Danish and Swedish Consumers' Perception of Functional Foods

- A case study of Coca-Cola light plus with vitamins

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Abstract

Functional Foods is a category of food products that has emerged, as a consequence of consumers increasing interest in the relationship between diet and health.

The attitude towards functional foods is very different in Denmark and Sweden, even though the two countries are usually perceived to be similar in many ways. We thus found it interesting to conduct a comparative analysis of the two countries in order to understand the cognitive structure that determines the perception of functional food products.

In order to investigate the perceptions in the two countries, we have conducted a case study based on a functional soft drink introduced by The Coca-Cola Company on both the Swedish and Danish market: Coca-Cola light plus with vitamins (CCL+).

One purpose of the thesis is thus to provide The Coca-Cola Company with information regarding their target group's cognitive structure of CCL+. Another is to contribute to the knowledgebase of functional foods in Denmark and Sweden.

By applying the Means-End Chain theory and the Laddering interview technique, we have established the determinants that influence the perception of CCL+. We have done this by identifying the abstract and concrete attributes, the functional and psychosocial consequences, and the instrumental and terminal values, as perceived by ten Danish and ten Swedish women aged 20-39 years old.

We found that the Danish and Swedish respondents have very different cognitive structures regarding CCL+. The Danes reacted to both the product and the concept itself. They compared CCL+ to a vitamin pill and found it inferior due to both the content and the fact that they perceived it to be unhealthy. As they were unfamiliar with functional food products, they related the concept to discussions of ethics and morale.

The Swedes had a more indifferent attitude towards both the product and the concept of functional foods. They perceived the product as superfluous as it was unhealthy compared to other functional products. They focused a great deal on the vessel, and as CCL+ is only sold in a can, they would not purchase it, as they preferred bottles.

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1 Introduction

During the last few decades consumers have become increasingly interested in, and conscious about, their health and have acquired a better understanding of the relationship between health and diet (Jonas & Beckman, 1998).

For many years the answer to consumer demand for healthier food alternatives have meant focus on reducing the content that nutritionists have labelled as undesirable (Jonas & Beckman, 1998). This has led to the development of for example light products, which have been modified by reducing the content of for example sugar, fat, and salt (Poulsen, 1999). This product category has however experienced some negative attention regarding the use of additives and artificial flavouring etc. The trend has shifted during recent years, and focus has been on more "natural" products with a reduction in the number of additives and other artificial ingredients. This has meant an increasing market for ecological products (Poulsen, 1999).

Functional foods, is a concept that has emerged as a continuation of this trend (Poulsen, 1999). Development in food technology has increased the possibilities for adding substances to products and combined with an increasing demand for healthier foods, this has caused a great interest in the market from the perspective of the industry.

Although a relatively new concept in Denmark, other countries (the leaders are Japan and USA) have embraced the concept for years and experience growth of 15-20% in this market, compared to the general food market with a growth around 1%. (Bech-Larsen et al., 2001, Meyer, 2006) Even though the market in Denmark is still very limited it is a market that the industry sees as one with great potential.[1]

[1] FødevareIndustrien, 2007

1.1 Presentation of the Problem

The phenomenon we would like to investigate is the perception of functional foods in Denmark and Sweden.

After preliminary research of the concept in Denmark we saw phenomena we find interesting and would like to investigate. We, furthermore, find it interesting to compare the Danes to the Swedes, as it is a nation quite similar to Denmark in many areas, except when it comes to functional foods.

YouGov Zapera conducted a survey regarding Nordic consumer's views on food and health in 2008. The population group consisted of 115,000 men and women from Sweden, Denmark, Norway and Finland aged 15-74.

The essence of this, in relation to functional foods, was that the Danes were more negative towards enrichment than all the other nations. When asked, how they regarded the statement that a product was Calcium enriched, 30 % of the Danes found it to be a negative statement. In comparison the number for Sweden was 5 %.

Regarding products that are vitamin enriched, 48% of the Danes had a negative view of the concept, whereas the number for Sweden was 9 %.

1.1.1 Clarification of the Problem

We find the distinct difference in attitude to be interesting and the focus of the thesis is therefore on the view of functional foods in Denmark and Sweden. We will conduct a comparative analysis of the population's perception of a specific functional food product launched in both countries.

Some research has already been conducted in this field, but as the focus has mainly been on people's attitudes towards enrichment of product categories such as bread and yoghurt, we believe some new research is called for.

