recipes, providers are interested in meal ideas as well as new snack ideas.
- There is also an interest in linking recipes with nutrition guidelines to facilitate compliance.
- In focus groups, gardens are mentioned by a few providers as a way to better connect children in their care with the food they eat and to promote more healthful eating. Given the interest in, and benefits of, gardens, it may be beneficial to tie menu planning and/or recipe trainings to gardening curricula instructions or recommendations.

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9. **Audiences say they would also benefit from training and information on the availability of fresh produce, cost-effective recipes, and managing children's preferences.**

- State agency staff, in particular, see cost as a challenge for providers when it comes to adopting and meeting nutrition guidelines.
- Sponsoring organizations are sensitive to cost as well, noting the intersection of cost and convenience. Processed foods tend to be both more convenient and less expensive as compared to more nutritious options.
- Unaided, providers participating in the focus groups are less likely to raise cost on their own. When prompted, though, they discuss how it is more expensive to serve more healthful foods.

Physical Activity

10. **Time spent on physical activity is proportional to age. All audiences think older children should have more time for physical activity.**

- Perceptions of how much time children of different ages should spend exercising appear to match actual practice, with older children having more time for physical activity in a typical day.
- The majority of children ages 3, 4, and 5 have at least an hour, if not more, for physical activity in both child care centers and family day care homes, while younger children have less time.

11. **Many factors influence how much time children in child care settings have for physical activity.**

- From safety to space or equipment limitations, to weather and staff interest, to lack of appropriate attire, there are a range of factors that appear to play a primary role in influencing the time spent on physical activities in child care settings.
- For all audiences, electronic media use is less of a factor, and for State agency staff, child and parental preferences are relatively less important.

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12. Limited indoor space presents the most significant barrier to physical activity when the weather prohibits outdoor activities.

- Providers typically envision physical activity taking place outdoors, so when there is bad weather and providers and children are stuck inside, there are often more limitations around opportunities for physical activity.
- Indoor physical activity is easier for child care centers than for family day care homes due to space limitations, but both would benefit from guidance to accommodate physical activity during inclement weather.
- Dancing is a popular option for providers looking to encourage physical activity while indoors. Dancing is possible in small spaces in both centers and homes, and providers are looking for similar activities that are possible in small spaces.

13. All audiences see safety as a leading factor in determining the amount of time for physical activity, but it does not come up unaided.

- Safety concerns are top of mind for State agency staff, sponsoring organization leaders, and providers in the survey, with most of each audience saying safety concerns are a very important factor in determining how much time children have for physical activity. This safety consideration did not come up unaided in the focus groups.
- The caregiver-to-child ratio, another reflection of safety, is also an important factor identified by all audiences, but this is another factor that was not consistently mentioned by focus group participants.

14. Child and parental preferences are more likely to be identified as a top factor related to physical activity among child care providers and sponsoring organizations than among State agency staff.

- Family day care homes appear particularly sensitive to the role of child and parental preferences in deciding the amount of time children have for physical activities. About half of family day care homes say either type of preference is *very important*.
- In focus groups, providers report that children are generally enthusiastic about participation in physical activity and that they love moving around, which may mean

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that child preferences are actually a contributing factor to time spent on physical activity, rather than detractor.

15. State agency staff and sponsoring organizations believe some providers themselves can be a limiting factor in promoting physical activity in child care settings because they are not modeling the physical activity behavior in which they want the children to participate. Providers, however, do not raise themselves or their staffs as a barrier.

- State agency staff are more likely to think challenges that are specific to providers and their environment play a primary role in influencing decisions related to physical activity. This includes lack of knowledge about how to engage infants and young children in physical activity, limitations in available indoor and outdoor space, and staff resistance to or discomfort with physical activity.
- Providers and, to some extent, sponsoring organizations, are more likely to identify other challenges, like the cost of purchasing equipment for physical activity and the number and varied ages of children in their care.

16. Information and technical assistance around ideas for indoor play and how to modify activities for children with special needs or who are overweight are of greatest interest for those participating in the provider focus groups.

- While providers do appear to have some options for indoor play, there is a strong interest in learning about new ways to engage children in physical activity when they are inside.
- Providers participating in focus groups say that most children enthusiastically participate in physical activities. However, guidelines by age and ideas to help providers identify appropriate physical activities for the youngest children and children with special needs would be useful for both child care centers and homes.

Electronic Media Use

17. Electronic media use is widespread in child care settings.

- Overall, most providers report that most children are using electronic media while in their care.

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- In focus groups, providers say it is important to create limited opportunities for electronic media use so the children in their care are not behind others when they get to elementary school. Providers report that they are particularly interested in making sure children who do not have computers and tablets at home have this access in the child care setting. Sponsoring organizations tend to share this view about offering, but still limiting, electronic media.
- Most State agency staff and sponsoring organizations believe electronic media use is widespread among providers, revealing consistencies in perceptions among administrative groups and actual practices in child care settings.

18. There is limited interest in electronic media guidelines among all audiences.

- Comparatively, there is greater interest in information and training related to nutrition and physical activity than there is in information and training about electronic media use.
- A relatively lower prioritization of this technical area may be influenced by current views among State agency staff that electronic media is beyond their purview, and by providers' perceptions that electronic media use practices are both somewhat positive and already controlled appropriately.

19. Over half of all audiences, except family day care homes, think that children under age two should not have any screen time. All audiences think older children should have more opportunities for electronic media use.

- Views among State agency staff, sponsoring organizations, and child care centers are generally consistent when it comes to the amount of time children under 2 should spend using electronic media.
- Perceptions about recommended electronic media use are more varied when it comes to children ages 2 and older, possibly revealing lack of knowledge or consensus about best practices and guidelines for this wellness topic.
- And, notably, while the majority of State agency staff, sponsoring organizations, and child care centers think that children under age 2 should not spend any time on electronic media use, only four in 10 family day care homes tends feel this way.

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20. Lack of staff knowledge about the need to limit electronic media use is identified as a leading factor in deciding time spent using electronic media by all audiences.

- Providers and, to some extent, sponsoring organizations, are more likely to identify other challenges, like the cost of purchasing equipment for physical activity and the number and varied ages of children in their care.
- State agency staff believe staff breaks or needing to leave children without supervision, convenience, and time spent on other activities are also top factors.
- Sponsoring organizations think staff breaks and the caregiver-to-child ratio influence the amount of time providers allocate for electronic media use.
- The caregiver-to-child ratio is identified by providers as a top factor as well. Family day care homes say weather plays a primary role.

21. There are several differences among audiences related to perceived challenges around limiting electronic media use.

- Half of State agency staff think the biggest challenges are lack of staff training and perceptions that electronic media use is educational. Staff resistance is also a top challenge reported by this audience.
- These are the top three challenges selected by sponsoring organizations as well, though to a lesser extent than State agency staff.
- In the focus group, some State agency staff insist that electronic media use does not fall under their purview, and, relatedly, they do not believe they have the time, resources, or knowledge to be managing guidelines related to electronic media use.
- Perceptions that electronic media use is educational and challenges associated with finding activities for mixed age ranges are leading factors among providers. Notably, a sizeable minority of providers say that they do not face any challenges here, with “none” being the most common answer among providers when asked about challenges to controlling electronic media use.

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Technical Assistance and Training

22. Overall, there is clear interest in receiving information and assistance about the three technical areas of focus in this research.

- While receptivity to all the nutrition topics presented is generally favorable, the most popular topics are related to learning more on guidelines and recommendations and then practical applications, including cost and successfully engaging children around these nutrition and wellness categories. Menu planning is also a topic of interest, particularly for State agency staff and sponsoring organizations.
- All audiences report similar levels of interest around physical activity guidelines and recommendations for children ages 0 to 5, best practices to encourage children in this age range to be more physically active, and ideas for both structured and free play in indoor settings. Overall interest and intensity of interest (the proportion saying they are *very interested*) tends to lag among family day care homes as compared to the other three audiences.
- Interest in topics related to electronic media use tends to lag as compared to topics related to nutrition and physical activity. The three topics about electronic media presented – best practices to encourage alternatives, planning activities that do not involve electronic media, and electronic media use guidelines – all fare similarly across audiences.

23. All audiences like interactive trainings because they can ask questions and learn from the group. They also like having access to trainings in multiple formats so they can use them with staff and parents.

- Participants said they like learning from each other and would like to be able to communicate with their peers.
- Despite performing less well in the survey, social media was one suggested option for distributing information and allowing participants to interact.

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24. There is no single preferred training method across audiences or within audiences. Thus, offering a variety of formats and channels is very important.

- Webinars were well-received but will not be useful for those who are not proficient in computer use.
- Video trainings (whether via a DVD or online, as both are useful for different reasons) were appreciated for their convenience and for their ability to show instead of tell; however, they do not allow for interaction or for providers to ask questions. For videos posted online, it may be advisable to post them on a website other than YouTube, which may be blocked by some providers' Internet security settings.
- In-person trainings allow interaction between providers, as well as between providers and sponsoring organizations and State agencies. They also create opportunities to demonstrate activities or require participation from providers. Convenience and scheduling present challenges to this type of training.
- Demonstrations are preferred, but this does not mean all trainings have to be in-person. For example, a video that demonstrated how to garden or involve children in preparing meals would be valuable. Similarly, a video that gives examples and ideas related to physical activity would be preferable to a printed document with the same information.

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V. RECOMMENDATIONS

Following are recommendations regarding how to approach technical assistance for the relevant audiences. More details about specific training topics for each audience are provided on page 62 (for State agency staff), page 87 (for sponsoring organizations), and page 138 (for providers).

Following are very high-level recommendations for technical assistance and training, based on the research findings.

- 1. Continue to build familiarity with, and knowledge about, nutrition guidelines to reinforce good practices and facilitate implementation.** Large numbers of providers are at least somewhat familiar with *2010 Dietary Guidelines for Americans*. Yet, fewer than half of sponsoring organizations and only about one-third of child care centers and family day care homes are very familiar with the recommendations, which leaves room for improvement. Even so, reported meal and snack offerings in child care centers and day care homes appear to adhere mostly to nutrition guidelines.
- 2. Help providers with tips and best practices to encourage children to eat healthier foods, to manage food costs, to reduce food preparation time, and to overcome space constraints.** Providers said the biggest barriers they face in meeting nutritional guidelines are the cost of food, preparation time, and the preferences of young children. The majority of providers are *very* interested in best practices to encourage children, aged 0 to 5 years, to eat healthier foods, including how to prepare cost-effective meals and snacks that meet nutritional guidelines. Our research suggests that family day care home providers may also benefit from more customized information that facilitates nutrition and wellness practices that can be applied across a wider age range.
- 3. Clarify the role of State agency staff to help increase physical activity and limit use of electronic media.** There is some confusion about the role that of State agency staff should play in encouraging physical activity and limiting screen time. Our research suggests that there is resistance from providers to take responsibility for these behaviors. This is due, in part, to lack of resource limitations and feelings of inadequacy, as well as not understanding why they are expected to take responsibility in the first place. Educating State agencies about the Healthy, Hunger-Free Kids Act and its goals to improve

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overall wellness, as well as established guidelines that already exist in these areas, will help clear up this confusion.

4. **Reinforce providers' perceptions about the value of daily physical activity and provide guidance, best practices, and practical ideas.** Providers recognize the value of daily physical activity for young children, according to age and physical ability. They also try to balance a wide-array of important factors in making decisions about physical activity—including safety concerns, caregiver to child ratio, equipment availability, and children's preferences. Offering providers recommendations specific to encouraging physical activity in small indoor spaces will help them manage the difficulties that arise due to inclement weather, one of the barriers cited most frequently by provider staff. Among State agency staff and sponsoring organizations, lack of knowledge about ways to engage infants and young children in physical activity is also a barrier, along with perceived staff resistance to or discomfort with physical activity. Across all groups, there is a great deal of interest in all assistance and training topics listed in our survey—ranging from guidelines, to best practices, to practical and new ideas.
5. **Elevate conversation about electronic media use to demonstrate how it can connect with the other two technical areas and to create greater familiarity with guidelines.** There is no confusion about the definition of electronic media use, but there is certainly less interest in electronic media use and training. Some State agency staff feel that young children should not have any exposure to electronic media at all. This audience overall tends to believe the biggest challenges to controlling the amount of electronic media use in child care settings are perceptions that electronic media use is educational, lack of staff training about age-appropriate guidelines and recommendations, and staff resistance to the reduced or limited electronic media use. They are also less clear about their role relative to this technical area. Providers, on the other hand, think there is some utility to a limited amount of electronic media use, but they also acknowledge the barriers trying to limit it and the need to rely on it, when they care for children of different ages. To communicate effectively about the assets and liabilities of electronic media use, integrate conversations about electronic media use into conversations about nutrition and physical activity, in which all audiences expressed more interest.

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6. **Across groups, provide the option to receive information and training in a variety of formats.** For general information, email is the appropriate and preferred means of communication. Among family day care homes, print is equally preferred to email. Providers also see print as an important tool to share information with parents. For training and technical assistance, in-person is often preferred, as available, followed by videos, webinars, and methods that allow peer interaction and the ability to ask questions of the trainers. Providers also appreciate video (DVD or web-based) that illustrates information and recommendations. State agency staff and sponsoring organizations are particularly comfortable with webinars.
7. **Promote greater dialogue between State agencies and providers, as well as sponsoring organizations and providers, about the role they and providers can play to encourage adoption of favorable nutrition and wellness practices** State agencies and some sponsoring organizations do not believe providers are modeling healthy habits for the children in their care. Promoting a dialogue between these groups will create an opportunity for State agencies to understand what steps providers take in their centers and homes and will create education opportunities for providers who need additional guidance. This can also help identify providers who might need more guidance than others and create education opportunities for them.
8. **Provide information in a format that can be shared with parents.** Many providers appear to be struggling to balance the need to meet guidelines while still satisfying parents and encouraging healthy lifestyles outside the child care homes and family day care centers. They are very interested in materials that can be displayed in centers and homes and can be passed along to parents, and materials distributed by the USDA would add credibility to the message.

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VI. DETAILED FINDINGS

State Agency Staff

State Agencies: At a Glance

- There is universal knowledge of the *2010 Dietary Guidelines for Americans* among State agency staff responsible for administering the CACFP.
- More generally, those participating in the Phase 2 research also report that more attention is being paid now than in the past to healthy habits, in part due to increased regulation. Still, while this audience is clear on their role in promoting positive nutrition habits in provider settings, the focus group uncovered questions about their role in providing information tied to physical activity and electronic media use.
- In the focus group, State agency staff discuss the important role child care providers can play in promoting healthy habits. However, perceptions among this audience on how well providers are promoting healthy habits are unfavorable.
- State agency staff consistently identify factors related to staff knowledge, perceptions, and resistance as influences on, as well as challenges to, implementing nutrition and wellness practices among child care providers. Cost is also perceived to be a top factor related to the types of food and beverages served in child care settings. These findings are confirmed by the Phase 2 research.
- Communication between this audience and child care providers on the technical areas in focus is relatively limited, which may in part explain the disconnect between State agency staff and providers on current practices as well as existing challenges to promoting nutrition and wellness practices.
- Staff would primarily like to receive information online, particularly through email, and they are most interested in receiving guidance and training via webinars/online trainings. They express an interest in offering videos and in-person trainings for providers that allow for demonstration and interaction.

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Nutrition and Wellness in Child Care Settings

“I think the regulatory attention is much more robust than it was just six or seven years ago. So the mandates that compel all of us to focus on healthy habits have increased.”

– State Agency

State agency staff identify nutrition, hygiene, and physical activity as “healthy habits” in children ages zero to five. Nutrition is most likely to be top of mind, including making and encouraging good food choices, learning appropriate food consumption, and identifying and listening to hunger habits. State agencies agree that the attention around healthy habits in children ages

zero to five has increased in the past several years, identifying increased training and regulation as the primary drivers of this change. Some were eager to mention the increase in trainings as compared to six or seven years ago, in part due to increased regulatory attention, resulting in “mandates that compel all of us to focus on healthy habits.” State agencies note that parents are integral to achieving lifelong healthy habits, and suggest that – in addition to the explicit focus of the formative research – there should be an emphasis on parent education related to nutrition and wellness.

Consistent with other audiences participating in this research, State agency staff believe child care providers play a role in promoting healthy habits. Specifically, they think providers should be promoting healthy habits by adopting and modeling them, with the latter defined as participating in the activity with the children and showing them the appropriate behaviors. In contrast to the reports of providers, State agency staff in the focus group are generally unfavorable in their assessment of providers, saying, for example, that it is “disheartening” to see the lack of provider modeling. In particular, State agency staff believe that child care providers are not modeling appropriate behavior during mealtimes, seeing it as “just an activity that will allow them to get to the next activity.”

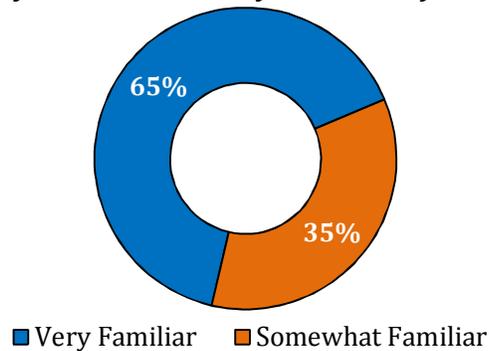
Importantly, some representing State agencies are uncertain child care providers recognize the importance of promoting healthy habits. This is likely a factor in their assessment of how well providers are modeling and implementing positive nutrition and wellness practices in their centers and homes. They also say, though, that “it’s not just around the meal service.” Anecdotally, State agency staff report that providers are not only not eating the same foods as the children in their care, but they are also not participating in physical activity.

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Nutrition

All State agency staff who participated in the Phase 1 research say they are familiar with the *2010 Dietary Guidelines for Americans*. Almost two-thirds report being *very familiar* with these guidelines (65%). The rest are *somewhat familiar*. Awareness of these guidelines, both overall and the level of knowledge, is highest among this audience as compared to sponsoring organizations and child care providers.

Familiarity with 2010 Dietary Guidelines for Americans



(For example, 65% of State agency staff are very familiar with the 2010 Dietary Guidelines)

"I think the recipes have to tell providers exactly what portion sizes and how it meets the requirements so that they don't have to wonder after they put together, say, this casserole, if it meets this one and a half ounces of a meat alternative or how much to serve to be able to do that."

– State Agency

Despite familiarity with the guidelines themselves, State agency staff recognize that providers are ultimately responsible for implementation of the guidelines. To aid this, they describe a series of efforts, including providing a wide variety of optional and mandatory trainings for providers (both in-person and through online modules), offering assistance with meal planning and reading nutrition labels, and providing specific feedback related to the menus and food of individual centers and homes.

Reflecting on what impacts food service in child care settings, State agency staff identify cost as a standout factor. All respondents representing State agency staff say that cost is an important factor in deciding what types of food and beverages are served to children at child care centers and family day care homes in their states, with 83% saying cost is *very important*, significantly

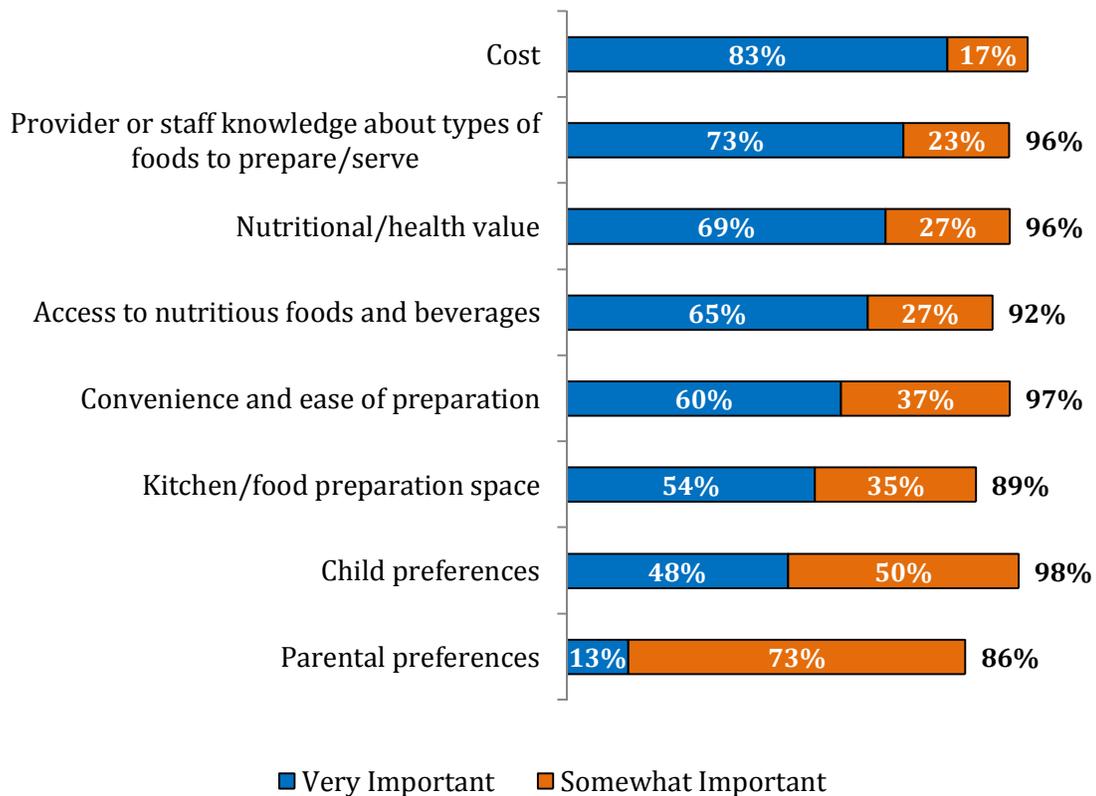
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more than either provider group. Cost is raised as a variable among State agency focus group participants as well. In the Phase 1 research, many also say that provider or staff knowledge about types of foods to prepare/serve are *very important*, with 96% saying this is at least *somewhat important*.

Almost all State agencies agree that convenience and ease of preparation are at least *somewhat important* factors in what is being served (97%). They noted that providers often have to be able to create quick, easy meals while still watching children. State agency staff are much less likely to think parental preferences are influential, with only 13% saying these are *very important* as compared to 28% of sponsoring organization staff, 33% of child care center staff, and 47% of those responding from family day care homes. State agency staff do mention in focus groups, however, that parents are starting to request more healthy options, corroborating survey findings that say that 86% of State agencies think parental preferences are at least a *somewhat important* factor.

State agency staff and providers appear to be more in sync around beverage service. State agencies feel as though nutrition guidelines are the driving force behind what beverages are being served in child care settings. In the focus group, this audience discussed how they thought providers were making progress in limiting the amount of juice served and increasing the amount of water readily available to children. Beverage service is one of the few nutrition topics discussed in which State agency staff perceptions align with providers self-reporting, with providers reporting in both the Phase 1 and 2 research that they are following nutrition guidelines as they relate to milk, juice, and water consumption.

Factors in Deciding What is Served (State Agencies)



(For example, 83% of State agencies say cost is very important)

Thinking specifically about challenges faced by child care centers and day care homes they work with to administer the CACFP, State agency staff identify the cost of food as the top challenge providers face when trying to ensure that food prepared and served to children in these settings meets nutrition guidelines. By a wide margin, cost is more likely to be selected as a challenge than any other factor. Over half of State agency staff also identify a lack of staff knowledge and skills to prepare nutritious meals and snacks as a challenge (52%) – notably more than the providers themselves (six percent and two percent for child care centers and family day care homes) and their sponsoring organizations (12%). Four in 10 also think the convenience of using processed and prepared foods may be creating a challenge in meeting nutrition guidelines.

While most of this audience says that provider or staff knowledge is a factor in determining the types of food and beverages served by child care providers, knowledge about the specific nutrition guidelines is not likely to be noted as a challenge. Only about one in five say that lack of knowledge about guidelines is among the biggest challenges faced by providers when trying to

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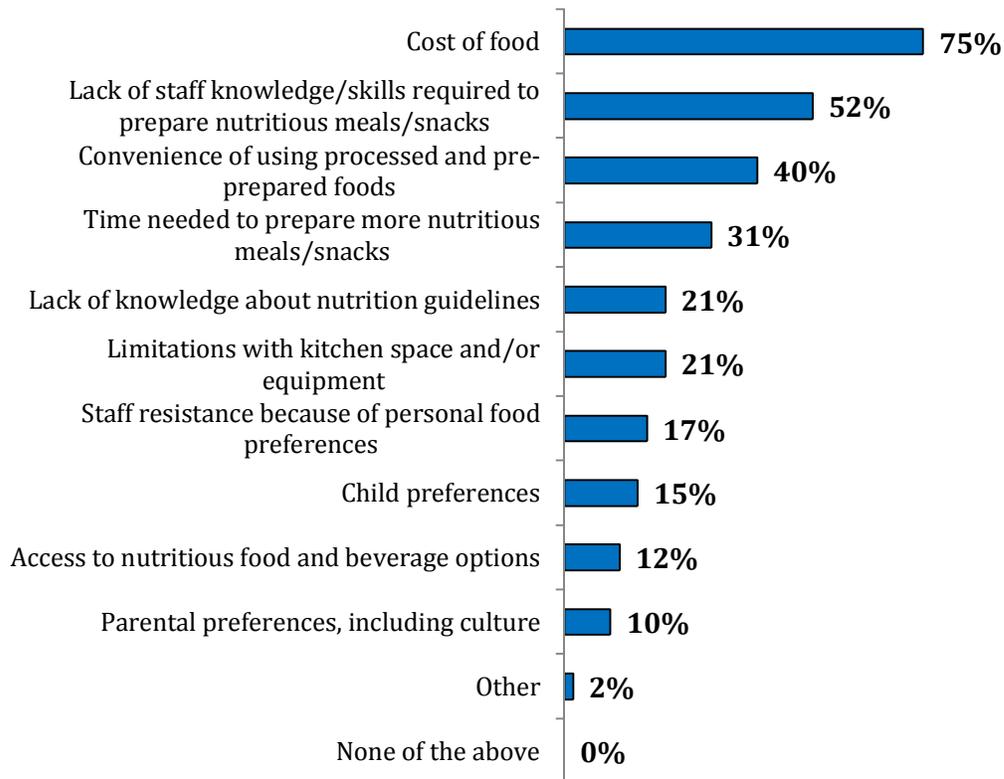
prepare and serve foods that meet nutrition guidelines. The disconnect, at least as perceived by this audience, is not related to whether or not providers are familiar with nutrition guidelines but whether or not they have the knowledge, skills, and capabilities to implement them.⁹ State agencies corroborated this finding during focus groups, agreeing that cost, convenience, and knowledge and skills were primary barriers to meeting the guidelines.

