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## **THE AGENCY DILEMMA IN THE READY-TO-DRINK PROTEIN SHAKES MARKET SEGMENT: AN INVESTIGATION WITH YOUNG BRITISH CONSUMERS**

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### **ABSTRACT**

The extent to which the consumer is less knowledgeable and vulnerable within the RTD health shake market has been the focus of this study. Trust is one of the most significant contributing factors in reducing the agency of consumers. Not only do consumers place trust in legislators to protect them, but also in brands with which they have prior experience, as illustrated by the halo effect observed in this research.

This study demonstrates that the predominant goal of the young consumer in purchasing RTD health shakes is not health, but the facilitation and satiation of salient and latent beliefs associated with prevailing nutritional concepts such as increased protein consumption resulting in increased muscle mass, or reduced sugar/fat consumption associated with a healthful diet. The perceived risks of ingesting potentially harmful, but legislatively safe, ingredients are trumped by the strength of these prevailing nutritional concepts.

**Key Words:** RTD Health Shake, Consumer Health, Protein, Food Additives

### **INTRODUCTION**

Consumers are becoming more health conscious, but with conflicting advice over what actually constitutes a healthy diet, can the average consumer be expected to make truly reasoned and balanced decisions surrounding their food choices, especially when so many new products carry strong nutritional claims?

There has been a sharp increase in the market for fortified foods and nutraceuticals in Europe in line with growing public concern for health and well-being. According to Euromonitor, “worldwide sales of sports-related protein products grew from £2.5bn in 2007 to £4.9bn in 2012 and are likely to reach £7.8bn in 2017. In the UK, sales increased from £73m in 2007 to £170m in 2012 and are expected to reach £358m by 2017” (Walker, 2013). The global food additives market has seen significant growth in the last five years, with the emulsifier market gaining an average of over 5% year on year between 2009 and 2014. This is coupled with the sweetener market seeing a less impressive 1% rise annually during the same time frame (Leatherhead Food Research, 2014). Not only does this indicate how changing consumer trends surrounding nutritional information is influencing the additives market, but it also marks a whole new level of understanding which is increasingly being required by consumers to make appropriate and reasoned choices about their dietary intake.

When looking at the dynamics of the ready-to-drink (RTD) health shake market segment, the agency theory becomes increasingly significant. Within packaged and pre-prepared food markets, the producer undertakes processes which will ultimately affect the consumer. In the case of RTD health shakes, the producers are undertaking the mixing and preparation of health shakes which the consumer will ultimately ingest. In engaging in the act of purchasing the product, the consumer is engaging in the delegation of some decision-making authority to the agent. It could be said that to form any kind of relationship, information sharing is essential. Barriers to consumer engagement could be perceived as the time available to read

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into and assess each ingredient listed on each product they buy – a task that can be extremely time-consuming. Added to this, consumers are constantly being bombarded with nutritional claims and marketing campaigns by companies placing their own spin on sanctioned health assertions. This closely links with consumer empowerment in the market place to regain a level of information symmetry between producer and consumer.

## LITERATURE REVIEW

The results from the survey entitled “Special Eurobarometer 354 – Food-related risks” regarding food safety suggested a 4% rise since 2005 in people’s perceptions of whether it is likely or very likely that food will be a main instigator in damaging health (European Commission, 2010). This shows a slight increase in consumer concern over the safety of their food and the ingredients in them. Furthermore, in a 2001 study conducted by Roche Vitamins surrounding consumer trends towards micronutrients in food, 80% of the survey participants indicated that they were aware that manufacturers sometime add vitamins and minerals to prepared foods, with 18% of consumers noting that they actively seek such fortified foods (Gallup Study of Vitamin Awareness and Behaviour, 1999). Clearly, there is a substantial growth trend in the fortified foods market; in 2015, nearly 9 in 10 adults (86%) “made a strong effort to consume more nutrients” (Povarova and Kozonova, 2015). The reasons for growth in this market are “advances in food and medical sciences as well as changing consumer demand and demographics” (Povarova and Kozonova, 2015).

