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Parental Perspectives Regarding Primary-Care Weight-Management Strategies for School-Age Children

Christy Boling Turer, M.D., M.H.S., F.A.A.P.,

Division of General Pediatrics, Department of Pediatrics, UT Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75390-9063; telephone (214) 648-4798; fax (214) 648-3220

Megha Mehta, M.D.,

Case Western Reserve, Rainbow Babies Hospital, Cleveland, OH. During the conduct of this study, Dr. Mehta's prior affiliation was School of Medicine, UT Southwestern, 5201 Harry Hines Blvd., Dallas, TX 75235

Richard Durante, B.S.,

School of Medicine, UT Southwestern, 5201 Harry Hines Blvd., Dallas, TX 75235

Fatima Wazni, B.S., and

School of Medicine, UT Southwestern, 5201 Harry Hines Blvd., Dallas, TX 75235

Glenn Flores, M.D., F.A.A.P.

Division of General Pediatrics, Department of Pediatrics, UT Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75390-9063; telephone (214) 648-3405; fax (214) 648-3220

Christy Boling Turer: christy.turer@utsouthwestern.edu; Megha Mehta: Megha.Mehta@UHHospitals.org, Megha.Mehta@gmail.com; Richard Durante: Richard.Durante@UTSouthwestern.edu; Fatima Wazni: Fatima.Wazni@UTSouthwestern.edu; Glenn Flores: Glenn.Flores@UTSouthwestern.edu

Abstract

To identify parental perspectives regarding weight-management strategies for school-age children, focus groups were conducted of parents of overweight and obese (BMI ≥ 85th percentile) 6–12 year-old children recruited from primary-care clinics. Questions focused on the role of the primary-care provider, effective components of weight-management strategies, and feasibility of specific dietary strategies. Focus groups were recorded, transcribed, and analyzed using margin-coding and grounded theory. Six focus groups were held. The mean age (in years) for parents was 32, and for children, eight; 44% of participants were Latino, 33%, African-American, and 23%, white. Parents' recommendations on the primary-care provider's role in weight management included monitoring weight, providing guidance regarding health risks and lifestyle changes, consistent follow-up, and using discretion during weight discussions. Weight-management components identified as key included emphasizing healthy lifestyles and enjoyment, small

CONFLICTS OF INTEREST

Competing interests: The authors have no competing interests.

CONTRIBUTIONS

CBT designed the study, observed focus groups, assisted with data analyses, met with focus-group participants to review and revise the final study model, and drafted the manuscript. MM assisted with the study design, moderated focus groups, assisted with data analyses, and contributed to drafting the paper. RD and FW moderated focus groups, assisted with data analyses, and contributed to drafting the paper. GF oversaw the study design and critically revised the drafted paper. All authors read and approved the final manuscript.

changes to routines, and parental role-modeling. Parents prefer guidance regarding healthy dietary practices rather than specific weight-loss diets, but identified principles that could enhance the acceptability of these diets. For dietary guidance to be feasible, parents recommended easy-to-follow instructions and emphasizing servings over counting calories. Effective weight-management strategies identified by parents include primary-care provider engagement in weight management, simple instructions regarding healthy lifestyle changes, parental involvement, and deemphasizing specific weight-loss diets. These findings may prove useful in developing primary-care weight-management strategies for children that maximize parental acceptance.

Keywords

Childhood diet; childhood obesity; diet and physical activity intervention studies; dietary strategies; focus group; primary health care

INTRODUCTION

Because one in three children is overweight or obese, primary-care providers are strongly encouraged to provide universal assessment and treatment of pediatric overweight and obesity (US Preventive Services Task Force 2010). An important barrier to weight management cited by primary-care providers, however, is a lack of parental motivation to change the diet and lifestyle of their overweight and obese children (Story *et al.* 2002; Spivack *et al.* 2009; Silberberg *et al.* 2012).

Parental perspectives regarding primary-care weight-management strategies for school-age children are needed, because intervention strategies that incorporate views of target participants have a greater likelihood of success (Institute of Medicine 2001), and because maternal behaviors appear to influence child behaviors (Turer *et al*. 2013). Current primary-care weight-management recommendations for primary-care providers are based on expert consensus (US Preventive Services Task Force 2010), incorporate experiences of clinicians (Story *et al.* 2002; Spivack *et al.* 2009; US Preventive Services Task Force 2010; Silberberg *et al.* 2012), and include consideration of several weight-management techniques that have been addressed in clinical trials (Gibson *et al.* 2006; Oude Luttikhuis *et al.* 2009), but may not be techniques that are practical for use in the clinical setting or by parents. Recommendations for primary-care providers are to conduct body-mass-index (BMI) screening and weight-related risk factor assessment, and to provide routine brief clinical interventions (family-centered communication and interventions that emphasize long-term changes in behaviors related to obesity risk) using a staged approach to weight management (Barlow et al. 2007). The first two stages are provided in primary care. Stage one, or "Prevention Plus," includes setting specific goals for nutrition and activity (increase fruits and vegetables, limit sugary beverages, eat breakfast, eat most meals at home and as a family, limit screen time to two hours/day or less, and get more than one hour/day of physical activity), and adding additional visits to reinforce goals. Stage two, or "Structured Weight Management," adds to Stage 1 additional patient/parent training in nutrition and behavioral counseling, monthly patient-provider contact, using logs to monitor goals, and strong parental involvement for school-age children. In this stage, goals are more specific,