An additional concern for some State agency staff is providers' relationships with vendors, which they think is causing the purchase of unhealthy foods. Vendors are "pushing things like chicken nuggets and they put a whole grain exterior on it and they call it healthy." These unhealthy foods, State agency staff say, may be incompatible with nutrition guidelines. State agencies also express concern about unhealthy food marketing, or false marketing of some foods as "healthy" by vendors and food companies. Vendor-related challenges were also raised by some providers in the focus groups among this audience. Notably, neither vendor obstacles nor unhealthy marketing were among the challenges State agency staff, sponsoring organizations, and providers could select in the Phase 1 research when asked about what might inhibit providers' ability to meet nutrition guidelines.

⁹ Provider knowledge of the 2010 Dietary Guidelines for Americans is fairly widespread, with most being at least somewhat familiar with them.

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Challenges to Meeting Nutritional Guidelines (State Agencies)



(For example, 75% of State agencies say cost of food is a challenge)

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There is significant overlap between the factors identified as challenges to ensuring nutrition guidelines are met by child care providers and the assistance and training topics of most interest to State agency staff. For example, 75% say cost of food is a challenge, and 85% are *very interested* in cost-effective ways to integrate more nutritious options into meals and snacks.

<i>% Identifying as Challenge</i>	<i>% Very Interested in Assistance and Training on [TOPIC]</i>
Cost and Space	
<ul style="list-style-type: none"> • Cost of food (75) 	<ul style="list-style-type: none"> • Cost-effective ways to integrate more nutritious options into meals and snacks (85)
Time and Planning	
<ul style="list-style-type: none"> • Convenience of using processed and pre-prepared foods (40) • Time needed to prepare more nutritious meals and snacks (31) 	<ul style="list-style-type: none"> • Menu planning (62)
Knowledge	
<ul style="list-style-type: none"> • Lack of staff knowledge/skills required to prepare nutritious meals and snacks (52) 	<ul style="list-style-type: none"> • Preparing meals and snacks that meet nutritional guidelines (65) • Nutritional guidelines for children ages 0 to 5 (54) • Reading nutrition labels (52)

(For example, 62% of State agencies are very interested in menu planning)

Other solutions, assistance, and training suggested by State agency staff participating in the Phase 2 research include:

- Increasing the CACFP reimbursement rates to help manage cost;
- Providing recipes with fewer ingredients to make nutritious meals more convenient to prepare;
- Identifying portion sizes within recipes and clarifying which guidelines they meet to improve staff knowledge;
- Offering support for working with food vendors and systems to oversee products claimed to meet meal pattern requirements; and,
- Educating providers about unhealthy food marketing and running advertising to help providers more clearly identify healthy foods.

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Physical Activity

The majority of State agency staff believe that children ages 3 through 5 should spend at least one to two hours per day on physical activity. Seven in 10 (71%) believe that children younger than one year old should be physically active for less than one hour a day. There is *not* consensus, however, on the recommended time for physical activity for children ages 1 and 2, revealing a possible need to provide additional information to State agency staff on this topic. During the focus group discussion on physical activity, some State agency staff also expressed concern about their own personal knowledge and expertise in this area and wondered if they were the best organizations to be providing training and assistance around physical activity, so communicating not just recommendations on physical activity, but also the role State agencies play here, will be instructive.

Recommended Physical Activity: % Saying Time Child in [AGE GROUP] Should Spend on Physical Activity			
Time children should spend	Ages 0-12 Months		
	<u><1 hour</u>	<u>1-2 hours</u>	<u>>2 hours</u>
	71	10	4
	Ages 1 and 2		
	<u><1 hour</u>	<u>1-2 hours</u>	<u>>2 hours</u>
	44	40	6
	Ages 3, 4, and 5		
	<u><1 hour</u>	<u>1-2 hours</u>	<u>>2 hours</u>
	21	63	8

(For example, 71% of State agencies say children ages 0-12 months should get less than hour of physical activity)

State agency staff agree that there is some utility to having guidelines and recommendations for physical activity that are specific to children of certain ages, especially for encouraging physical activity in the youngest children. One participant noted that the center classes are usually organized by age, but having guidelines on how to modify an activity by age for family day care home providers (who often care for children across a range of ages) would be helpful. They discussed the difference between a guideline or regulation as compared to a recommendation: the latter is viewed as a suggestion so it does not necessarily compel providers to take certain

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actions, so a guideline or regulation would be more likely to promote widespread behavioral changes in support of increased physical activity. Additionally, some State agency staff were also concerned about the time they had available to train child care providers and whether they could go into detail by age.

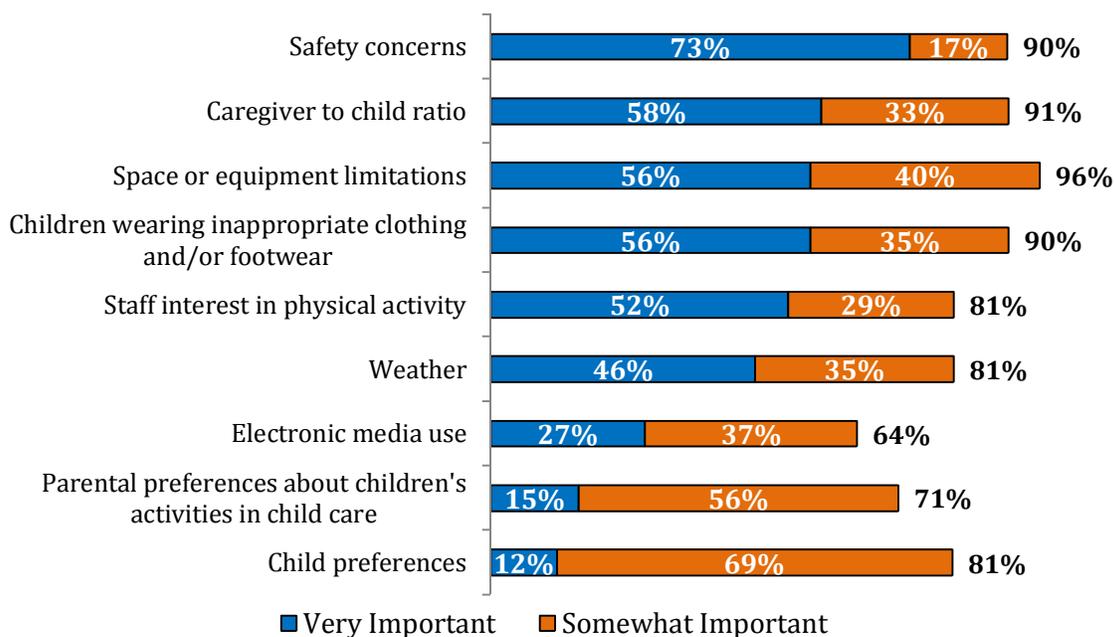
Most State agency staff say that safety concerns are a *very important* factor in deciding the amount of time children have for physical activity (73%), and this is consistently a top factor related

“The guidelines are extremely helpful and they can be very supportive of the nutrition guidelines. But we have so much trouble carving out a little time to talk about the food programs with all the regulatory information that we have to cover on reviews and so forth, that we really don’t have time to add other topics.”

– State Agency

to physical activity for all audiences included in the formative research. Over half say that the caregiver-to-child ratio (58%) and children wearing inappropriate clothing or footwear (56%) are also top factors. They are less likely, however, to identify child or parental preferences as *very important*. This differs significantly from the views of both sponsoring organizations and child care providers. Additionally, many State agency staff think electronic media use is at least a *somewhat important* factor in determining the amount of time children have for physical activity (63%), with some concern that electronic media has evolved into a “secondary caregiver,” but this perception is more common among this audience than sponsoring organization (41%), child care centers (29%), and those who responded from family day care homes (47%).

Factors in Deciding Time for Physical Activity (State Agencies)

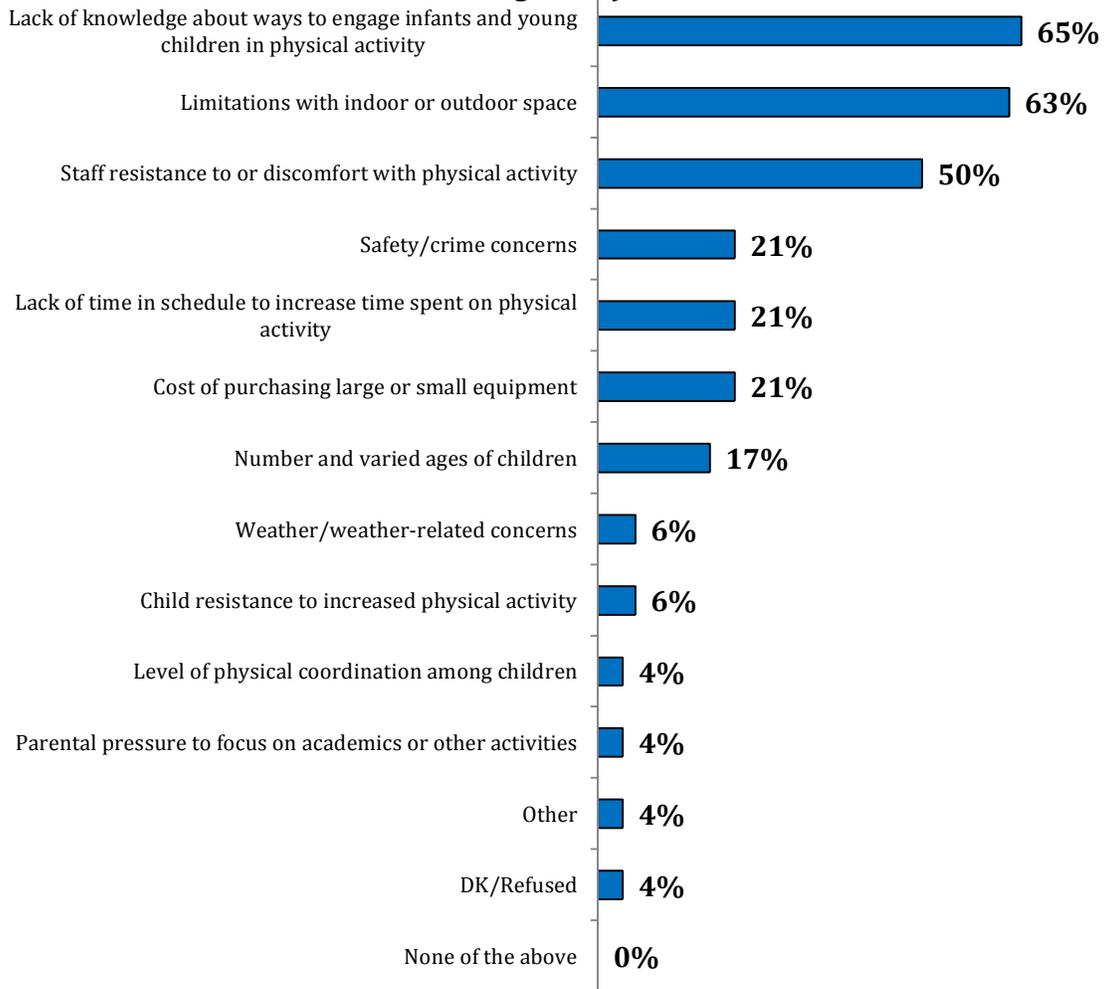


(For example, 73% of State agencies say safety concerns are a very important factor)

Nearly two-thirds (65%) of State agency staff say that providers’ lack of knowledge about ways to engage infants and young children in physical activity presents one of the greatest challenges to providing opportunities for physical activity for children, reporting that providers “feel that children are automatically...going to be active” and that they do not know how to lead structured activities. This is more than double the response of every other audience. Nearly two-thirds (63%) also believe that limitations with indoor or outdoor space pose a challenge, a perspective corroborated in the focus group by State agency staff who note that providers “don’t recognize that they don’t have to have a lot of space in order to offer children opportunities of physical activity.” To manage space concerns, State agency staff recommend trainings specific to small space activities both for indoor and outdoor settings. Providers, themselves, showed interest in this topic during their focus groups.

After lack of knowledge and space, half (50%) say that staff resistance to or discomfort with physical activity is one of the biggest challenges. State agencies believe that providers may not feel as though they are physically capable themselves, but that they need to do more to lead or be a part of the physical activity to model the behavior to the children in their care.

Challenges to Providing Opportunities for Physical Activity (State Agencies)



(For example, 21% of State agencies say safety/crime concerns are a challenge)

State agency staff administering the CACFP report that the physical activity topics of greatest interest center on cost, space, and staff gaps. Almost two-thirds think that lack of knowledge about ways to engage children is a challenge in child care settings, and there is notable interest in assistance and training on the related topic of engaging children in physical activity. This audience is also interested in ideas for physical activity in indoor settings.

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<i>% Identifying as Challenge</i>		<i>% Very Interested in Assistance and Training on [TOPIC]</i>	
Cost and Space			
<ul style="list-style-type: none"> • Limitations with indoor or outdoor space (63) 	<ul style="list-style-type: none"> • Ideas for both structured and free play in indoor settings (62) • Cost-effective ways to integrate more physical activity into the day (56) 		
Staff Gaps			
<ul style="list-style-type: none"> • Lack of knowledge about ways to engage infants and young children in physical activity (65) • Staff resistance to or discomfort with physical activity (50) 	<ul style="list-style-type: none"> • Best practices to encourage children ages 0 to 5 to be more physically active (67) • Training staff members about how to lead structured play (63) • Physical activity guidelines and recommendations for children ages 0 to 5 (62) • Engaging children in physical activity (48) 		

(For example, 48% of State agencies are very interested in assistance and training on engaging children in physical activity)

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Electronic Media Use

State agency staff perceptions about the use of electronic media in child care settings are consistent with what providers, themselves, report on this topic. Ninety-four percent think that electronic media, including TV, video and DVD watching, electronic games, and computer use, is prevalent among the child care providers they work with to administer the CACFP. This is relatively consistent with what providers say, with 82% of child care centers and 91% of family day care homes reporting that electronic media is used in their individual child care settings.

According to the Phase 1 findings, the majority of State agency staff do not believe children under age 2 should be using electronic media at all. One in 10 think that even older children should not be using electronic media in child care settings. Half believe that older children in child care settings should be using electronic media for fewer than 30 minutes in a typical day. Another three in 10 think children ages 2 and older should have more than 30 minutes on electronic media use. Views about electronic media use among those participating in the focus group were more decisive, with these State agency staff representatives saying electronic media is not appropriate for young children at all.

Recommended Electronic Media Use: % Saying Time Child in [AGE GROUP] Should Spend Using Electronic Media			
Time children should spend	Under Age 2		
	<u>None</u>	<u><30 minutes</u>	<u>30 minutes+</u>
	58	25	6
	Ages 2 and older		
	<u>None</u>	<u><30 minutes</u>	<u>30 minutes+</u>
	10	50	29

(For example, 58% of State agencies say children under age 2 shouldn't spend any time using electronic media)

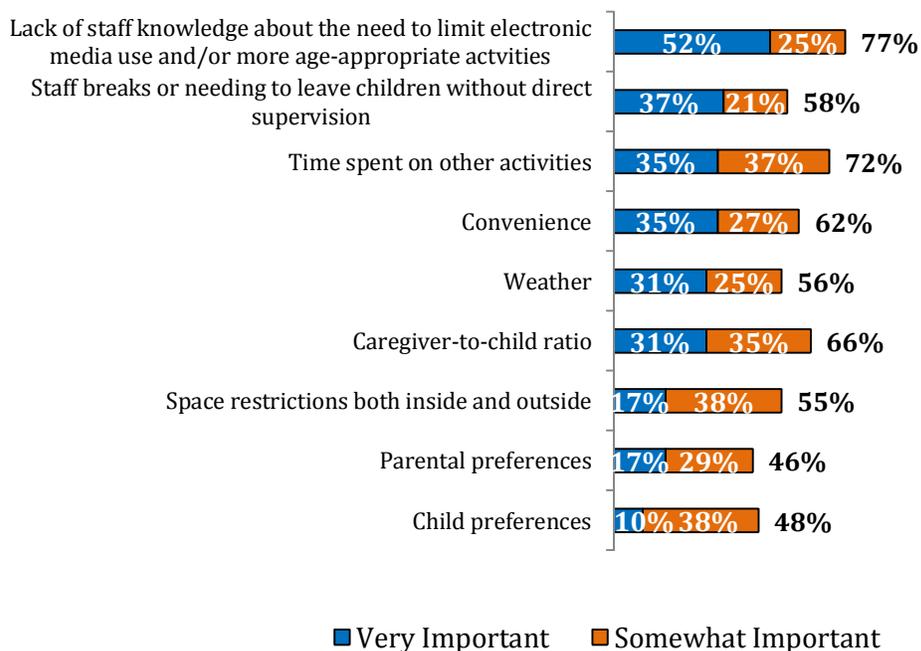
As with physical activity, some State agency staff are unclear about their responsibility (or that of the USDA) to provide assistance in this technical area. Unlike assistance on nutritional guidelines and in topics like menu planning, which they accept, understand, and have technical expertise for, there is pushback on the role they have to play in mainstreaming electronic media use guidelines among child care providers. Some say their agencies occasionally provide tailored

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recommendations in the form of newsletters and tool kits, but rarely with an emphasis on electronic media use.

Regardless of their perceptions about how, if at all, electronic media should be used in child care settings, or their lack of confidence about their own skills, half of State agency staff think that providers are lacking knowledge on this topic. Specifically, this audience says lack of staff knowledge about the need to limit electronic use or provide more age-appropriate activities is *very important* in driving the amount of electronic media use at child care centers and day care homes, with three-quarters (77%) saying this is at least *somewhat important*. Staff breaks or needing to leave children without direct supervision, convenience, time spent on other activities, caregiver-to-child ratio, and weather fall into a second tier of importance. This view tends to conflict with how providers perceive the topic. In the focus groups among providers, there is a widespread sense that electronic media should be very limited. Providers think electronic media has some utility for young children, but they still are very careful about why and how much screen time children under their care have during a typical day or week.

Factors in Deciding Time Spent on Electronic Media Use (State Agencies)

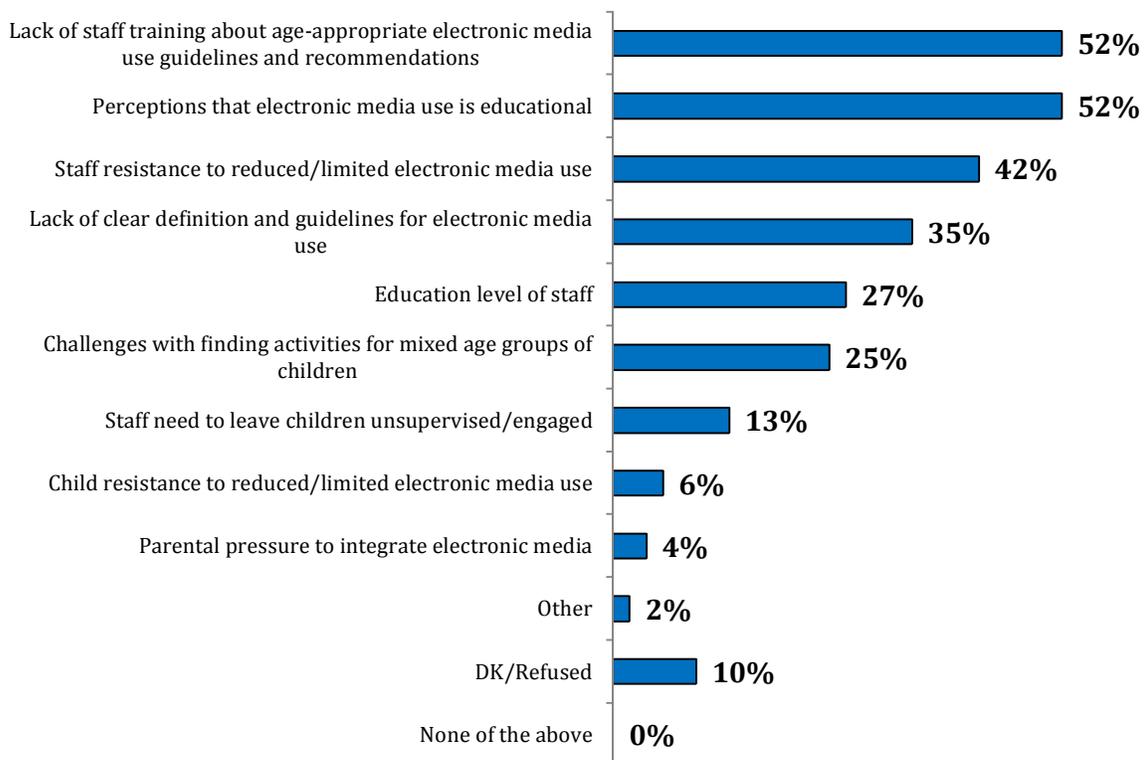


(For example, 35% of State agencies say convenience is a very important factor)

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Concerns about staff knowledge extend to the challenges identified when State agency staff are asked what factors present the greatest challenges to controlling electronic media use in child care settings. The challenges selected by this audience are lack of staff training about age-appropriate electronic media use (52%) and perceptions that electronic media use is educational, followed by staff resistance to reduced electronic media use (42%), a lack of clear definition and guidelines for electronic media use (35%), and the education level of the staff (27%). This is corroborated in focus groups, where some State agencies perceive more time spent using electronic media in family day care homes because there are fewer staff and that staff is less educated. In general, State agency staff are more likely to think providers face challenges to controlling electronic media use than providers self-report from their own experiences and, to some extent, than sponsoring organizations report, as well.

Challenges to Controlling Electronic Media Use (State Agencies)



(For example, 27% of State agencies say education level of staff is a challenge)

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As with the other technical areas, interest in assistance and training related to electronic media use parallels the factors State agency staff see as challenges for child care providers. Over a third think lack of clear definition on guidelines for electronic media use is a challenge, and 42% are *very interested* in assistance and training on this topic. This is a notable drop from interest in assistance on nutrition and physical activity, possibly reflecting views among this audience that this topic is beyond their purview.

% Identifying as Challenge	% Very Interested in Assistance and Training on [TOPIC]
Guidelines and Planning	
<ul style="list-style-type: none"> Lack of clear definition and guidelines for electronic media use (35) 	<ul style="list-style-type: none"> Best practices to encourage children ages 0 to 5 to choose alternatives to electronic media (50) Planning activities that do not involve electronic media (46) Electronic media use guidelines and recommendations for children ages 0 to 5 (42)
Staff Gaps	
<ul style="list-style-type: none"> Lack of staff training about age-appropriate electronic media use guidelines and recommendations (52) Perceptions that electronic media use is educational (52) Staff resistance to reduced/limited electronic media use (42) Education level of staff (27) 	

(For example, 35% of State agencies say lack of clear definition and guidelines for electronic media use are a challenge)

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Technical Assistance and Training

All of the suggested training topics across the three technical areas in focus are well-received by State agency respondents, although training on nutrition and physical activity is notably more popular than that for electronic media use. Assistance and training on “best practices” to encourage more nutritious eating, more physical activity, and less electronic media use are particularly popular, as is assistance and training on planning and preparation in each category.

Reflecting a concern that cost is a challenge for providers, State agency staff are interested in learning more about cost-effective ways to integrate more nutritious meal options into meals and snacks, preparing meals and snacks that meet nutrition guidelines, and menu planning. Unaided, this audience also expresses interest in assistance or training about program information and requirements, including CACFP requirements and programs that might help providers meet these.

In the focus group, when asked to elaborate on specific ways to better promote nutrition guidelines and recommendations, participating State agency staff would like to:

- Expand their available menu planning trainings and trainings on reading nutrition labels;
- Increase CACFP reimbursement rates;
- Offer recipes for providers that require few ingredients;
- Establish a system to oversee products that vendors claim meet meal pattern requirements; and
- Educate providers about advertising so they can better identify characteristics of healthy food (from vendors and within food marketing, more generally).

