

Comments on the Preliminary Proposed Nutrition Principles
to Guide Industry Self-Regulatory Efforts: Questions 18 and 26*

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 18 and 26. In a separate document we also provide comments on questions 2 and 14.

Question 18: What impact will the voluntary principles as proposed have on the nutritional quality of foods marketed to children if industry fully adopts them? Specifically, what percentage of foods currently marketed to children would not meet the proposed principles and to what extent could such foods be reformulated to do so?

The Working Group is interested in determining what percentage of foods currently marketed to children would not meet the proposed principles and to what extent could such foods be reformulated to do so. We compiled a list of all breakfast cereals that used brand specific advertising on television from 2006-2008. This does not include firm-level advertising or brand-

group advertising.¹ Based on the nutrient data, we calculate which breakfast cereals would not have met the principle guidelines proposed by the Working Group.

There were 101 products advertised on television from 2006-2008 (Table 1). As can be seen, over 73.3 percent of cereals advertised during our sample period did not meet the Principle B nutritional guidelines and 53.5 percent of the cereals did not meet the guidelines for a single nutrient.

Table 1. Advertised cereal products that did not meet the Principle B guidelines: 2006-2008

	count	as a percentage of total
Number of advertised products (2006-2008)	101	--
Number of products that would not meet the Principle B guidelines	74	73.3%
Number of products that would not meet the Principle B guidelines for one single nutrient	54	53.5%
Due to sodium restriction only	5	5.0%
Due to sugar restriction only	46	45.5%
Due to fat restriction only	3	3.0%
Number of products that would not meet the Principle B guidelines for multiple nutrients	20	19.8%
Fat and Sugar	14	13.9%
Fat and Sodium	2	2.0%
Sugar and Sodium	3	3.0%
Fat, sugar and Sodium	1	1.0%

source: calculated using AC Nielsen advertising data

The majority of the cereals failed to meet the restriction on sugar content alone (45.5 percent). Further, 63.4 percent failed to meet the sugar restriction alone or in addition to one other

¹ Brand-Group advertising is advertising of a group of products that share a brand name but the products in the group have some degree of differentiation. An example is advertising for General Mills Cheerios which includes Honey Nut Cheerios, Multi-Grain Cheerios, Fruity Cheerios, etc.

restriction². The large share of products that fail to meet the guidelines for sugar indicates there might be potential for reformulation to meet the proposed principles.

The Working Group identifies advertising targeted to children based on the audience share of children and adolescents (30 percent of 2-11 year olds and 20 percent of 12-17 year olds). The products we identify that did not meet the nutritional guidelines (Table 1) would only be restricted if they failed to meet these Working Groups advertising standards. Some of these products may not have had advertising targeted to children or adolescents. As such, our estimate of restricted products represents an upper bound estimate of products that would be restricted under the Working Group guidelines.

Question 26: For measured media, such as television, radio, print, and the Internet, the Working Group proposes using audience percentages as one of the criteria for determining whether a specific program, publication, or web site is targeted toward children or adolescents. What are the advantages and disadvantages of this approach? Are there alternative approaches that would provide a more accurate and appropriate measure of whether these media are targeted toward children or adolescents?

The Working Group identifies television advertising targeted to children as advertising that has a relevant audience share of 30 percent of 2-11 year olds and 20 percent of 12-17 year olds. The question is whether there are alternative approaches that would provide a more accurate and appropriate measure of whether these media are targeted toward children or adolescents?

One metric used to evaluate the reach of advertising is Gross Ratings Points (GRPs). GRPs measure the percentage of a target audience that is reached by an advertisement times the frequency the audience sees the advertisement. GRPs do not identify the target audience for a

² This is calculated based on 45.5 percent due to sugar only + 13.9 percent due to fat and sugar + 3.0 percent due to sugar and sodium + 1.0 percent due to fat, sodium and sugar

specific advertisement. Instead, GRPs provide an aggregate measure of the effectiveness of all advertisements for a particular product, regardless of the television program or audience that is targeted.

