

Marketing Poor Health to Kids

Editorial Staff

According to a recent report released by the Federal Trade Commission, advertising food products to children (an estimated \$1.6 billion business annually) is all about integrated ad campaigns that combine traditional media, such as television, with packaging, in-store advertising, sweepstakes and the Internet. The executive summary of the report provided one example of this "cross-promotional" marketing:

"Cross-promotions were widespread in 2006, tying foods and beverages in all of the covered categories to about 80 movies, television shows, and animated characters that appeal primarily to youth. *Superman Returns* and *Pirates of the Caribbean* were prominent that year - promoting QSR [quick-service restaurants] children's meals, frozen waffles, fruit and fruit snacks, breakfast cereals, popcorn, lunch kits, candy, carbonated and non-carbonated drinks, pasta, snack chips, and milk. *Superman* and the *Pirates* characters appeared in ads on television, in movie theaters, on the Internet, and on packaging and in-store displays. Companies created special limited-edition snacks, cereals, frozen waffles and candies based on the movies. Children or adolescents could go online to play 'advergames' related to the characters and their stories and to enter contests or sweepstakes using special codes obtained from food packages or beverage containers. Prizes ranged from video games to trips to Disney parks to a \$1,000,000 reward for the 'capture' of *Superman* villain, Lex Luthor. Related premiums included skull-shaped bowls, bandanas, strobe light key chains, movie posters, outdoor flying toys, *Superman* action figures, activity books, and digital downloads."

The biggest category of marketing expenditure for the 44 companies surveyed, \$492 million, was carbonated-drink advertising. By comparison, the Dairy Association's "Got Milk?" ads cost approximately \$67 million in 2006. In terms of where the money is spent, the report noted, "Television advertising still dominates the landscape of marketing techniques used to promote foods and beverages to youth; companies reported spending \$745 million, or 46% of all reported youth marketing expenditures, on this medium. More than 50% of the television advertising was directed to children under 12, with breakfast cereals and restaurant food accounting for more than half of that advertising. Carbonated beverages and restaurant food dominated adolescent-directed television advertising. All told, traditional 'measured media' (television, radio, and print) accounted for \$853 million, or 53% of the reported youth-directed marketing expenditures.

The report recommends various steps be taken to improve this situation, including mandating "meaningful, nutrition-based standards for marketing products" to children under age 12; improving the nutritional profiles of products marketed to children; stopping in-school promotion of products that fall below accepted nutritional standards; and urging media and entertainment companies to restrict character licensing to healthier foods/beverages marketed to children. To learn more, visit www.ftc.gov/opa/2008/07/foodmktng/shtm.

References

1. J. Bolufer. Salivary corticosteroids in the study of adrenal function. *Clinica Chimica Acta* 1989;183:217-226.
2. B. Kahn, et al. Salivary cortisol: a practical method for evaluation of adrenal function.

Biological Psychiatry 1988;23:335-349.