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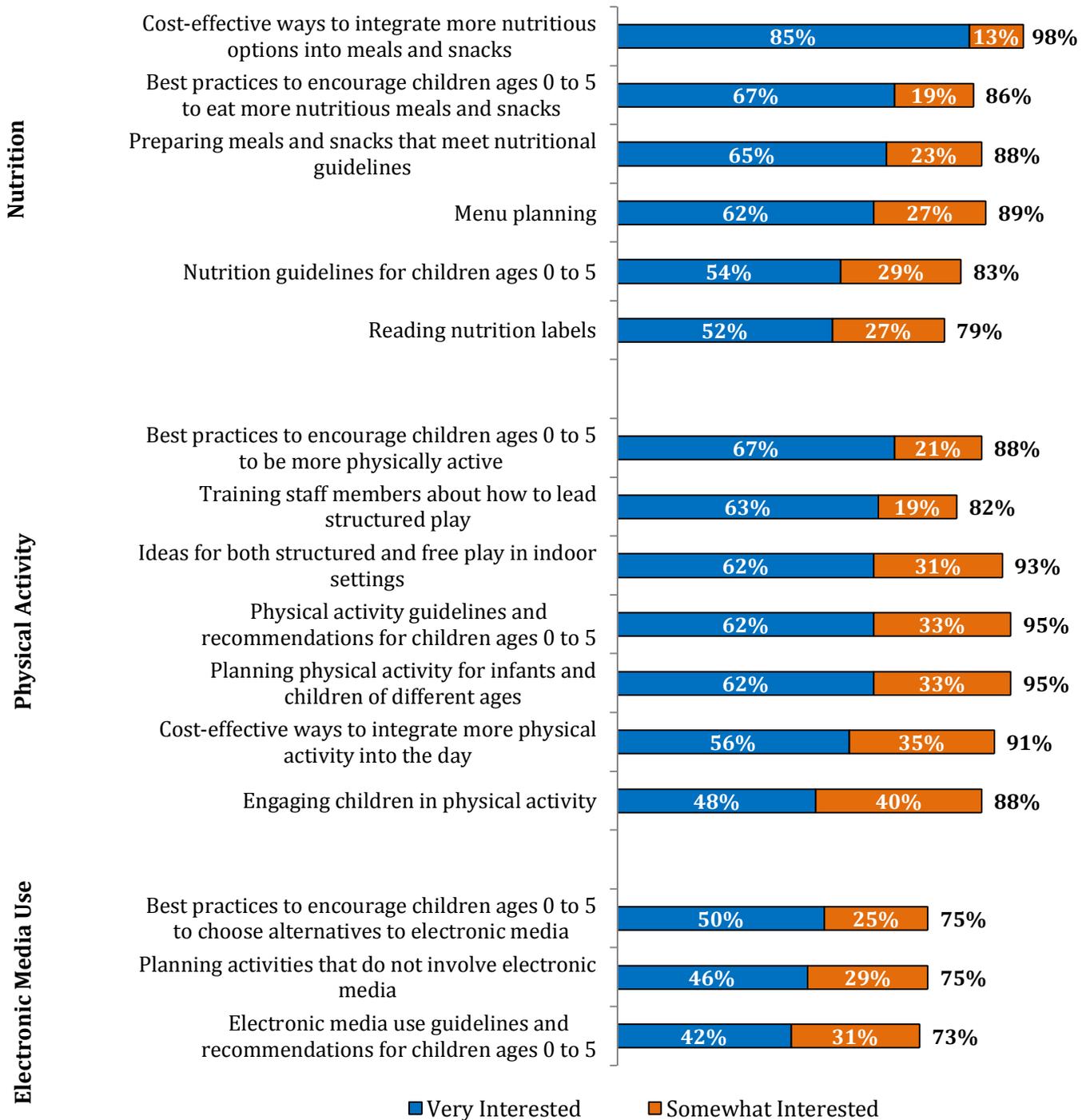
Two-thirds of surveyed State agency staff (67%) would be *very interested* in best practices to encourage children ages 0 to 5 to be more physically active (88% total interested). Six in 10 would be *very interested* in training and assistance about training staff members how to lead structured play (63%, 83% total), ideas for both structured and free play in indoor settings (62%, 92% total), planning physical activity for infants and children of different ages (62%, 94% total), and physical activity guidelines and recommendations for children ages 0 to 5 (62%, 94% total). Nearly three in 10 (29%) say, unaided, that they would like information on new age-appropriate activities, and how to incorporate them into the curriculum, utilize available space, and plan for weather.

In the focus group, while specifically reflecting on ways to increase physical activity in centers and homes, State agency staff suggested:

- Teaching facilities the difference between structured and unstructured physical activity;
- Providing activities that can be done in limited indoor space; and
- Providing modified activities by age, particularly for family day care home providers.

Although some in the focus group are uncertain of how electronic media use falls under their purview, State agency staff are supportive of regulations and guidelines on electronic media use. In fact, in the Phase 1 research, half of State agency staff surveyed would be very interested in assistance and training on the best practices to encourage children ages 0 to 5 to choose alternatives to electronic media (50%, 75% total) and in planning activities that do not involve electronic media (46%, 75% total). In a slightly lower tier, four in 10 (42%) State agency staff would be very interested in assistance and training on electronic media use guidelines and recommendations for children ages 0 to 5 (73% total). When asked on what additional topics State agency staff would like assistance or training related to electronic media use, seven in 10 State agency staff respondents (71%) say they are satisfied with what is currently available. Unaided, there are no additional suggestions for training and assistance regarding electronic media use.

Interest in Assistance or Training on... (State Agencies)



(For example, 52% of State agencies are very interested in training and assistance on reading nutrition labels)

In the focus group among State agency staff, this audience spoke about information and training in the context of the barriers they might help overcome and the concerns they might alleviate. Some of these mirrored popular training options tested in the survey, including training on meal planning, ideas for structured play indoors, and planning activities that do not involve electronic media. Some new information and training recommendations were made, as well, including providing easier recipes that meet the guidelines, advertising to counter that of food vendors, and strategies to monitor children’s play while participating in physical activity.

<i>Barriers and Concerns</i>	<i>Information and Training Recommendations</i>
Healthy Habits	
Parental involvement: <ul style="list-style-type: none"> • Obstacle to provider efforts to instill healthy behaviors in children • Concern that nutritious practices are not reinforced in the home • Parents are an important element in creating healthy patterns that will continue later in a child’s life 	<ul style="list-style-type: none"> • Educate and increase awareness among parents about healthy habits
Nutrition	
Caregiver skill and awareness: <ul style="list-style-type: none"> • Providers are not modeling healthy eating • Providers’ skill level is a factor in determining the healthfulness of the meal 	<ul style="list-style-type: none"> • Expand menu planning and food preparation training • Expand training on reading nutrition labels
Cost: <ul style="list-style-type: none"> • CACFP reimbursement is not high enough 	<ul style="list-style-type: none"> • Increase CACFP reimbursement rate
Convenience: <ul style="list-style-type: none"> • Ease of preparation is perceived to be a significant factor for family day care homes in deciding what to prepare and serve 	<ul style="list-style-type: none"> • Provide easy recipes that require few ingredients and meet nutritional guidelines
Influence of food marketing: <ul style="list-style-type: none"> • Providers can be persuaded by food advertised as healthy regardless of whether it meets nutrition standards 	<ul style="list-style-type: none"> • Establish a system to oversee products which vendors claim meet meal pattern requirements • Counter-advertise to identify characteristics of healthy food choices • Educate providers about unhealthy food marketing

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<i>Barriers and Concerns</i>		<i>Information and Training Recommendations</i>	
Physical Activity			
Caregiver involvement: <ul style="list-style-type: none"> Providers are not always willing to engage in physical activity 		<ul style="list-style-type: none"> Communicate the importance of structured and unstructured play with examples of each Provide strategies to supervise physical activity to ensure child safety while conducting structured play 	
Space limitations: <ul style="list-style-type: none"> Do not have the equipment or space to organize indoor structured play that could require equipment 		<ul style="list-style-type: none"> Circulate strategies for offering physical activity in small spaces and without large equipment 	
Electronic Media Use			
Role in guiding providers about electronic media use: <ul style="list-style-type: none"> Do not feel equipped to advise sponsors or providers on acceptable screen time guidelines 		<ul style="list-style-type: none"> Communicate how electronic media use is one of three technical areas that fall under Healthy, Hunger-Free Kids Act Share ideas on alternatives to electronic media use and the importance of limiting it so that State agency staff can pass that information along to sponsors and providers 	

There is no clear preference for how State agencies would like to receive information and assistance. When possible, offering information and trainings in multiple formats can help ensure that it is both accessible and useful.

<i>Preferred Delivery of Technical Assistance</i>			
	<i>Nutrition</i>	<i>Physical Activity</i>	<i>Electronic Media Use</i>
State agencies	<ul style="list-style-type: none"> • Webinars • Online training modules • In-person • Print materials 	<ul style="list-style-type: none"> • Webinar • Video • In-person 	-

In the survey, email is the clear preferred communication mode for receiving information about nutrition guidelines, physical activity, and electronic media use. Two-thirds also think a web portal or website would be helpful on these topics. Similarly, web-based options are preferred as the means to actually receiving guidance and training. Focus groups corroborate support among this audience for online-based training and information-sharing.

Preferred Communications Channels to Receive Information			
	% Nutrition	% Physical Activity	% Electronic Media Use
Email communications, including e-newsletters	92	85	85
Web portal or website	67	73	67
On-site visits	27	21	21
Postal mail	13	13	19
Social media, such as Facebook or YouTube	6	12	10
None of the above	0	1	4

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Preferred Ways to Receive Guidance and Training			
	% Nutrition	% Physical Activity	% Electronic Media Use
Webinars/online trainings	88	79	81
Print materials	54	60	60
In-person trainings at a nearby location	58	50	35
Video clips (online, DVD)	52	54	54
On-site visits by food program and other professionals	31	35	19
None of the above	0	2	2

(For example, 27% of State agencies would prefer to receive information about nutrition via on-site visits)

“If you have examples of things that they can do, I think that would be wonderful to...actually show them how to do it, because sometimes, if you give them something like an information sheet or a sheet that’s just going to say, ‘this is an activity that you...’...even though you may have a picture of whatever it turns out to be, to be able to have a video to show how somebody actually did it and how they used it and how much fun it is, I think that would be a bit more engaging.”

– State Agency

Online methods did better than some other guidance and training methods in the survey, but focus group participants were also eager to speak about the benefits of video or live demonstrations (which *can* occur online), noting that the opportunity to show providers how to cook or lead physical activity, instead of just telling them, is extremely important. State agencies did speak about leading demonstrations as part of in-person trainings, which are used across several states, but these require that providers travel to trainings, which has cost and scheduling implications. In regions that are sparsely populated or in particularly big states, making trainings local or accessible without creating a tremendous cost for providers *and* for State agencies may be difficult.

And, since State agencies and sponsoring organizations often run these trainings, the scheduling limitations of providers, who must care for children during normal working hours, require State agency and sponsoring organization staff to work after hours or on weekends.

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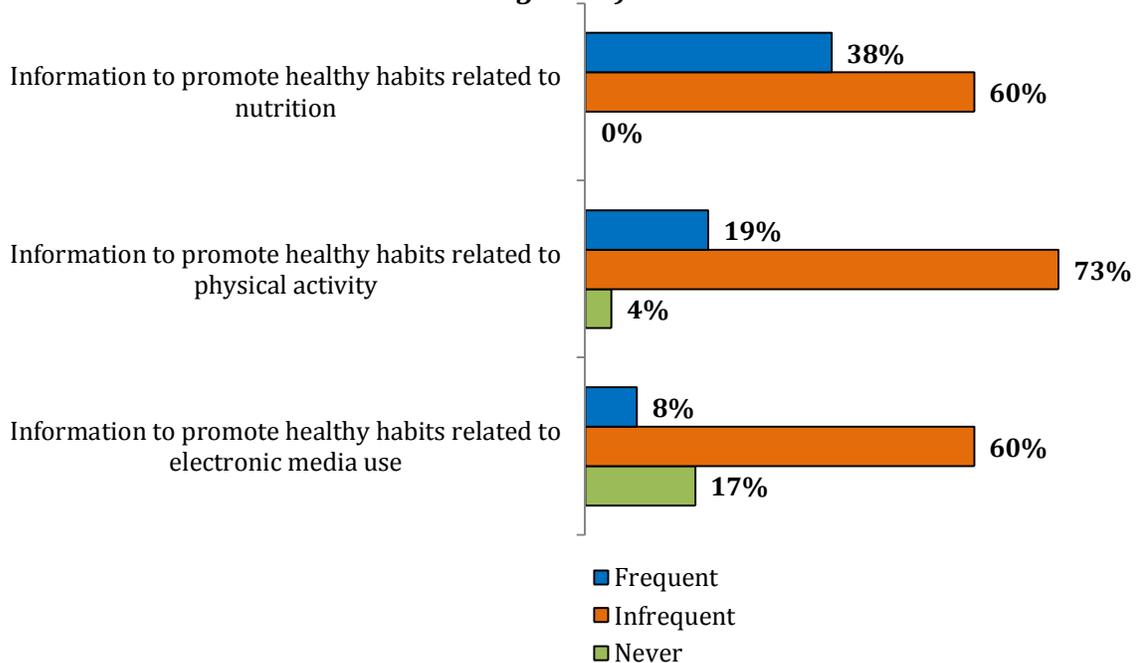
Print materials also tested well in the survey, but State agencies in focus groups questioned whether or not providers are actually reading those materials, noting that, “too often, we don’t...even see things, even sitting on a shelf and not being used.” So while they may prefer to receive training in a print format, themselves, they do not necessarily want to be sharing information with providers in this manner.

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Communication with Sponsoring Organizations and Providers

State agency staff communicate with sponsoring organizations and providers in their states relatively infrequently, with only four in 10 communicating at least monthly about information to promote healthy habits related to nutrition. Far fewer communicate with any frequency regarding healthy habits related to physical activity or electronic media use. In fact, one-quarter of State agency staff say they communicate with sponsoring organizations and providers yearly, at most, about promoting healthy habits related to nutrition. One in five never communicates about electronic media use.¹⁰ State agency staff tend to rely on both on-site visits and email to communicate with sponsoring organizations and providers in their state (88% and 85%), respectively. Many are also using conferences and events to communicate with these audiences.

Communication with Providers and Sponsoring Organizations (State Agencies)

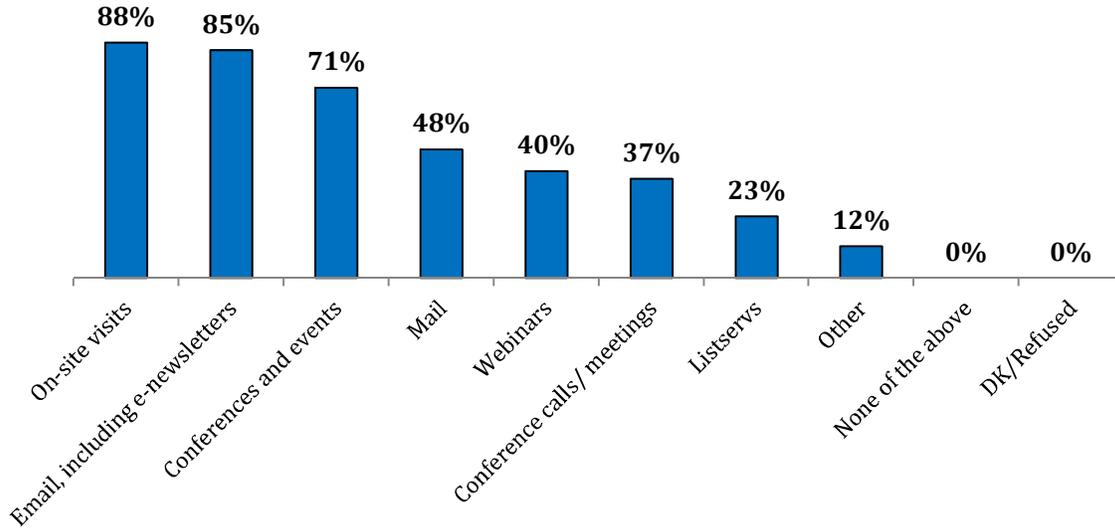


(For example, 38% of State agencies frequently communicate about nutrition)

¹⁰ "Frequent" communication occurs at least monthly. "Infrequent" communication occurs every few months or yearly.

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Communicating and Providing Information to Providers and Sponsoring Organizations (State Agencies)



(For example, 88% of State agencies communicate via on-site visits)

Sponsoring Organizations

Sponsoring Organizations: At a Glance

- As with other audiences, sponsoring organizations believe child care providers play an important role in promoting healthy habits. Like other audiences, they are also mindful of how parents can oftentimes create an environment at home that runs counter to the favorable wellness and nutrition practices in child care settings.
- Not surprisingly, sponsoring organizations tend to communicate more frequently than State agency staff about nutrition and wellness topics. Still, the frequency of communications between sponsoring organizations and providers is not consistent across the three technical areas.
- Likely because of their interactions with providers, sponsoring organizations recognize that nutrition is an important factor in how providers determine what types of food and beverages to serve the children in their care. Notably, nutritional value was a top factor cited by providers when asked to select from a list of factors influencing what they served children (but not the top one selected by State agency staff).
- They also see cost as a factor in what providers serve children. Cost is cited as a challenge in meeting nutrition guidelines as well, followed by time constraints and convenience of serving less healthy options.
- Like State agency staff, sponsoring organizations see providers, themselves, as possibly inhibiting opportunities for physical activity (staff resistance of discomfort with it). Their views are closer to providers, though, around electronic media use, saying that while it should be limited, there are some benefits to electronic media as well.
- Consistent with providers' interests and reported experience, training related to nutrition may prove more useful than in the other two technical areas, though there are areas where sponsoring organizations could also relay information on physical activity and electronic media use to providers.

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Nutrition and Wellness in Child Care Settings

“When I hear healthy habits for this age range, I think of a total package, which includes nutrition, access to health care, outside time, not so much computer and television time.”

– Sponsoring Organization

In the focus group among sponsoring organizations, as compared to the groups among the other audiences, they have the most comprehensive approach to defining “healthy habits.” Specifically, sponsoring organizations say healthy habits mean not only nutrition, physical activity, and limiting electronic media use, but also hygiene and having a daily structure. Having

consistent daily routines for sleep, hand washing, and other habits were top of mind, and sponsoring organizations noted that these areas are important in both child care and home settings alike. Thinking about the past several years, sponsoring organizations agree that attention to healthy habits has increased, identifying specific federal initiatives as the key drivers. During the discussion on healthy habits in the focus group, they were notably the only group to mention the Healthy, Hunger-Free Kids Act of 2010 by name. Sponsoring organization participants also identified the First Lady’s *Let’s Move* campaign as a variable in promoting the subject, along with the change to MyPlate, noting that it provides a good visual for children, parents, and providers alike.

Sponsoring organizations agree that providers play an important role in promoting healthy habits by establishing routines, introducing certain foods, and by modeling healthy behavior. They also emphasize the role of parents in promoting favorable nutrition and wellness practices. Sponsors recognize that parents can inhibit, not encourage, healthy habits outside of child. At the same time, some sponsoring organizations in the Phase 2 research report seeing parents trying to be more proactive in integrating healthy habits, particularly around nutrition, into their children’s lives. This observation, however, does not seem to extend to the other two technical areas, physical activity and electronic media use. Across audiences, though, there is a widespread feeling that parents are hurting, not helping, efforts to encourage positive nutrition and wellness behaviors.

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Nutrition

Sponsoring organizations report high levels of awareness with the USDA's nutrition guidelines. Specifically, almost all sponsoring organization survey respondents (90%) are familiar with the

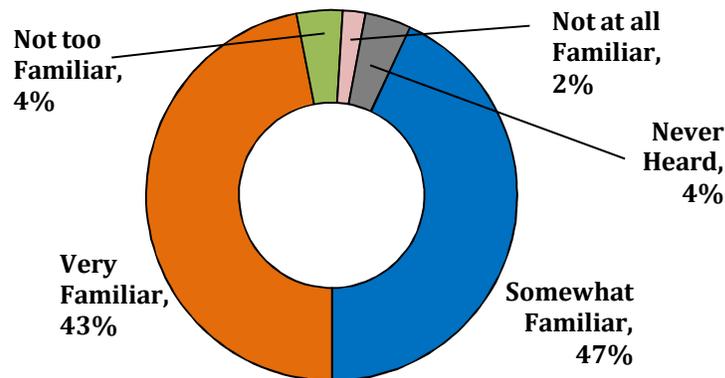
"I think that's extremely important, because we know as children are developing that their bodies require different nutrients or different amounts of nutrients."

– Sponsoring Organization

2010 Dietary Guidelines for Americans, including 43% who say they are *very familiar*. Their level of knowledge, that is, the proportion reporting they are *very familiar* with these guidelines, lags behind State agency staff (65%) but is greater than providers (27% among child care centers, 34% among family day care homes). The discussion in the focus group among sponsoring organizations also confirms that this

audience is highly supportive and appreciative of nutrition recommendations specific to different age groups, and they readily cite federal initiatives as part of an increase in awareness of nutrition and healthy habits over the past several years.

Familiarity with 2010 Dietary Guidelines for Americans



(For example, 43% of sponsoring organizations are very familiar)

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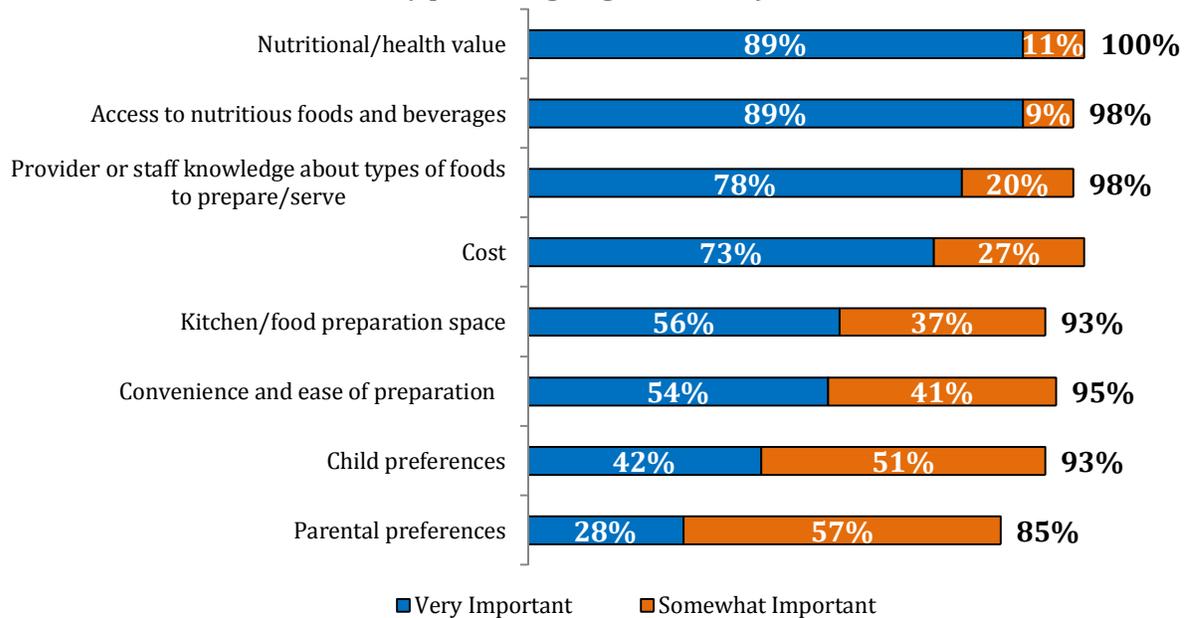
"[A] lot of times caregivers get stressed out when a child won't eat or if they're very picky... I think it's very important to have some guidelines to those child care providers, to remind them different ways to encourage children to eat, but to not make it a stressful situation."

- Sponsoring Organization

Nutritional/health value and access to nutritious foods and beverages were the top determinants of the types of food and beverages served in child care centers in the survey. Almost all sponsoring organizations describe these two factors as *very important*, followed by provider knowledge about the types of foods to prepare and serve, and cost. Kitchen space as well as convenience and ease of preparation fall into a much lower tier,

though still over half identify these factors as *very important*. Sponsoring organizations think that child and parental preferences play less of a role when it comes to providers deciding the types of food and beverages to serve to the children in their care.

**Importance of Factors in Food and Beverage Decisions
(Sponsoring Organizations)**



(For example, 89% of sponsoring organizations say nutritional/health value is a very important factor)

While cost is not the leading factor in providers' determining what to serve, sponsoring organizations do think it is a primary challenge to providers' ensuring that the food they serve meets nutrition guidelines, a finding supported both by the survey and focus group. Cost, and

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particularly its intersection with convenience, was the top of mind barrier to serving a variety of nutritious foods and beverages from sponsoring organizations' perspectives when asked in the focus group.

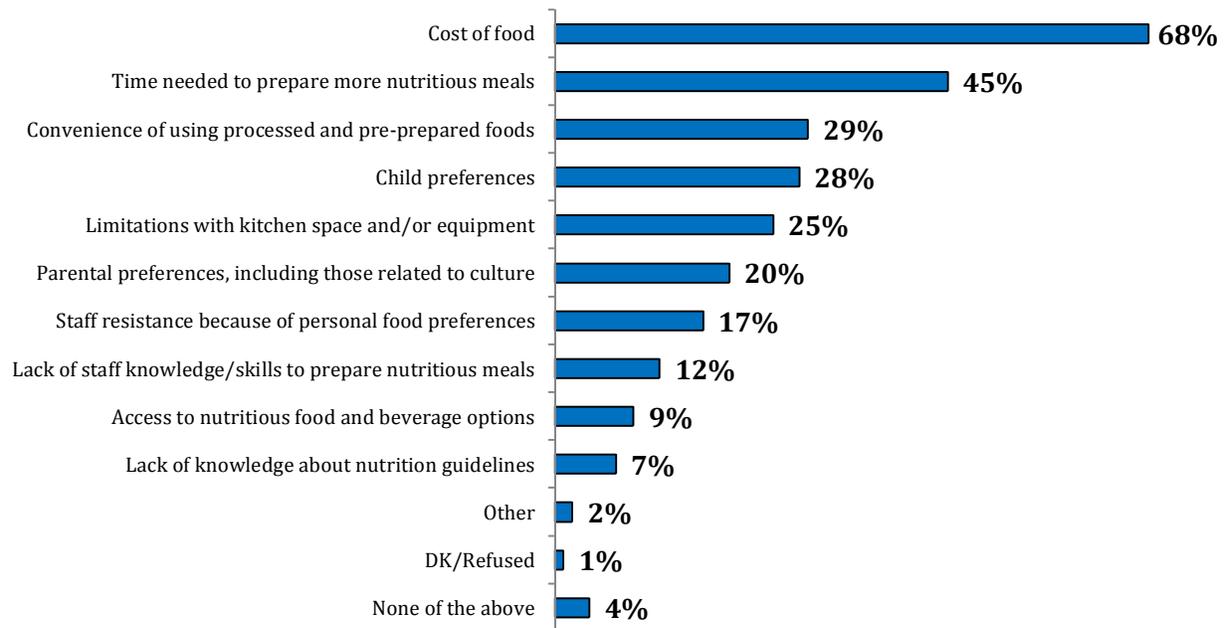
In the survey, two-thirds of sponsoring organizations identified cost as a challenge

to providers' meeting nutrition guidelines. In a much lower tier, time is the second biggest challenge, followed by convenience of pre-prepared foods (29%), child preferences (28%), limitations of kitchen space (25%), and parental preferences (20%).

"You can feed almost a whole class with a bag of apples for \$3...a box of blueberries to introduce them to something new would be, like, \$3 or \$4, and you can only serve one or two kids with that box of blueberries."

– Sponsoring Organization

Challenges to Meeting Nutritional Guidelines (Sponsoring Organizations)



(For example, 68% of sponsoring organizations say cost of food is a challenge)

In the survey, sponsoring organizations show the highest level of interest in assistance and training about cost-effective ways to integrate more nutritious options into meals and snacks. Their widespread interest in this particular topic is consistent with perceptions about the top challenges facing providers when trying to prepare and serve nutritious foods. In addition to learning more about cost-effective ways to provide more nutritious food options, many

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sponsoring organizations are also interested in best practices to encourage children ages 0 to 5 to eat more nutritious meals and snacks (67%) and menu planning (63%).