and may include a daily eating plan, limiting screen time to under one hour/day, and adding supervision or structure to physical activity. Because patients and their parents may perceive that changes associated with nutritional and behavioral interventions are challenging or hold consequences for patients and their families—including money, time, and opportunity costs related to changing lifestyle routines—interventions must be seen as valuable to patients and their parents.

Information is needed about primary-care weight-management strategies for school-age children that are acceptable to parents. In a previous study, the most frequent reason cited by parents for non-return to a weight-management program was that the program was "not what they were looking for (Barlow & Ohlemeyer 2006)." Little is known about what parents *are* looking for, including the most important things that will help their child improve their weight and that should be incorporated into primary-care weight-management strategies that are feasible for the family. Prior qualitative research largely has focused on the primary-care-provider perspective regarding weight management and parental perceptions of multi-specialty weight-management programs (Stewart *et al.* 2008; Spivack *et al.* 2009; US Preventive Services Task Force 2010; Silberberg *et al.* 2012). No study, however, to our knowledge, has examined parental perspectives regarding how primary-care providers should manage childhood overweight and obesity in school-age children, and what would be most feasible and successful. Although the Stage 2/Structured Weight Management recommendations for physical activity and screen time are specific, the recommendation for a daily eating plan does not specify the type of plan. Though limited data exist regarding the efficacy of weight-loss dietary interventions tested in non-primary-care settings, but deemed "suitable for primary care" (including low-fat, low-carbohydrate, Mediterranean, and traffic-light diets) (Gibson *et al*. 2006; Oude Luttikhuis *et al*. 2009), no study has examined parental preferences for prescribing specific weight-loss dietary plans to school-age children in primary care. Because parental involvement is critical for weight-management success (Johnson & Birch 1994; Birch & Davison 2001; Wrotniak *et al*. 2005), understanding weight-management strategy components that parents consider feasible may promote adherence to weight-management interventions.

The study objective, therefore, was to identify parental perspectives regarding primary-care weight-management strategies for overweight and obese school-age children, including the role of the primary-care provider/pediatrician, and feasibility of specific dietary strategies, to provide data for the development of primary-care weight-management interventions that parents and school-age children are more likely to adhere to.

MATERIALS AND METHODS

Study design

This was a qualitative study using focus groups of parents of overweight and obese children in primary-care clinics. Focus-group methodology was chosen because it is considered to be a powerful method for conducting an in-depth exploration of people's attitudes, motivations, knowledge, and experience (Kitizinger 1995). Grounded theory, particularly as described by Glaser and Krueger (Glaser & Strauss 1967; Krueger & Casey 2009), informed both the data

collection and analysis in this study. The study was approved by the UT Southwestern Institutional Review Board, and all participants provided written informed consent.

Participant selection

Following the tenets of grounded theory, the initial recruitment of parents was purposive, to ensure a sample of parents of overweight and obese school-age children presenting for primary care who made decisions regarding changing their child's diet/lifestyle, and who were diverse in terms of race/ethnicity. Study staff invited a convenience sample of parents of overweight, school-age children presenting for primary care at Children's Medical Center (CMC)-affiliated primary-care clinics. CMC is the seventh largest pediatric hospital in the US. Over 12,000 school-age children are followed in these clinics, and data document that 60% are Latino, 25–30% are African-American, and almost all are publicly insured (Children's Medical Center 2011 report).

Potential participants were identified through prospective chart review of scheduled patients at Children's Medical Center-affiliated primary-care clinics. Parents were eligible to participate if they had a child 6–12 years old with a measured BMI ≥ 85th percentile in the clinic at the time of recruitment (CDC 2009). Parents were excluded from participation if they were not English proficient or their child was actively enrolled in a weight-loss program (to limit bias from participation in specific programs). Study staff met with interested parents after the child's clinic visit, confirmed eligibility, provided study information and a copy of the informed-consent document, and obtained contact information. Parents were contacted within two weeks to schedule focus groups, which were stratified by self-reported race/ethnicity, including non-Latino African-American, Latino, and non-Latino white (to identify race/ethnicity-specific themes, a secondary objective of the study). Participants were provided with $50 gift-card incentives, free-parking vouchers, onsite child care (children were not present during focus groups), and light refreshments.