An interesting observation is that, of the consumer’s perceived significance of the importance of macronutrient content within food, it was noted in a 2000 study that UK consumers detailed “low fat, high fibre, low salt” as being among their most important food health claims with 39%, 41%, and 31% respectively, asserted as “very important” (Gallup Study of Vitamin Awareness and Behaviour, 1999). However, as nutritional knowledge has developed, a greater focus has been drawn to the protein content in food, with 57% of consumers noting that they make an effort to eat more protein. This figure has risen by 9% since 2014 (Povarova and Kozonova, 2015). In addition, “[c]onsumers placed within the 18 to 34 age category were most likely to try to eat more protein. Forty percent of the best-selling new better-for-you foods/beverages in 2014 carried a high protein claim” (Povarova and Kozonova, 2015).

According to Euromonitor figures, worldwide sales of sports related protein products nearly doubled between 2007 and 2012 from £2.5bn to £4.9bn and are expected to grow by more than 55% by 2017, with the UK expected to contribute £358mil of these sales. In fact, many of the health shakes currently on the market champion their high protein content as their key marketing tool. This rise in sales has been driven by many factors, some of which will be detailed in this study. One key driver of growth has been the boom in the convenience foods market. Joanna Blythman (2006) remarks in *Bad Food Britain* that:

“food processors and retailers continue to appeal to consumers who like to think they belong to this new ‘Cash rich, time poor’ breed. They are an easy market for products with added value, products that generate more money from basic natural ingredients by altering them in a technological way and repackaging them imaginatively” ((p. 77).

Food additives such as Carrageenan, Xanthan Gum or soy-based additives are added to many RTD shakes as thickening agents or stabilisers, which allow the finished product to remain on the shelf for a far longer period of time while retaining the consistency of the product to ensure customer satisfaction. However, with both of these additives and others, there is a growing amount of literature surrounding the long-term safety of their consumption. Depending on the origins of these additives, it is highly possible that as long as they have originated from natural sources, for example the extraction of Carrageenan from red seaweed, then it will be allowed

to be certified as a natural ingredient. Safety does not often relate to the source of the ingredient, but to the molecular structure, weight and what it is ingested with.

Information asymmetry and information failure is recognised as a key area which may hinder the extent to which consumers are able to exercise choice and hence drive market efficiencies. Further, “a lack of sufficiently accurate, timely information and constraints on the ability of consumers to process information can lead to non-optimal choices” (UK Department for Business, Innovation and Skills, 2012). The repercussions of information asymmetry can be extrapolated and applied to the RTD health shakes market. As mentioned above, for consumers to be the drivers of market efficiencies it is paramount for them to have adequate time to process accurate information effectively. For them to do this, appropriate information channels must be in place for consumers to acquire relevant information.

Understanding the way in which consumers interpret product stimuli is imperative in beginning to understand their beliefs in relation to a particular product. It has been postulated and incorporated into new research frameworks that the perceptual process is indeed both “conscious and unconscious” (Grunert and Wills, 2007). This is supported by the identification by Bell et al. that there is “a known tendency for shoppers to make decisions automatically, but then be able to post-rationalise a reason for this decision, which is not necessarily the true reason” (Bell et al., 2007)

## **METHODOLOGY**

The social sciences literature has plenty of good practice cases where mixed methods provided greater confidence in conclusions (Saunders, Lewis and Thornhill, 2003). Therefore, the authors decided to use a multi-phase research design approach to study the information asymmetry between consumers and producers, demonstrating that the Principal-Agent problem is active and instrumental in the RTD health shake market. This paper includes some of the results of both qualitative and quantitative stages, but is mainly focused on presenting the insights from the focus groups with consumers.

The qualitative side of this study has two stages. A pilot focus group was carried out prior to the main focus group with young RTD health shakes consumers. This was done to identify key themes which could be addressed in a more specific manner in the main focus group. The pilot focus group took the form of one session lasting around one hour and contained one brief exercise with seven consumers (three female and four male participants). The main focus group spanned just over two hours, with six consumers (three female and three male participants). It is important to note that all subjects involved within both focus groups were between the ages of 20 and 25. This is likely to produce a distinctive set of results relating to this consumer demographic.