1.1.1.1 Focus of Our Study

The functional foods category contains many different product types and classes, but we wish to focus on a specific product for several reasons:

Previous research conducted on food categories, for example on genetically modified foods (Bredahl, 1998), show that the results of an analysis will become more reliable when the focus is on a specific product than on the category itself.

From other research conducted on consumer attitudes towards functional foods in Denmark (Poulsen, 1999) it is clear that there is a difference in attitudes towards the concept itself and the product level. This means that the results found by YouGov Zapera (2008) about the attitudes towards the category will not necessarily be the same when focusing on specific products.

In order to make the analysis more concrete our focus will be on a specific functional food product: Coca-Cola light plus with vitamins (CCL+).

We have chosen to focus on CCL+ because it represents a category of functional food products usually perceived as unhealthy - a category of candy, soft drinks, etc.

This is a category manufacturers focus on developing, and we therefore think it is interesting to investigate this particular product category.[2]

The thesis is written independently of The Coca-Cola Company (TCCC), and does therefore not address a problem specifically defined by the company. Besides one statement from an employee of The Coca-Cola Company, the thesis is based on publicly assessable information.

1.1.1.1.1 Coca-Cola light plus with vitamins

CCL+ is a functional food product introduced on both the Danish and Swedish market. It is one of the first functional food products of this category introduced on the Danish market, and we have seen that it is a product that has caused some strong reactions in Denmark, which is why we find it interesting to conduct this research:

- **Sampling at CBS and a 'special offer' in the canteen**

  Shortly after deciding that the topic of this thesis should be functional foods, The Coca-Cola Company conducted a sampling event of CCL+ at Copenhagen Business School. We conducted an observation study of this sampling to see if anything unexpected would

[2] Based on various articles – see Bibliography for details

occur.[3] Students at CBS often receive free samples of new products from various companies and they are usually very happy to receive free goods.

This was however not the case with CCL+. A number of exposed individuals simply refused to take the product – they did not even want the product even though it was for free. The same pattern could be seen in the canteen and kiosk. The canteen at CBS ran a special offer: "buy a Coca-Cola product and receive one CCL+ for free…". When visiting the canteen it became clear that people were not interested in the product – they did not want the product. Even when the sales clerks reminded people of the offer at the register they declined, and when suggested that they could take it to their friends they also declined.

- **When first introduced the product got a lot of negative media attention.**

For example from 'Forbrugerrådet' that believes it leads people to believe it is a healthy product, and therefore criticises the fact that it can be sold in Danish stores[4].

- **COOP and Dansk Supermarked removed it from their stores.**

They believed it to undermine the '13-points plan against obesity' that inhibits the sale of candy enriched with vitamins[5].

1.2 Purpose of the Thesis

There are two main purposes of this thesis.

One is to contribute to the knowledge base of functional foods in Denmark and Sweden by investigating consumer's perception of a specific product. The other is to provide TCCC with knowledge of the consumer's cognitive structure of CCL+, which could help them in evaluating the present strategy of CCL+ in both countries, and serve as inspiration for making adjustments.

[3] See appendix 1
[4] Drik dine vitaminer I en cola, Politiken
[5] Coca-Cola light plus fjernes fra hylderne, www.fpn.dk

Based on the observations described previously, and the findings of YouGov Zapera (2008), we find it interesting to investigate the consumer's cognitive structures regarding CCL+ in both countries, and also conduct a comparative analysis of them.

We have chosen a specific theory to assist in depicting the consumer's cognitive structure about this product: The Means-End Chain Theory (MEC).

1.2.1 Research Question

The research question for this thesis will be:

- ***What are the MEC determinants influencing Danish and Swedish consumers regarding Coca-Cola light plus with vitamins?***

In answering this, we will answer the following sub questions:

- ***What are the perceived attributes of Coca-Cola light plus with vitamins?***
- ***What are the perceived consequences of consuming Coca-Cola light plus with vitamins?***
- ***What are the self-relevant values that Coca-Cola light plus with vitamins entails?***
- ***How are these linked?***

We are aware of the fact that it might not be possible to reach all levels of the MEC theory but the questions above will create the basis for our analysis. This will be elaborated in section 2.3.1.