Qualitative methodology

Focus groups were semi-structured, conducted by trained moderators using a moderator's guide consisting of seven open-ended questions and 10 probes (Table 1), and of two to six participants in size. Focus-group domains included the role of the primary-care provider, general weight management, weight-management strategies, and specific dietary strategies. Prior to discussion of specific weight-loss diets, selected because they previously had been tested in children, brief dietary descriptions were verbally administered (Table 2).

Focus groups were of 60–90 minutes duration. At the start of focus groups, written informed consent, HIPAA authorization documents, and a questionnaire were completed. The questionnaire included NHANES questions to assess participant age, educational attainment, household income, and self-reported parental weight and height (CDC 2010).

Data analyses

Focus groups were audio-taped and professionally transcribed. Transcripts were analyzed using margin coding and grounded theory (Glaser & Strauss 1967). In accordance with the methodology of grounded theory, thematic coding and the constant-comparison method

were used simultaneously with data collection to identify similarities and differences in themes within and between focus groups (Krueger & Casey 2009). As additional focus-group texts were coded, constant comparison provided a means to group similar codes into themes and subthemes. Three trained coders independently reviewed transcripts, listed major themes and subthemes in the margins, and identified dialogue that best illustrated major themes. To validate thematic coding, coders met to compare results and develop a taxonomy of themes. Group consensus was used to resolve differences among coders. Data collection continued in this fashion until no new themes emerged, the primary study questions were answered, and the resulting taxonomy fully developed. As a final step, to evaluate the validity of the results, four parents who participated in focus groups were asked to read and comment on the taxonomy. Parents stated agreement with the taxonomy; no new themes were identified. Participant recruitment began in May 2010 and continued through October 2011.

RESULTS

Participant Characteristics

Participants included 19 parents, two of whom were fathers (Table 3). The median age (in years) for parents was 32, and for children, eight. Less than one quarter of parents were white. About one-quarter of parents were not high-school graduates. The median parental BMI was 33 kg/m^2, and over half of children were severely obese (BMI ≥ 99^{th} percentile).

Thematic saturation for the primary study aim occurred with two focus groups each of parents of African-Americans, Latinos, and whites. Due to difficulty recruiting white participants, however, thematic saturation was not reached for race/ethnicity-specific themes. The taxonomy developed from the study findings is shown in Table 4.

Role of Primary-Care Provider

Parents' recommendations on the primary-care provider's role in weight management included three major themes (Table 3): monitor weight and health risks using discretion; provide specific guidance on healthy diet/lifestyle changes and a weight-status improvement plan, specifying whether the child needs to maintain or lose weight; and provide consistent follow-up, including continually monitoring child's adherence to the weight-status improvement plan without solely focusing on weight, and providing encouragement. When conveying a child's high weight status to a parent, some parents were comfortable with the primary-care provider speaking directly with the child, whereas others wanted the information conveyed only to the parent (Table 3). One mother remarked, "*The best thing a doctor has ever said to [my son] was, 'I don't want you to lose weight. I just want you not to gain any.'*" Regarding providing guidance, a father remarked: "*If some doctor says, 'Your son's overweight,' what do you want me to do? How do I get him to cut down on food and lose weight? I need more guidance.*" Providing consistent follow-up and encouragement also was identified by parents as important (Table 3). One mother remarked, "*Then the doctor reinforced it three months after that. The doctor said, 'The incredible shrinking boy!' I went, 'Ahhh, thank you for that.' [My son] just felt like the king of the world.*"

Most Important Things that Help a Child Lose Weight

Things parents cited as most important to help their child lose weight included: parental role-modeling, limiting unhealthful foods provided by family and friends, and specific dietary and activity changes. Regarding parental role-modeling, one mother stated, "*It's very important to have the parent involved as well; that way they don't feel like, well, I'm not willing to do something my parent's not willing to do.*" Parents noted that grandparents, the other parent, and other family and friends regularly provide children with unhealthy foods. To help a school-age child limit unhealthful foods provided by family and friends, one mother described trying to teach her child to make good choices; she said, "*When [my child] goes to grandma's, I told him, 'I'm not going to be there all the time to help you make good decisions.' I give him a choice—like carrots or a bag of chips, and then ask him what he thinks is better*."

