Children’s Menu Assessment tool (CMA): What is it, how to use it, and how the CMA is being used to track the impacts of toy giveaway legislation in California

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Healthy Restaurant Options for Children

Children’s dietary intake influenced by the availability of healthy restaurant options for them
Many restaurants have menus specifically targeted towards children
Availability of healthy options limited (O’Donnell et al., 2008)
Problem: Providing a clear picture of the restaurant food environment offered to children and evaluating policy changes related to children’s menus

Overview of Presentation

- Development of the 29-item Children’s Menu Assessment (CMA)
  - by expanding on the Nutrition Environment Measures Survey-Restaurant’s (NEMS-R) (Saelens et al., 2007) 13-item children’s menu subsection
- How to use and score the CMA
- An example of how the CMA is being used to track the impact of California’s toy giveaway legislation

Extension of the 13-item NEMS-R: the CMA

- Greater quantification: healthy entrée salads, proportion of healthy entrees, whole grains, healthy desserts
- Assessment of soda
- Expanded assessment of side dishes (vegetables, fruit, dairy)
- Food marketing/toys

High Inter-Rater and Test-Retest Reliability and Quick Completion

- Interrater reliability: percent agreement (categorical data) was 94% and Spearman correlation (ordinal data) was 0.93
- Test-retest reliability: percent agreement was 91% and Spearman correlation was 0.96
- CMA completion time: M=14 minutes, 56 seconds±10 minutes, 21 seconds.

Enumerating Entrees

Definitions of “Healthier Entrees”

| Burden of proof: identification that an item is healthy or prepared in a more healthy way |
| Entrees: “Grilled”, “baked” or “broiled” items (with the exception of “grilled” sandwiches) without a “cheese”, “butter” or cream sauce |
| Not anything fried or with red meat, unless specified the meat is lower-fat or calories |
| Sandwich, if it is “modified” to be made with whole wheat bread, lower-calorie/fat condiments or all fruit preserves |

Healthy Entrée Salads

| Of sufficient size and contains at least one protein source |
| Price similar |
| No fried meat |
| Salad bar, if promoted for children and price is similar to other entrees |
| Vegetable plate if it is possible for the child to select all healthier items for this plate |
**Enumerating Grains**

**Childrens Menu**

- Pow Wow Pizza
- Individual Cheese Pizza $5
- Big Hit Burger
  - With Go Fast Fries $6, add $.50 for cheese
- Twin Tip Hot Dog
  - With Go Fast Fries $5
- Big Mountain Mac and Cheese $6
- Top of the Mountain Tenders
  - With Go Fast Fries $6
- Rail Slide Pasta
  - Choice of Penne or Linguini with choice of home made Marinara or Butter $6
- Go for it Grilled Cheese
  - With Go Fast Fries, Choice of White or Wheat Bread
  - Choice of American, Swiss, or Cheddar Cheese $5

**Enumerating Grains**

**Beverages**
Instructions for Beverage
- Again, burden of proof to identify that the beverages are healthier choices.
- Assess availability of 100% fruit juice and milk on the whole menu, but restrict assessment of soda to the children’s menu.
- Low fat milk: skim or 1% milk.
- Sugar sweetened beverages: soft drinks, sports drinks, fruit drinks and punches, sweetened tea, and other sweetened beverages.

Instructions for Side Dishes
- Only assess side dishes listed on the children’s menu.
- The side dishes can be in a combination meal or be available separately.
- Non-fried vegetables: including any vegetable (including salads and vegetables with dressing on the side) plus beans.
  - Mayonnaise or oil-based sides (e.g., coleslaw, potato salad, etc.) and other sides where oil, cream or butter is typically added to the preparation (e.g., mashed potatoes, stuffing or dressing, potato chips) are not considered healthy.
Side Dishes Assessment

Instructions for Desserts
- Only assess desserts on the children’s menu
- Healthy desserts (e.g., fruit without added sugar or unhealthy topping, lower calorie/fat/sugar dairy product)
- If a dessert is not identified, counted as an unhealthy dessert

Desserts

<table>
<thead>
<tr>
<th>No.</th>
<th>Dessert</th>
<th>Healthy Dessert?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ice cream sundae</td>
<td>Y</td>
</tr>
<tr>
<td>2</td>
<td>Y</td>
<td>NA</td>
</tr>
</tbody>
</table>

Transcript:

**KIDS STARTING LINEUP**

Bobby Burger w/ Fries $3.99
Wing Ding w/ Fries $4.49
Chicken Tender Bites w/ Fries $4.49
Corn Dog w/ Fries $3.99
Grilled Cheese w/ Fries $2.89
Kraft Mac and Cheese w/ Fruit cup $3.99
Gooey Fries $3.99

**Side Dishes Assessment**

1. Are non-fried vegetables or salad offered as a side dish?
   - Yes
   - No
   - Can't tell
2. Are fruits offered as a side dish?
   - Yes
   - No
   - Can't tell
3. Does the menu specify that the fruit is a without added sugar?
   - Yes
   - No
   - Can't tell
4. Are dairy products (e.g., cottage cheese, yogurt) offered as a side dish?
   - Yes
   - No
   - Can't tell
5. Does the menu specify that any of the dairy products are low fat?
   - Yes
   - No
   - Can't tell
6. If any healthy side is available, does the menu indicate that a non-fried vegetable, fruit, or without added sugar or a dairy product (regular or low fat) can be substituted for an assigned side of no extra charge?
   - Yes
   - No
   - Can't tell

**Desserts**

**Children’s Menu**

$6.95 (ages 2-10)
- Choice of Beverage: Soda, Juice or Milk
- Choice of Entrée:
  - Spaghetti with Meat Sauce
  - Hamburger/ Cheeseburger
  - Chicken Tenders
  - Grilled Cheese Sandwich
  - Hot Dog
- Ice Cream Sundae

**Instructions for Desserts**
- Only assess desserts on the children’s menu
- Healthy desserts (e.g., fruit without added sugar or unhealthy topping, lower calorie/fat/sugar dairy product)
- If a dessert is not identified, counted as an unhealthy dessert
- Salad dressing: assess if the children’s menu includes either an entrée salad or a side dish salad
- refer to the general menu
- Branded marketing – logos or characters that are desired by children and commonly seen in popular culture

CMA Scoring
- 21 scored items and 8 descriptive items
- Provides information on the availability of healthy options
- Possible scores: -5 to 21
- Points (0, 1, or 2): based on proportion of identified healthier items
- -1 point: soda, free refills on sugar-sweetened beverages, inclusion of an unhealthy dessert in a children’s meal, and use of toys or branded marketing

Scoring Practice