% Identifying as Challenge	% Very Interested in Assistance and Training on [TOPIC]
Cost and Space	
<ul style="list-style-type: none"> • Cost of food (68) 	<ul style="list-style-type: none"> • Cost-effective ways to integrate more nutritious options into meals and snacks (77)
Preferences (staff, children, parents)	
<ul style="list-style-type: none"> • Child preferences (28) 	<ul style="list-style-type: none"> • Best practices to encourage children ages 0 to 5 to eat more nutritious meals and snacks (67)
Time and Planning	
<ul style="list-style-type: none"> • Time needed to prepare more nutritious meals and snacks (45) 	<ul style="list-style-type: none"> • Menu planning (63)
Staff Gaps	
	<ul style="list-style-type: none"> • Preparing meals and snacks that meet nutritional guidelines (58) • Nutritional guidelines for children ages 0 to 5 (48)

(For example, 28% of sponsoring organizations say child preferences are a challenge)

These interests were echoed in the focus group, with sponsoring organizations saying that trainings and information on recipe and menu planning as well as advice on how to navigate children’s unique food preferences would benefit providers. Additionally, sponsoring organizations noted, along with other audiences, that parents play a critical role in reinforcing healthy habits, and oftentimes create an environment that undoes what is happening at child care centers and family day care homes. As such, sponsoring organizations say parents could benefit from communications that give them ways to encourage children to try new foods, to cook healthy ones, and to remind them of the dangers of unhealthy foods (with this information relayed via providers).

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Physical Activity

Sponsoring organizations say that physical activity is a key part of promoting healthy habits among younger children. As with State agency staff, the majority of this audience has a clear sense of the recommended time for physical activity for the youngest children in child care for those ages 3 through 5. Their views diverge more on children ages 1 and 2. In particular, the majority of sponsoring organization survey respondents believe that children younger than age 1 should have less than an hour of physical activity (59%) on a typical day and children between the ages of 3 and 5 years old should receive between one and two hours (65%). Sponsoring organizations lack consensus about how much time children ages 1 and 2 should spend on physical activity. Most are split between saying children in this age range should have less than an hour (44%) or between one and two hours (39%) of physical activity. Few believe that children ages 0 to 5, regardless of actual age, should be getting more than two hours of physical activity in a typical day.

Recommended Physical Activity: % Saying Time Child in [AGE GROUP] Should Spend on Physical Activity			
Time children should spend	Ages 0 to 12 Months		
	<u><1 hour</u>	<u>1-2 hours</u>	<u>>2 hours</u>
	59	20	3
	Ages 1 and 2		
	<u><1 hour</u>	<u>1-2 hours</u>	<u>>2 hours</u>
	44	39	4
	Ages 3, 4, and 5		
	<u><1 hour</u>	<u>1-2 hours</u>	<u>>2 hours</u>
	22	65	9

(For example, 59% of sponsoring organizations say children 0-12 months should spend less than an hour on physical activity)

Sponsoring organizations also say that providers may not have enough information about what levels of physical activity are acceptable for younger children, as some raised this as a concern in the focus group.

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Across all audiences surveyed, including sponsoring organizations, safety is a leading factor in determining the opportunities children in child care settings have for physical activity. Three-fourths of sponsoring organizations say that safety concerns are *very important*. Other factors

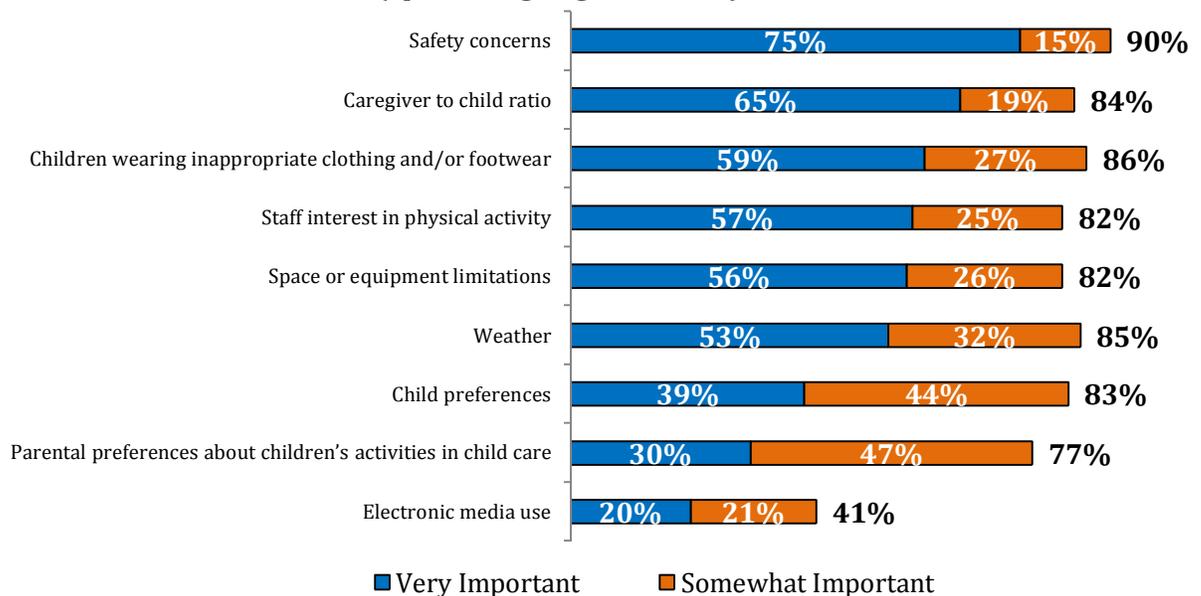
“Maybe they’re embarrassed or shy, but something that they’re not used to doing. Even the hula hoops or jump ropes or stuff like that. ‘They go, no, we’re too old for that.’ And they don’t want to participate.”

– Sponsoring Organization

influencing physical activity include caregiver-to-child ratio (65%), children wearing inappropriate clothes (59%), staff interest (57%), space/equipment limitations (56%), and weather (53%) are also top of mind factors behind safety concerns. Some elaborated that ability or embarrassment may prevent provider staff from personally modeling physical activity, which the research audiences agreed is a key way to

encourage physical activity among children under their care.

Importance of Factors in Physical Activity Decisions (Sponsoring Organizations)



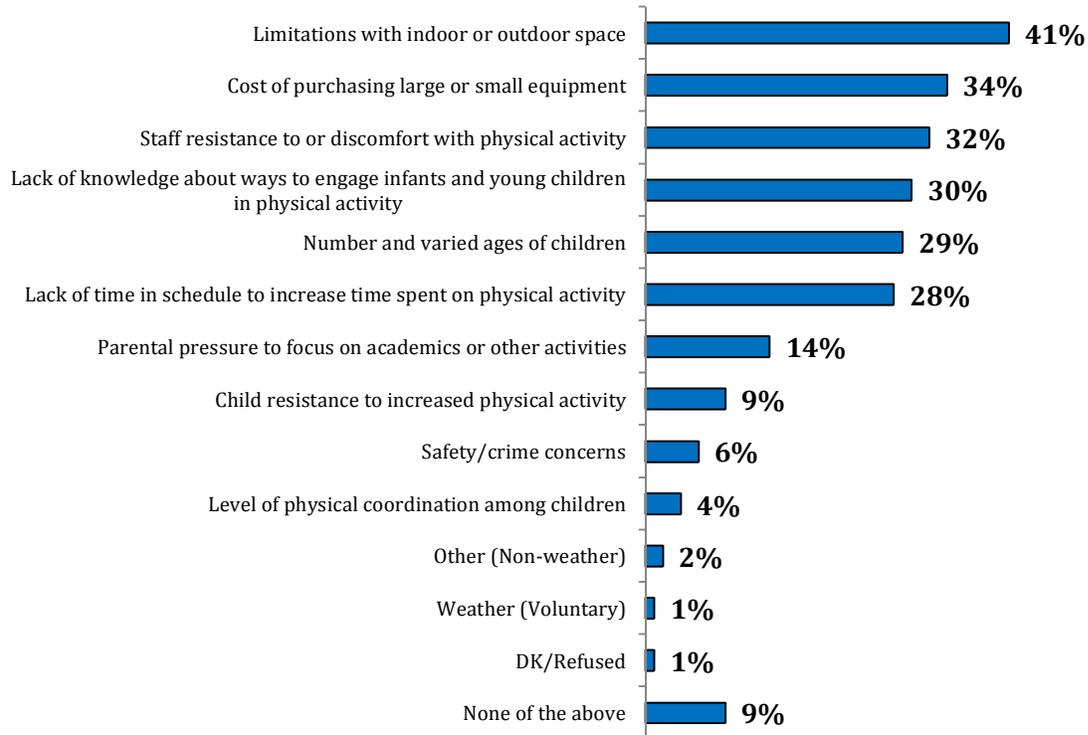
(For example, 75% of sponsoring organizations say safety concerns are very important factors)

Limitations with indoor and outdoor space (41%) tops the list of challenges to ensuring providers offer children in their care enough opportunities for physical activity in the survey. Barriers related to space are followed by cost of purchasing equipment (34%), staff resistance (32%), lack

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of knowledge (30%), number and varied ages of children (29%), and lack of time (28%). Sponsoring organizations are more likely than providers to say that lack of staff knowledge about ways to engage infants and young children in physical activity is a challenge, and they are also more likely to say that lack of time is a challenge.

Challenges to Providing Opportunities for Physical Activity (Sponsoring Organizations)



(For example, 41% of sponsoring organizations say limitations with indoor or outdoor space are a challenge)

The survey showed that assistance and training that are explicitly directed at staff could help lessen challenges related to lack of staff knowledge about engaging children in their care in physical activity, as well as staff resistance to, or discomfort with, physical activity. In fact, two-thirds of sponsoring organizations say they are *very interested* in assistance and training about training staff members about how to lead structured play.

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% Identifying as Challenge	% Very Interested in Assistance and Training on [TOPIC]
Cost and Space	
<ul style="list-style-type: none"> • Limitations with indoor or outdoor space (41) 	<ul style="list-style-type: none"> • Ideas for both structured and free play in indoor settings (70) • Cost-effective ways to integrate more physical activity into the day (63)
Guidelines and Planning	
<ul style="list-style-type: none"> • Number and varied ages of children (29) 	<ul style="list-style-type: none"> • Engaging children in physical activity (64) • Best practices to encourage children ages 0 to 5 to be more physically active (63) • Physical activity guidelines and recommendations for children ages 0 to 5 (62)
Staff Gaps	
<ul style="list-style-type: none"> • Staff resistance to or discomfort with physical activity (32) 	<ul style="list-style-type: none"> • Training staff members about how to lead structured play (67)

(For example, 64% of sponsoring organizations are very interested in assistance and training on engaging children in physical activity)

The focus group among sponsoring organizations also confirmed these needs, with participants

“I think what would help more is giving actual examples of structured activity that the kids can do and of course, like previously stated, we don’t want the kids to get hurt or they might be afraid to do it. But if it’s something age appropriate to where we can find a way to get the kids all involved, then that way, we’re incorporating the physical activity as part of their routine, as something that they just do normally.”

– Sponsoring Organization

saying that providing specific examples of physical activities that could be conducted indoors may address some of these challenges. Beyond training or guidance for child care providers, sponsoring organizations in the focus group discuss relaying information on physical activity to parents. Specifically, they think parents would benefit from information to

encourage physical activity at home.

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Electronic Media Use

Sponsoring organizations agree (along with other audiences) that electronic media use guidelines are important and useful, but are not as high of a priority as guidelines on nutritional and physical activity. However, the focus group findings suggest sponsoring organizations may be more open to receiving guidelines on the topic than State agency staff. In this regard, their views about electronic media use for young children are more closely aligned with providers than State agency staff. Like providers, sponsoring organizations recognize the benefits and drawbacks of exposing children of different age groups to electronic media and agree that suggested use varies by age group.

“Even though I think [electronic media is] wonderful and very useful, I don’t think they should be the emphasis of learning. I think that children still need those old-fashioned experiences of hands-on, to go out and get dirty and to touch things and to experience things.”

– Sponsoring Organization

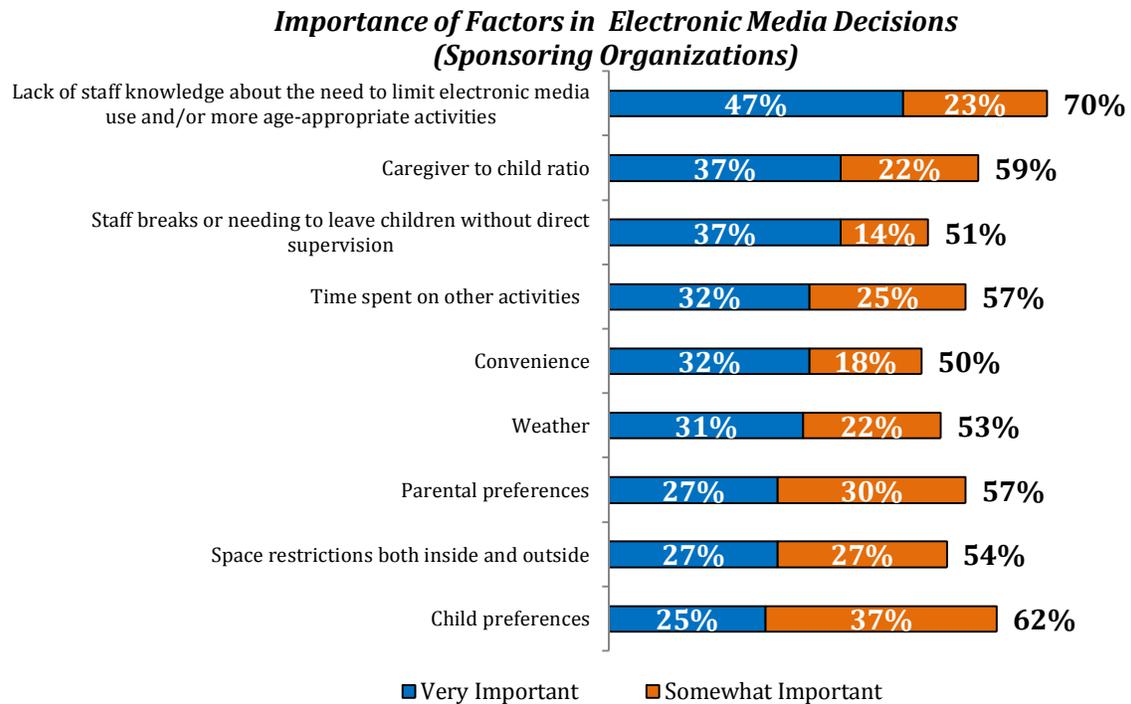
Almost all sponsoring organizations (87%) say the providers they sponsor use electronic media, and this assessment matches with providers’ self-report on electronic media use. There is consensus among sponsoring organizations around how much time children in different age cohorts should spend using electronic media. 56% of this audience think that children under age 2 should not use electronic media at all while in a child care setting. For those ages 2 and older, 55% of sponsoring organizations think the recommended amount of time spent with electronic media should be less than 30 minutes. Another 25% believe this age cohort should spend 30 minutes or more, and 14% think that they should not use electronic media at all.

Recommended Electronic Media Use: % Saying Time Child in [AGE GROUP] Should Spend Using Electronic Media			
Time children should spend	Under Age 2		
	<u>None</u>	<u><30 minutes</u>	<u>30 minutes+</u>
	56	26	6
	Ages 2 and older		
	<u>None</u>	<u><30 minutes</u>	<u>30 minutes+</u>
	14	55	25

(For example, 56% of sponsoring organizations say children under age 2 shouldn’t spend any time using electronic media)

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Sponsoring organizations say lack of staff knowledge about the need to limit electronic media use or do more age-appropriate activities is one of the most important factors facing providers when making decisions related to electronic media use, with just under half in the survey saying it is very important (47%). Other factors fall into a second tier, with around one-third of respondents saying they are *very important*. These range from caregiver-to-child ratio to staff breaks, and from convenience to weather.



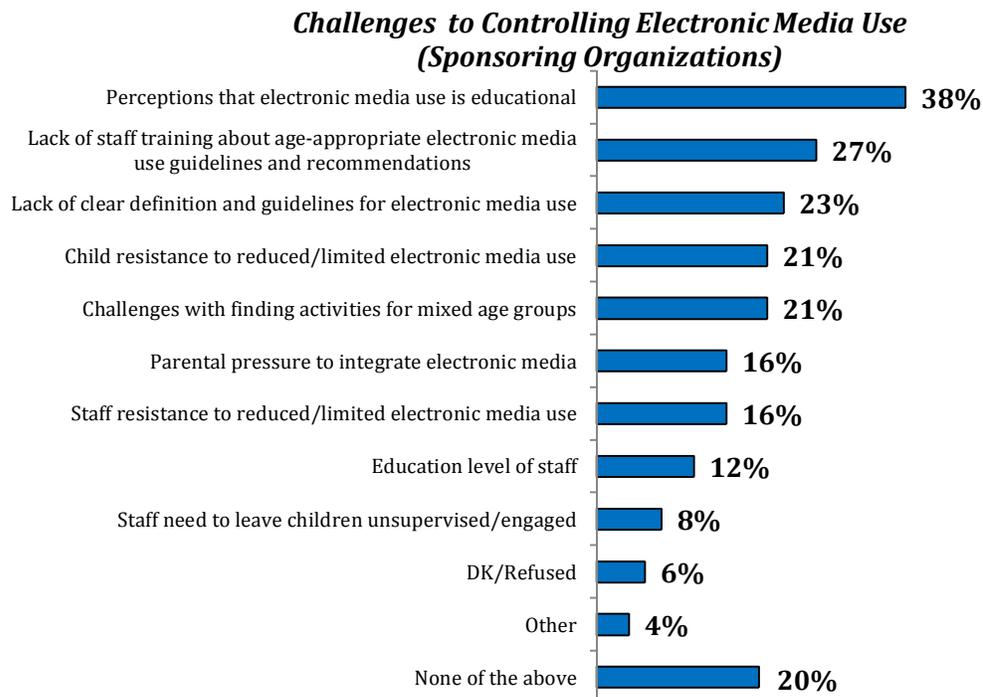
(For example, 37% of sponsoring organizations say the caregiver to child ratio is a very important factor)

On the whole, the survey showed that sponsoring organizations are less likely than State agency staff to think providers face challenges to controlling electronic media use. The exception relates to both child and parental preferences. Both sponsoring organizations and providers are more likely to identify these types of preferences as barriers related to controlling electronic media use in child care settings, which may indicate that sponsoring organizations have greater awareness about some of the daily realities faced by providers. (This may at least partly be explained by their having more frequent communication with providers than State agency staff, not just on electronic media use, but on all three technical areas.) This perspective is validated in the focus

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groups among providers, with some providers discussing how parents are often pushing for greater use of screens in child care settings.

Sponsoring organizations say that perceptions that electronic media is educational (38%) are the top challenge around limiting electronic media use. Secondary challenges include lack of staff training about guidelines (27%), lack of clear definition of guidelines (23%), and child resistance (21%), and challenges in finding activities for mixed ages groups (21%). One in five say the providers they sponsor do not face any of these challenges in meeting guidelines.



(For example, 38% of sponsoring organizations say perceptions that electronic media use is educational is a challenge)

However, the top challenges that came up in the survey do not tell the full story of the balancing act sponsoring organizations think providers face when it comes to electronic media use. In the focus group, sponsoring organizations say that in some instances, parents want more electronic media exposure and that exposure to computers is beneficial to children who might not have access to one at home and need to prepare for school. This makes it harder to distinguish when electronic media use is *educational* and when *perceptions that it is educational* are a barrier, particularly among providers catering to a wider range of age groups.

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Recognizing the challenges associated with electronic media use, sponsoring organizations participating in the focus groups suggest that more communications with parents about

“Now, the providers, to me, will be more difficult, because they provide child care for different age groups. And then, that to me seems more difficult, because then you have the little ones, who want to be watching for example, Sponge Bob, and then you have the 12 or 13 year olds who want to play video games.”

– Sponsoring Organization

electronic media use could be beneficial. In fact, they expressed interest in materials that help them (and, in turn, providers) make the case to parents that their screen time should be limited and should provide information about its educational uses.

Information about planning activities that do not involve electronic media and electronic media use guidelines and recommendations will also help address several challenges that sponsoring organizations think providers

confront relative to this technical area. This includes challenges around the lack of clear definition and guidelines for electronic media use, which over one-quarter of survey respondents selected as a challenge. This information will also likely ameliorate challenges presented by staff gaps, such as perceptions that electronic media use is educational or lack of staff training about what is appropriate for children in their care. Twenty-seven percent and 38%, respectively, identify these two factors as challenges that they believe providers must address when trying to control electronic media use, so assistance and training on electronic media use guidelines and recommendations, in particular, could be instructive.

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% Identifying as Challenge	% Very Interested in Assistance and Training on [TOPIC]
Guidelines and Planning	
<ul style="list-style-type: none"> Lack of clear definition and guidelines for electronic media use (23) 	<ul style="list-style-type: none"> Best practices to encourage children ages 0 to 5 to choose alternatives to electronic media (53) Planning activities that do not involve electronic media (47)
Staff Gaps	
<ul style="list-style-type: none"> Perceptions that electronic media use is educational (38) Lack of staff training about age-appropriate electronic media use guidelines and recommendations (27) 	

(For example, 47% of sponsoring organizations are very interested in assistance and training on planning activities that do not involve electronic media)

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Technical Assistance and Training

Across topics, sponsoring organizations say they are most interested in new, creative ways for providers to integrate guidelines and recommendations for nutrition, physical activity, and electronic media use in to their daily work. Additionally, many topics of interest tend to align with factors this audience identified as challenges for providers when trying to integrate nutrition and wellness practices in child care centers. Sponsoring organizations also expressed interest in the availability of information in multiple languages and many suggested that videos would be a useful format for technical assistance and training.

Sponsoring organizations see cost as the primary challenge to meeting nutrition guidelines and, accordingly when presented in the survey with a list of topics related to nutrition, they are the most interested in cost-effective ways to integrate more nutritious options into meals and snacks (77%). This audience also shows a high level of interest in best practices to encourage children to eat more nutritious meals and snacks (67%), menu planning (63%), and preparing meals that meet nutrition guidelines (58%). Nutrition guidelines for children (48%) and reading nutrition labels (39%) fall into a lower tier based on the proportion indicating they are *very interested*.

In the focus group, sponsoring organizations expressed specific interest around menu planning and best practices to encourage children to eat more nutritious meals and snacks, saying that training on how to manage children's food preferences and ways to share successful techniques such as "the two bite" rule to get children to try new foods, along with healthy recipes, would be especially beneficial. A new finding that came out of the focus group is also that sponsoring organizations are interested in ways to better communicate these topics with parents in addition to providers.

There are consistently high levels of interest in a range of topics related to physical activity. Space and weather limitations came up in both the survey and focus group, where participants said that they could benefit from specific examples of indoor activities since weather is a common barrier to outdoor activity. Sponsoring organizations participating in the survey report space limits as a primary challenge and, possibly as a result, seven in 10 are *very interested* in assistance or training on ideas for indoor play (70%). Two-thirds of sponsoring organization respondents are similarly interested in training staff about how to lead structured play (67%) and planning for different ages (66%). Approximately six in 10 want assistance in engaging children in physical

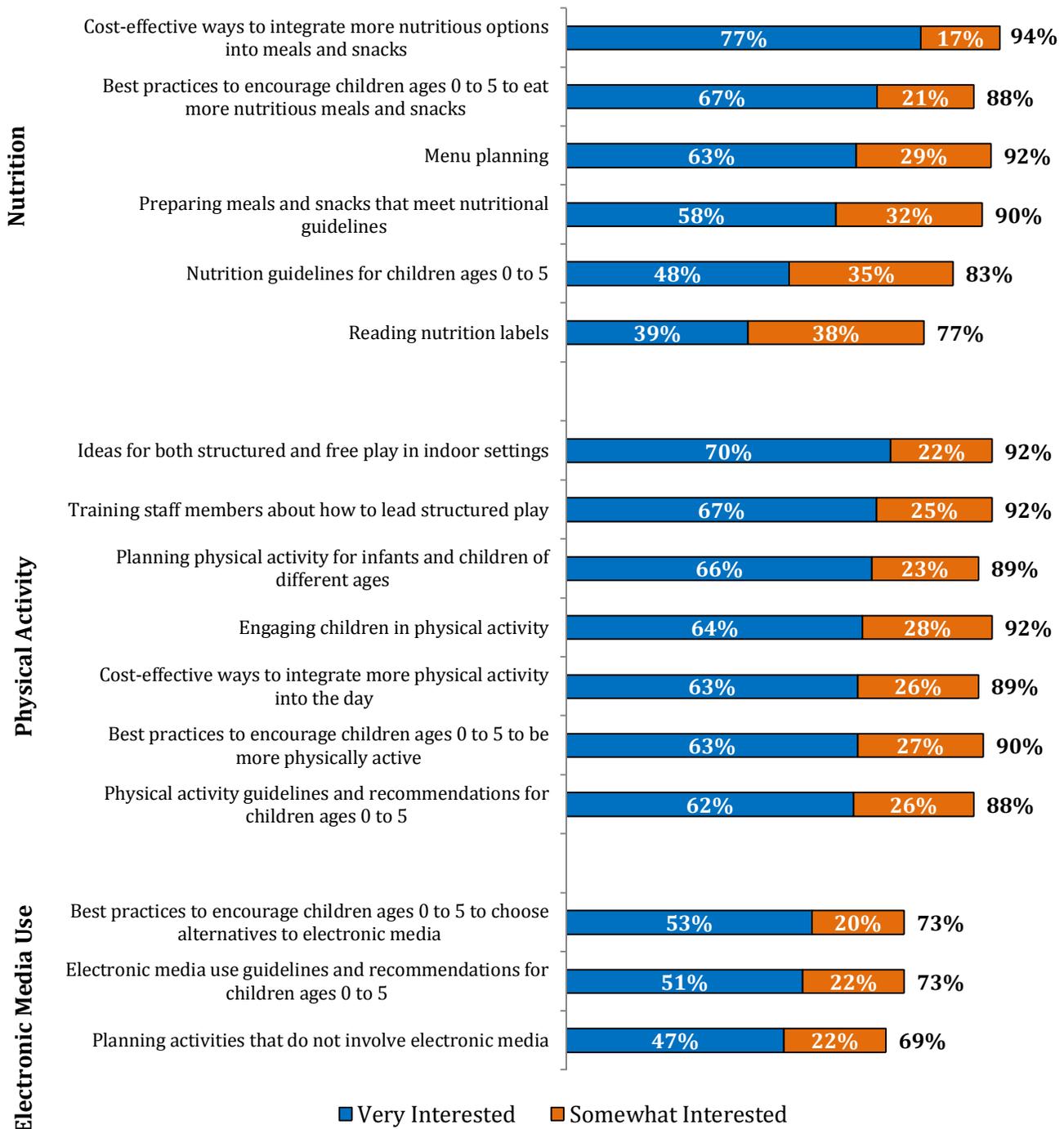
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activity (64%), cost-effective ways to integrate more physical activity into the day (63%), best practices to encourage children 0 to 5 (63%), and physical activity guidelines for ages 0 to 5 (62%).