Regarding important dietary changes, parents cited a need for decreasing unhealthy snacks, bread/tortillas, fried/fatty foods, eating out, sugary drinks/foods, portion sizes, and second helpings, and increasing fruits/vegetables, drinking water, and substituting artificial sweeteners for sugar in drinks. A recurring theme was the challenge of trying to "*break*" kids from unhealthy dietary habits and replace them with healthier habits that kids enjoy. Other parents described ways to facilitate these dietary changes. One mother stated, "*It works really well if he gets to choose his vegetables when we go shopping. When I cook it, he's like, 'I picked that.'*"

Important activity changes for overweight and obese children that were identified by parents included fun, varied, regular activity and sports participation, limiting TV viewing and video games, and increasing sleep duration. Parents stated that there should be more emphasis on getting kids to embrace active lifestyles. An illustrative quote from a father is, "*Gym should focus on how to incorporate physical activity into daily life. Get them to where they constantly exercising. It's important getting them to that stage where they say we [sup]posed to do this.*" Similarly, parents identified limiting media use and increasing sleep as important for weight loss.

Important Things to Include in a Weight-Management Strategy

General strategies parents identified as important included emphasizing healthy lifestyles (not weight), small changes to current routines, rewards, and a motivational leader. A quote from a mother that encapsulates the recommendation to introduce small, gradual changes is, "*You'd have to [introduce changes] slowly. When you can incorporate it into a lifestyle, to where they feel they're making the decision on their own, it has a much better effect than forcing them*." According to parents, children need someone motivational and good with kids to work with them on weight-management. One father stated, "*Sometimes with kids, you just have to have a way to talk them into eating their vegetables.*"

Activity strategies that parents cited as important were scheduling daily activities to ensure that kids get sufficient physical activity while limiting TV viewing and video games, and emphasizing play and enjoyment, not weight loss. Referring to fitting activity into the day, one mother stated, "*There's just so much to do in that little time we have nowadays. It's*

about structuring, scheduling. When they come in to do their homework, let them outside first, before it gets dark."

Regarding general dietary strategies, parents emphasized healthy eating behaviors as more important than recommending specific diets. Referring to why she would not include a specific weight-loss diet, one mother stated, *"I was told never put a kid on a diet.*" Another mother said, *"Being consistent, that is the big issue. I think they're all effective, as long as you follow them.*"

The most important features of a specific dietary strategy cited by parents included: child suitability; simple, explicit instructions; and providing helpful examples of lower-cost diet and activity substitutions. For child suitability, parents stated that dietary strategies would be acceptable if they incorporate foods that taste good to kids and instructions that are understandable to children, such as sample menus that use pictures to indicate what to eat and what not to eat. Regarding examples of healthful, lower-cost substitutions, one mother remarked, *"You need to say what's cheap and what's not. My double quarter pounder is $6. Subway sandwiches are $5–6. Both are the same price, which one is better for you?"*

Parental Perspectives Regarding Specific Dietary Weight-Management Strategies

For each specific dietary strategy, parents cited strengths and challenges (Table 4). A strength of the low-fat diet cited by parents was the potential for easy substitutions, whereas challenges included the tendency to overeat low-fat items, and the expense. An illustrative quote from a mother is: *"I don't think it would work. They're gonna go, 'it's low-fat, so I can get more of it.' You'd have to limit them."* For the low-carbohydrate diet, strengths cited by parents were that it allows for foods kids like and limits foods that are over-consumed, and that they liked not having to count calories: *"Because when you're counting calories, I have to count the calories, not him."* Challenges were that it was difficult to identify carbohydrate-rich foods and reduce their consumption. For the Mediterranean diet, strengths included that olive oil was considered beneficial, and it would work if you liked seafood. Challenges included that it was incompatible with typical "kid cuisine," too complicated, and misconstrued as a seafood diet. An illustrative quote from a mother is: *"I'm not fixing to touch fish. I think it would work, but just the fish, I don't know*." For the traffic-light diet, parents cited the color-coding as child-friendly, but identified as challenges that the diet was difficult to understand, children are not used to eating green foods, and red foods would be eaten more, despite restriction. One mother stated, "*We had that in the cafeteria. I was always going for the red, so I don't think that one would work.*"

DISCUSSION

This is the first study, to our knowledge, to examine parental perspectives regarding effective primary-care weight-management strategies. Parents identified what they considered the most important things for primary-care providers to communicate during primary-care visits when addressing a child's high weight status, to help a school-age overweight or obese child lose weight, and to include in primary-care weight-management strategies that would be acceptable to parents of overweight and obese school-age children. Given a recent greater focus in primary care on implementing strategies previously

employed by obesity centers (National Association of Children's Hospitals and Related Institutions 2010), including providing patient-oriented, empowering, behavior-change strategies, the study findings contribute novel information regarding parental preferences for clinical obesity care in pediatrics.

