Minty Fresh! Absolving Dieters of Their Consumption Sins

Maureen Morrin, Temple University, USA
May Lwin, Nanyang Technological University, Singapore
Melissa Bublitz, University of Wisconsin - Oshkosh, USA
Nguyen Pham, Arizona State University, USA

We investigate the effect of minty flavors on dieters’ food choices. Results show dieters prefer “taboo” food when they contain a minty flavor (study 1). After consuming taboo foods, dieters prefer mint-flavored oral cleansers (study 2). Mint flavoring licenses dieters to re-indulge through a reduction of consumption guilt (study 3).

[to cite]:

[url]:
http://www.acrwebsite.org/volumes/1017270/volumes/v42/NA-42

[copyright notice]:
This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at http://www.copyright.com/.
Minty Fresh! Absolving Dieters of Their Consumption Sins
Nguyen Pham, Arizona State University, USA
Maureen Morrin, Temple University, USA
May O. Lwin, Nanyang Technological University, Singapore
Melissa Bublitz, University of Wisconsin, USA

EXTENDED ABSTRACT

Overeating is associated with a lack of self-control, which runs contrary to accepted norms of moral behavior and social prescriptions. Not surprisingly, feelings of shame and guilt often accompany being overweight or obese (Conradt et al. 2008). Overeating can thus have negative consequences not only for one’s health but also for one’s psyche (Yuker et al. 1995). The stigma associated with obesity motivates many to try to avoid the consumption of energy-dense foods such as chocolate, cookies, and pudding, which they find highly desirable but consider forbidden or taboo (Macht and Dettmer 2006). We propose in the present research that dieters’ sense of self-worth, in particular their sense of moral self-worth, is tied up with their food choices, and that they can “wash away” some of the guilt associated with taboo food choices by consuming mint-flavored products. In this research, we propose that the cooling and refreshing oral perceptions created by mint-flavored oral products will wipe away dieters’ feelings of guilt associated with taboo food consumption in a manner similar to that which has been observed with physical cleansing in the embodied cognition literature.

Consuming products that are mint-flavored (i.e., that contain menthol compounds) creates sensations of coolness when applied to the skin or mucous membranes in the oral/nasal cavities, because menthol activates trigeminal nerve endings (Karashima et. al. 2007). Such temperature-sensitive nerve fibers in the oral/nasal cavity respond to substances that produce hot and cold sensations such as cinnamon and menthol, respectively. Menthol binds to the same neural receptors that are activated by actual declines in body temperature (i.e., TRPA1 and TRPM8; Klein et al. 2010). In this way, the menthol compounds in mint-flavored foods and oral cleansers activate thermoreceptive neurons signaling temperature reduction to the brain. The result of mint exposure in the oral/nasal cavity is typically described by consumers as a highly refreshing experience.

In study 1, we explore whether dieters prefer forbidden foods, such as mint-flavored filling cookie, that contain a mint flavor. We found that dieters were significantly more likely to prefer a cookie that contained a minty-flavored filling rather than a vanilla-flavored filling in a within-subjects tasting format. This was evident in terms of both flavor preference and purchase intent. Participants (n=116) received three ziplock bags, each of which contained a single Oreo cookie with different flavors: chocolate with vanilla creme, chocolate with mint-flavored creme, and vanilla with vanilla creme. Participants on a diet felt significantly more guilty after tasting the cookies than did those not on a diet. A Pearson chi-square test to see whether the likelihood of choosing the mint-flavored cookie (yes, no) varied as a function of dietary status was significant. Dieters were more likely to choose the minty cookie than were non-dieters. Dieters’ favorite cookie was mint, whereas mint was the least favorite among non-dieters. The purchase intent measure for the mint-flavored cookie emerged significant. A follow-up ANOVA shows that dieters were more likely to agree to purchase the product than were non-dieters for the mint-flavored cookie. Neither of the other two cookies exhibited significant differences in purchase intent as a function of dietary status.

In study 2, we examine whether dieters who are made to eat regular (i.e., full fat) chocolate rather than the same chocolate labeled as “low fat” are more likely to subsequently choose a breath strip in a minty (vs. a non-minty) flavor. We expect dieters will exhibit a greater desire for palate cleansing via mint flavored oral products after taboo food consumption. All participants (n=209) received a ziplock bag containing three bite-sized pieces of chocolate. A logistic regression showed that the interaction between whether or not mint was chosen as the breath strip flavor as a function dietary status and chocolate type was significant. Specifically, among non-dieters, there was no effect of chocolate type on the predicted probability of choosing the mint-flavored breath strip. However, among dieters, there was a significant effect of chocolate type, with the probability of choosing the mint-flavored breath strip higher if chocolate labeled regular rather than low-fat had been eaten.

In study 3, we expect that mint-flavored cleansing will morally license the dieter to choose a taboo food. Since non-dieters feel less post-consumption guilt after they indulge, we expect non-dieters’ choices will not exhibit the same pattern of results. Participants (n=374) were provided with either a sample of M&M chocolate or a rice cake to evaluate. Then we asked half of participants to evaluate a toothbrush by brushing their teeth with water in a nearby bathroom. The other half brushed their teeth with minty flavored toothpaste. Finally, participants chose between a pen and a piece of chocolate as a thank you for their participation. We conducted a logistic regression on whether chocolate was the type of gift chosen rather than a pen, as a function of tasting condition, minty condition, dieter and all possible interactions. A three-way interaction was significant. Specifically, dieters who had tasted chocolate rather than a rice cake were less likely to take chocolate as a gift if they had cleansed their mouths with only a toothbrush with water, presumably because the post-consumption guilt they experienced after consuming chocolate had not been counteracted by cleansing with water. When dieters used the minty toothpaste, however, the guilt from the chocolate consumption seems to have been washed away, as is evident in an equal likelihood of choosing chocolate among dieters who had tasted the rice cake instead. This pattern of results was not evident among the non-dieters, for whom the conditional effect of the tasting by cleansing interaction is not significant.

Across three studies, we demonstrate that dieters prefer to consume mint-flavored energy-dense foods and mint-flavored oral cleansers after eating energy-dense foods. Moreover, mint flavoring is shown to license dieters to indulge in taboo food choices through a reduction of consumption guilt. Thus, morally charged implications of food choices emerged here only for dieters, for whom taboo foods such as chocolate have the capacity to create the desire for physical and metaphorical cleansing.

REFERENCES