Sponsoring organization respondents do not report as many challenges to limiting electronic media use as they do to encouraging nutritious eating and physical activity, but approximately half do say they are *very interested* in training on best practices to encourage children to choose alternatives to electronic media (53%), electronic media use guidelines (51%), and planning activities that do not involve electronic media (47%). Unaided, a sizeable minority say there are no other topics beyond the ones presented in the SQI that they are interested in related to electronic media use (39%). The focus group confirmed that sponsoring organizations are less interested in training on electronic media use but do want guidelines that can be shared with parents, noting that providers have a duty to prepare children for computer use in school but that exposure should be educational and limited while under their care.

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Interest in Assistance or Training on... (Sponsoring Organizations)



(For example, 63% of sponsoring organizations are very interested in assistance and training on menu planning)

In focus groups, sponsoring organizations often spoke about information and training in the context of barriers and concerns that they and providers have around the three technical areas. Some were extensions of popular technical assistance options tested in the survey, including sharing cost-effective ways to prepare meals that meet nutrition guidelines, best practices to encourage children to eat more nutritiously, assistance managing indoor settings and leading structured play, and establishing electronic media use guidelines and sharing alternatives to its use. The focus group among sponsors raised suggestions around educating parents, specific tactics for encouraging children to eat more healthfully, assistance in meal preparation, and providing guidance in multiple languages.

<i>Barriers and Concerns</i>	<i>Information and Training Recommendations</i>
Healthy Habits	
Parental roles: <ul style="list-style-type: none"> • Parents can present obstacles to behaviors providers are trying to promote • Aware that simply sharing information with parents does not mean parents will apply healthy behaviors in the home 	<ul style="list-style-type: none"> • Communicate the benefits of healthy eating, physical activity, and limited electronic media use in children • Provide information on ways to encourage parents to adopt these practices at home
Nutrition	
Child preferences: <ul style="list-style-type: none"> • Difficulty in encouraging children to eat healthy foods and try new foods, especially foods that may be unfamiliar to them 	<ul style="list-style-type: none"> • Implement a two-bite rule • Train providers in techniques that encourage children to eat a variety of foods, whether in preparation or presentation of food • Encourage repetition and modeling the behavior
Cost and convenience: <ul style="list-style-type: none"> • Cost hinders the quality and variety of foods served • Providers can be forced to serve more convenient foods according to the amenities of their facilities (providers may lack kitchens and rely on other facilities) • Cost and convenience intersect as barriers: processed foods are likely to be less expensive and require less time to prepare 	<ul style="list-style-type: none"> • Share cost-effective ways to source and prepare meals that can meet nutrition guidelines • Offer training on preparing food from scratch that could serve multiple purposes, work in different preparation environments, and save providers time
Language: <ul style="list-style-type: none"> • Not all providers are fluent in English 	<ul style="list-style-type: none"> • Have nutritional guidelines and other handbooks available in commonly-used languages

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<i>Barriers and Concerns</i>	<i>Information and Training Recommendations</i>
Physical Activity	
<p>Caregiver involvement:</p> <ul style="list-style-type: none"> • Not all providers participate in physical activity 	<ul style="list-style-type: none"> • Train providers to become more comfortable with leading structured play • Encourage providers to get their own physical activity with the children during the day, including offering ideas for activities they could easily do as well
<p>Child's age and safety concerns:</p> <ul style="list-style-type: none"> • Provider concern for child safety can hamper physical activity 	<ul style="list-style-type: none"> • Give examples of age-appropriate structured and unstructured activities that can be done safely in different settings
<p>Weather:</p> <ul style="list-style-type: none"> • Inclement weather limits opportunities for physical activity in child care settings 	<ul style="list-style-type: none"> • Offer alternatives to outdoor physical activity in case of inclement weather
<p>Clothing or footwear:</p> <ul style="list-style-type: none"> • Lack of proper clothing and footwear can interfere with a provider's planned physical activity 	<ul style="list-style-type: none"> • Provide ideas for physical activity that children could do regardless of clothing/footwear
Electronic Media Use	
<p>Educational value:</p> <ul style="list-style-type: none"> • Electronic media is seen to have educational value, especially for children without access to such devices at home • See a need to prepare children for elementary school 	<ul style="list-style-type: none"> • Establish electronic media recommendations by age and include recommendations about usage time as well as device and activity type
<p>Varying age levels:</p> <ul style="list-style-type: none"> • In settings with varying ages of children, there is difficulty limiting screen time due to different child interests 	<ul style="list-style-type: none"> • Share solutions to manage screen time for children of varying ages and in different settings • Promote alternatives to screen time, such as physical activities, that can accommodate children of different ages

Sponsoring organizations prefer receiving information about any of the three technical areas via email communications, including e-newsletters. Web portals or websites rank second for communications about all three topics. Online formats are also the preferred mode for receiving guidance and training. Print materials, local in-person trainings, and video clips are secondary preferences, though sponsoring organizations participating in the focus groups showed a greater interest in videos than those among the larger group of this audience who partook in the Phase 1 research.

<i>Preferred Delivery of Technical Assistance</i>			
	<i>Nutrition</i>	<i>Physical Activity</i>	<i>Electronic Media Use</i>
Sponsoring organizations	<ul style="list-style-type: none"> • Video • Email and listservs 	<ul style="list-style-type: none"> • Video • Posters 	<ul style="list-style-type: none"> • Video

Preferred Communications Channels to Receive Information			
	% Nutrition	% Physical Activity	% Electronic Media Use
Email Communications, including e-newsletters	89	85	83
Web Portal or website	56	66	58
Postal mail	31	35	35
On-site visits	20	28	19
Social media, such as Facebook or YouTube	12	16	17
None of the above	0	1	6

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Preferred Ways to Receive Guidance and Training			
	% Nutrition	% Physical Activity	% Electronic Media Use
Webinars/Online Trainings	79	77	70
Print materials	61	59	56
In-person trainings at a nearby location	58	53	43
Video clips (online, DVD)	49	57	49
On-site visits by food program and other professionals	27	30	23
None of the above	1	1	6

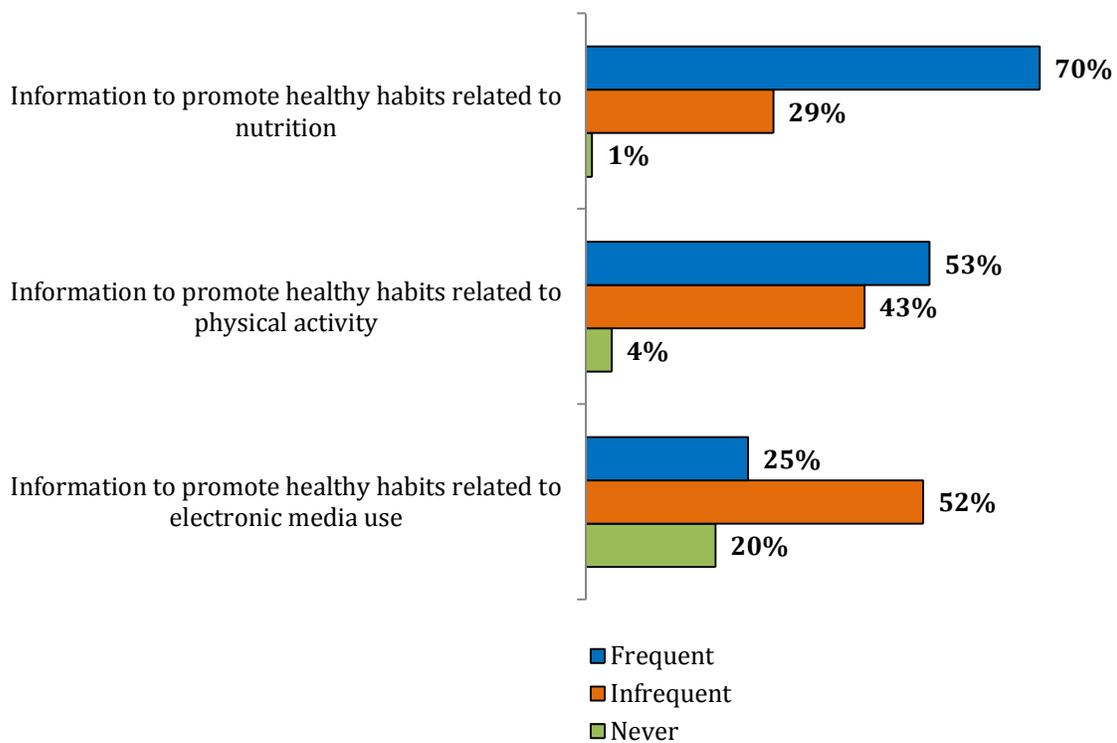
(For example, 61% of sponsoring organizations prefer to receive nutrition guidance and training via print materials)

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Communication with Providers

Sponsoring organizations communicate with their providers with some frequency, with seven in 10 survey participants communicating at least monthly about information to promote healthy habits related to nutrition. Fewer, although still more than half, communicate at least monthly about information to promote healthy habits related to physical activity, while only one-quarter communicate at least monthly about electronic media use. Over half only communicate about electronic media use every few months or yearly, and one in five never communicates about electronic media use at all.¹¹ Still, sponsoring organizations tend to communicate with providers with greater frequency on all three topics as compared to State agency staff. When sponsoring organizations do communicate with their providers, almost all communicate via on-site visits (82%) or through email (77%).

Communication with Providers (Sponsoring Organizations)

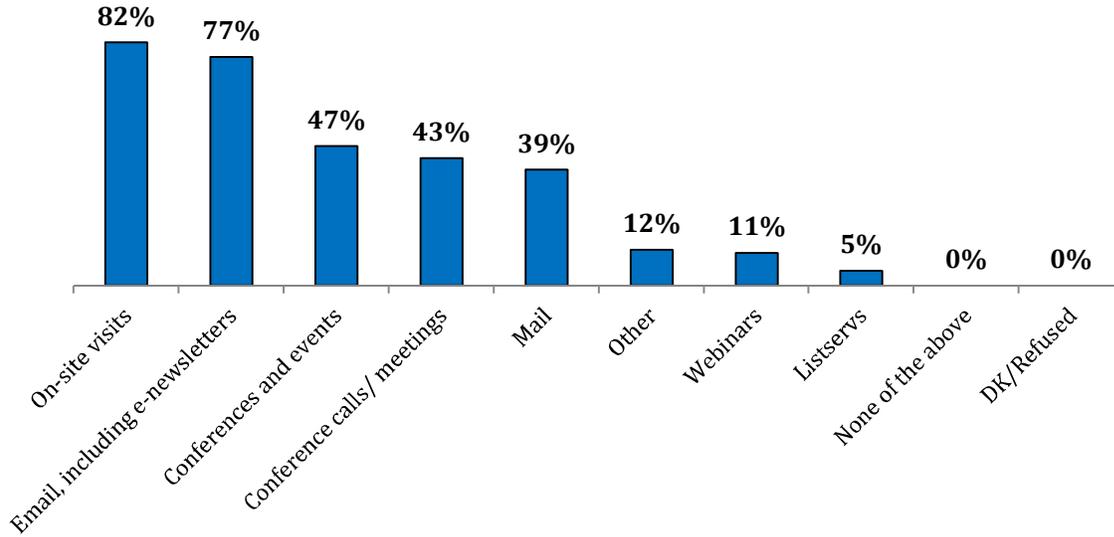


(For example, 70% of sponsoring organizations frequently communicate information on nutrition)

¹¹ “Frequent” communication occurs at least monthly. “Infrequent” communication occurs every few months or yearly.

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***Communicating and Providing Information to Providers
(Sponsoring Organizations)***



(For example, 39% of sponsoring organizations communicate information to providers via mail)

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Child Care Providers

Child Care Providers: At a Glance

- Providers are in agreement about the role they can play to promote healthy habits among the children in their care. This includes exposure by introducing and adopting specific practices as well as modeling favorable nutrition and wellness behavior.
- Recognizing the long-term importance of healthy habits, providers also believe they should be encouraging more positive nutrition and wellness practices with the parents of the children in their care, who they feel do not support healthy habits at home.
- Familiarity with nutrition guidelines is high, though there is an opportunity to increase the proportion who report being *very familiar* with these guidelines. This familiarity may at least partially explain the types of food and beverages served by providers, including milk, whole grains, fruits, vegetables, and lean meats.
- Focus group participants confirm that providers are generally comfortable with nutrition guidelines but could use help with menu planning and recipes to make sure they have diversity in the foods served and to keep down costs, while at the same time meeting nutrition guidelines. And, while family style meal service appears to be in place among the majority of providers participating in the Phase 1 research, the focus group discussions show that moving from pre-plated to family style meals is a topic of interest for some providers.
- Among focus group participants, interest in information and training on physical activity lags behind providers' interest for more guidance on nutrition-related topics. Their interest lags even further when asked about information and training related to electronic media use. Importantly, though, there is greater interest among providers participating in the Phase 1 research in receiving information and training on these two technical areas.
- Child care providers are very receptive to learning more about different nutrition and wellness topics. When possible, they prefer getting information and training in interactive, demonstrative formats.

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Nutrition and Wellness in Child Care Settings

Child care providers have three primary associations with “healthy habits” in children ages zero to five: nutrition, hygiene, and physical activity. Nutrition is most likely to be top of mind, including making and encouraging good food choices, learning appropriate food consumption, and identifying and listening to hunger cues.

Hygiene tends to be framed around hand-washing and tooth-brushing (described by one provider as “self-health” habits), while physical activity is

described relative to opportunities for exercise. Electronic media use is mentioned less frequently. Some providers also spoke to the importance of providing structure for children throughout the day via a routine.

Providers are working to educate parents about healthy habits, and they are sharing with parents the ways they encourage favorable nutrition and wellness behaviors while in a child care setting. This is often to ensure that practices in place in a center or home are not negated by practices at home. In some instances, providers discuss that the children they care for are exposed to entirely conflicting practices when at home. Overall, providers are unlikely to see parents as an ally in promoting healthy habits.

Importantly, providers participating in the focus groups identify several different ways they should be promoting healthy habits among the children in their care. This includes exposure, education, and modeling. Exposure is as simple as introducing new foods or activities into a daily routine. Educating children about favorable nutrition and wellness behaviors and encouraging them to try and adopt them is the primary role. Providers instruct the children they care for about which foods are healthy and, among those who serve food family style, help children learn which foods to put on their plates. Providers want to make any exposure to food positive but structured, and they describe trying to create a positive environment around meals and snacks, as well as trying to make the actual food and beverages served more appealing. Providers also ensure that exposure to food is diverse in aspects including color, texture, culture, and sourcing (gardens, farmers markets, etc.).

“It’s important that we provide a really good, healthy food service to the kids we serve because, for a lot of our kids, we’re their primary source of nutrition, and we want to make sure we’re giving them the best options we can.”

– Child Care Center, lower familiarity with *Dietary Guidelines*

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In addition to introducing and adopting healthy habits in a child care environment, providers also suggest they have a role in modeling healthy habits – making healthful choices for themselves while with the children in their care. Providers report that they model healthy behavior regularly, particularly during meals, when they sit at a table with the children in their care, eating the same foods. Some talk about how delicious their vegetables are or how strong the healthy foods will make them. Providers also noted that they make an effort to participate in physical activity with the children, particularly during structured play. Notably, State agency staff participating in the Phase 2 focus group have a different perception of providers and physical activity, saying they do not think providers are getting involved here.

Modeling Healthy Behavior

“I don’t think that the centers and the homes understand how important it is for them to model the behavior that they want to see. Like when they sit with children and they’re drinking soda or they’re not partaking of the meal, it sends a very strong message to the kids. The way to develop those habits is to model the behavior.”

– State Agency

“I let them see me eat what they are going to see and eat. Sometimes it’s challenging because we don’t like what they’re going to do...I know little ones...are watching what I’m doing.”

– Family Day Care Home, lower familiarity with *Dietary Guidelines*

“One thing we do is the teachers eat with the children. They talk throughout the meal. They talk about how good the whatever they’re eating that day is and how it helps them and what part of the body it helps. The kids want to be strong. ‘Well, will this make me strong? Will this make my muscles?’ So we encourage the teachers to eat it as well as the children and they eat with the children so that helps.”

– Child Care Center, higher familiarity with *Dietary Guidelines*

“So if the teacher is sitting there with them and encouraging them, it does help.”

– Child Care Center, mixed familiarity with *Dietary Guidelines*

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Providers also see their role as extending beyond the purview of the child care setting and into the home. Burdened by time constraints and other realities of daily life, parents are sometimes presented as neutrally unhelpful participants in their children's development, not doing anything to undo favorable practices introduced by child care providers. In other instances, though, parents are presented as stumbling blocks to the promotion of healthy habits, letting their children eat whatever they want, sit in front of the television, or use electronic media for long periods of time. As a result, providers see educating parents as an important opportunity to further promote healthy habits among the children in their care. (In the focus groups, some providers describe ways they are already trying to communicate with parents about specific nutrition and physical activity practices.)

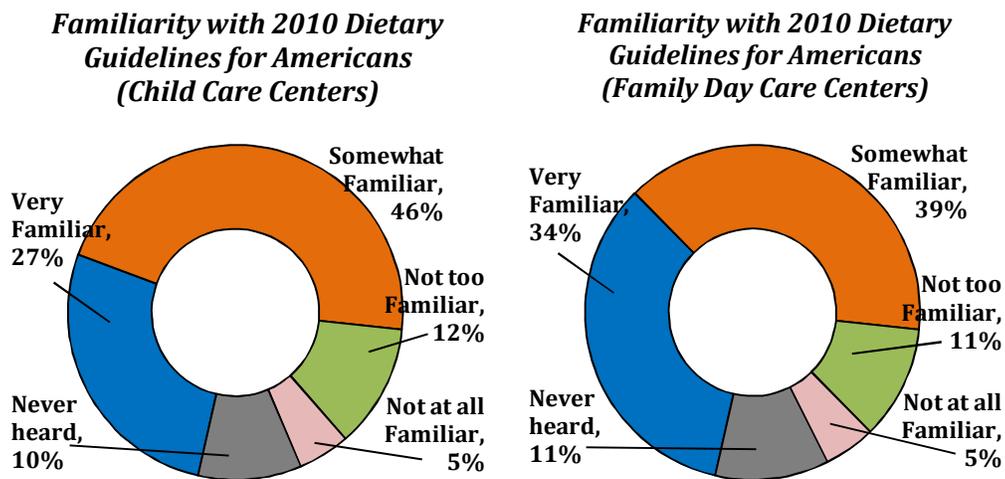
"I'm trying to care for the child and the parent. It's crazy."

– Family Day Care Home, lower familiarity with *Dietary Guidelines*

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Nutrition

A majority of providers say they are at least somewhat familiar (73% for both child care centers and family day care homes) with the *2010 Dietary Guidelines for Americans*. Level of knowledge among those who are familiar is not high, though, with 27% of child care centers and 34% of family day care homes saying they are *very familiar* with these guidelines. Though providers are at least *somewhat familiar* with the guidelines, a sizeable minority report knowing less, and one in 10 say they have not heard of the guidelines.



(For example, 27% of child care centers are very familiar)

Awareness among centers also varies by FNS region: centers in the Southeast region note particular familiarity with the guidelines. Comparatively, centers in the Mountain Plains and Western regions are almost twice as likely as those in the Southeast to be less familiar or have never heard of them.¹²

¹² Regional comparisons for family day care homes are not possible due to a smaller sample size.

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Child Care Centers: Awareness of 2010 Dietary Guidelines for Americans (%)

	Mountain Plains	Northeast	Mid Atlantic	Mid West	Southeast	Southwest	Western
NET: Familiar	67	74	70	76	83	70	67
Very familiar	24	29	29	29	29	20	30
Somewhat familiar	44	44	41	47	54	50	37
NET: Not familiar/Never heard of	33	26	30	24	17	30	33
Not too familiar	13	10	17	13	10	12	10
Not at all familiar	13	6	4	2	2	8	5
Never heard	7	10	9	9	5	11	17

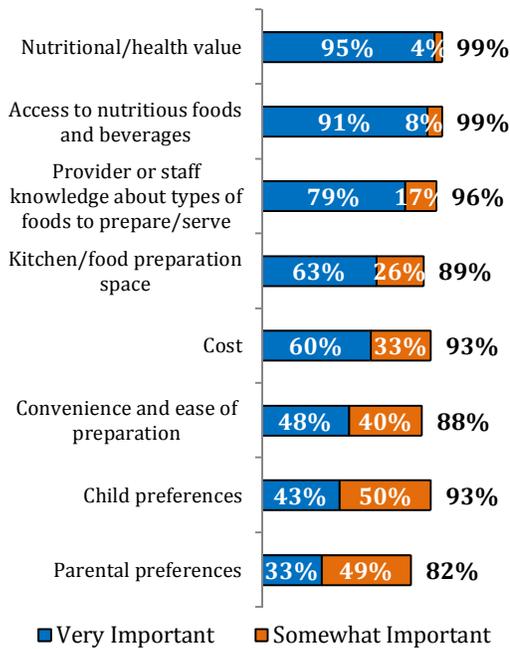
(For example, 67% of child care centers in the Mountain Plains are very or somewhat familiar)

Providers are receptive to having nutrition guidelines specific to different age groups. Providers acknowledge that children cannot eat the same foods, or the same amount of food, at every point in their development, and having nutrition guidelines that are broken down by age takes out much of the guesswork in determining what providers can and should serve to children in their care. Providers are able to use the guidelines to communicate to parents that they are meeting the nutritional needs of their children, as well as to educate and remind parents how to continue nutrition habits at home. For the most part, providers did not recall having received recent changes or clarifications to any of the guidelines.

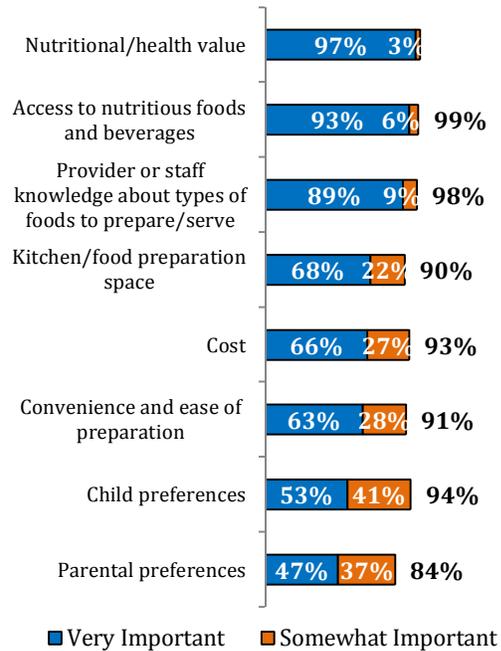
Several factors play a *very important* role in providers' decisions regarding the types of foods and beverages served to children in their care. The nutritional/health value of food and beverages and having access to nutritious foods and beverages are the most important factors to providers, with nearly all identifying them as *very important*. These are followed closely by staff knowledge about types of food to prepare or serve. Kitchen space and cost also play a role, with two-thirds reporting that these are *very important* determinants of the types of food and beverages they serve. To a lesser extent, child and parental preferences play a role, too, though these factors are more pronounced among family day care homes.

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Importance of Factors in Food and Beverage Decisions (Child Care Center)



Importance of Factors in Food and Beverage Decisions (Family Day Care Homes)



(For example, 66% of family day care homes say cost is very important)

Family day care home providers also identify factors as *very important* at differing levels based on whether they fall above or below 185% of the federal poverty level (FPL). Those below 185% of the FPL are significantly more likely than those above this FPL level to identify access to nutritious foods and beverages, kitchen/food preparation space, cost, convenience and ease of preparation, child preferences, and parental preferences as *very important* factors in making food and beverage decisions for the children in their care. The same distinction is not found among child care centers, perhaps because the income level of one employee is a less accurate reflection of the financial resources of a child care center as it is of a family day care home.

