

Comments on the Preliminary Proposed Nutrition Principles  
to Guide Industry Self-Regulatory Efforts: Questions 2 and 14\*

by

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## **Introduction**

The Interagency Working Group on Food Marketing to Children (Working Group) has issued a request for comments to proposed nutrition principles. These principles are to be used as a guide for industry self-regulation to improve the nutritional profile of foods marketed to children. Recognizing the current obesity crisis in the United States and the current trend toward restricting marketing of unhealthful foods to children, we analyze the effects of self-regulation and proposed industry guidelines for the Ready-to-Eat Breakfast Cereal food category.

We examine the proposed nutrition principles for advertised products with specific brand level data from 2006-2008. National advertising data is from Nielsen Media Research for national, cable, and syndicated television media. Nutrition profiles for each advertised product are from the USDA's Nutrient Database for Standard Reference, SR23. Using this information we present comments on questions 2 and 14. In a separate document we also provide comments on questions 18 and 26.

*Question 2: The Working Group recognizes that companies often engage in brand advertising and marketing, without reference to a specific food product in the brand line. How should the nutrition principles be adapted to accommodate advertising and marketing of a general brand or an entire product line as opposed to specific food products or menu items?*

The Working Group recognizes that companies often engage in brand advertising and marketing, without reference to a specific food product in the brand line. The question is how should the nutrition principles be adapted to accommodate advertising and marketing of a general brand or an entire product line as opposed to a specific food product?

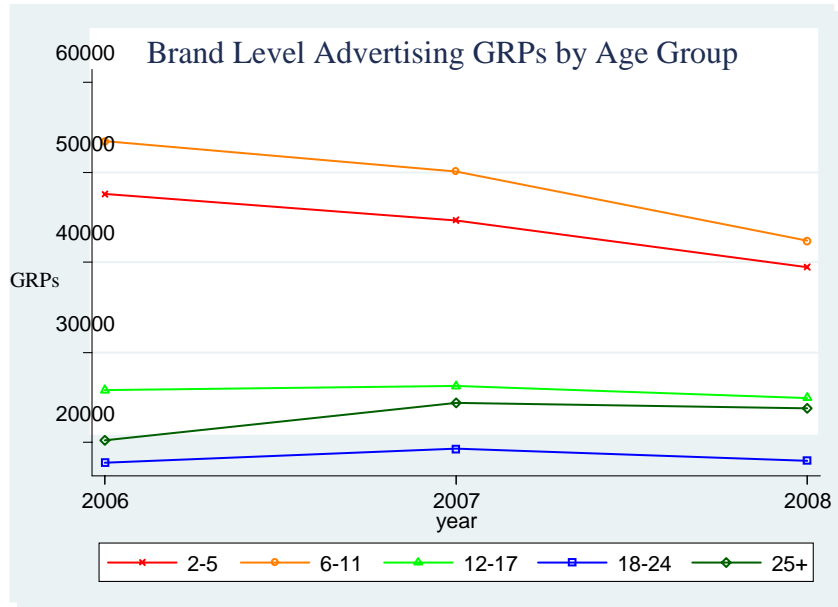
Based on an examination of advertising exposure data for the ready-to-eat cereal industry we find that firm and brand-group advertising, as opposed to brand specific advertising, has become increasingly prevalent in recent years, especially with advertising to children. Therefore,

we recommend that the nutrition principles provide guidelines for firm and brand-group advertising. Our evidence for this conclusion is below. Additionally, the nutrition principles need to encourage firms to examine the composition of the products being advertised as a group. One such method of examining this composition would be based on a percentage of the unhealthful brands in a product line relative to a specific threshold, where exceeding the threshold restricts advertising of this product line.

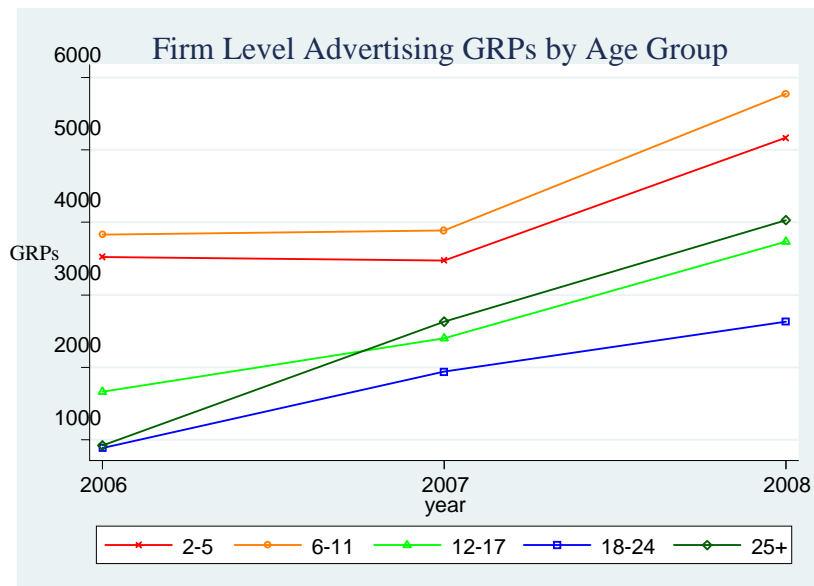
Using Nielsen Media Research advertising data we evaluate brand, group and firm level advertising exposure using Gross Rating Points (GRPs) for the following five age groups: audiences aged 2-5, 6-11, 12-17, 18-25, and over 25. GRPs are an impact measure of advertising and are usually the basis of advertising contracts. GRPs are calculated as the percentage of a target audience that is reached by an advertisement times the frequency the audience sees the advertisement. We categorize advertising according to the focus of the advertisement (i.e. the brand or the firm) resulting in four types of advertising:

