ABSTRACT
This study investigated the barriers that parents face in helping their families establish healthy and consistent family mealtime routines. Using parent focus groups we interviewed 42 parents of 5-to-8-year-old children to brainstorm ideas for how to encourage children to be more involved in mealtime preparation and planning. Using the feedback from parents we designed and pilot-tested a mealtime planning web-tool with 100 parents. Parents used the tool for one month and then provided feedback.

BACKGROUND
Healthy and consistent family mealtimes have been associated with numerous benefits, such as:
- Eating healthy – more fruits, vegetables
- Increased academic performance
- Decreased risk for obesity, eating disorders
- Decreased risky child behaviors
- Decreased drug and tobacco use
Many barriers have been identified that influence the consistency of healthy family mealtimes, such as:
- Differing family schedules
- Parental work schedules
- Use of media, distractions
- Lack of planning
- Different food preferences
- Lack of time to prepare healthy food
- Picky eaters, kids won’t eat food

RESEARCH QUESTIONS
What barriers do parents face in making healthy mealtime routines for school-aged children?
Can a web-based mealtime calendar planning tool help parents get children more involved in mealtime planning and preparation?

METHOD

Part 1 – Parent Focus Groups
Participants
- Participants included 42 parents of 5-to-8-year-old children
- Sample consisted primarily of highly educated, Non-Hispanic White mothers (with 6 fathers)
Procedure
- Participants met in small focus groups with a trained facilitator to discuss barriers to healthy mealtime routines
- Parents reviewed and critiqued 4 nutrition and USDA websites
- Parents completed surveys about child and family routines
Measures
- Surveys included questions about family mealtimes, child participation in preparing and making foods, and parental beliefs about health, obesity, routines
- Reviewed websites included: USDA SuperTracker, NourishInteractive, EatRight.org, Natl Agric. Library

Part 2 – Website Pilot Study
Participants
- Participants included 100 parents of 5-to-8-year-old children
- Sample consisted primarily of highly educated, Non-Hispanic White mothers (with 12 fathers)
Procedure
- Participants completed a survey and gave initial feedback prior to having access to the web-tool
- Participants were given approximately 1 month of access to use the web-tool (along with instructions)
- After 1 month, participants completed a follow-up survey about their family routine patterns and thoughts about the mealtime calendar web-tool
Measures
- Parent online surveys asked questions about the design and functions of the web-tool
- Surveys included questions about family mealtimes, child participation in preparing and making foods, and parental beliefs about health, obesity, and routines

RESULTS

Parent Focus Groups
- Parents reported a lack of interest in using the 4 websites that they reviewed because the sites were too complex, not user-friendly
- The main frustrations/barriers reported were:
  - lack of time (for meal preparation, decisions)
  - lack of planning / run out of ideas for meals
  - keeping children busy, and "out of the way"
- Brainstorming by parents resulted in the following suggested needs:
  - a weekly meal calendar to plan out meals
  - include recipes, shopping lists, child tasks

Website Pilot Study
- What did parents like about the tool?
  - Easiness - drag-n-drop foods into calendar
  - Printing recipes, calendars, child tasks
  - Using child tasks to get kids involved in meal
  - Having children help choose meals
  - Recent foods list and pictures of foods
- What would parents change about the tool?
  - Have more options (vegan, more recipes)
  - Options for a monthly calendar
  - Allow users to remove food choices
  - Make the tool more mobile-friendly
  - Add more meals per day (snacks)

SURVEY RESULTS

Meatime Climate Scale 4.11
Meatime Planning and Preparation (1-5 scale mean)
- Dinners planned in advance 3.69
- Child helps choose meals often 3.03
- Child helps prepare meals often 2.81
- Child knows menu in advance 3.65
- Child sets the table 3.60
- I want my child to help plan meals 3.84
- I want my child to help prepare meals 3.82
- Challenge – Choosing healthy meals 3.31
- Challenge – Choosing balanced meals 2.76
- Challenge – Time to plan dinner 3.37
- Challenge – Time to cook healthy 3.34
- My child helping would slow me down 3.24
- My child helping might get hurt 3.91
- Most important part of meal – healthy food 4.45
- Most important part of meal – being together 3.74
- Most important part of meal – teaching child 3.80
1 = strongly disagree, 5 = strongly agree

CONCLUSIONS
- Parents want their children to be more involved in regular mealtime planning and preparation, but barriers exist
- Common barriers include lack of time and lack of planning/organization
- The pilot-testing of the website showed that parents like having something to help them stay organized, give them meal ideas, and get children involved
- At Time 2 survey, 59.7% of parents said they would use calendar again, 24.7% said maybe (w/changes), 15.6% said no
- We need to encourage parents to engage their children more in mealtime planning and preparation to teach children about healthy routines