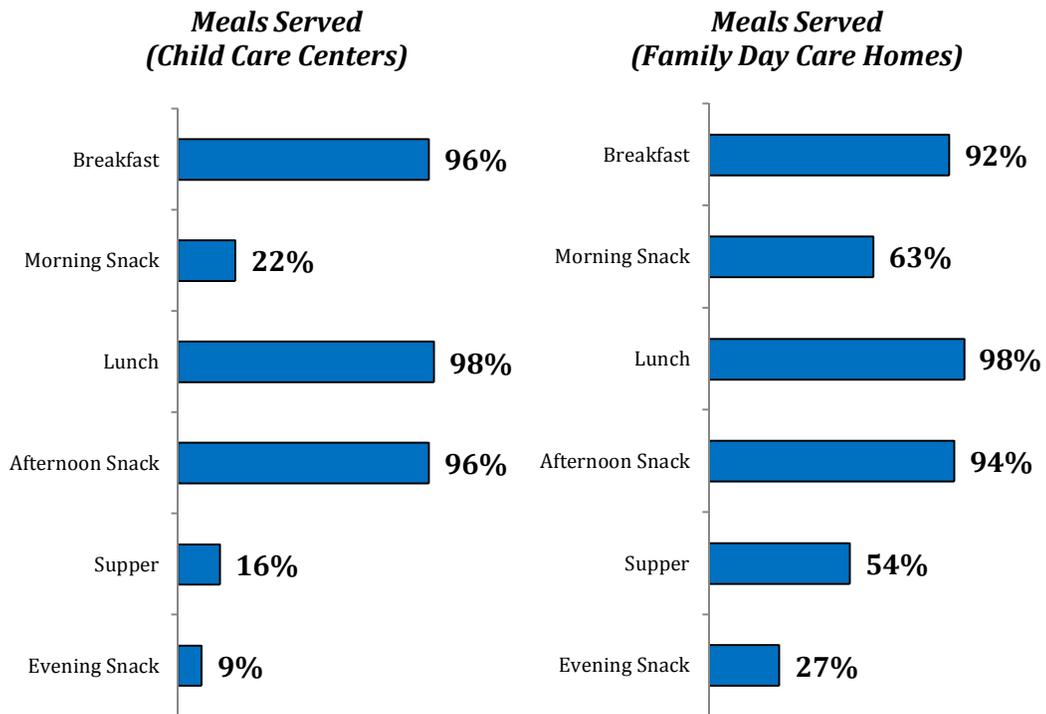
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<i>Family Day Care Home Factors in Food and Beverage Decisions: "Very Important"</i>	Under 185% FPL %	185%+ FPL %
Nutritional/health value	99	96
Access to nutritious foods and beverages	96	92
Provider or staff knowledge about types of foods to prepare/serve	92	88
Kitchen/food preparation space	79	61
Cost	72	62
Convenience and ease of preparation	72	56
Child preferences	59	45
Parental preferences	54	42

(For example, 99% of family day homes under 185% FPL say nutritional/health value is very important)

Most child care providers keep these factors in mind for several meals and snacks throughout the day, with almost all serving lunch (98%, both audiences), afternoon snack (96% child care centers, 94% family day care homes), and breakfast (96% child care centers, 92% family day care homes). Over half of family day care homes (54%) report serving supper compared to only one-sixth of child care centers (16%), a stark difference that suggests a large percentage of family day care homes are serving one meal more than most child care centers. Family day care homes are also more likely to serve morning snack (63% compared to 22% for child care centers) and evening snack (27% compared to nine percent). Child care centers in the Southwest were significantly more likely to serve supper than those in other regions (29% versus 16% overall). Family day care home providers under 185% FPL were also significantly more likely to serve supper (62% vs. 50% above 185% FPL), perhaps reflecting the needs of working parents in the surrounding community. Interestingly, child care center providers under 185% FPL were significantly more likely to serve breakfast (99% versus 94% above 185% FPL).

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(For example, 96% of child care centers serve breakfast)

While almost 100% of family day care homes report that these meals are prepared on-site, the preparation of food in child care centers varies by region, with significantly more food being prepared and purchased from a catering company or another child care center in the Northeast (29%) and Midwest (14%) regions.

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	Location of Food Preparation: Child Care Centers (%)							
	Total	Mountain Plains	Northeast	Mid Atlantic	Mid West	Southeast	Southwest	Western
Prepared on-site at center or home	87	91	67	88	82	90	98	90
Pre-prepared and purchased from a catering company or another child care company	9	4	29	7	14	7	0	4
Prepared off-site by school food service staff	3	5	4	5	2	3	2	4

(For example, 90% of Western child care centers prepare meals on-site)

Six in ten providers (63% child care centers, 60% family day care homes) are serving meals family style. Providers participating in the Phase 2 focus groups describe family style meals as a means to creating an environment where healthy eating practices can be modelled and adopted. Among those focus group participants who are serving pre-plated meals, there is clear interest in transitioning to family style. Still, they worry about meeting nutrition guidelines if they were to make this switch. Some of the barriers that providers encounter include difficulty in controlling serving sizes and ensuring correct portions, the messiness that may ensue when young children serve themselves, and the difficulty in getting children to choose foods with which they are unfamiliar, or foods they have determined they do not like. In the focus groups, those who do serve family style offer solutions like giving all teachers measuring cups and spoons to ensure that portion sizes are correct and that children are getting at least the minimum in fruits and vegetables. The benefits include allowing active caregiver role-modeling of food consumption, facilitation of discussion about nutrition and the food on the table, promoting independence by having older children serve themselves, and teaching children to understand food cues.

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<i>Serving Family Style Meals</i>	
Implementation Questions	Participant Strategies
How to control serving sizes and ensure portions are correct?	<ul style="list-style-type: none"> • Use measuring cups to serve recommended portions first, then children can ask for a second serving • Use this as a means to encourage independence
Are young children able to serve themselves?	<ul style="list-style-type: none"> • Guide young children as they serve themselves • Accept messes early on as children become more familiar with this type of service
Will children only choose foods they recognize?	<ul style="list-style-type: none"> • Encourage children to try servings of all food items in the meal • Have providers try the food to model positive behaviors around trying new or unfamiliar foods

Providers generally report following CACFP guidelines for beverage consumption in children ages 0 to 5. As required by CACFP, most providers say milk was served at all, most, or some meals and snacks the previous day.

<i>Milk Consumption Among Children 0 to 5 in Child Care Settings</i>			
	USDA CACFP Guidelines	Child Care Centers	Family Day Care Homes
Infants 0 to 11 months	Breast milk and/or formula	Formula	Formula
Children Age 1	Whole or reduced-fat milk	Whole milk	Whole milk
Children Ages 2 - 5	Fat-free or low-fat milk	Fat-free or low-fat milk	Fat-free or low-fat milk
Lactose intolerant children	Lactose free or soy milk	Soy milk or rice milk	-13

Just under half of providers specifically serve water all or most of the time, but water is available throughout the course of the day, with most providers suggesting that any beverage requested above and beyond juice or milk is supplied in the form of water. Fruit juice is even less likely to be served to children, and providers reported that they serve only 100% juice in limited quantities (four or five ounces) a maximum of once a day. Providers are cognizant of how much sugar is in even 100% juice and report that they would rather serve fresh fruit instead. There are

¹³ Dairy-free milk was not discussed in the groups among day care homes.

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almost no reported servings of sugar-sweetened or fruit-flavored drinks or soda, and providers did not report needing training or technical assistance with beverage service.

From planning to preparation, service of meals and snacks also seems to be a positive experience, but there are areas where increased information would make food service easier for providers. Centers report working with their cooks to plan their menus a month or two in advance, while family day care home providers say they usually plan for each week.

Where possible, family day care homes also try to incorporate children into weekly menu planning and meal preparation, even if the latter is as simple as connecting what is grown in a garden with the food served. Menu planning with children often means simply discussing upcoming meals with children, and it is something providers seem comfortable doing.

Still, while most providers discuss serving meals and snacks that meet nutrition guidelines, this is not always easy or straightforward. Even providers who describe menu planning as a consistent and deliberate process struggle to incorporate diversity and new foods into their meals and snacks. Providers note that incorporating diversity into their menus can be difficult because they have to deal with the limited seasonal availability of fresh fruits and vegetables and the cost of these fresh foods. Other challenges include managing children's preferences and dealing with food allergies. Center providers who work with vendors spoke to the need to encourage the vendors to include healthier food and replace juices or juice cocktails with fresh fruit.

Reflecting CACFP nutrition guidelines, fruit, whole grains, and vegetables are the foods most likely to be served regularly in the previous day, and providers do report making an effort to incorporate these into meals and snacks. Lean meat is in a slightly lower tier, but seven in 10 child care centers (69%) and three-quarters of family day care homes (77%) served lean meat at least at all, most, or some meals in the previous day, perhaps reflecting that fewer reimbursable meals are required to include meat (meat is not reimbursed at breakfast and is only

"They get their serving of juice and then we give them water and we encourage them to drink water because they need the hydration, especially with summer coming on... And we don't serve anything but 100% juice but it's only one time a day and we limit how much they get."

– Child Care Center, higher familiarity with *Dietary Guidelines*

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recommended to be included by IOM 3 times/week, and it is not a requirement during afternoon snack).^{14,15}

"I try not to add anything in there that's fattening or oily. I try to either boil or bake or broil whatever it is I'm making...it's not always easy. But it's that I'm mindful of..."

– Family Day Care Home, lower familiarity with *Dietary Guidelines*

Fried foods, nuts and seeds, and sweet snacks were reported as being served with far less frequency the previous day: fried foods were not served at all by two-thirds of family day care homes (66%) and a significantly higher proportion (79%) of child care centers. Nuts and seeds were not served by over half of family day care homes (56%) and a

significantly higher three-quarters (75%) of child care centers – this was attributed to the associated allergy risks, to which providers report greater sensitivity and attention in recent years. Sweet snacks were also not served by the majority of family day care homes (57%) and a significantly higher seven in 10 child care centers (71%). Providers reported that sugar is a top ingredient to be avoided in both foods and beverages, and that they try to avoid anything “fattening or oily” by, for example, making baked potatoes instead of french fries.

¹⁴ Child and Adult Care Food Program (CACFP), “Meals and Snacks.” <http://www.fns.usda.gov/cacfp/meals-and-snacks>

¹⁵ Institute of Medicine, “Recommended Daily Meal Patterns for Breakfast, Lunch/Supper, and Snacks, Number of Servings and Range of Serving Sizes.” <http://www.iom.edu/Reports/2010/Child-and-Adult-Care-Food-Program-Aligning-Dietary-Guidance-for-All/Recommended-Daily-Meal-Patterns.aspx>

	Child Care Centers			Family Day Care Homes		
	All/Most Meals and Snacks %	Some Meals and Snacks %	Net: At Least Some %	All/Most Meals and Snacks %	Some Meals and Snacks %	Net: At Least Some %
Beverages						
Milk, including dairy milk, lactose-free milk, soy milk, breast milk, and infant formula	86	8	94	87	7	95
Water	48	23	71	49	28	76
100% fruit juice, including 100% fruit juice bars	14	28	42	14	29	43
Sugar-sweetened or fruit-flavored drinks or soda	*	1	1	*	1	1
Foods						
Fresh, frozen and/or canned vegetables	60	21	81	58	23	82
Fresh, frozen, canned, and/or dried fruits	59	23	82	58	23	81
Whole grains, such as oatmeal, brown rice, whole wheat bread, whole wheat pasta, and whole grain crackers	54	27	81	54	29	83
Lean meat and poultry, including beef, pork, lamb, chicken, and turkey	43	26	69	48	28	77
Low-fat or nonfat dairy foods, such as yogurt and cheese	24	41	65	23	43	66
Beans and peas, such as black beans, kidney beans, and lentils	17	33	50	19	32	51
Processed foods, such as fish sticks, chicken nuggets and hot dogs	5	21	27	3	21	25
Minimally processed fish and seafood, such as canned tuna and non-breaded fish filets	4	17	20	6	20	26
Nuts and seeds, such as almonds, peanuts and sunflower seeds, and their butters	1	7	8	4	15	20
Sweet snacks, such as ice cream, granola bars, doughnuts, pies, pudding, cookies, cake, and candy	1	5	6	1	6	7
Fried foods, such as fried chicken, french fries or potato chips	*	5	6	2	9	11

(For example, 86% of child care centers serve milk at all or most meals)

	Child Care Centers %	Family Day Care Homes %
Beverages Not Included in Meals Yesterday		
Sugar-sweetened or fruit-flavored drinks or soda	96	95
100% fruit juice, including 100% fruit juice bars	21	23
Water	13	6
Milk, including dairy milk, lactose-free milk, soy milk, breast milk, and infant formula	*	*
Foods Not Included in Meals Yesterday		
Fried foods, such as fried chicken, french fries or potato chips	79	66
Nuts and seeds, such as almonds, peanuts and sunflower seeds, and their butters	75	56
Sweet snacks, such as ice cream, granola bars, doughnuts, pies, pudding, cookies, cake, and candy	71	57
Minimally processed fish and seafood, such as canned tuna and non-breaded fish filets	57	47
Processed foods, such as fish sticks, chicken nuggets and hot dogs	46	46
Beans and peas, such as black beans, kidney beans and lentils	30	28
Low-fat or nonfat dairy foods, such as yogurt and cheese	13	8
Lean meat and poultry, including beef, pork, lamb, chicken, and turkey	11	7
Fresh, frozen, canned, and/or dried fruits	4	5
Whole grains, such as oatmeal, brown rice, whole wheat bread, whole wheat pasta, and whole grain crackers	4	2
Fresh, frozen and/or canned vegetables	3	3

(For example, 13% of child care centers did not serve water with meals the prior day)

There is a noticeable gap, by region, in the centers serving whole grains: child care centers in the Mountain Plains and the Southwest regions are significantly less likely than every other region to report serving whole grains during the previous day. Centers in the Southeast and Southwest served more beans and peas than other centers (65% and 58%), but particularly in the Southwest, they also served more processed food (39%, 30%). More centers in the Southeast reported serving lean meat (78%) and minimally processed seafoods (28%) at some meals the preceding day than centers in any other region.¹⁶

¹⁶ Due to smaller sample size, only child care centers, and not family day care homes, are examined by region.

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	Mountain Plains %	Northeast %	Mid Atlantic %	Mid West %	Southeast %	Southwest %	Western %
Fresh, frozen, canned, and/or dried fruits	87	78	78	85	82	81	85
Whole grains, such as oatmeal, brown rice, whole wheat bread, whole wheat pasta, and whole grain crackers	69	84	84	84	85	73	83
Fresh, frozen and/or canned vegetables	82	80	78	84	82	78	83
Lean meat and poultry, including beef, pork, lamb, chicken, and turkey	73	64	63	71	78	66	68
Low-fat or nonfat dairy foods, such as yogurt and cheese	62	73	62	67	68	64	59
Beans and peas, such as black beans, kidney beans and lentils	55	56	35	42	65	58	42
Processed foods, such as fish sticks, chicken nuggets and hot dogs	22	18	25	27	30	39	17
Minimally processed fish and seafood, such as canned tuna and non-breaded fish filets	15	20	20	16	28	22	17
Nuts and seeds, such as almonds, peanuts and sunflower seeds, and their butters	11	5	6	6	10	11	10
Sweet snacks, such as ice cream, granola bars, doughnuts, pies, pudding, cookies, cake, and candy	9	2	5	5	7	11	4
Fried foods, such as fried chicken, French fries or potato chips	2	2	5	8	9	8	4

(For example, 78% of Northeast child care centers served fresh, frozen, canned and/or dried fruits the prior day)

While providers give nutritional value greater weight than costs when making decisions about what to serve to children in their care, cost is a major factor in ensuring that the food they prepare and serve meets nutrition guidelines. Over half of providers cite the cost of food as a challenge. In the focus groups, this was seen as particularly relevant in the context of increasing

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the diversity of meals served and obtaining fresh produce year round. Still, cost did not come up *unaided* in most of the provider focus groups.

Cost as a Barrier

“You can feed almost a whole class with a bag of apples for \$3...a box of blueberries to introduce them to something new would be, like, \$3 or \$4, and you can only serve one or two kids with that box of blueberries.”

– Sponsoring Organization

“Yes, [cost is a challenge]...they’re wanting us to do more fresh fruits, more fresh vegetables, more fresh produce as opposed to canned fruit and canned vegetables, etc. Or replacing the use of juice with more fresh fruit and things like that. That tends to be a lot more expensive to try to do it at the frequency and extent that the food program person wants you to do.”

– Child Care Center, lower familiarity with *Dietary Guidelines*

“Definitely, cost is a factor in what I prepare. But it’s not really a big deal. I may have to spend a few extra dollars. Because I do whole wheat pasta as opposed to enriched pasta. So, I may spend a few extra dollars, but I know it makes me feel really good that these kids eat well at my day care.”

– Family Day Care Home, higher familiarity with *Dietary Guidelines*

“Everything is expensive, and I shop at a farmers market...for the vegetables and the fruit. So I try to get everything fresh at the farmers market. It is supposed to be cheaper than the supermarket, and it is sometimes. But sometimes it’s running neck and neck. The prices are the same. Most everything is just creeping up.”

– Family Day Care Home, lower familiarity with *Dietary Guidelines*

“Basically, it just comes down to money... The cost of the food that we know that we want to serve. You know, it would be great if we could have fresh fruit every day. It would be great to throw the juice away. It would be great to serve different foods that we know the kids would like and that are healthy for them.”

– Child Care Center, mixed familiarity with *Dietary Guidelines*

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Even outside of cost, providers find that diversifying what they are serving is a challenge. Providers note that they are recommended to create cycle menus, but they often feel as though they get “stuck in a rut” and need fresh ideas so that they, and the children in their care, do not become bored with healthy food options. To manage these challenges, several providers recommended the creation of an app that suggests a variety of recipes built around foods that are inputted by the user. Other specific requests, unaided, included simple menus with quick, easy recipes and recipes that reflect different cultures (both to match the diversity of children in their care and to expose children to foods from different cultures). There was also a request to tie recipe ideas to specific guidelines, so providers do not have to take the extra step to match what is in a recipe to nutrition requirements. Overall, interest in both menu planning and recipe assistance is widespread and a clear priority among providers.

Assistance Meeting Nutrition Guidelines

“It would be almost like if we could come up with a program or an app that would have creditable foods in the database and then you could put in a search for chicken or a vegetable or whatever and it would plug in options for you so you could put together rotating menus easily with approved items...”

– Child Care Center, lower familiarity with *Dietary Guidelines*

“I am always looking for something new, and I’ll go through different things. Every once in a while, my sponsor will send out different ideas that I think are wonderful and we’ll try those. That’s why I thought of, if we could send different menus out with different ideas...because it’s hard. You’re right. We get in a rut and it’s like, ‘Okay, we just serve the same old thing.’ And I hate it.”

– Child Care Center, higher familiarity with *Dietary Guidelines*

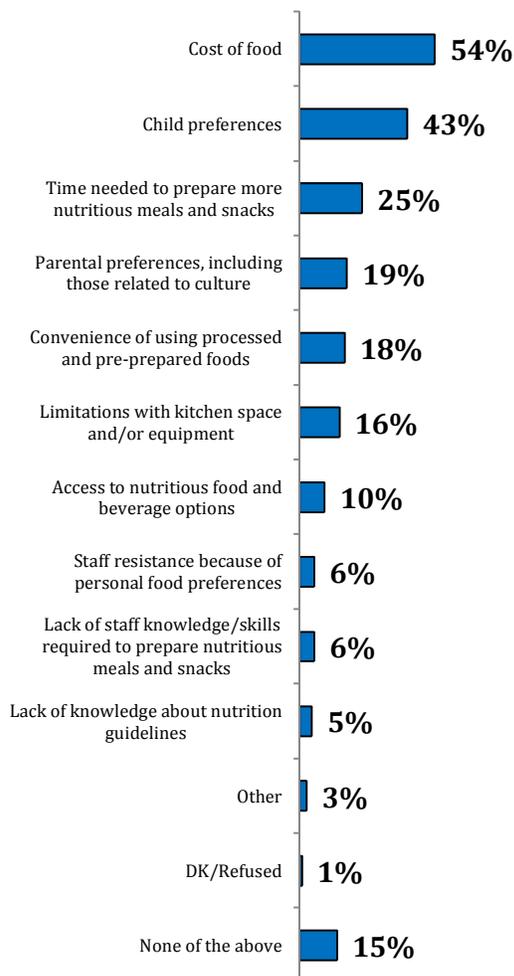
“I think different ideas for when we do cooking projects, quick and simple that would help educate the children as well, that would be great.”

– Child Care Center, mixed familiarity with *Dietary Guidelines*

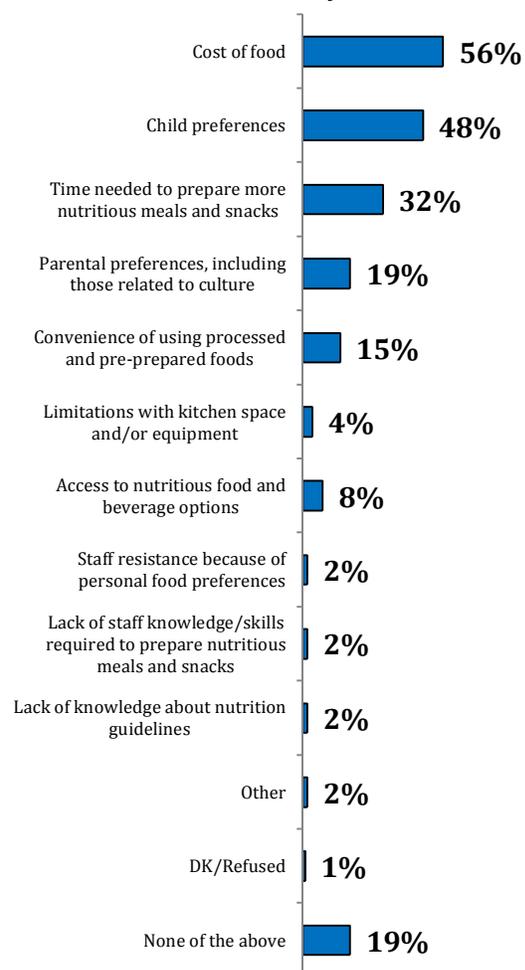
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Child preferences and, to a lesser extent, the time needed to prepare more nutritious meals are also common challenges. Providers report that parental preferences are a *very important* factor in determining what types of foods and beverages are served (child care centers: 33% very important; family day care homes: 47% very important), but fewer report it as a challenge to meeting guidelines (19%). These findings are confirmed among participants in the provider focus groups, who tend not to raise these factors as significant challenges to their efforts to promote favorable nutrition practices.

Challenges to Meeting Nutritional Guidelines (Child Care Centers)



Challenges to Meeting Nutritional Guidelines (Family Day Care Homes)



(For example, 54% of child care centers say cost of food is a challenge)

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Challenges for child care centers vary by region. Child care centers in the Mountain Plains region were significantly more likely to say that cost is a challenge to meeting nutrition guidelines (82% versus 54% overall). Child care centers in the Mountain Plains and Mid West regions are also more likely to identify time needed to prepare more nutritious meals and snacks as a challenge (45% Mountain Plains, 31% Mid West, 25% overall).

Child Care Centers: Challenges to Meeting Nutrition Guidelines

	Mountain Plains %	Northeast %	Mid Atlantic %	Mid West %	Southeast %	Southwest %	Western %
Cost of food	82	49	59	59	47	48	53
Child preferences	51	47	43	39	38	50	38
Time needed to prepare more nutritious meals and snacks	45	17	20	31	26	23	20
Parental preferences, including those related to culture	15	21	24	18	22	15	17
Convenience of using processed and pre-prepared foods	22	15	19	20	15	22	12
Limitations with kitchen space and/or equipment	7	17	23	20	14	11	19
Access to nutritious food and beverage options	13	8	9	10	10	11	10
Staff resistance because of personal food preferences	13	11	3	10	3	4	3
Lack of staff knowledge/skills required to prepare nutritious meals and snacks	9	6	8	3	7	7	3
Lack of knowledge about nutrition guidelines	9	6	3	5	5	7	3
Other	2	6	3	4	4	1	3
None of the above	4	17	11	9	22	15	21
DK/Refused	0	1	1	2	1	2	2

(For example, 82% of Mountain Plains child care centers say cost of food is a challenge)

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Physical Activity

Providers see a direct relationship between a child's age and the amount of time that child should be spending on physical activity in a typical day. Most respondents from both child care centers and family day care homes think younger children should spend less time on physical activity than those in the older age cohort (ages 3, 4, and 5). Actual time spent on physical activity mirrors perceptions about what is recommended for physical activity, with providers reporting that older children in their care spend more time on physical activity in a typical day.

There are currently no specific, time-related recommendations for time spent on physical activity for children ages 0 to 12 months. Current physical activity guidelines from the National Association for Sport and Physical Education say that toddlers should have 30 minutes of structured physical activity and 60 minutes of unstructured physical activity daily, while preschool-aged children should have 60 minutes of structured physical activity and 60 minutes of unstructured physical activity daily.¹⁷ At present, only one in three child care centers (30%) and one-quarter of family day care homes (27%) report that children ages 1 to 2 (toddlers) are getting the recommended 90 minutes, and only one in six (16% for child care centers, 18% family day care homes) report that preschool-aged children ages 3, 4, and 5 are getting 120 minutes or more. While providers' self-reporting of physical activity may not meet existing recommendations and guidelines, there is definite interest in the topic. In fact, providers report that the guidelines that *are* available take the guesswork out of the way they should be leading physical activity, particularly when it comes to infants and the youngest children.

¹⁷ National Association for Sport and Physical Education, "Active Start: A Statement of Physical Activity Guidelines for Children From Birth to Age 5, 2nd Edition."