- Type 1. Firm level advertising (e.g., “Kellogg’s cereal”)
- Type 2. Brand-group advertising with greater product differentiation (e.g., General Mills Cheerios is a brand-group which includes the brand products Honey Nut Cheerios, Multigrain Cheerios, Fruity Cheerios, etc.).
- Type 3. Brand-group advertising with smaller product differentiation (e.g., Kellogg’s Froot Loops has a group of products with a shared brand name but different flavors or shapes).
- Type 4. Brand level advertising (e.g., the individual product General Mills Fruity Cheerios or the individual product General Mills Honey Nut Cheerios).

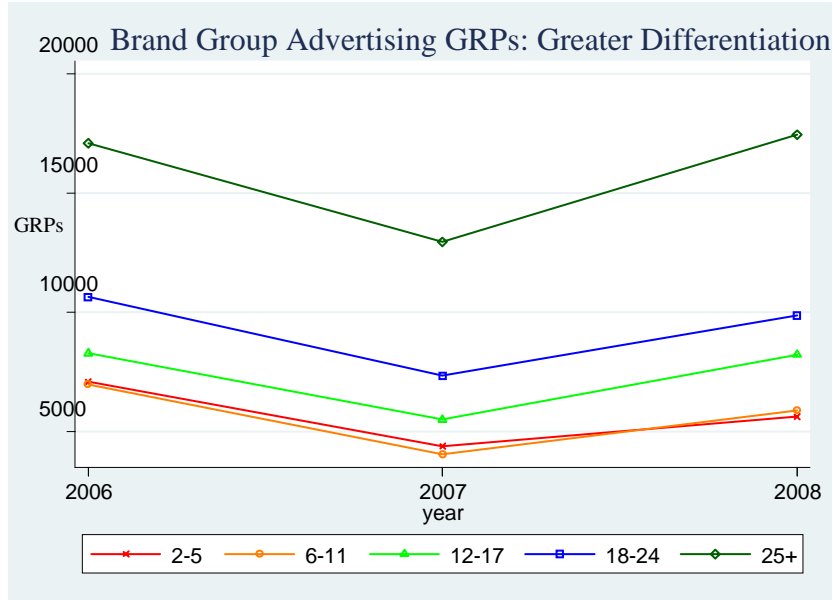
In Figure 1 to Figure 4, we depict the aggregate annual GRPs for the cereal industry by age group. Overall these four figures show that brand advertising (Type 4) dominates all other types of advertising during our data period with a much larger overall number of GRPs.



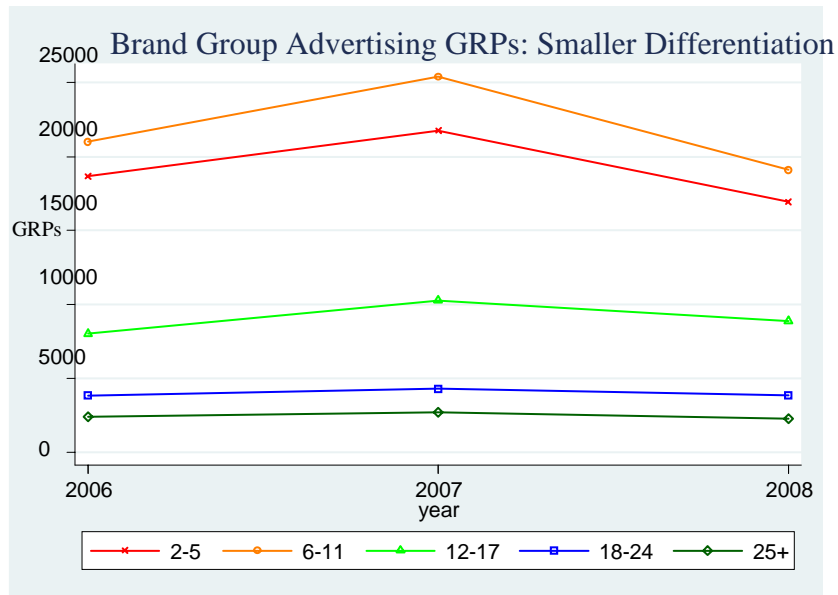
**Figure 1. Brand Level (Type 4) Advertising GRPs by Age Group**