When we have analyzed the both the Danish and Swedish respondent's Means-End Chains, we will answer the following question:

- ***Are there any differences in the MEC's of consumers in Denmark and Sweden? If so, what are they?***

1.3 Conceptual Clarification

The following section will provide some of the definitions of the key concepts that are the foundation for our research. It will also serve as an aid for the reader in understanding many of the aspects and assumptions that are implicit throughout the thesis.

- ***What is functional food?***

A formal definition of functional foods has not yet been agreed upon, and numerous different definitions are being used. There is however elements that are reiterated which justifies a description of functional foods as representing the following (Jonas & Beckmann 1998):

> *"A food category in which the products are either a) modified or b) fortified with substances that have a preventive or therapeutic effect beyond their original nutritional value".*

Modified: customizing the product by altering the "genetic blueprint" in order to reduce the concentration of certain substances and/or increase the nutritional content (Jonas & Beckmann, 1998).

Fortification: enrichment of products by adding or increasing certain substances in the product (Jonas & Beckman, 1998).

The most typical types of fortification include: (Jonas & Beckman, 1998)

- Vitamin and mineral fortification
- Antioxidant fortification
- Fibre fortification
- Live culture fortification
- Fat substitutes

Generally speaking, functional foods can be classified in the following categories (Poulsen, 1999, FødevareIndustrien, 2007):

- Upgrading: i.e. by increasing the amount of a substance already present in the product.
- Substitution: i.e. by replacing a substance in the product with a similar but "healthier" one (e.g. fat substitutes).
- Enrichment: i.e. by adding a substance not naturally present in the product (e.g. vitamins in cola drinks).
- Elimination: i.e. by removing "unhealthy" unwanted substances from the product (e.g. light products).

Manufacturers, the media, scientists and nutritional experts etc. all use different terms to describe the category, e.g.: functional foods, designer foods, nutraceuticals etc. The term "Functional Foods" will in this thesis be used to cover all the above mentioned.

- **Functional Foods in Denmark and Sweden**

The legislation and tradition for functional foods is very different in Denmark and Sweden.

The Swedish have had functional foods on the market for many years, and have a variety of functional products available. In Denmark the situation is different, as it is not until 2003 that EU legislation made it possible for manufacturers to sell functional products, without having to prove a general need in the population for the added substance[6]. The previous restrictive legislation is has meant that there are only few products available on the market.

- **What is Coca-Cola light plus with vitamins?**

CCL+ is a soft drink in the Coke light category. It is enriched with vitamin B12 and Niacin and has a slight taste of citrus compared to the original Coke light. It is marketed in a 0,33 L can, and is sold at the same price as a 0,5 L Coke light[7].

It was introduced on the Danish market in January 2009 and on the Swedish market in august 2008.

The strategy for CCL+ has more or less been the same in the two countries. The design of the can is the same, with the only difference being the language of which the information regarding the content on the back of the can is written in.

[6] See appendix no. 9 for more details on the legislation
[7] See appendix 2 for pack shot

The marketing strategy has more or less been the same with minor local adaptations and with a slightly higher budget in the Danish launch. It is however the same material used in both television and print materials, only translated into Danish and Swedish, and it has also been the same activities and activations that have been carried out in the two countries[8].

1.4 Delimitations

This section will list the aspects that have been delimitated from the thesis in order to assure a clear focus.

It should be noted that this thesis is written from the perspective of the industry – The Coca-Cola Company. As the purpose of the thesis is to give Coca-Cola knowledge, and contribute to the knowledge base of functional foods in Denmark and Sweden based on the case of Coke light plus, it is implicit that our findings could be used as an aid in creating higher sales. It is therefore a basic assumption that functional foods is a "good concept" – meaning, we will not discuss whether these types of foods have negative effect on people, if they are misleading consumers etc.

There are two variants in the Coca-Cola light plus portfolio. One is enriched with vitamin B and Niacin, whereas the other contains green tea extract. Green tea is said to provide antioxidants, and can thereby in theory also be classified as a functional product, but the focus of the thesis will solely be on the variant containing vitamins. We believe these two products to be elementary different, and in order to ensure a clear focus, we have chosen to concentrate on only one variant. We, furthermore, see the product with vitamins as being the most interesting, as this is the variant causing strong reactions, and falls in a product group of which the industry has high expectations.

The term CCL+ will refer to Coca-Cola light plus with vitamins and not to the version containing green tea.

