

# A content analysis of recipes included in food blogs focused on child and family feeding: Recipe types, inclusion of produce, added sugars, and cooking methods

## Background

### Many young children lack healthy dietary patterns

- > 25% of 2-3 year olds do not consume any vegetables in a day<sup>1</sup>
- Energy-dense mixed dishes (e.g., pasta) and desserts are among the top 5 sources of energy for children<sup>2</sup>
- Mothers can positively influence children's eating behaviors through their child feeding practices

### Food prepared at home tends to be healthier than food prepared away from home

- Decreased food away from home consumption in children is associated with improved dietary quality, including:
  - Increased consumption of fruits and vegetables<sup>3</sup>
  - Decreased consumption of added sugars, sugar sweetened beverages, and added fats<sup>3</sup>

### Mothers use social media to learn about parenting and child health

- In 2014, 66% of mothers found parenting information while looking at social media content<sup>4</sup>
- 50% of mothers received social/emotional support on a parenting issue on social media<sup>4</sup>

### Social media may influence social norms and behaviors related to child feeding practices

- Recipes included in food blogs focused on child and/or family feeding may impact readers' attitudes and behaviors related to "home cooking" through social network effects and social cognitive processes

## Research Question

- What types of recipes and cooking methods are included in food blogs written by mothers of preschool-aged children?

### References

- Fox, Condon, Briefel, Reidy, Deming (2010) *J Am Diet Assoc*, 110
- Reedy & Krebs-Smith (2010) *J Am Diet Assoc*, 110
- Altman et al. (2015) *JAND*, 115
- Pew Research Center (2015) Parents and social media report
- Schreier (2012) Qualitative content analysis in practice. SAGE
- Ervin & Ogden (2013) NCHS Data Brief No. 122
- University of Minnesota (N.D.) Glossary of cooking terms [http://www.d.umn.edu/~alphanu/cookery/glossary\\_cooking.html](http://www.d.umn.edu/~alphanu/cookery/glossary_cooking.html)

## Method

### Sampling procedure

#### Blogs

#### Inclusion criteria

- Blogger was a parent of at least one 2-5 year old child
- Blog title and/or description indicated the blog focused on child and family feeding relevant topics

24 blogs identified from:

- Babble's Top 100 Mom Food Blogs of 2013 (16 blogs)
- Snowball sample of blog rolls (8 blogs)

#### Blog posts

- All posts from 03/2013 - 02/2014 ( $N = 2345$ ) were coded for relevance to child and/or family feeding (Y/N)
- 13 blogs mentioned child/family feeding in > 25% of posts
- 20% of all posts were randomly sampled from these 13 blogs ( $N = 325$  posts)

### Coding: Qualitative content analysis<sup>5</sup>

- Recipes included in blog posts were coded using schemes developed a priori from existing literature
- Types of recipes and fruits and vegetables were based on the Feeding Infants and Toddlers Studies schema<sup>1</sup>
  - Mixed dish recipes included substantial proportions of multiple food groups (e.g., pasta and chicken)
- Added sugars (e.g., honey, white sugar, sweetened gelatin) were coded based on the NHANES schema<sup>6</sup>
- Cooking methods were coded based on the cooking resource guides found on the USDA webpage<sup>7</sup>
  - Oven-based methods (e.g., bake, roast, broil) and stovetop methods (e.g., boil, steam) were grouped together under these parent codes
  - The code "no cook" was assigned to recipes requiring only ingredient assembly for immediate consumption

### Analyses

- Coding was conducted in MaxQDA Version 11 for Mac
- The frequency of each code was calculated
- Chi-square tests were conducted to explore whether vegetables, fruits, or added sugars were more likely to occur in any of the types of recipes