An important finding from this study was the parental perspective regarding the role of the primary-care provider in weight management. Parents stated that clinicians can be helpful by using discretion during weight discussions. Although prior research indicates that BMI screening and counseling pose no harm (US Preventive Services Task Force 2010), parents reported in this study that their school-age children were sensitive to doctor's weight assessments. A growing body of literature documents implicit weight bias among health professionals; weight bias may influence the professionals' behavior in terms of empathy, the quality of interactions, and the patient's likelihood of returning for care (Teachman *et al*. 2001). Other helpful things that parents noted that providers can do include openly discussing weight-related health risks; providing more guidance about recommended lifestyle behaviors; addressing with the parent how much the child is overweight, including specific weight-management goals (such as "maintain weight" or "lose 'x' amount of weight"); and consistent follow-up—defined in Stage 1/Prevention Plus as an interval determined by the patient/pediatrician, and in Stage 2/Structured Weight Management as monthly. These findings suggest that information regarding the child's high weight status, weight-management goals, weight-related health risks, and specific diet and activity goals could be incorporated into a written "healthy lifestyle" action plan, analogous to the asthma action plan that has been shown to be associated with better outcomes (Bhogal *et al*. 2006; Zemek *et al*. 2008; Shah *et al*. 2011). Qualitative studies of asthma-action plans suggest that a patient- and partnership-based joint approach to development and review of action plans is important for the plan to be utilized (Ring *et al*. 2011), and might prove effective in developing action plans for overweight and obese patients. Additionally, to ensure that consistent follow-up can be provided, and that there are no barriers to the implementation and evaluation of interventions, overweight and obesity must be reimbursable diagnoses for visits to primary-care providers.

Study findings revealed that parents want weight-management strategies to focus less on weight, and more on adopting healthy lifestyles. Parents stated that activity strategies should emphasize playing, enjoyment, and structuring daily activities. Parents desire dietary strategies that teach children healthful eating, including portion sizes, and how to make healthy choices so that they learn to moderate their own intake. These findings suggest that parents may welcome a recommendation to enroll in community-based programs, such as the YMCA's MEND (Mind, Exercise, Nutrition…Do It!), which emphasizes active play, nutrition education, behavior-change strategies, and positive parenting (Smith *et al*. 2013). Parental role modeling also was cited by parents as critical for weight-management success. This finding complements research which indicated that a treatment strategy that included training in parental role-modeling and parenting skills promoted weight-status improvement in overweight and obese children Kitzman *et al*. 2010).

Although parents viewed weight-loss diets for their school-age children with circumspection, they identified principles that could improve the acceptability of these diets.

According to parents, enhancing child suitability of specific diets should include slightly modifying the preparation of kids' favorite foods to be consistent with each diet's specifications. To simplify instructions, parents recommended providing concrete examples of allowable foods and ways to limit caloric consumption that do not require counting calories. Two dietary strategies that have been shown to promote satiety and reduce energy intake are low-energy-dense and low-carbohydrate dietary patterns (Boling *et al*. 2009, Spill *et al* 2011, Rolls *et al* 2009). Parents also desire lower-cost alternatives, and request examples of reasonably-priced substitutions that would be recommended. Pediatricians might emphasize previously identified low- and high-cost foods relative to their nutrient value, ranked in an index based on their nutrient content and cost (Drewnoski *et al.* 2010). The lowest-cost sources of protein, in order of cost for nutrient value, include eggs, dry beans/legumes/nuts/seeds, meat/poultry/fish, and milk/milk products. Higher-cost foods in this index include cakes/cookies, lunch meats, desserts, sugars, and sugary beverages. Identifying ways to make weight-loss diets affordable and understandable to children may improve their acceptability to parents.

Parents provided guidance regarding key pitfalls of weight-loss diets that primary-care providers might consider discussing when a specific diet is recommended. For low-fat diets, providers might caution parents to not allow children unlimited consumption of lower-fat foods. For low-carbohydrate diets, parents want providers to help them identify high-carbohydrate foods in addition to allowable foods. For the Mediterranean diet, the study findings indicate that providers might promote understandability of the diet using examples of recommended foods and meals which are kid-friendly. For the Traffic Light Diet, education is needed to correctly categorize foods. For all diets, parents noted that primary-care providers should provide specific examples of allowable, kid-friendly foods, meals, and shopping lists to make the dietary instructions more understandable and appealing to children. Assisting parents with making dietary strategies more palatable and understandable to children might improve long-term adherence.