The participants were provided with samples of RTD health shakes and asked to make their own choices, rank the products according to the perceived quality, healthiness and value for money and provide a reasoning/comment based on their options. To facilitate this exercise, a wide selection of different types of RTD health shakes was purchased from the local supermarket (a total of 18 RTD health products).

At the end of the main focus group, the group was provided with key information about ingredients, including additives such as Carrageenan and Xanthan Gum and their possible side effects identified within the secondary research. The participants were then given the option to change their decision with the given information in mind.

The main Focus Group also contained a picture association section which constituted a “practical projective technique” (Hoets, 2016), in which participants were asked to view 60 images all representing various aspects in close association to nutrition, diet, exercise, food and lifestyle. After viewing the pictures, the participants were asked to associate images with the products based on given criteria. According to Hoets (2016), practical projective techniques

“help to explore people’s subconscious feelings, beliefs, and desires” and so could be significant help in addressing latent beliefs of the subjects.

Both focus groups were recorded using digital audio recording devices and the full transcriptions were analysed using interpretative phenomenological analysis (IPA) as an experiential qualitative approach to research. The generation of the text to which the IPA method of analysis was applied was facilitated through the semi-structured group interviews of the focus group and mediated by the researchers and one note taker.

## KEY FINDINGS AND DISCUSSION

The comments from both the pilot focus group and the main focus group suggest three key emerging and reoccurring themes. These are: 1) trust; 2) health impacts; and 3) habits and usage.

The overriding associated attribute of RTD health shakes was protein. More often for males, the protein content was used to gauge the quality of a product, although females also mentioned this as an important attribute. In tandem, females mentioned that their attention was often drawn to the sugar and fat content of a product, although this was also mentioned by males. Sugars and fats were mentioned together often, marking them both as negative factors, whereas protein was often drawn in a positive light.

Both genders displayed awareness of possible harmful ingredients within the products, although males were more likely to accept these as “acceptable risks” in seeking the associated positive effects of protein consumption. Convenience stood out as the main factor for this conscious poisoning, with some attendees citing the need for a consistent flow of nutrients into the body. Part of these comments will be highlighted in the tables below.

**Table 1: Trust based on product image**

<i>Theme/Sub-theme</i>	<i>Comments</i>
Trust based on product image	R: “Because it’s a well-known brand, it’s probably going to be a good product. I trust it to be a good product. ... I don’t know, I think it looks a bit smarter and a bit more trustworthy, which is what you are looking for in a health supplement.” (21, Male) H: “Because I recognise the logo, I trust the brand.” (21, Male) M2: “I like the look of D, because it looks very scientific.” (21, Male)

On regular occasions participants commented on packaging aspects which were unrelated to the nutritional profiles of the product, communicating safety and quality to the consumer (Table 1).

Participants regularly remarked that there are key aspects to food items which are critical factors for them when deciding whether to trust that item or not. Differences were seen between participants on where they derive their trust from, with some following opinion leaders, internet information sources such as blogs or social media sites and some using labelling information or the packaging.

There was an awareness that producers may skew packaging design to focus more on the positive aspects of the product (Table 2).

**Table 2: Scepticism over health claims**

<i>Theme/Sub-theme</i>	<i>Comments</i>
<i>Scepticism over health claims</i>	E2: “Yea, I looked at this one and it says ‘no added sugar’, and then there is a little mark on it, and it says no added sugar, and then you look on the back and then it says sweetener sucralose, so yeah that’s a no for me. I mean, put no sugar in and then put sweetener in, I mean come on... come on.” (25, Male)

	H: "Because a lot of these kind of shakes and a lot of brands say low fat, all this, but then they just fill it up with sugar."(21, Male)
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Participants regularly remarked on the health impacts they associated with different macronutrients, ingredients and supplements. There was a heavily weighted focus on protein as a key nutrient for RTD shakes, as well as reference to carbohydrates (in the form of sugars) and fats. This information is generally held in the nutrition information (Nhs.uk, 2016) section of a product. Very little attention was drawn to individual ingredients (Table 3). Both genders were concerned with sugar and fat content being at a minimum, although males expressed more interest in the protein content of the products and often used protein content as a gauge for quality, with protein being significantly linked with muscle building.