**Figure 2. Firm Level (Type 1) Advertising GRPs by Age Group**



**Figure 3. Brand-Group (Type 2) Advertising GRPs: Greater Differentiation**



**Figure 4. Brand-Group (Type 3) Advertising GRPs: Smaller Differentiation**

Looking further at each individual figure, we can identify where trends exist with the different types of advertising. Figure 1 shows that brand advertising (Type 4) has been declining over the three year period, especially advertising GRPs to children. Alternatively, firm level

advertising (Type 1), shown in Figure 2, has been increasing during our data period. Noticeably, for both brand level and firm level advertising, GRPs of children with an audience age of 2-5 and 6-11 are consistently much higher than the GRPs of other age groups. It seems that although brand level advertising is reaching fewer children, there is an increase in firm level advertising that is reaching children.

Figures 3 and 4 show that brand-group advertising (Type 2 and 3) also consists of an important part of total advertising exposure to children. Specifically, in 2008, brand-group advertising (including both Type 2 and Type 3) accounts for 34 percent of total GRP exposure to children 2-5 and children 6-11. Therefore, if a firm chooses not to advertise a particular brand that is deemed less healthful for children, the brand may still gain exposure to children audiences from firm (Type 1) or brand-group advertising (Type 2 and Type 3).

While we have identified a trend of reduced brand advertising (Type 4) and an increase in firm advertising (Type 1), there is no apparent trend (increase or decrease) for brand-group advertising (Type 2 and 3). We have, however, identified the overall importance of brand-group and firm advertising (Type 1, 2, and 3). This suggests that the Working Group may need to also consider these three categories of advertising.

An important question is the relative effectiveness of these different types of advertising at converting advertising to purchases. That is, brand advertising may have more of an impact on purchases than firm advertising. That said, given that firm (Type 1) and brand-group advertising (Type 2 and 3) represent a 42 percent share of advertising, we believe that firm and brand-group advertising should also be restricted according to the nutrition principles. We recommend restrictions based on the composition of the group of products being advertised. For example, a generic Cheerios commercial could be evaluated based on the different Cheerio

products in that particular brand-group. Firm level advertising could be evaluated based on the composition of all of the products represented by the firm. One effective mechanism for evaluating a groups composition is to compute the percentage of the groups sales volume that comes from the unhealthful products. If the percentage exceeds a certain threshold, then advertising to children should be restricted.

*Question 14: Under Principle B, the proposed nutrient targets for individual foods are generally tied to the RACC. The proposal recommends that individual foods with a small RACC (30 grams or less), meet the targets for saturated fat, trans fat, added sugars, and sodium per 50 grams (with the exception of the interim sodium value of 210 milligrams per serving). What are the implications of this approach in particular for smaller serving foods like cereals or for foods marketed in smaller children's portions? What would be the advantages and disadvantages of tying Principle B recommendations to labeled serving instead of the RACC?*

In evaluating cereals for this response, it is necessary to consider how the proposed nutrient targets are tied to the Reference Amounts Customarily Consumed Per Eating Occasion (RACC) instead of a labeled serving.

As seen in Table 1, there exists three different RACC sizes for ready-to-eat cereals. The smallest RACC is 15 grams for a cereal weighing less than 20 grams per cup, such as a plain puffed cereal. The next RACC size is 30 grams, which consists of cereals weighing 20 grams or more but less than 43 grams per cup. High fiber cereals containing 28 grams or more of fiber per 100 grams are also included in this RACC. An example of a cereal in the 30 grams RACC is General Mills Cheerios. The third RACC size is the 55 gram RACC. This RACC is for cereals weighing 43 grams or more per cup and biscuit type cereals. Post Honey Bunches of Oats is an example of a cereal that falls in the 55 gram RACC category.