Certain study limitations should be noted. Participants were recruited from urban clinics in an academic medical center in Texas, and the impact of further theoretical sampling on study themes was not explored. The study findings, therefore, may not necessarily generalize to non-urban regions and non-academic settings. Participants had lower educational attainment, and so the findings may not generalize to populations with a higher mean parental educational-attainment level. The potential for selection bias exists based upon who presented for the focus groups; however, differences in screened versus enrolled participants could not be examined, because only parents who came to the focus groups completed demographic questionnaires. In addition, this study cannot address other participant characteristics, such as the frequency of the participant's overweight child's clinic visits, visit reason, or antecedent changes in BMI percentile, because this information was not collected. Due to difficulty recruiting white participants, thematic differences could not be examined in parental preferences for weight-management strategies by race/ethnicity; and, differences could not be examined for older vs. younger children because of the relatively small number of parents of children from a broad range of ages. Finally, participants with limited English proficiency were excluded.

Strengths of this study are the inclusion of a diverse sample of parents and the qualitative study design. The study included parents from low-educational-attainment households. Significantly greater proportions of children from households such as these are affected by overweight/obesity and in great need of effective weight-management solutions (Wang & Zhang 2006). The qualitative study design allowed in-depth exploration of parental perspectives regarding weight-management, and identified key components to include in weight-management strategies, such as focusing on parental role-modeling and healthy lifestyle behaviors, which may be more effective than focusing primarily on the child or the child's weight (Magarey *et al.* 2011; Brotman *et al*. 2012).

The study results suggest that parents desire a weight-management strategy for their overweight and obese children that includes: 1) monitoring and communication of a child's high weight status and weight-related health risks to the parent, using discretion regarding child presence during weight discussions; 2) education and provision of simple instructions regarding healthful diet/activity practices; 3) parental role-modeling; and 4) consistent reevaluation of progress toward attaining a healthy weight. The study findings may prove useful in developing effective primary-care weight-management strategies for overweight and obese, school-age children that maximize parental acceptance and adherence and strengthen parent-primary-care-provider collaboration.

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KEY MESSAGES

- Little is known about parental perspectives regarding primary-care weight-management strategies for school-age children.
- Effective weight-management strategies identified by parents in this study include:
  - Primary-care provider engagement in weight management by monitoring and communicating a child's high weight status and health risks;
  - Primary-care providers should use discretion during weight discussions, because school-age children may be sensitive to doctor's weight assessments; and,
  - Although parents viewed weight-loss diets for their school-age children with circumspection, they identified principles that could improve the acceptability of these diets.

Table 1

Moderator's guide of focus-group domains, questions, and probes.

The moderator's guide, used to conducted the semi-structured focus groups, is provided.

Domain	Question	Probes
Role of primary-care provider	**1)** Would your child's primary-care provider be helpful in having your child lose weight?	• What would be the most useful thing your child's primary-care provider could do to help him/her lose weight?
General weight management	**2)** What is the most important thing that would help your child lose weight?	• Are there dietary changes that would help your child lose or maintain weight? • What specific foods and beverages do you think may be contributing to your child's weight gain? • What role, if any, does exercise play in helping your child lose or maintain weight? • What role do TV, video games, and computer use play in your child's weight?
Weight-management strategy	**3)** What are the most important things to include in a weight-management strategy?	• Would you include physical activity; if so, what would you recommend? • Would you include any specific diets? Why or why not?
Specific dietary strategies	A simple description of each dietary strategy was verbally administered to participants (Table 2). (4–7) What is your view of a dietary plan for your your child that is: **4)** Low-fat **5)** Low-carbohydrate **6)** Mediterranean **7)** Traffic-light?	• What is your overall view of specific dietary strategies for school-age children? For each dietary strategy, the following probes were asked: • What do you like most about this dietary strategy? What do you like least? • Would you have your child follow this dietary strategy? Why or why not?

Table 2

Descriptions of specific common dietary strategies.

The descriptions of specific common dietary strategies that were verbally administered to participants is provided.