3. Davis SN, Tate D. Effects of morning hypoglycemia on neuroendocrine and metabolic responses to subsequent afternoon hypoglycemia in normal man. *J Clin Endocrinol Metab* 2001 May; 86(5): 2043-50.
4. Davis SN, et al. Effects of differing antecedent hypoglycemia on subsequent counter regulation in normal humans. *Diabetes* 1997 Aug;46(8):1328-35.
5. Matyka, Crowen, et al. Conterregulation during spontaneous nocturnal hypoglycemia in prepubertal children with type I diabetes. *Diabetes Care* 1999 Jul;22(7):114-50.
6. Bendston, et al. Nocturnal versus diurnal hormonal counter regulation to hypoglycemia in type I diabetic patients. *Acta Endocrinol* 1993 Feb;128(2):109-15.
7. Garrel, et al. Decreased hypoglycemia effect of insulin at night in insulin-dependent diabetes mellitus and healthy subjects. *J Clin Endocrinol Metab* 1992 Jul;75(1):106-9.
8. Burge, et al. Effect of short-term glucose control on glycemic thresholds for epinephrine and hypoglycemic symptoms. *J Clin Endocrinol Metab* 2001 Nov;86(11):5471-8.
9. Scott, Scandart. Nocturnal cortisol release during hypoglycemia in diabetes. *Diabetes Care* 1981 Sept-Oct; 4(5):514-8.
10. McGregor, et al. Elevated endogenous cortisol reduces autonomic neuroendocrine and symptom response to subsequent hypoglycemia. *Am J Physiol Endocrinol Metab* 2002 Apr;282(4):E770-7.
11. Davis, et al. Role of cortisol in pathogenesis of deficient counter regulation after antecedent hypoglycemia in normal humans. *J Clin Invest* 1996 Aug 1;98(3):680-91.
12. Davis SN, Shavers C, et al. Prevention of an increase in plasma cortisol during hypoglycemia preserves subsequent count regulatory responses. *J Clin Invest* 1997 Jul 15;100(2):429-38.
13. Avakia EV, Evonuk E. Effects of Pannax ginseng extract on tissue glycogen and adrenal cholesterol depletion during prolonged exercise. *Planta Medica* 1979;36:43-48.
14. Fulder SJ. Ginseng and the hypothalamic-pituitary control of stress. *Am J Chinese Med* 1981;9(2):112-118.
15. Filaretov AA, et al. Effects of adaptagens on the activity of the pituitary-adrenocortical system in rats. *Biull Eksp Biol Med* 1986;101:573-574.
16. Wichtl MW. *Herbal Drugs and Phytopharmaceuticals*. Ed. N.M. Bisset. Stuttgart: Medpharm Scientific Publishers.
17. Wagner H, et al. Plant adaptagens. *Phytomedicine* 1994;1:63-76.
18. Kapoor LDL. *Handbook of Ayurvedic Medicinal Plants*. CRC Press: NY, 1990 (337-338).
19. Wagner H, et al. Plant adaptagens. *Phytomedicine* 1994;1:63-76.
20. Mungantiwar AA, Nair AM, Shinde UA, Saraf MN. Effect of stress on plasma and adrenal cortisol levels and immune responsiveness in rats: modulation by alkaloidal fraction of Boerhaavia difuasa. *Fitoterapia* 1997;6:498-500.
21. Kosaka C, Okdio M, Keneyuki, et al. Action of panathine on the adrenal cortex of hypophysectomized rats. *Horumon to Rinsho* 1973;21:517-525.
22. Onuki M, Hoshino H. Effects of panathine on the adrenocortical function. Experimental results using rabbits. *Horumon To Rinsho* 1970;18:601-605.
23. Onuki M, Suzawa A. Effect of panathine on the function of the adrenal cortex. Clinical experience using pantethine in cases under steroid hormone treatment. *Horumon To Rhinsho* 1970;18:937-940.
24. Anderson RA, Polansky MM, Bryden NA, Canary JJ. Supplemental-chromium effects on glucose, insulin, glucagon, and urinary chromium losses in subjects consuming controlled low-chromium diets. *Am J Clin Nutr* 1991;54:909-916.
25. Cohen N, Halberstam M, Shlimovih P, et al. Oral vanadyl sulfate improves hepatic and peripheral insulin insensitivity in patients with non-insulin dependent diabetes mellitus. *J Clin Invest* 1995;95:2501-2509.
26. Shang H, Osada K, Maebashi M, et al. A high biotin diet improves the impaired glucose tolerance of long-term spontaneously hyperglycemic rats with non-insulin dependent diabetes mellitus. *J Nutr Sci Vitamin* 1996;42:517-526.

27. Jacob S, Henriksen EJ, Schiemann AL, et al. Enhancement of glucose disposal in patients with Type 2 diabetes by alpha-lipoic acid. *Arzneim-Rosch Drug Res* 1995;45(2):872-874.
28. Paolisso G, Sgambato S, Pizza G, et al. Improved insulin response and action by chronic magnesium administration in aged NIDDM subjects. *Diabetes Care* 1989;12;265-269.
29. Maebashi M, Makino Y, Furukawa Y, et al. Therapeutic evaluation of the effect of biotin on hyperglycemia in patients with non-insulin dependent diabetes mellitus. *J Clin Biochem Nutr* 1993;14:211-218.
30. Mingrone G, Greco AV, Capristo E, et al. L-carnitine improves glucose disposal in type 2 diabetic patients. *J Am Coll Nutr* 1999;18:77-82.
31. Winger, et al. Protein content of the evening meal and nocturnal plasma glucose regulation in type-I diabetic subjects. *Diabetes Care* 1993 Dec;16 Suppl 3:71-89.
32. Fruehwals-Schultes B, et al. Adaptation of cognitive function to hypoglycemia in healthy men. *Diabetes Care* 2000 Aug;23(8):1059-66.

FEBRUARY 2009