<http://www.aahperd.org/naspe/standards/nationalguidelines/activestart.cfm>

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Physical Activity at Child Care Centers			
	Should Spend %	Typically Spend %	
	0 to 12 months		
Should spend vs. time spent in typical day	< 30 minutes	19	15
	30-60 minutes	36	32
	60-90 minutes	14	15
	90-120 minutes	6	6
	120+ minutes	4	5
		Ages 1 and 2	
	< 30 minutes	4	3
	30-60 minutes	36	31
	60-90 minutes	30	32
	90-120 minutes	15	15
	120+ minutes	8	10
		Ages 3, 4, and 5	
	< 30 minutes	1	1
	30-60 minutes	25	25
	60-90 minutes	37	38
90-120 minutes	21	20	
120+ minutes	16	14	

(For example, 19% of child care centers say children ages 0-12 months should spend less than 30 minutes on physical activity)

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Physical Activity at Family Day Care Homes			
	Should Spend %	Typically Spend %	
	0 to 12 months		
Should spend vs. time spent in typical day	< 30 minutes	32	20
	30-60 minutes	37	36
	60-90 minutes	13	16
	90-120 minutes	4	7
	120+ minutes	4	6
		Ages 1 and 2	
	< 30 minutes	11	5
	30-60 minutes	39	34
	60-90 minutes	27	30
	90-120 minutes	11	16
	120+ minutes	9	11
		Ages 3, 4, and 5	
	< 30 minutes	2	2
	30-60 minutes	25	26
	60-90 minutes	36	33
90-120 minutes	17	19	
120+ minutes	18	18	

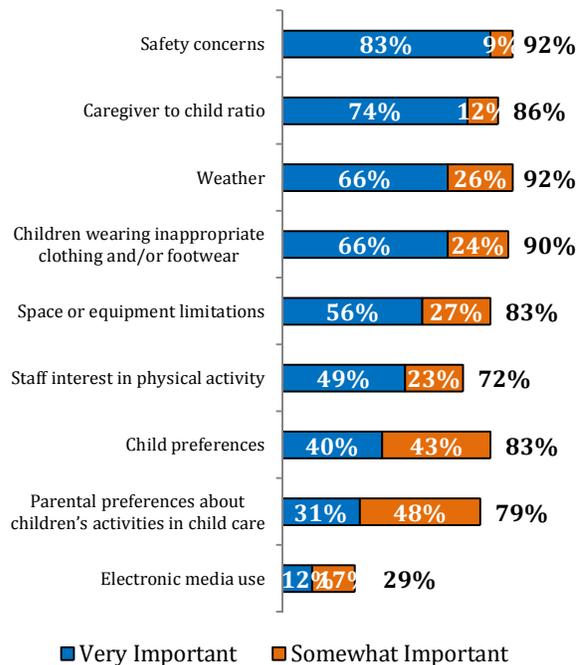
(For example, 20% of family day care homes say children ages 0-12 months typically spend less than 30 minutes on physical activity)

Providers were presented with nine different factors that might influence the amount of time devoted to physical activity in a typical day at their child care center or home. Six of the nine

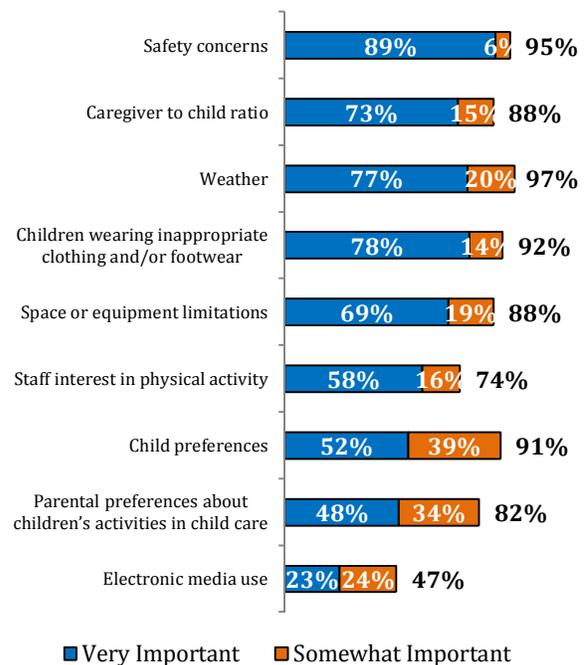
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factors are characterized as *very important* to the majority of child care centers, and eight of the nine receive a similar characterization by at least half of family day care homes. Safety concerns top the list of influences that child care providers say are *very important* in making physical activity decisions, followed by weather, caregiver-to-child ratio, and children wearing appropriate clothing/footwear. Space or equipment limitations and staff interest in physical activity are also important considerations, while child and parental preferences are less important compared to other factors.

Importance of Factors in Physical Activity Decisions (Child Care Centers)



Importance of Factors in Physical Activity Decisions (Family Day Care Homes)



(For example, 83% of child care centers say safety concerns are a *very important* factor)

The federal poverty level of the provider played a role in which items were selected as *very important*, with providers under 185% FPL, especially among child care centers, significantly more likely to note that safety concerns, caregiver-to-child ratio, children wearing inappropriate clothing, weather, space/equipment limitations, and parental preferences are *very important* factors in determining how much time children have for physical activity. Among family day care home providers, weather, space or equipment limitations, and electronic media use were significantly more likely to be chosen as *very important* factors for those under 185% FPL. The

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correlation between lower FPL and more factors of importance may suggest that providers who have limited resources feel like they have less control over these factors.

<i>Child Care Center Factors in Physical Activity Decisions: "Very Important"</i>	Under 185% FPL %	185%+ FPL %
Safety concerns	92	79
Caregiver-to-child ratio	86	70
Children wearing inappropriate clothing and/or footwear	75	65
Weather	73	63
Space or equipment limitations	67	54
Staff interest in physical activity	54	45
Child preferences	46	38
Parental preferences about children's activities in child care	37	27
Electronic media use	14	12

<i>Family Day Care Home Factors in Physical Activity Decisions: "Very Important"</i>	Under 185% FPL %	185%+ FPL %
Safety concerns	93	87
Children wearing inappropriate clothing and/or footwear	83	78
Weather	84	74
Caregiver-to-child ratio	77	69
Space or equipment limitations	77	64
Staff interest in physical activity	62	55
Child preferences	52	51
Parental preferences about children's activities in child care	52	45
Electronic media use	30	18

(For example, 92% of child care centers under 185% FPL say safety concerns are a very important factor)

In a typical day, the number of opportunities that children have to participate in moderate to vigorous physical activity varies between provider types. Family day care homes report giving the children in their care more opportunities to engage in this kind of activity, particularly among children ages 3, 4, and 5 (34% five or more times a day for family day care homes, 25% for child care centers).

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Opportunities for Moderate to Vigorous Physical Activity				
		Child Care Centers	Family Day Care Homes	
		%	%	
0 to 12 months				
Opportunities	None	3	4	
	1-2 times per day	37	39	
	3-4 times per day	26	33	
	5+ times per day	11	12	
	Ages 1 and 2			
	None	*	1	
	1-2 times per day	27	22	
	3-4 times per day	47	51	
	5+ times per day	18	23	
	Ages 3, 4, and 5			
	None	0	1	
	1-2 times per day	24	19	
	3-4 times per day	51	43	
5+ times per day	25	34		

Asterisk indicates that fewer than a non-zero number of respondents, but less than 1%, selected this answer. (For example, 26% of child care centers say children ages 0 to 12 months get 3-4 opportunities per day for physical activity)

Most physical activity is led by a caregiver at least some of the time. In a typical day, family day care home providers are more likely to lead physical activity than child care center providers, with 56% of family day care homes and 46% of child care centers saying a caregiver leads physical activity *all or most of the time*.

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Frequency of Caregiver Leading Physical Activity		
	Child Care Centers %	Family Day Care Homes %
NET: Some of the time or more often	96	97
All or most of the time	46	56
Some of the time	49	42
NET: Once in a while or never	4	2
Once in a while	4	2
Never	*	0

(For example, 96% of child care centers say caregivers lead physical activity all, most or some of the time)

Anecdotally in focus groups, providers are able to detail what physical activity at their center or home looks like. Center providers report having playground equipment and outdoor space for children to run around, while family day care home providers report encouraging tag, hopscotch, and playing with chalk in relatively smaller outdoor spaces. When it is too cold or rainy to go outside, center providers will allow children to run around in long hallways or play tag or catch in large indoor spaces; family day care homes are limited to smaller indoor spaces. Regardless of these differences in space availability, a common activity in both types of provider settings is dancing. Both center providers and family day care home providers describe turning on music for the children in their care, especially audio and video recordings that include lyrics encouraging active participation in particular stretches or movements.

Despite child care centers reporting a significant advantage over family day care home providers in available indoor space, center providers still identify equipment costs and space limitations as the primary barriers to creating opportunities for physical activity. Family day care home providers reported their space limitations in focus groups, but only one in four (26%) said these were a challenge to physical activity, with substantially more home providers (41%) identifying the cost of purchasing equipment as a challenge. Family day care homes are also five times as likely as child care centers to identify the number and varied ages of children as a challenge related to physical activity (44% to 9%), which is likely related to the ability to separate children into classes in child care centers.

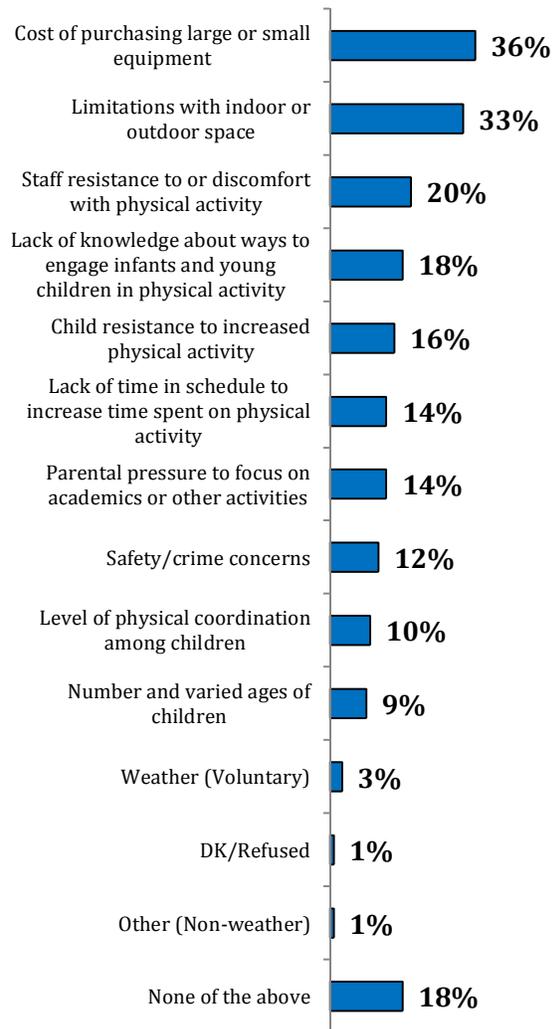
Conversely, staff-related challenges are more likely to be raised by child care centers than family day care homes. This category of concerns includes staff resistance to or discomfort with physical activity and lack of knowledge about ways to engage infants and young children in physical activity. An additional challenge among both sets of providers is creating opportunities for

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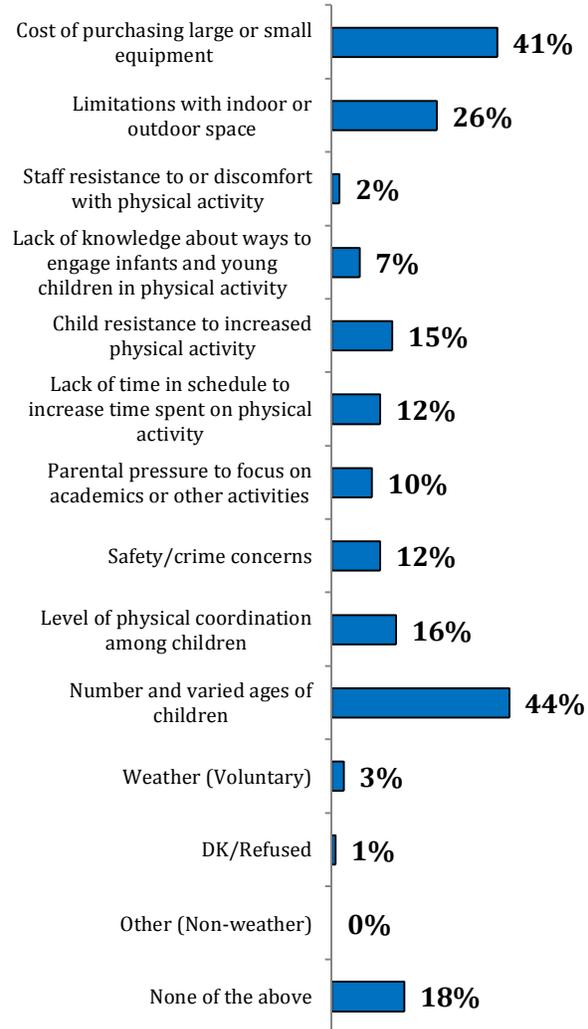
physical activity among children who are overweight or have special needs. Engaging children who find physical activity demanding or uncomfortable requires different strategies or activity types. On the whole, though, providers do not report difficulties in encouraging children to engage in physical activity, and 8% of providers report that they do not face any challenges at all in ensuring children have enough opportunities for physical activity each day. In focus groups, providers do not share any experiences that would make providing opportunities for physical activity an overwhelming or insurmountable challenge. They are most likely to say they need more ideas for play indoors, but this does not mean they have not already figured out ways to get children in their care active when they are unable to take them outside.

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Challenges to Providing Opportunities for Physical Activity (Child Care Centers)



Challenges to Providing Opportunities for Physical Activity (Family Day Care Homes)



(For example, 41% of family day care homes say cost of purchasing large or small equipment is a challenge)

Challenges to providing physical activity opportunities do vary across regions, particularly with regard to child care centers' limitations with indoor or outdoor space. Centers in the Mountain Plains, Northeast, Mid Atlantic, and Mid West regions are significantly more likely than those in the Southeast, Southwest, or West to see indoor or outdoor space as a challenge to providing opportunities for physical activity, which may be related to weather and developing activities for indoor space. Providers in the Mid Atlantic rarely (7%) report child resistance as a challenge to providing opportunities for physical activity.

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Child Care Centers: Challenges to Providing Opportunities for Physical Activity

	Mountain Plains %	Northeast %	Mid Atlantic %	Mid West %	Southeast %	Southwest %	Western %
Cost of purchasing large or small equipment	44	27	38	30	45	37	35
Limitations with indoor or outdoor space	45	40	43	44	23	23	18
Staff resistance to or discomfort with physical activity	24	17	25	24	16	14	23
Lack of knowledge about ways to engage infants and young children in physical activity	27	11	15	22	17	18	21
Child resistance to increased physical activity	18	17	7	15	16	22	16
Parental pressure to focus on academics or other activities	13	10	20	14	16	12	15
Lack of time in schedule to increase time spent on physical activity	18	18	13	13	15	12	14
Safety/crime concerns	4	15	16	10	10	14	14
Level of physical coordination among children	5	10	4	6	10	17	13
Number and varied ages of children	15	10	8	5	7	14	10
Weather/weather-related concerns (i.e. unpredictable, bad, too hot/cold)	2	2	3	7	1	2	2
Other	0	0	2	1	2	0	2
None of the above	7	23	15	15	26	16	18
DK/Refused	0	1	0	1	4	0	1

(For example, 44% of Mountain Plains child care centers say cost of purchasing large or small equipment is a challenge)

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Electronic Media Use

Electronic media use is widespread in child care settings. Eighty-two percent of child care centers and 91% of family day care homes say that electronic media is used in their centers or homes. Perceptions about recommended and actual electronic media use vary by provider type: family day care homes think children ages 5 and under should have more time with electronic media than child care centers do, and they are more likely to create these opportunities. Still, for both audiences, the general sense is that younger children should use electronic media less frequently, and actual practices match this perception.

These perceptions and practices also reflect guidelines from the American Academy of Pediatrics, which recommends limiting screen time of preschool-aged children to one to two hours per day.¹⁸ For children 2 years of age and younger, electronic media use is not recommended at all; over half (56%) of child care centers and one-third (36%) of family day care homes follow this recommendation. Notably, however, introducing and using electronic media is accepted as a responsibility because providers believe that children need exposure to it before starting elementary school, especially children who might not have access to computers and tablets at home.

Overall, providers participating in the focus groups describe trying to avoid electronic media as much as possible for young children, citing that children often have plenty of access to television, video games, computers, and mobile devices at home, and that they can get too engrossed in these and miss out on hands-on social activities. They emphasize that integrating screen time is almost exclusively related to educational electronic media. Providers say that parents are supportive of their children getting moderate computer exposure for educational purposes, though they sometimes hear that their children are not getting *enough*, rather than too much, exposure.

¹⁸ American Academy of Pediatrics, "Media and Children." <http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/pages/media-and-children.aspx>

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Electronic Media Use at Child Care Centers			
		Should Spend	Do Spend
		%	%
Should spend vs. total time spent in typical day	Under Age 2		
	None	58	56
	Less than 15 minutes	14	14
	15-30 minutes	9	9
	30-60 minutes	2	2
	60+ minutes	0	0
	Ages 2+		
	None	21	10
	Less than 15 minutes	23	28
	15-30 minutes	40	46
	30-60 minutes	11	13
60+ minutes	1	1	

(For example, 58% of child care centers say children under age 2 should not have any time spent on electronic media use)

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Electronic Media Use at Family Day Care Homes				
		Should Spend	Do Spend	
		%	%	
Under Age 2				
Should spend vs. total time spent in typical day	None	43	36	
	Less than 15 minutes	19	23	
	15-30 minutes	22	23	
	30-60 minutes	9	11	
	60+ minutes	2	1	
	Ages 2+			
	None	12	6	
	Less than 15 minutes	12	11	
	15-30 minutes	39	39	
	30-60 minutes	29	35	
	60+ minutes	5	8	

(For example, 23% of family day care homes say children under age 2 have less than 15 minutes of electronic media use)

In focus groups, providers freely admit to using electronic media, but also caveat that use is limited. Further, they describe what they believe to be effective techniques for integrating time-limited electronic media use into the week, particularly for computer use. Common techniques for moderating computer use include:

- Setting time limits in daily schedules;
- Promoting a daily routine (that may or may not include screen time) so that children are accustomed to a specific schedule;
- Alternating days on which children use computers;
- Displaying nametags near computers to show who has used them; and,

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- Introducing computer software with individual log-in information that tracks usage and sets time limits.

In addition to computers, providers commonly utilize videos, and some incorporate other technology, such as electronic reading pens, into their lesson plans.

Summary of Electronic Media Use at Centers and Homes	
Educational computers and games	Computer hardware and software designed specifically for young children that feature educational games and built in time limits are a typically cited use of electronic media in child care settings.
Videos to supplement learning or physical activity	Providers play videos for young children that supplement a topic they are learning about or demonstrate exercises or physical activities that the children participate in while watching.
Non-educational videos for special occasions	Non-educational videos are typically reserved for special occasions, such as snow days or as a reward at the end of the week.
Digital reading pens	Handheld digital reading pens that children can use to hear how words are pronounced on a page are another use of technology that providers say is useful in teaching reading skills.

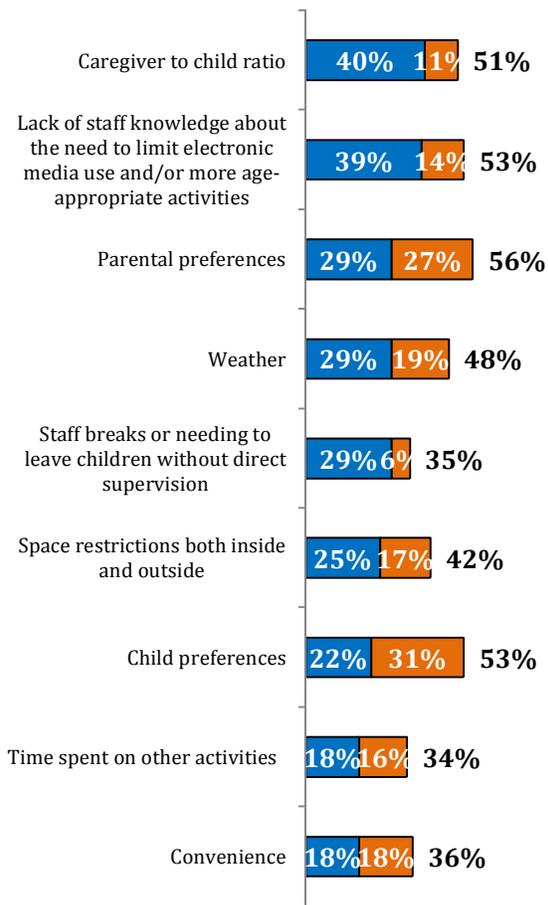
Promoting favorable electronic media use practices appears to be less challenging than meeting nutrition guidelines or offering children opportunities for physical activity. Rather, over one-third of providers say that none of the factors presented during the Phase 1 research are challenges to controlling electronic media use, perhaps suggesting that providers need more information on electronic media use best practices and recommendations. For child care centers, perceptions that electronic media use is educational are a top challenge. Challenges related to finding activities for children in mixed age groups, child resistance to reduced electronic media use, and perceptions that electronic media use is educational are among the leading challenges faced by family day care homes.

Overall, child care centers and family day care homes appear to face a different mix of factors when deciding how much time children in their care spend using electronic media in a typical day. One in five child care centers say that time spent on other activities is a *very important* factor, with one-third of family day care homes agreeing. Weather and caregiver-to-child ratio are the leading influences on electronic media use decisions for family day care homes, followed by

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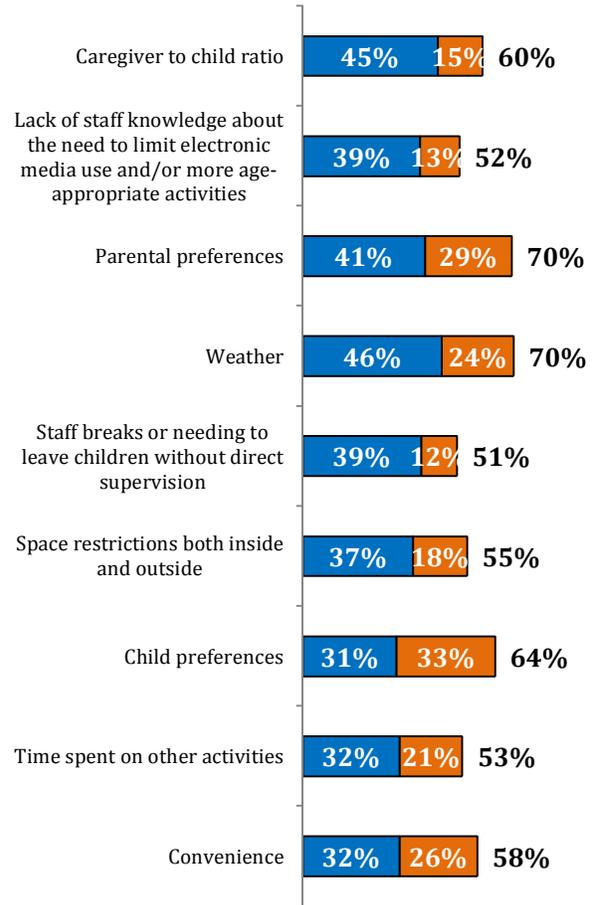
parental preferences, staff breaks, and lack of staff knowledge about the need to limit electronic media use. Both child and parental preferences are more likely to play a role in the decisions that family day care homes are making about electronic media use than they are to affect child care centers.

Importance of Factors in Electronic Media Decisions (Child Care Centers)



■ Very Important ■ Somewhat Important

Importance of Factors in Electronic Media Decisions (Family Day Care Homes)



■ Very Important ■ Somewhat Important

(For example, 45% of family day care homes say caregiver to child ratio is very important)

The federal poverty level of the respondent played a role in which items were selected as *very important*, with providers under 185% FPL significantly more likely to note that almost every

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factor was *very important* in determining how much time children use electronic media. As noted previously, the correlation between lower FPL and more factors of importance may suggest that providers who have limited resources feel like they have less control over these items. Also related, however, may be that providers with incomes under 185% FPL care for more children from lower-income households who may have fewer opportunities to use electronic media at home. Providers reported that they want to create opportunities for electronic media use among those who may not have these resources at home so that when children get to elementary school, they are not behind their peers.

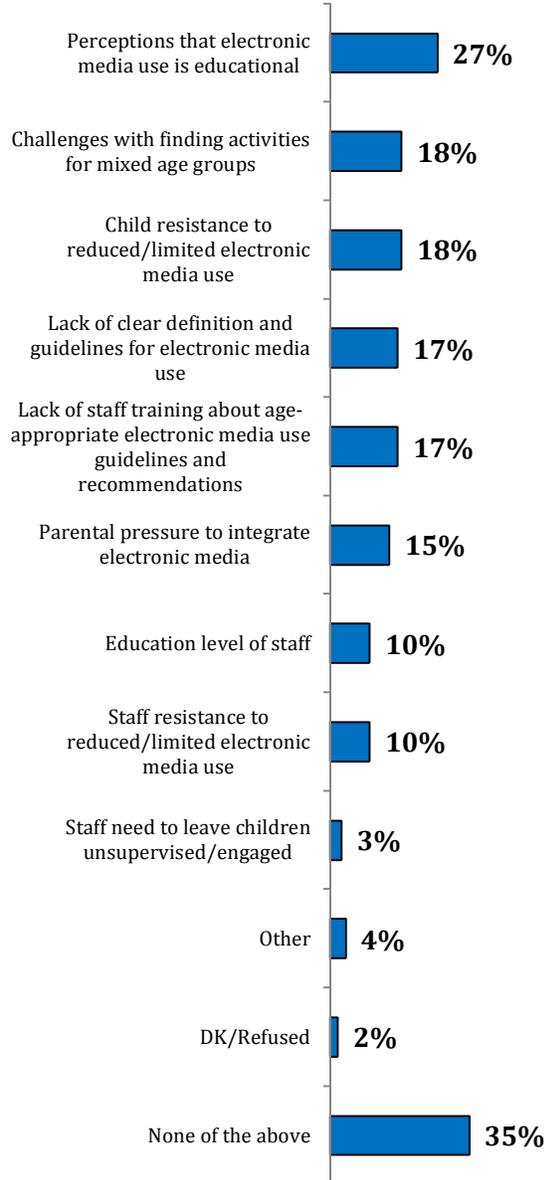
<i>Child Care Center Factors in Electronic Media Use Decisions: "Very Important"</i>	Under 185% FPL %	185%+ FPL %
Lack of staff knowledge about the need to limit electronic media use and/or more age-appropriate activities	50	36
Caregiver-to-child ratio	48	37
Weather	38	26
Staff breaks or needing to leave children without direct supervision	37	26
Parental preferences	36	26
Space restrictions both inside and outside	33	23
Child preferences	31	20
Convenience	27	15
Time spent on other activities	27	15

<i>Family Day Care Home Factors in Electronic Media Use Decisions: "Very Important"</i>	Under 185% FPL %	185%+ FPL %
Caregiver-to-child ratio	54	39
Weather	49	44
Staff breaks or needing to leave children without direct supervision	47	32
Parental preferences	46	37
Lack of staff knowledge about the need to limit electronic media use and/or more age-appropriate activities	44	34
Space restrictions both inside and outside	43	32
Convenience	39	27
Time spent on other activities	39	27
Child preferences	36	28

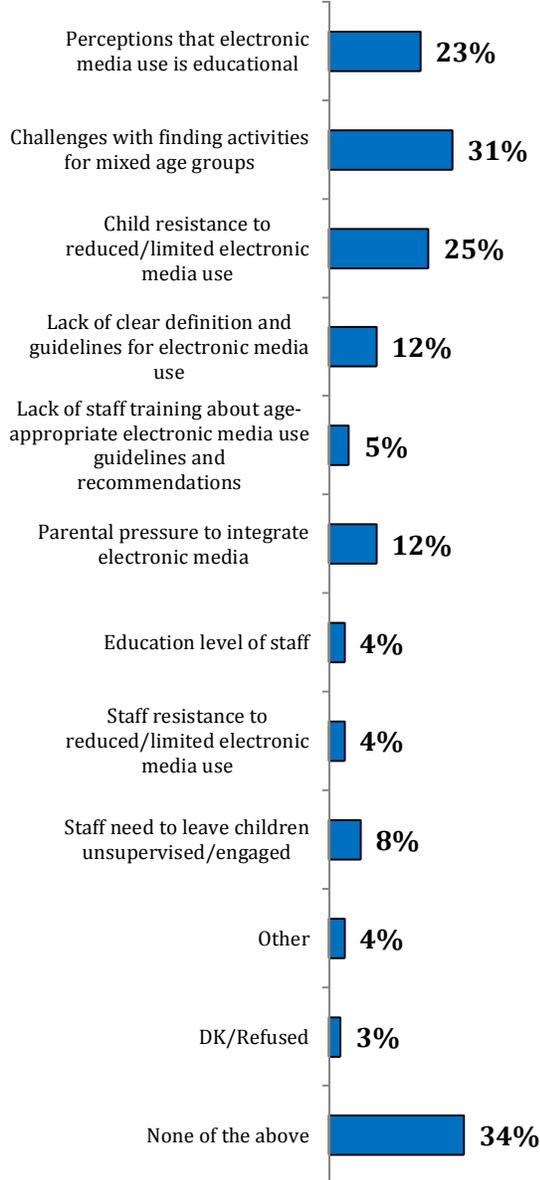
(For example, 38% of child care centers under 185% FPL say weather is a very important factor)

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Challenges to Controlling Electronic Media Use (Child Care Centers)



Challenges to Controlling Electronic Media Use (Family Day Care Homes)



(For example, 4% of family day care homes say education level of staff is a challenge)

Child care center providers in the Mountain Plains region are significantly more likely to say that parental pressure to integrate electronic media is a challenge to limiting its use, and one in five (20%) say the education level of the staff is also a challenge. One-quarter (24%) of both Southeastern and Southwestern centers report challenges with finding activities for mixed age

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groups of children. Approximately four in 10 Mid Atlantic (40%) and Western (43%) center providers say that none of these are challenges to limiting electronic media use.

