

Current Market for Functional Foods and Consumption Intention

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Functional foods generally refer to foods with one or more particular functions and positive effects on human health, often in relation to nutrition or reducing disease risk. The growth of the functional food market has been largely caused by concerns about rising medical and healthcare costs, the desire to improve the quality of later life with the steady increase in life expectancy, and scientific evidence that functional foods are beneficial to health. Purchase intention, which is strongly associated with market expansion, is the likelihood that consumers plan to purchase specific products or services. Consumer attitude towards a certain product or brand, along with certain external factors, promote consumers' purchase intentions and are crucial indicators for predicting consumer behaviour.

Keywords: advertising involvement ; functional food ; purchase intention

1. Introduction

Food has long been used to prevent and treat disease in Asian countries where people perceive particular foods as traditional ^[1]. In addition to providing nutrition, functional foods can improve health and reduce disease risks ^[2]. In the last two decades, noncommunicable chronic diseases have been prevalent globally, causing severe disease burden, medical trauma, and increased expenditure ^[3]. Improvement in public health has become an obligatory policy for governments of various countries, with numerous plans and guidelines related to the development of functional foods issued to promote innovation and encourage the food industry to provide people with healthier choices ^[4].

Functional food claims (i.e., nutrition, health, and disease risk reduction) are crucial to consumers who measure the health benefits of certain products and make purchase decisions based on these claims ^[4]. Research has indicated that functional foods with health-related claims are considered healthier than products without such claims ^[5], which emphasises the key role of health-related claims in functional foods. Because public awareness of health promotion through diet has increased, consumers are more inclined to purchase functional foods at a premium compared with traditional foods ^[4]. As the consumer market for functional foods expands, the functions and advertisement of these products have become major topics ^[6].

Food advertising affects consumer preferences, purchase intention, and eating behaviour ^[7]. The advertisements for functional food often employ the credibility, influence, and persuasive power of celebrities and authorities to increase consumers' purchase intention ^[8]. However, false or misleading advertisements can result in inappropriate or unnecessary participation in health services and negatively affect people's self-care decisions. The consumption of foods that claim to reduce the risk of disease may be used as a replacement for formal medical care ^[9]. People who lack medical resources often engage in self-care behaviours ^[10]. Chang and Tung indicated that the decision to consume functional food is associated with customers' residential region, with urban women exhibiting more willingness to purchase functional food ^[11]. The positive association between functional food purchase and customer residential region is further supported by several studies ^{[12][13][14]}. Therefore, in discussions of topics related to purchasing functional foods, regional differences must be taken into account.

With changing social patterns, the improving quality of life, and advent of an aging society, health has become a dominant topic among Taiwanese people, driving the market demand for functional foods. In 2017, Taiwan's functional food market was valued at approximately USD 4.5 billion, with a growth rate of 6.43%; in 2018, the growth rate was 5.88% ^[15], whereas the global market size was estimated to be USD 177.770 million in 2019 and is expected to reach USD 267,924.4 million by 2027 ^[16]. Maintaining or losing weight is often a particular concern of Taiwanese women, and annual spending on functional foods for weight control has reached USD 35 million in the past 3 years. However, in recent years, Taiwan's health authorities have reported over 4500 food advertisement violations annually, for which they have issued fines as high as USD 4 million. Such advertisements often claim false effects such as weight loss or anticancer properties,

which can lead to consumers losing confidence in functional foods, weakening their purchase intention. In Taiwan, regional differences are evident between 'small areas of land with abundant [medical] resources' and 'large areas of land with scarce [medical] resources' [17]. A large gap in terms of medical resources is present between the northern and nonnorthern regions of Taiwan [18].

A high degree of consumer involvement can generate strong purchase intention and predict consumer purchase behaviours, which is reflected in numerous countries including Taiwan [19][20]. Consumer involvement can be divided into product, advertising, and situational involvement [21]. Product involvement represents an experience with symbolic value in which different products incorporate varying degrees of involvement that are the precursors of purchase decisions [22]. Advertising involvement, referring to the personal state induced by specific stimuli, directly affects the effectiveness of advertising [23][24]. Situational involvement is related to short-term changes, such as health status, in a consumer's environment that largely affect purchasing behaviour [25].

2. Current Market for Functional Foods and Consumption Intention

Demand for functional foods is rising rapidly, and the market has great potential for development [26]. Functional foods generally refer to foods with one or more particular functions and positive effects on human health, often in relation to nutrition or reducing disease risk [27]. The growth of the functional food market has been largely caused by concerns about rising medical and healthcare costs, the desire to improve the quality of later life with the steady increase in life expectancy, and scientific evidence that functional foods are beneficial to health [28]. Purchase intention, which is strongly associated with market expansion, is the likelihood that consumers plan to purchase specific products or services. Consumer attitude towards a certain product or brand, along with certain external factors, promote consumers' purchase intentions and are crucial indicators for predicting consumer behaviour [29]. Research has revealed that health-related claims in functional food advertisements, market segments, and government policies and laws all affect purchase intention of these foods [30].

According to the Codex Alimentarius Commission [31], the health-related claims of functional foods can be divided into those of nutrition, health, and reduction in disease risk. Nutrition claims refer to specific stated or implied nutritional properties, and health claims state or imply a specific relationship between certain foods and an aspect of health; claims to reduce disease risk refer to statements that the consumption of certain foods is associated with a reduced risk of developing or contracting diseases [31]. Nutritional information and health-related claims have positive effects on purchase intention, even when products are sold at a premium [32]. Food categories and health-related claims, separately and in combination, are essential factors affecting consumer perception and acceptance of functional foods. A product category regarded as healthier generally has a high degree of consumer acceptance, particularly for products with disease risk reduction claims [3].

Regional differences are crucial factors affecting self-care practices, particularly in relation to the allocation of medical resources [33]. The uneven development and supply of medical services between urban and rural areas have resulted in a low utilisation rate of medical services in rural areas and a high proportion of inhabitants exercising self-care behaviours [10][34]. Studies have reported that the lack of high-quality and dependable medical services has often driven disadvantaged groups towards convenient, medically unconventional treatments, including the intake of functional foods as a substitute for medicinal drugs and professional medical advice, that can induce adverse health effects [33]. Especially for people living in remote areas that lack modern medical facilities and advanced treatments, functional foods are regarded as having disease prevention and treatment properties as well as nutritional benefits [35]. However, research on functional food purchasing in relation to demographic variables has mostly centred on gender, age, education level, living situation, and marital status [36][37] but has rarely discussed regional differences.

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