**Table 1. RACC Categories for Ready-to-Eat Cereal**

<b>RACC Size</b>	<b>Description</b>
15 g	RTE Cereal weighing less than 20 g per cup (e.g. Plain Puffed Cereal)
30 g	RTE Cereal weighing 20 g or more but less than 43 g per cup or high fiber cereals containing 28 g or more of fiber per 100 g (e.g. General Mills Cheerios)
55 g	RTE Cereal weighing 43 g or more per cup or biscuit type (e.g. Post Honey Bunches of Oats Cereal)

The proposed Principle B nutrition standards have identified specific target values for saturated fat, trans fat, added sugars, and sodium. Table 2 outlines these standards. It is important to note that the proposed target values are only applicable for RACC servings greater than 30 grams. A small RACC (30 grams or less) must be considered at the per 50 gram serving size. For cereals, this means that the 15 gram and 30 gram RACC must be evaluated at a 50 gram serving size. This approach for cereals, and other foods with either multiple or a small RACC creates a complicated measure when determining which foods are allowed to be marketed to children. For smaller RACC foods it becomes necessary to recalculate the proposed nutrient targets. We show this recalculation in Table 3.

**Table 2. Principle B Nutrient Targets with Negative Impact on Health or Weight**

<b>Nutrient</b>	<b>Restriction</b>
Saturated Fat	1 g or less per RACC* and 15% or less of calories
Trans Fat	0 g per RACC*
Added Sugars	No more than 13 g per RACC*
Sodium	No more than 210 mg per serving^

\* For foods with a small RACC (30 g or less), the recommendations refer to the amount per 50 g of food.

^ Ultimate goal is 140 mg per RACC to be reached by 2021.

As one can see from Table 3, a cereal in the 15 gram RACC can contain no more than 0.3 grams of saturated fat and 4 grams of added sugar. A 30 gram RACC cereal can contain no more than 0.6 grams of saturated fat and 8 grams of added sugar, whereas a cereal in the 55 gram



RACC is at the general proposed standard of 1 gram or less of saturated fat and no more than 13 grams of added sugar. Sodium is based on a per labeled serving rather than the RACC. As a result, the target value for sodium is not affected by the different RACC categories. To determine if a cereal product meets the proposed nutrient standards as shown in Table 3, the labeled serving on the product must be converted to a 15, 30, or 55 gram weight and compared to these targets. While these transformations are not complex, it does add a level of complication in interpreting the proposed targets when different RACCs apply to different brands of a single product category.

**Table 3. Principle B Nutrient Targets Converted to RACC Categories for Cereal**

<b>RACC Size</b>	<b>Nutrient</b>	<b>Calculated Restriction</b>
15 g	Saturated Fat	0.3 g or less and 15% or less of calories
	Trans Fat	0 g
	Added Sugars	No more than 4 g
	Sodium	No more than 210 mg per serving (ultimate goal: 42 mg per RACC)
30 g	Saturated Fat	0.6 g or less and 15% or less of calories
	Trans Fat	0 g
	Added Sugars	No more than 8 g
	Sodium	No more than 210 mg per serving (ultimate goal: 84 mg per RACC)
55 g	Saturated Fat	1 g or less and 15% or less of calories
	Trans Fat	0 g
	Added Sugars	No more than 13 g
	Sodium	No more than 210 mg per serving (ultimate goal: 140 mg per RACC)

An alternative approach for evaluating the proposed nutrient targets is to tie these recommendations to labeled servings instead of the RACC. This is already the case with sodium, which for example is no more than 210 mg per serving. While this has the distinct advantage of being significantly easier to implement, it does dramatically affect the implications of the proposed targets.

Using the RACC implementation we find that 73.3 percent of the cereal products that advertised from 2006-2008 would be restricted from marketing to children. Alternatively, if one were to apply the Principle B standards on a per labeled serving measure the percentage of affected advertised products drops to 30.7 percent. The reason for this large drop in restricted products is due to a single common standard for a wide variety of serving sizes. For example, a target of no more than 14 grams of added sugar is a large amount of sugar for a common serving size of a sugared cereal product (28-31 grams on the label corresponds to a 30 gram RACC). If one were to apply the proposed targets to labeled serving sizes it becomes necessary to create a conversion criteria so that small serving sizes have a proportionally smaller target value rather than a large target value that is considerably less restrictive.

### **Additional Perspectives**

This response evaluates the proposed nutrition principles and suggests some refinements to the recommendations. Another important consideration is the behavior of the firms in reaction to advertising regulations. Following a restriction on advertising, firms may change their behavior. We have already identified that firms may switch from brand specific advertising to group or company name advertising strategies. Alternatively, firms may reduce their prices or invest in other innovative marketing strategies. Another possible outcome that has not been adequately discussed in the literature is that firms may choose to reformulate their products to meet the standards for advertising. The Working Group has recognized that reformulation is a possibility. Such reformulation would ultimately benefit the consumer as long as it does not spur a marginal increase in price greater than the marginal health gain from better nutritional quality. While this specific response does not address reformulation, the authors are currently working on a project

that examines the history of reformulation of cereal products and advertising in the United States. This forthcoming research also expands upon the discussion of the questions addressed in this response. We expect this research to be completed during the Fall of 2011; and such will be available from the authors upon completion.