Research on food healthiness:
Supporting decisions on public health, package design, and everyday consumption situations

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Abstract

The current dissertation comprises five scientific research contributions dealing with food healthiness in relation to consumer beliefs and the influence of package design with the overarching aim of deriving implications for public health, package designers, and informed consumers.

Food consumption is strongly related to health status, quality of life, and life expectation. Since global changes in dietary patterns have caused a dramatic increase in obesity and nutrition-related diseases, such as diabetes, cancer, and cardiovascular diseases, public health organizations and governments have introduced public health interventions to foster healthy food choices. Despite substantial efforts, these interventions exhibit only limited influences on actual eating behavior. Additionally, due to the complexity of official recommendations and the impact of various informational sources, consumer beliefs on healthy nutrition vary immensely among individuals. As these beliefs play a pivotal role in driving consumer behavior, the first contribution of this dissertation applies Q methodology, combining qualitative and quantitative research techniques in order to explore and holistically describe four major lay theories regarding healthy nutrition among German consumers. Based on these theories, extensive implications for the development and modification of public health campaigns are derived.

Food marketing has been accused of being one of the leading causes of increased energy intake and, consequently, obesity. However, food marketing can also be used as a means to combat the obesity epidemic by increasing the healthiness of a consumer’s diet. The negative and positive influence of marketing practices on food intake has been investigated for advertisements via traditional (media) and modern (online, in-store, events, etc.) channels, branding campaigns, or product placement. Another increasingly applied, yet underresearched marketing tool, which marketers use to communicate with consumers, is product packaging. Recently, the potential of food packaging to positively influence a healthy food choice has attracted researchers’ interest. Contributing to these developments, four contributions of this dissertation focus on implicit and explicit measures to empirically investigate the impact of package design elements on food healthiness perceptions. Chapter 3 establishes basic design-healthiness associations for color lightness (vs. darkness) and shape roundness (vs. angularity) by using an Implicit Association Test (IAT). When applied on food packages, light colors and round shapes also yield explicitly positive health inferences for the respective product. Chapter 4 examines how the design factor weight—as expressed by light-weighted vs. heavy-weighted
colors and typefaces applied on a package design— influences the respective healthiness perception of food. Light-weighted colors and typefaces on a food package are shown to have a positive influence on the healthiness evaluation of the product. These effects were corroborated implicitly via an IAT, but only for individuals high in health promotion focus. Following up on this, Chapter 5 investigates the overall shape of a package design, i.e., its slimness (vs. thickness) and how it subsequently shapes food healthiness perceptions depending on participants’ gender and body mass index (BMI). Findings reveal that women with moderate to high BMI perceive products in slim packages as healthier. It also introduces the social construct of self-referencing as an explanatory mechanism. The last chapter extends design-related findings by utilizing symbolic meaning in product images on packages that are shown to not only impact a food’s healthiness, but perceptions of its level of processing, quality, and, ultimately, its actual taste.

Ultimately, the results offer important implications for public health managers and package designers by showing that subtle changes in visual product design are able to alter healthiness perceptions of the respective product. Additionally, knowledge on how the design of a product is able to influence consumers’ purchase decision provides interested consumers with the ability to consciously and better control future consumption decisions.