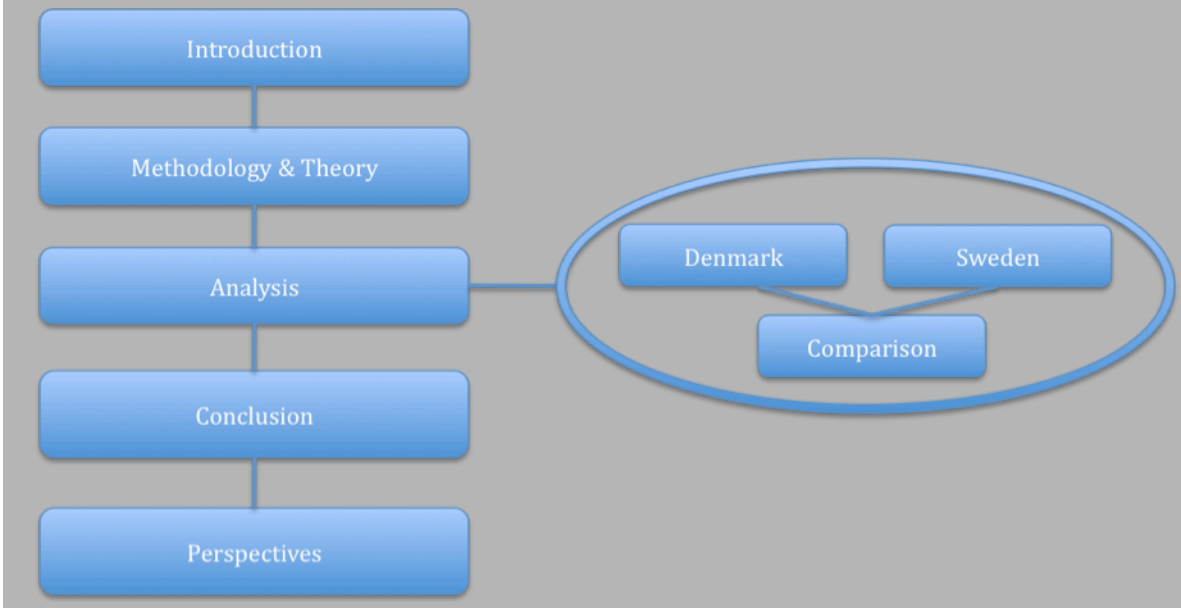
We consider the functional foods category to be new in Denmark. Even though there has been iodine in salt since 1998[9], it is not until 2003 that alteration of the legislation in Denmark has led to the development of functional products that are not designed to directly prevent diseases common in the population.

[8] The Coca-Cola Company, Business Manager Camilla Munkholm Fischer
[9] Fødevarestyrelsen, 1998

1.5 Structure

Based on the above described, the structure of this thesis will be as illustrated in Figure 1.1 below.

Figure 1.1: Structure of the Thesis



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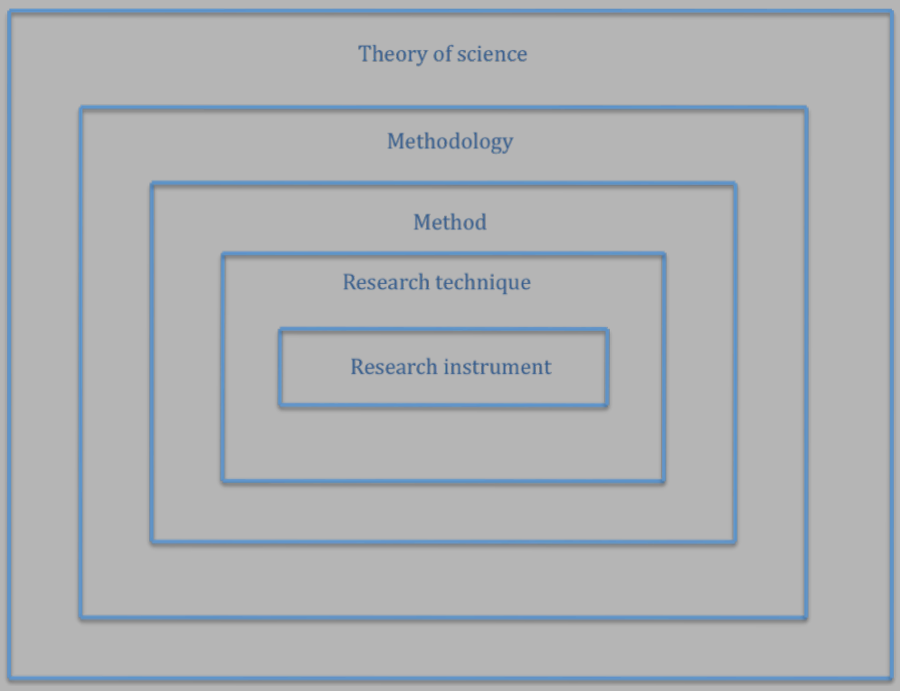
2 Methodological and Theoretical Considerations