Specific dietary strategies: (source)	Description
Low-fat diet:(Adapted from //en.wikipedia.org/wiki/Low-fat_diet, and //en.wikipedia.org/wiki/Dietary_Approaches_to_Stop_Hypertension):	A low-fat diet is a diet that consists of little fat, especially saturated fat and cholesterol. A low-fat diet recommends that less than 20–30% of daily calorie intake come from fat, and <7% from saturated fat. The DASH diet (or Dietary Approaches to Stop Hypertension) is an example of a low-fat diet. It recommends high intake of fruits, vegetables, and whole grains, moderate intake of beans [legumes], nuts, and low-fat dairy products, and low intake of red and processed meats and sodium.
Low-carbohydrate diet (Adapted from http://en.wikipedia.org/wiki/Atkins_diet):	A low-carbohydrate diet, for example, the Atkins diet, involves limited consumption of carbohydrates. Carbohydrate intake is limited to less than 20 grams/day, 12 to 15 net grams of which must come in the form of salad greens and other fruits and vegetables such as broccoli, spinach, pumpkin, cauliflower, turnips, tomatoes, and asparagus (but not beans [legumes], since they are too starchy for the strictest phase). The allowed foods include a liberal amount of all meats, chicken, turkey, fish, shellfish, and eggs; up to 4 ounces of cheese such as cheddar cheese; most salad vegetables, other low-carbohydrate vegetables; and butter, olive oil, and vegetable oils. During the first week, vegetables that are low in carbohydrates are consumed. For example, asparagus, salad, cauliflower, or one half of an avocado. The next week, dairy is added. Foods are gradually added as follows: vegetables, cheese, nuts and seeds, berries, legumes, other fruits, starchy vegetables, and then whole grains.
Mediterranean diet (Adapted from //en.wikipedia.org/wiki/Mediterranean_diet):	The Mediterranean diet was inspired by the traditional dietary patterns of Spain, southern Italy and France, Greece, and parts of the Middle East. In the most commonly understood version of the Mediterranean diet, in addition to “regular physical activity,” the diet emphasizes “abundant plant foods, fresh fruit as the typical daily dessert, olive oil as the principal source of fat, dairy products (principally cheese and yogurt), and fish and poultry consumed in low to moderate amounts, zero to four eggs consumed weekly, and red meat consumed in low amounts. Total fat in this diet is 25% to 35% of calories, with saturated fat at 8% or less of calories. The principal aspects of this diet include high olive oil consumption, high consumption of beans [legumes], unrefined cereals, fruits, and vegetables, and moderate consumption of dairy products (mostly as cheese and yogurt), moderate to high consumption of fish, and low consumption of meat and meat products. Olive oil is particularly characteristic of the Mediterranean diet.
Traffic-light/Stoplight diet (Adapted from Epstein/Squires The Stoplight Diet for Children and //en.wikipedia.org/wiki/Traffic_light_rating_system):	Food is labeled to show the proportions of fat, saturated fats, sugar, and salt using traffic light colors to signal high (*red*), medium (*yellow*) and low (*green*) percentages for each of these ingredients. Foods with ‘green’ indicators are healthier and to be preferred over those with ‘red’ ones. The goal of the traffic light diet is to provide the most nutrition with the least number of calories. Daily calorie intake is limited to a maximum of 1500 calories. The Traffic Light Diet divides foods into 5 categories: fruits and vegetables, grains, milk and dairy, protein, and other. Foods in each category are color-coded according to the caloric density per average serving: Green foods are foods containing <20 calories per average serving; yellow foods are staples of the diet that provide most of the nutrition; red foods are high in fat and simple carbohydrates (for example, sweets and sugared drinks). A food reference guide is provided listing foods according to their color code and group. Participants are strongly encouraged to remove all red foods from their homes and are provided with the following two goals: 1) Stay within the prescribed calorie range; and 2) Eat no more than four red foods a week.

Table 3

Parents' and children's demographic characteristics.

The demographic characteristics of the parents in the focus groups and their children are described.

Parents' Characteristic	Median or Percent
Median parental age (range), in years	32 (24 – 48)
Race/ethnicity	
African-American	33%
Latino	44%
Non-Latino white	23%
Educational attainment	
Not high-school graduate	22%
High-school degree or equivalent	17%
Some college or technical school	50%
College degree or higher	11%
Median parental BMI (range), in kg/m^2	33 (21 – 45)

Children	Median or Percent
Median child age (range), in years	8 (6 – 12)
Male	54%
Weight status	
Overweight (BMI ≥ 85^{th} – <95^{th} percentile)	15%
Obese (BMI ≥ 95^{th} – <99^{th} percentile)	26%
Severely Obese (BMI ≥ 99^{th} percentile)	59%

Table 4

Taxonomy of themes and subthemes.

This table provides an overview of the key themes and subthemes resulting from the qualitative analysis.

Domain	Theme	Subtheme
How provider can help child lose weight:	• Monitor weight, health risks	• Use discretion in weight discussions • Discuss weight-related health risks • Do not use scare tactics
	• Provide specific guidance	• Healthy diet and lifestyle changes • Weight-status improvement plan
	• Consistent follow-up	• Monitor child's progress, not just weight • Provide encouragement
Most important thing to help child lose weight:	• Family	• Parental role-modeling • Limit unhealthful foods provided by family and friends • Decrease unhealthy snacks, breads/tortillas, fried/fatty foods, eating out, and sugary foods/drinks
	• Dietary changes	• Decrease portions and second helpings • Increase fruits and vegetables • Drink water and substitute artificial sweeteners for sugar in drinks
	• Activity changes	• Fun, varied, regular activity and sports participation • Limit TV viewing and video games
Important things to include in weight-management strategy:	• General strategy components	• Emphasize healthy lifestyle • Small changes to current routines • Rewards • Motivational leader
	• Activity strategies	• Schedule daily activities • Emphasize play and enjoyment
	• General dietary strategies	• Healthful eating, not specific diets
	• Specific dietary strategies	• Child suitability • Simple, explicit instructions • Provide examples of lower-cost diet and activity substitutions
Specific dietary strategies:	• Equally effective if followed	• Each has strengths and challenges (Table 4)

Table 5

Taxonomy of themes, subthemes, and illustrative quotes: How a primary-care provider can be helpful in having a child lose weight.