Child Care Centers: Challenges to Controlling Electronic Media Use (%)

	Mountain Plains	Northeast	Mid Atlantic	Mid West	Southeast	Southwest	Western
Perceptions that electronic media use is educational	24	30	27	26	30	27	23
Lack of staff training about age-appropriate electronic media use guidelines and recommendations	24	15	18	16	18	18	12
Staff resistance to reduced/limited electronic media use	15	7	13	10	10	14	6
Staff need to leave children unsupervised/engaged	5	3	2	2	3	2	3
Child resistance to reduced/limited electronic media use	15	20	18	22	14	23	14
Challenges with finding activities for mixed age groups of children	18	18	15	12	24	24	13
Lack of clear definition and guidelines for electronic media use	22	24	11	18	17	14	17
Parental pressure to integrate electronic media	27	8	15	14	14	17	15
Education level of staff	20	12	9	8	10	11	8
Other	2	7	2	5	3	4	7
None of the above	25	28	40	35	37	32	43
DK/Refused	4	2	2	3	1	4	2

(For example, 24% of Mountain Plains child care centers say that perceptions that electronic media use is educational is a challenge)

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Technical Assistance and Training

Providers are most interested in assistance and training related to best practices and practical integration of recommended nutrition and wellness practices. With regard to nutrition, specifically, providers report that assistance in menu planning would be a great help. Providers want ways to diversify their meal options, rather than serving the same items week after week, and to ensure that these meals fall within nutrition guidelines. Recipe ideas that also overcome other barriers, like cost and child preferences, while still meeting guidelines and helping providers diversify meals and snacks are particularly appealing. When possible, providers say recipe ideas that include information about how nutrition requirements are met in a single serving would be even more useful.

Discussions around meal planning during the focus groups prompted the following suggestions related to training and technical assistance:

- Smart-phone based tools that facilitate menu planning, including ones that provide recipe and snack ideas based on inputting specific foods available;
- Hard-copy menu-cycling tools;
- Greater diversity of recipes that meet guidelines (that are also easy/convenient to prepare), as well as diversity in cultural origin of recipes;
- Video or written training for cooks that would not require providers to find replacements while they were gone for the trainings; and
- Recommendations on how to incorporate the children being fed into the menu planning activity.

Food costs present another training opportunity. Unaided, providers did not raise cost as a concern. Once prompted, however, as well as in the survey, providers acknowledge that food costs can make it difficult to meet nutrition guidelines, especially when trying to purchase fruits and vegetables. Sharing cost-effective ways to source and prepare meals that meet nutrition guidelines, and offering training in preparing inexpensive and quick meals from fresh ingredients, would help providers overcome these barriers. In particular, providers would benefit from being informed about cost-effective seasonal produce options for regions throughout the United States. Some providers noted that “farm-to-school programs,” which bring local farmers directly to school

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property or other locations near them, are helping them get fresh produce easily and make it easy for parents to do the same. Several providers also mentioned gardening as a cost-effective solution to obtaining fresh produce, noting that children like being involved in the process and were more likely to eat food that they had helped grow.

Recognizing that self-reported current nutrition practices among providers tend to be fairly positive, assistance and training in these areas will likely only advance even more favorable nutrition practices in child care settings.

Outside of simply meeting nutrition guidelines when serving meals and snacks to children in their care, providers want to be able to encourage healthy habits outside of their centers and homes. Recognizing parental disinterest and, often, conflicting nutrition patterns at home, providers say that parents can be barriers to encouraging these healthy habits. To counter or at least try to mitigate these unhealthy food patterns, providers requested print materials that they could hand off to parents about what children are being fed and why and how to continue these practices at home. Encouraging these healthy habits benefits both the children in their care and the providers themselves, since ultimately, a child familiar with favorable nutrition habits will be more willing to eat healthy food in the provider's care.

Center providers did not suggest that they needed additional support to work with their food vendors, but some note that vendors will sometimes supply foods that are unhealthy and incompatible with nutrition guidelines, and that they occasionally go back to their vendors to ask for meal plan revisions. Providers may benefit from additional training about working with food vendors to support the nutrition practices that meet guidelines.

There are high levels of interest in a series of topics related to physical activity, especially among child care centers. Six in 10, if not more, say they are *very interested* in each of the different physical activity topics presented. Existing trainings focused on physical activity in child care settings seems to be inconsistent, or, at best, not well advertised to providers. Some providers talked about training they already get related to physical activity, which appears to be state-mandated and varies in length.

Providers are generally confident that they are providing ample opportunity for physical activity, even with acknowledged limitations, but they also admit in focus groups to facing some barriers. Weather comes up the most frequently. All provider groups defaulted to the outdoors as the

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location where most physical activity can and should occur, and in all of these groups, when asked what physical activity occurred in their centers or homes that day or on the previous day, at least a few participants noted that inclement weather had prevented them from going outside. Most had solutions for indoor days; dancing came up in almost every group among providers. Still, child care centers often had the added advantage of large, open spaces or hallways in which they could let children run around. Family day care homes expressed a need for more indoor activities that would be feasible with limited space, while some child care providers showed interest in game ideas, including age-appropriate games that would help them promote physical activity while indoors. Ideas for indoor free and structured play will be especially useful to both audiences.

Indoor Activity Barriers and Solutions

“At my center, we try to go out at least twice a day. Of course, if the weather is inclement, what my teachers do which is really – there are certain songs on YouTube or certain sites that they go to that are action songs where there is one particular person leading. And that’s something that works out well as far as them getting the opportunity to...in the same room as the computer, and it’s on, but they’re also following instructions like doing jumping jacks or doing certain action songs that they love to sing.”

– Child Care Center, higher familiarity with *Dietary Guidelines*

“It rained here today so what it looked like today was - we’re blessed to have a big gym in our center - so the teachers have two different plans, a plan for outside and a plan for inside.”

– Child Care Center, mixed familiarity with *Dietary Guidelines*

“We do have movement to music in the morning and when we are not able to go outside, we get pretty inventive around here...when I was listening to the lady saying seven to nine motor skills, we do that regularly, just doing relays up and down the classroom, because we have a lot of winter – a lot of snow days here in Michigan. We had to do events where we put out just regular laundry baskets and gave the kids plastic balls. They look like little baseballs with the holes in them. And they played basketball. It was like the neatest thing. You know, we had to invent other ways for them to get exercise because that same video or that same song gets boring. We were just trying to think of some different ways for the kids.”

– Family Day Care Home, higher familiarity with *Dietary Guidelines*

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Currently, providers report that a caregiver is leading physical activity at least some of the time, so information about free play may allow providers to increase the number of opportunities for physical activity in a typical day without significantly burdening staff.

Providers generally stated that children are very enthusiastic about participating in physical activity, and they do not struggle with getting most children to be active. They do have trouble, however, with children who cannot participate in all of the activities, either because they are

overweight or because they have other special needs. Along with physical activity recommendations by age, providers would benefit from having modified physical activity recommendations for children within the same age groups who are unable to participate. Several caregivers noted that parents were sending conflicting messages by picking up children from child care and immediately putting them in front of a screen, like a television or a tablet, instead of engaging them in activity that involves movement. Overall, though, among the providers participating in the research, electronic media is not characterized as an overwhelming or insurmountable barrier to physical activity.

“For the most part, they’re all really enthusiastic about exercise...I have one that is resistant. And she, physically, she’s restricted.”

– Family Day Care Home, higher familiarity with *Dietary Guidelines*

“Parents don’t want their kids parked in front of a TV for four hours in the morning and you don’t want a kid on the computer for four hours. So you want to talk about what is an age appropriate time frame. So that would be good to see - what is a reasonable expectation for how you use it in the classroom and an expectation for how long you let a child use it.”

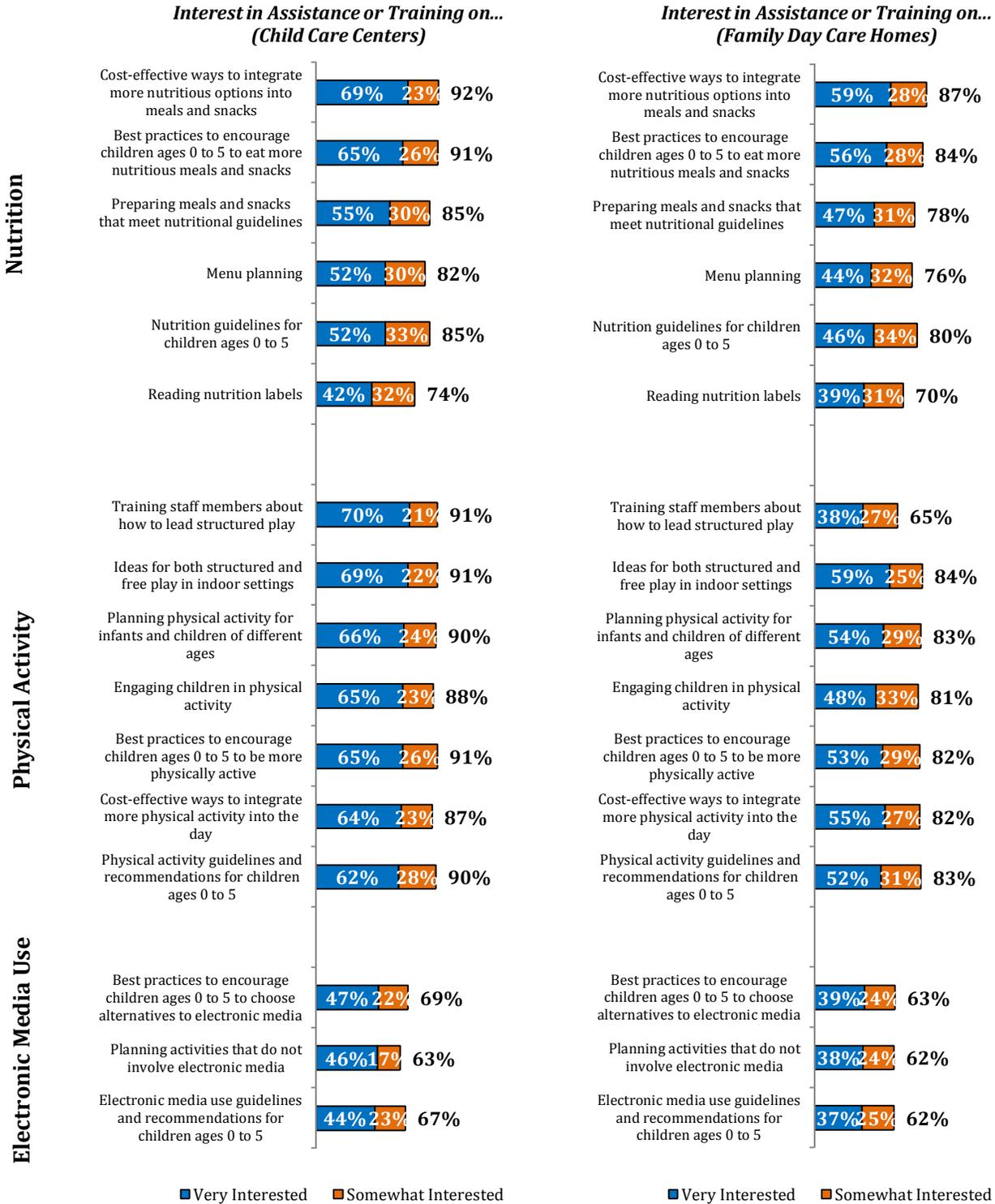
– Child Care Center

Relative to the topics presented about nutrition and physical activity, interest in learning more about topics related to electronic media use lags among child care providers. Further, within this category specifically, child care centers show a higher level of interest in topics related to electronic media use as compared to family day care homes. In addition to USDA guidelines, providers say they are familiar with Department of Health and Department of Education recommendations on electronic media use, and perhaps look more to these

sources for recommendations on the subject. Notably, barriers to moderating electronic media

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use are not a pressing concern among providers, who say they have identified ways to set time limits and move on to other activities during the day. There is slight interest among child care centers in information to pass on to parents about the warnings related to too much electronic media use. Overall, though, providers are more interested in tailored recommendations from State agencies on nutrition and menu planning, but say that it would be useful to have concise written guidelines and suggested alternatives to electronic media that they can share with parents and staff to encourage more physical activity.



(For example, 52% of child care centers are very interested in assistance and training on menu planning)

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In the focus groups among child care providers, this audience spoke about information and training in the context of the barriers they might help overcome and the concerns they might alleviate. Some of these mirrored popular training options tested in the survey, including providing cost-effective ways to integrate nutritious meals and snacks into the day, specific instruction on developing those nutritious meals, menu-planning assistance, new ideas for structured play, and ways to provide time for physical activity during inclement weather. New information and training recommendations included training in speaking with parents and materials to provide them, mobile- or tablet-based applications that improve the process of menu planning and recipe creation, methods for encouraging family style food service, and supplying recommendations of screen time that are specifically focused on making sure children are ready for the electronic media they will be expected to use in elementary school.

<i>Barriers and Concerns</i>		<i>Information and Training Recommendations</i>	
Healthy Habits			
Parental involvement: <ul style="list-style-type: none"> Concern that healthy habits fostered in the child care facility are not reinforced in the home Providers view themselves as a conduit through which parents can become aware of healthy behaviors Optimistic that parents can also positively influence healthy habits in their children 		<ul style="list-style-type: none"> Communicate the benefits of healthy eating, physical activity, and limited electronic media use in children 	
Nutrition			
Menu Planning: <ul style="list-style-type: none"> Excessive repetition of recipes with which providers are comfortable and which providers know meet CACFP requirements Recipes require too many complicated ingredients and do not reflect what providers actually purchase Menu options do not mirror cultural options at home 		<ul style="list-style-type: none"> Supply new, simple, and diverse recipes with explanations of how each ingredient meets CACFP requirements Develop mobile- or tablet-based application that builds recipes based on available foods inputted by provider Offer recipe options that reflect cultural influences Offer new snack ideas 	

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<i>Barriers and Concerns</i>	<i>Information and Training Recommendations</i>
<p>Family Style Food Service:</p> <ul style="list-style-type: none"> • Difficult to control serving sizes and ensure correct portions • Young children may not be able to serve themselves • Children may not choose foods with which they are unfamiliar or foods they know they do not like • Can be messy 	<ul style="list-style-type: none"> • Provide measuring tools that can be used to provide the first serving while allowing children to take the second on their own • Support for providers to model appropriate eating so children try new foods • Encourage providers to accept messes as children become familiar with this style
<p>Availability:</p> <ul style="list-style-type: none"> • Fresh produce tends to be more expensive and require more time to source and prepare • Difficulty in sourcing seasonal ingredients 	<ul style="list-style-type: none"> • Provide a variety of cost-effective and seasonal produce options for regions throughout the US • Provide resources and strategies for developing gardens and incorporating children into growing produce
<p>Cost:</p> <ul style="list-style-type: none"> • Nutritious foods/foods that meet nutrition guidelines often cost more 	<ul style="list-style-type: none"> • Provide cost-effective recipes • Share strategies on how to buy food that meets nutrition guidelines in a cost-effective way
<p>Caregiver knowledge:</p> <ul style="list-style-type: none"> • Interest in practical cooking instruction 	<ul style="list-style-type: none"> • Expand recipes that meet nutrition guidelines to include step-by-step preparation instructions (that can be adapted in different preparation environments)
<p>Child preferences:</p> <ul style="list-style-type: none"> • Children who are not exposed to a variety of fruits and vegetables at home are particularly resistant • Providers with lower familiarity struggled more with child preferences 	<ul style="list-style-type: none"> • Share strategies that have been successful in encouraging picky eaters to adopt healthy eating practices
<p>Parental involvement:</p> <ul style="list-style-type: none"> • Healthy food habits not reinforced at home 	<ul style="list-style-type: none"> • Increase communication between parents and providers regarding nutrition practices at the child care facility • Share nutrition information with parents to generate awareness of the importance of healthy eating • Share healthy eating ideas and tips with parents
<p>Vendor provision of food:</p> <ul style="list-style-type: none"> • Vendors may try to mask unhealthy foods as healthier options or may make it more difficult (based on what they offer) to meet nutritional guidelines 	<ul style="list-style-type: none"> • Provide training on how to communicate with vendors • Establish a system that oversees the products vendors claim meet meal-pattern requirements

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<i>Barriers and Concerns</i>		<i>Information and Training Recommendations</i>	
Physical Activity			
Weather: <ul style="list-style-type: none"> • Inclement weather can force caregivers to lead structured activity indoors 		<ul style="list-style-type: none"> • Offer alternative examples for structured physical activity and game ideas that can be conducted indoors 	
Child involvement: <ul style="list-style-type: none"> • Children with physical limitations may be less inclined to participate in physical activity 		<ul style="list-style-type: none"> • Provide examples of structured and unstructured play that can be adapted for children with physical limitations (including overweight children and those with special needs) • Share strategies that encourage reluctant children to become active 	
Space: <ul style="list-style-type: none"> • Physical space and specific amenities determine what types of indoor and outdoor activities are possible 		<ul style="list-style-type: none"> • Adapt examples of structured and unstructured play to situations in which space or equipment is limited 	
Parental involvement: <ul style="list-style-type: none"> • Parents are not reinforcing physical activity practices at home 		<ul style="list-style-type: none"> • Increase communication between parents and providers regarding physical activity practices at the child care facility • Share health information with parents to generate awareness of the importance of physical activity • Share ideas and tips with parents about easy ways to incorporate more physical activity at home (both indoors and out) 	
Electronic Media Use			
Educational: <ul style="list-style-type: none"> • Children need to be familiar with electronic media to be adequately prepared for elementary school 		<ul style="list-style-type: none"> • Share recommendations for screen time which are cognizant of differing levels of access to electronic media outside the child care setting • Provide examples of electronic media that is educational so there is less individual interpretation of this 	
Parental involvement: <ul style="list-style-type: none"> • Parents can hinder their efforts to limit screen time 		<ul style="list-style-type: none"> • Communicate to parents the need to limit electronic media use with children • Provide information to parents about the risks/warnings associated with too much screen time 	

There is no clear preference for how providers would like to receive information and assistance. Where possible, offering information and trainings in multiple formats can help ensure it is widely accessible, usable, and shareable among other staff and parents. It is important to offer technical assistance solutions that do not require technology use so that older providers, who are less comfortable with computers and tablets, do not require an initial training to increase their comfort level with these devices. Similarly, there are some cautions against print materials; as one child care provider described, “We find that the teachers aren’t learning much from paperwork because they’re really not reading them.” Feedback on print materials among State agency staff in the Phase 2 research was similar. Conversely, sharing a video with a group of providers in a center or home requires participants to listen and watch.

<i>Preferred Delivery of Technical Assistance</i>			
	<i>Nutrition</i>	<i>Physical Activity</i>	<i>Electronic Media Use</i>
Child care centers	<ul style="list-style-type: none"> • Social media • Peer-to-peer interaction • Video • Mobile/tablet apps 	<ul style="list-style-type: none"> • Video • Print or email to give to parents • In-person 	<ul style="list-style-type: none"> • Video • Print or email to give to parents
Family day care homes	<ul style="list-style-type: none"> • In-person • Video • Webinar <p>X <i>Not print</i></p>	<ul style="list-style-type: none"> • Peer-to-peer • Print materials in the form of posters • Webinar 	<ul style="list-style-type: none"> • In-person • Webinar

In the survey, child care centers indicated by a large margin that they would prefer to receive information about all guidelines, as well as recommendations, training, and assistance on all three technical areas through email. Email provides an opportunity to deliver many of the other technical assistance formats discussed in the focus groups, including links to social media and videos. Email is also shareable with parents, and as one provider noted of email newsletters, “you can’t miss an email. They know it’s coming.” A sizeable minority indicate that they are open to communications via a web portal or website, which may boast similar benefits to email. Family day care homes indicate a preference for email and for postal mail in the survey, but participants in focus groups warned that print materials are not necessarily being read. While Internet access among focus group participants – both center and home participants – appears widespread and, in turn, interest in postal mail lower, the Phase 1 research reached a larger number of providers, so there may still be some utility to postal mail.

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Although it did not perform well in the survey, social media was raised unaided in one of the child care center focus groups. Because it creates opportunities both to provide information and to promote information-sharing among providers, social media is a means to meet providers in their space and to promote peer interaction without requiring providers to take time off of work. Publishing information via center websites is also a means to communicating with parents, so there may be information and training opportunities via digital properties that extend beyond social media for some child care centers.

Preferred Communications Channels to Receive Information (Child Care Centers)			
	% Nutrition	% Physical Activity	% Electronic Media Use
Email communications, including e-newsletters	84	81	74
Postal mail	45	48	44
Web portal or website	39	50	44
On-site visits	12	22	16
Social media, such as Facebook or YouTube	8	14	11
None of the above	1	1	10

Preferred Communications Channels to Receive Information (Family Day Care Homes)			
	% Nutrition	% Physical Activity	% Electronic Media Use
Email communications, including e-newsletters	65	63	60
Postal mail	57	61	57
Web portal or website	29	34	31
On-site visits	16	17	12
Social media, such as Facebook or YouTube	12	12	10
None of the above	2	3	8

(For example, 84% of child care centers prefer to receive information on nutrition via email)

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In the survey, child care centers show an interest in several different options for receiving guidance and being trained on topics related to the three technical areas. Web-enabled or web-based options, such as webinars and online clips, are popular, as are print materials and local in-person trainings. Family day care homes slightly prefer to receive guidance or be trained via print materials, followed by local in-person trainings and web-based or web-enabled options.

Preferred Training Methods (Child Care Centers)			
	% Nutrition	% Physical Activity	% Electronic Media Use
Webinars/ online trainings	61	61	54
Print materials	57	56	49
In-person trainings at a nearby location	56	53	42
Video clips (online, DVD)	48	52	46
On-site visits by food program and other professionals	25	26	19
None of the above	1	2	11
DK/Refused	1	1	2
Other	*	1	*

(For example, 61% of child care centers prefer webinars/online trainings for training in nutrition)

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Preferred Training Methods (Family Day Care Homes)			
	% Nutrition	% Physical Activity	% Electronic Media Use
Print materials	57	53	52
In-person trainings at a nearby location	47	47	38
Webinars/online trainings	46	46	42
Video clips (online, DVD)	40	44	39
On-site visits by food program and other professionals	20	18	16
None of the above	2	3	9
DK/Refused	2	1	1
Other	2	1	1

(For example, 57% of family day care homes prefer print materials for training in nutrition)

Particularly for nutrition and physical activity, focus groups revealed a strong overall preference for delivery methods that provided opportunities for demonstrations. Providers are receptive to video training (either DVD or online streaming¹⁹), which can be shared with other staff, and to in-person training, which allows for questioning and interaction. Both delivery modes present opportunities for information to be relayed to providers via demonstrations (in real-time or recorded). On the nutrition side, videos and in-person training could feature cooking demonstrations, taste tests, and interactive menu planning activities. For physical activity, getting providers up and moving during in-person trainings, or at least showing how a physical activity should look on video, would be well-received. Video was slightly more popular because it seemed more efficient; both centers and family day care homes said they could watch videos during children's nap times or show it during a staff meeting.

The primary drawback to videos is that they do not provide opportunities for discussion and asking questions, ensuring clarity of instruction or the opportunity to learn from peers. In-person training promotes interaction along with ability to show demonstrations of nutritious foods and physical activities. It also allows the addition of taste testing and even more interactive,

¹⁹ For streaming video, it may be beneficial to use websites other than YouTube, as YouTube may be blocked by a provider's Internet security settings.

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personalized activities. Providers, especially those who work in family day care homes, like having the opportunity to speak to other adults. However, in-person trainings are difficult because they may pull providers out of classrooms, which may not be an option, particularly for family day care home providers. They tend to require that providers travel to trainings, which has cost and scheduling implications. As reflected in the survey, webinars are a popular option and may serve as an alternative to in-person trainings, but this solution will not work for providers who are less comfortable or familiar with technology.

Despite some warnings, print is seen as having utility, serving as quick-reference materials, recipe instructions, giveaways to parents, and posters that can be displayed throughout a center or home to promote specific nutrition or physical activity habits. Occasionally, getting binders of material and shorter pamphlets for quick reference was a well-received option. Going forward, print materials developed as recipes or meal planning instructions for providers would need to be constructed to withstand spills. Most provider groups liked the idea of being able to hand off information to parents and liked that print made information easily shareable. One of the family day care home groups was adamantly opposed to print materials, with providers saying they have “enough papers to last me until the year 2020.”