Use of Olive Oil for the Treatment of Seborrheic Dermatitis in Children

Seborrheic dermatitis is a common complaint brought to pediatricians. Also known as “cradle cap” in infants and “dandruff” in adolescents, the condition is believed to be triggered by Malassezia yeasts. The natural course correlates androgen-driven excess sebum production: spontaneous improvement by age 1 year and reoccurrence with puberty. Treatment of this condition has supported a billion dollar market for over-the-counter treatments, loosely regulated by a Food and Drug Administration monograph.

The Internet provides easy access to several websites that give directions for home treatments. A popular approach is application of oil (olive, vegetable, or mineral), left on for as short as 15 minutes or as long as overnight, followed by brushing to loosen scales, and finally shampooing.

While oil application may be risk free, a potential concern arises when considering a possible Malassezia virulence factor regulated by its metabolic lipid pathways. In vivo, Malassezia digests sebum into saturated and unsaturated fatty acids. Only the saturated molecules are essential while the unsaturated fatty acids are a by-product. Organic oils (such as olive oil) contain both saturated and unsaturated lipids and may be counterproductive to treat a condition whose etiology is linked to Malassezia. In fact, olive oil is a standard in vitro culture media for Malassezia. Saturated fatty acids likely encourage Malassezia overgrowth and excess unsaturated fatty acids may induce inflammation and scaling. As non-digestible oil, mineral oil may provide a triglyceride-free alternative to organic oils.

Based on the evidence currently available, it may be prudent to avoid organic oils, especially olive oil, when treating seborrheic dermatitis or other inflammatory skin diseases triggered by colonizing microflora.

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Can Branding Improve School Lunches?

As school food services outsource more of their food preparation, the processed products they offer to schoolchildren are increasingly branded. There is legitimate concern that branding will make more indulgent foods even more attractive. Conversely, a promising question is whether branding can be used to promote healthier eating. Could branding more dramatically improve the attractiveness of less exciting— but healthier—foods?

Methods. After obtaining institutional review board approval at Cornell University and parental consent, 208 children (99 female) ranging from 8 to 11 years old were recruited from 7 ethnically and economically diverse schools in suburban and rural upstate New York. The study occurred during lunchtime on 5 consecutive days at each location. After selecting their lunch, children were individually offered their usual opportunity to take 1 or both of the last items: an apple and/or cookie.

On the first day of the study, both the apple and the cookie were offered without a sticker, as a pretest control. This enabled us to calibrate a baseline preference for each child. On the last day of the study, both the apple and cookie were offered without a sticker as a posttest
control to help us determine if the presence of stickers on the apple had any carryover.

The remaining 3 days were intervention sessions. On one day, children were offered a choice between an unbranded apple and a cookie that had a sticker of a familiar popular character (i.e., Elmo) on it. On another day, children were offered a choice between an unbranded cookie and an apple that had a sticker of the Elmo icon on it. On another day, their choice was between an unbranded cookie and an apple with a sticker of an unknown character. On each day of the study, each child’s choice was unobtrusively recorded. Children were accustomed to knowing they could not take any lunch food home with them. The majority of children who selected a food ate at least a portion of the food. All analyses were 1-tailed tests and were performed using SPSS (version 16.0; SPSS Inc).

Results. The Elmo sticker led children to nearly double their apple choice compared with the pretest control session ($\chi^2 = 2.355; P = .06$) (Figure). On the other hand, there was no effect of the Elmo icon on the cookie ($\chi^2 = 0.007; P = .99$). Paired-samples $t$ tests for these comparisons were constructed by comparing the choices of children who participated in 2 intervention sessions, although overall sample size was decreased because not all children participated in all sessions.

Consistent with the results of the $\chi^2$ test, children were more likely to choose an apple when the Elmo icon was on it than when there was no icon (pretest control) ($t_{26} = -1.65; P = .05$). On the other hand, there was no effect of the Elmo icon on the cookie ($t_{26} = -1.18; P = .24$). In addition, there was no effect of the unknown character icon on the apple choice compared with the pretest control ($t_{26} = -0.41; P = .68$).

Comment. There is concern over what impact branded products in lunchrooms might have on children’s selection of food. In contrast, this study suggests that the use of branding or appealing branded characters may benefit healthier foods more than indulgent, more highly processed foods. Just as attractive names have been shown to increase the selection of healthier foods in school lunchrooms, brands and cartoon characters can do the same with preliterate children.

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COMMENTS

Methodological Concerns Regarding Cost-effectiveness Analysis of Palivizumab in Florida Medicaid

H ampp and colleagues1 present an economic analysis of palivizumab prophylaxis during the 2004–2005 respiratory syncytial virus (RSV) season in Florida using Medicaid claims data and assert that palivizumab prophylaxis is not cost-effective compared with no prophylaxis. Several important variables were not