This table is provided to highlight illustrative quotes that support the key themes and subthemes for the question regarding how a primary-care provider can be helpful in having a child lose weight.

Monitor weight and health risks

- Use discretion in weight discussions
  - Mother: "*When a doctor says to the child, 'You weigh this much and we need to work on a diet,' my daughter saying, 'I'm overweight.' Then she lookin' in the mirror—she's only seven years old. Don't talk about it in front of her; she's a child. She should be going to school, playing, not worrying about her weight.*"
  - Father: "*I think with me having the talk with the doctor about my daughter being overweight, the biggest thing was we talked about it in front of her and she picked up on it. You know, she started thinking about it and making comments. I think the doctor might have more impact telling the parent without telling them in front of the child—step out in the hallway or something, or give me a call.*"
- Discuss weight-related health risks
  - Mother: *"My son had to get a diabetes test. [He] is at an age that if you explain to him the effects of being overweight, he understands. The doctor was really concerned. That's what [my son] needs."*
  - Mother: "*The doctors have good resources and good referrals. [My son] actually learned why sugar is a big deal, and cholesterol issues. And that's something I don't think about. I need to let him know, 'This sugar thing {prediabetes} that you're having is very serious,' without scaring him.*"
- Do not use scare tactics: Mother: "*One of the doctors said that the way I been feeding her is like the same thing as giving her drugs. I said, 'No, it's totally different.' It made me upset.*"

Provide specific guidance

- Healthy diet and lifestyle changes: Mother: "*Reinforce a healthy eating lifestyle, and provide a referral to a nutritionist.*"
- Weight-status improvement plan: Mother: "*I would talk to her about how much she's overweight and needs to lose, and how to keep it off.*"

Consistent follow-up

- Continually monitor child's progress (not just weight): Father: "*Develop a strong relationship with them [the child and family]. Then, check up on them—how they are doing, and if they can do it [the weight-management strategy]. Don't just say, 'Okay, let's weigh your child again.' We know she's overweight."*
- Provide encouragement
  - Mother: "*We need the consistency of the doctor."*
  - Mother: "*Check in. It would be nice just so she could say, 'Well if I do this, the doctor will be proud of me.'" "You need that coaching, 'You're doing a good job.' You need to hear that as parents.*"

Table 6

Strengths, challenges, and illustrative quotes: Parental perspectives on specific dietary weight-management strategies.

This table is provided to highlight parental perspectives regarding strengths and challenges for each of the dietary interventions discussed, with illustrative quotes.

Low-Fat	
Strengths:	• Easy substitutions
Challenges:	• Tendency to overeat low-fat items • Expense of lower-fat options • Identifying high-fat/low-fat foods time consuming and confusing
• Father: *"It's the money; that stuff's high."* • Mother: *"I don't understand the fat, fat grams, and calories. I will stand in the aisle for an hour reading the back of things."*	
Low-Carbohydrate	
Strengths:	• Allows foods kids like, and limits foods that are over-consumed • No need to count calories
Challenges:	• Difficult to identify carbohydrate-rich foods • Difficult to cut out starches/carbohydrates—low cost, convenience, taste • Misconstrued as allowing substitution of whole grains
• Mother: *"For my child, the low carb kind of tells them what they can and can't eat. There's not a lot of you can't eat this and you can't eat that."* • Mother: *"What do you mean by carbohydrate? Starchy food? Bread has a lot of starch…what else?"*	
Mediterranean	
Strengths:	• Olive oil is beneficial • Good, if like seafood
Challenges:	• Inconsistent with typical "kid cuisine" • Too complicated • Misconstrued as seafood diet
• Mother: *"The only problem is the fish—I don't like fish sticks."* • Father: *"If the adults don't understand it, then for sure kids not gonna understand it—it's too confusing."*	
Traffic Light	
Strengths:	• Color-coding child-friendly • Promotes child understanding
Challenges:	• Difficult to identify red, yellow, green foods • Children not used to eating green foods • Red foods would be eaten more, despite restriction

- Mother: *"It's more of a game than a diet, that's what I like about it."*
- Mother: *"It would be too complicated, unless it came pre-packaged and pre-ready to go."*