As might be expected, even though a product advertisement does not target children or adolescents, those audiences may still view product advertisements when watching television shows with a larger adult audience. As an example, The Coca-Cola company does not target child audiences with their advertising (see The Coca-Cola Company's advertising pledge at <http://www.bbb.org/us/children-food-beverage-advertising-initiative/>; taken on June 1, 2011), yet Coca-Cola has consistent GRPs for children and adolescents.

To provide a sense of how breakfast cereals are advertised, we calculate the average GRPs for breakfast cereals for five age groups using the Nielsen Media Research advertising data. We separate breakfast cereals into two groups: those that would meet the proposed guidelines and those that would not (Table 2). As can be seen, the average GRPs for cereals that meet the nutritional guidelines is far less than that for cereals that do not meet the guidelines across all age categories except 25 and older. Clearly children and adolescents are exposed to more advertising for products that do not meet the nutritional guidelines; and the exposure is greatest for children 2-11.

Importantly, the large number of GRPs for children and adolescents does not result strictly from breakfast cereal manufacturers targeting children or adolescent audiences with their advertisements. Considering only measures of target audience fails to identify the extent that advertising reaches children. Children and adolescents are exposed to television advertising even if it is not directly targeted to them. Using an alternative measure, such as total GRPs, might better regulate advertising of unhealthful foods.

Table 2. Average GRPs for breakfast cereals that do and do not meet the guidelines, by Age Group

Year	Age Group	Average GRPs of products that meet guidelines	Average GRPs of products that do not meet guidelines
		n = 27	n = 74
2006	ages 2-5	102.112	806.161
	ages 6-11	108.445	927.460
	ages 12-17	128.883	385.005
	ages 18-24	140.408	194.183
	ages 25+	235.618	166.814
2007	ages 2-5	110.888	805.759
	ages 6-11	121.869	931.162
	ages 12-17	173.817	399.430
	ages 18-24	215.463	197.972
	ages 25+	369.755	180.115
2008	ages 2-5	89.833	699.687
	ages 6-11	107.970	773.595
	ages 12-17	163.140	380.302
	ages 18-24	186.036	198.225
	ages 25+	342.305	182.759

source: calculated using AC Nielsen advertising data

We further break down advertising GRPs by products that fail to meet the guidelines for only one of the nutrients: saturated fat, sodium, or sugar (Table 3). Looking at the GRPs, it is clear that children and adolescents are exposed to far more television advertisements for cereals that are high in sugar content than any other category. Comparing the GRPs for cereals with high sugar content (Table 3) to the cereals that meet the proposed guidelines (Table 2) provides an even starker comparison of the type of advertising that is reaching children and adolescents.

Although we do not necessarily advocate the use of GRPs over audience percentages, we consider it informative to evaluate the extent of television advertising using all available measures. The use of GRPs is one alternative that should be given additional consideration.

Table 3. Average GRPs for breakfast cereals that do and do not meet the guidelines, by Age Group and Restricted Nutrient

Year	Age Group	Average GRPs of products restricted due to sugar only n = 46	Average GRPs of products restricted due to fat only n = 3	Average GRPs of products restricted due to sodium only n = 5
2006	ages 2-5	1008.474	0.000	18.661
	ages 6-11	1158.800	0.000	16.788
	ages 12-17	455.920	0.000	30.398
	ages 18-24	207.874	0.000	42.002
	ages 25+	152.940	0.000	65.296
2007	ages 2-5	1009.240	75.121	70.673
	ages 6-11	1159.020	93.346	80.888
	ages 12-17	477.185	115.624	112.734
	ages 18-24	212.103	138.556	143.890
	ages 25+	160.788	230.083	212.796
2008	ages 2-5	922.098	26.312	166.801
	ages 6-11	1015.736	27.324	198.464
	ages 12-17	469.048	45.252	298.613
	ages 18-24	214.428	69.251	342.834
	ages 25+	158.549	117.621	618.353

source: calculated using AC Nielsen advertising data

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.