**Table 3: Confusion over individual ingredients**

<i>Theme/Sub-theme</i>	<i>Comments</i>
<i>Confusion over individual ingredients</i>	L: "Folic acid... just doesn't sound OK." (21, Female) L: "What's carra...?" H: "Caraa..geenan." (reading from label) (21, Female and 23, Female) H: "Different types of ingredient, so we almost do not understand exactly what it is." (23, Female) Researcher: "Do you not like pectin?" M: "I just don't like the name of it really." (21, Male) L: "See, that's got a lot of words that I don't know the meaning of on." (21, Female) T2: "I have no idea what any of them (ingredients) mean." (21, Male) M2: "I heard that soy increases oestrogen ... so as a man I try to avoid that." (21, Male)

On regular occasions, participants remarked on their reasoning behind using RTD health shakes. The majority of the time this reasoning amounted to the convenience of having a ready mixed shake with an acceptable protein content. Males commented most on convenience. There was also some mention of price being a factor behind the usage/product choice, with some citing a higher price as a gauge for quality, and others noting a maximum price they would pay for products.

The focus group subjects were asked to rank the sample selection of RTD health shakes in three differing categories: a) quality, b) value for money and c) overall health. When asked to rank RTD health shakes on their quality, the groups decided to split the sample products into two categories: 1) gym RTD shakes and 2) health meal replacement RTD shakes. The "gym RTD shakes" were ranked using protein content to reflect quality. The "health meal replacement RTD shakes" were ranked on sugar quantity, with the highest sugar content shake being ranked as the lowest quality.

The subjects were given the prices of each shake and asked to rank the health shakes on value for money. The subjects kept the products in their previously decided categories of "Health meal replacement shakes" and "gym RTD shakes". Subjects also continued with their previously used system of looking at macro-nutrient qualities to generate a ranking based around value for money. In the Gym RTD group, shakes were ranked according to protein content and price, while the health meal replacement group used sugar as well as other ingredients (including protein) as their determining factors for value for money. During the ranking process, the females of the focus group took charge of the ordering of the meal replacement shakes, while the males collaboratively ranked the gym sub-category for both the "quality" ranking and the "value for money" ranking. This could show that the males of the group identify more with the masculine branding of the "gym" category RTD shakes.

When conducting the third and final ranking, participants dissolved the sub-groups of the RTD shakes and amassed them into one large group, placing all of the shakes which were previously categorised as “health meal replacement” RTDs at the top of the ranking. Products containing or citing fruit in their contents or on their label fared particularly well. The results show that consumers prefer to use the macronutrient properties of a product to make a decision as to whether it is healthful or not. Sugar is identified as the most specifically avoided ingredient, with only one specific additive being regularly identified: aspartame. The responders ranked low sugar content and high protein content as the two most important factors for RTD health shakes, indicating that a product level of these two nutrients is used as a marker in the consumer decision making process. Support for this finding continues when looking at the results from the focus group, shown during the product ranking exercise. When the sample of RTD shakes was split into the two sub-categories of gym RTDs and meal replacement RTDs, both protein content and sugar content were used to rank the products, resulting in the RTDs with the highest protein content being perceived as the highest quality in the gym RTD sub-category, along with those with the lowest sugar content being seen as the highest quality in the meal replacement RTD category. Protein and sugar content continued to be used as a gauge for value for money, further strengthening this phenomenon.

This actuality associated with product ranking could be reduced down to Miller and Cassady’s (2015) “cognitive process underlying use of food labels”, citing nutritional knowledge as a key component for “attention to nutrition information on food labels”. The focus group attendees, although all had an interest in health and fitness in some form, seemed not to have had prior knowledge of the majority of ingredients listed on the back of the RTD shakes and may not have felt in a position to use ingredients as a marker for either quality or healthfulness. This is further support for the 2010 Ipsos MORI report, which detailed that “consumers avoid reading the back of food packs by using words or symbols on the front as ‘beacons’ to quickly guide shopping” (Ipsos MORI, 2010), as often protein, fat and sugar content is clearly marked on the FOP. This also supports to a greater degree that there is a significant level of information asymmetry within the RTD health shake market.