## Results



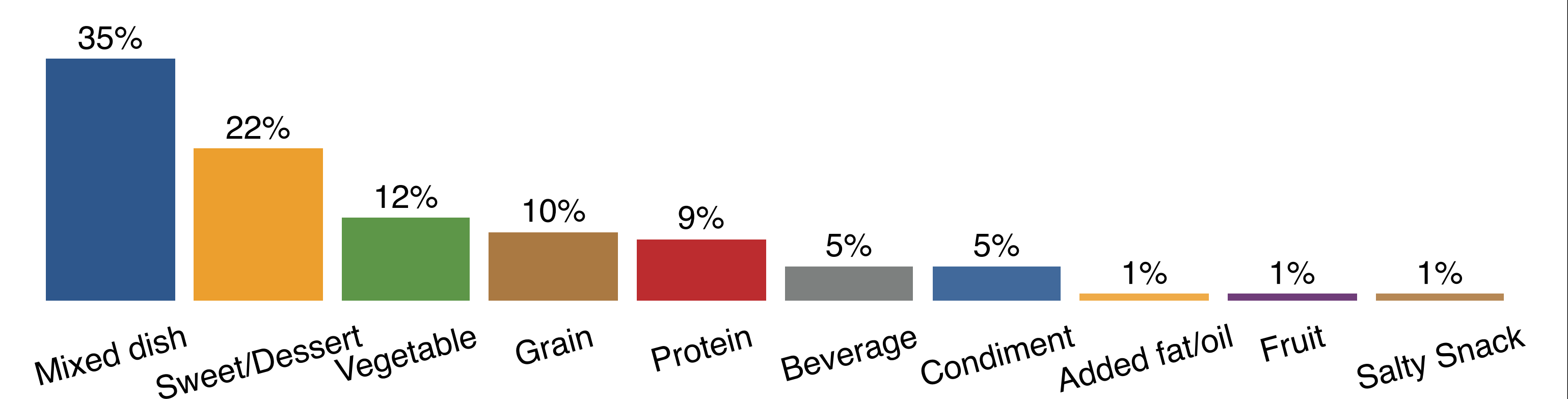
Example 1: Baked pasta with spinach and ricotta  
 • Mixed dish  
 • Any vegetable  
 • Stovetop  
 • Oven



Example 2: Baked chocolate donuts  
 • Dessert  
 • Oven  
 • Added sugars

### Types of recipes

- Mixed dishes (e.g., sandwiches) and sweets and desserts (e.g., cookies) were the most frequently coded types of recipes

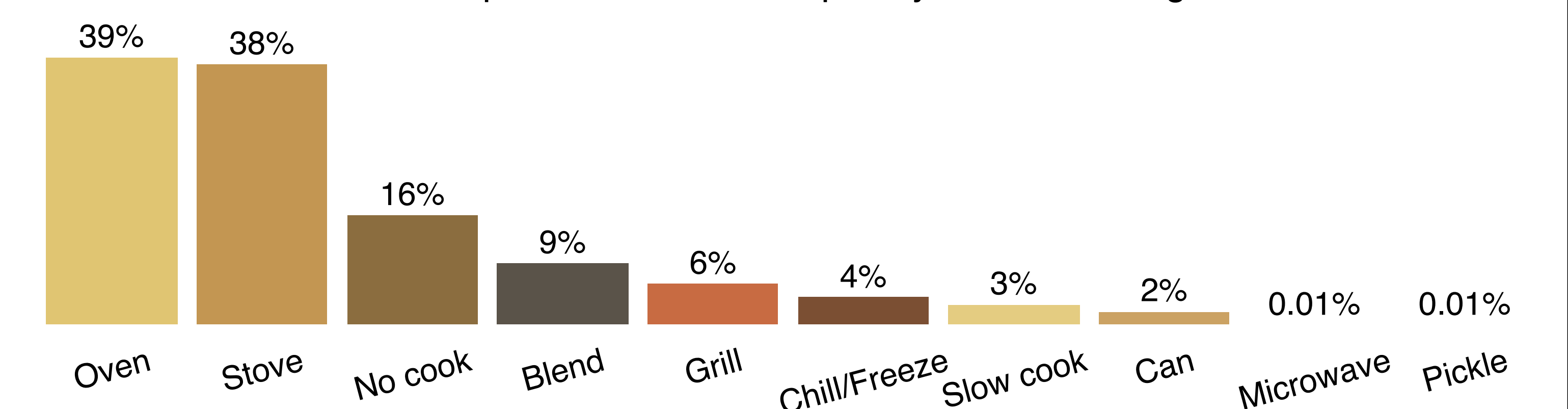


### Produce & Added sugars

- Any vegetables were included in 47% of all recipes and were more frequently in mixed dishes ( $p < .001$ ) and proteins ( $p < .01$ )
- Any fruits were included in 27% of all recipes and were more frequently in beverages ( $p = .01$ )
- Added sugars were included in 53% of all recipes and were more frequently in dessert ( $p < .001$ ) and grain recipes ( $p = .01$ )

### Cooking methods

- Oven-based and stovetop were the most frequently coded cooking methods



## Conclusions

- Recipes on food blogs may promote obesogenic dietary patterns among readers, even while promoting cooking at home
- Decreasing the amount of added sugars and increasing the amount of vegetables and fruits included in recipes shared by influential mom food bloggers may be an intervention opportunity for childhood obesity prevention
- Bloggers model a range of cooking skills in their recipes, which may empower readers to cook more at home

### Strengths & Limitations

- Research on food blogs focused on child feeding is important given the potential reach and uptake of this content
- Future studies should use a random and larger sample of blogs and blog posts as purposive sampling is non-probabilistic may not yield representative results