When looking at the results from the survey and the focus group in tandem, it is clear that consumers have displayed a general awareness of potentially unhealthy ingredients in their foods. The focus group results demonstrated a general “confusion over individual ingredients”. Despite significant focus on the fact that sugars and fats are avoided and protein is sought, on regular occasion when deciding on the product ranking order, participants commented on their lack of knowledge regarding specific ingredients, indicating that there is a level of “information asymmetry”. As identified in the literature review “information asymmetry is recognised as a key area which may hinder the extent to which consumers are able to exercise choice and hence drive market efficiencies” (UK Department for Business, Innovation and Skills, 2012).

The fact that this phenomenon may lead consumers to making non-optimal choices is further illustrated by the results from the product choice exercise executed in the focus group. Three out of six attendees changed their mind over their chosen RTD health shake when provided with information surrounding the potential health impacts of individual ingredients, demonstrating that in their current state the consumers in question were not able to act as “rational and self-interested agents” (Denegri-Knott, Zwick and Schroeder, 2006). In this case consumers are not able to exercise true “choice” (UK Department for Business, Innovation and Skills, 2012), leading to market inefficiencies and a lack of “consumer sovereignty” (Denegri-Knott, Zwick and Schroeder, 2006). The Principal-Agent problem present between Governmental organisations and RTD producers is especially relevant in this context. Consumers within this market are likely to be aware to some extent of harmful ingredients, but do not see this as a significant health risk.

## CONCLUSIONS

Our research concluded that a large factor in whether a consumer trusts a product or not is down to the brand or producer. Nearly 50% of the responding sample answered “depends on the producer” when asked if they read all of the ingredients when purchasing food products. This was also supported on frequent occasions in the comments from the focus group. The association of the brand with health surpassed the need for the consumer to carry out further information-gathering around the product, leading to an assumption that the product was unlikely to contain any harmful ingredients. This supports findings from the Ipsos MORI report (2010) which found that “Well-known brands have a *halo effect* – signifying quality and safety, and distracting”.

The *halo effect* can contribute to market inefficiencies, as consumers cease their inquiry into the specific components of their foods. As well as the halo effect, the growing stipulations surrounding EU and UK regulation relating to health food claims and sanctioned ingredients encourage consumers to abandon their responsibility of correctly understanding safe and harmful ingredients, instead assuming that legislation, along with producer ethics, negates the possibility of truly harmful additives entering their foods. This is particularly illustrated by the lack of identification of Carrageenan as a specifically avoided ingredient.

Trust has been shown to be one of the most significant contributing factors in reducing the agency of consumers – trust for legislators, as well as a presumption of ethical standards of practice associated with brands which consumers identify with. The UK government and the European Union seek to act as intermediaries between RTD health shake end-users and producers. In offering such significant levels of legislation surrounding nearly all facets of food production, from packaging to processing, consumers would be forgiven in thinking that they are fully protected from any negative consequences arising from food consumption. Nonetheless, the Principal-Agent problem between Government and RTD health shake manufacturers (as well as that between consumer and producer) serves to reduce the probability of efficient and useful legislation being passed. Constantly changing advice issued by governmental organisations surrounding nutrition, and increasing stipulations neighbouring compulsory information for packaging, have had the opposite of the desired effect.

This new breed of consumer no longer feels the need to read the label in full, but expects the producer to inform them, through FOP information and “beacons”, of the key constituents and properties of a given food item. Consumers with agendas relating to sports performance or dietary goals, in correlation with the comment made by the 25 years old male (E2) stating that he may still seek to identify some of the nutritional properties of foods, such as identifying protein content and sugar content. This was shown in the focus group by a 25 years old male who asserted that “I did not know that if you increase your protein levels to a great extent you become huge” (E2). However, these aspects of foods are easily manipulated by the producer, leaving consumers with low self-perceived nutritional knowledge severely exposed to marketing puffs, and consumers with nutritional knowledge self-perceived as good still vulnerable to nutritional claims and added value statements. Often nutritional profiles of foods can be remarkably similar when compared, but it is often the constituent make-up of the given ingredients that contributes to the healthfulness of foods.

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