In this chapter we will describe the foundation for the creation of this thesis – our paradigm. We will elaborate on our view on science, our realm of understanding, our chosen research approach, and the exact methodology we have chosen.

We believe these choices are essential to explain and elaborate on, as it is important for us to be aware of the consequences of our choices, but also for the reader, when assessing the thesis. In other words this chapter will help you, the reader, understand how we, the authors, have thought throughout the process of writing. It will elaborate on how we have constructed the thesis, and provide an understanding of the way that we have chosen to conduct the research, our foundation for interpreting results and finally how we reach our conclusions.

We will construct this chapter based on the structure proposed by Andersen (2005), which illustrates the most important concepts in science and methodology.

Figure 2.1: Structure of Methodology



Source: Own creation based on Andersen (2005. P. 17)

2.1 Theory of Science

Theory of science can be characterized as *the study of science* – what *is* science. It deals with the foundation on which science can be evaluated (Steinthorsson, 1991). In the following paragraph we will elaborate on our view of: how science generally develops, our view on human nature, our comprehension of data as all of these factors consciously or unconsciously determines our underlying assumptions (Andersen, 2005).

2.1.1 Development of Science

There are basically two main views on how science develops. One is *revolutionary* and the other *evolutionary*. Thomas Kuhn[10] is believed to be the prime exponent of the view that science is developed revolutionary, and on the contrary Karl Popper[11] is known to be the exponent of the belief that science develops in an evolutionary manner.

[10] Thomas Samuel Kuhn (1922 – 1996)
[11] Karl Raimond Popper (1902 – 1994)

Kuhn's (1962) main argument is that paradigms shift. As existing paradigms are not able to solve present problems, a crisis and a scientific revolution occur. The revolution leads to the generation of new ideas, which leads to the development of new paradigms (Andersen, 1988).

Popper (1973), on the other hand, argues that science develops in a dynamic and continuous process of problem solving (Andersen, 1988)

We have adopted an evolutionary view on science, taking base in Popper's arguments. According to Popper, theory is developed and evolved. Our knowledge is based on former assumptions. We cannot create new knowledge before we have the knowledge of which we are in possession of at this moment. Knowledge is thus developing continuously. Through mutual impact between individuals, we obtain insight into new approaches that leads us into a dynamic and never-ending process, always building knowledge on existing knowledge.

This view, on how science develops, also applies to and influences our realm of understanding and scientific approach.

2.1.2 Realm of Understanding

Generally, there are two main scientific approaches: positivism and hermeneutics. Positivism stems from natural science, and aims at reaching a definitive and conclusive truth - a truth that can be found independently of the scientists' assumptions and the phenomenon's context. The approach is based on goals of context-controlled results, researcher neutrality, prediction and behaviour control as well as quantifiable data. Hermeneutics, on the other hand, has a more relativistic and humanistic perspective that can be contrasted to the positivistic (Thurén, 2008, Kjørup, 1997).

The study of interpretation theory is named hermeneutics. Traditional hermeneutics most often refers to the study of the interpretation of literature, religion and law. In modern society hermeneutics encompasses not just issues involving the above, but everything in the interpretative process. Both verbal and nonverbal forms of communication as well as prior aspects that impact communication are related to hermeneutics. For example: presuppositions, pre-understandings, the meaning and philosophy of language, and semiotics[12].

[12] Den Store Danske Encyklopædi

There are naturally overlaps between the different scientific approaches, and it is not possible to create a strict diversion. There is however a tendency towards the hermeneutic research-approach, being typical for the humanistic- and social studies scientific work disciplines of which consumer behaviour is a part of (Kjørup, 1997). Hermeneutics is generally a good approach when the purpose is to understand individuals and their actions (Thurén, 2008).

We have chosen a hermeneutic approach in this thesis, because there is a general consistency of the characteristics of the hermeneutics and the goals of our study.

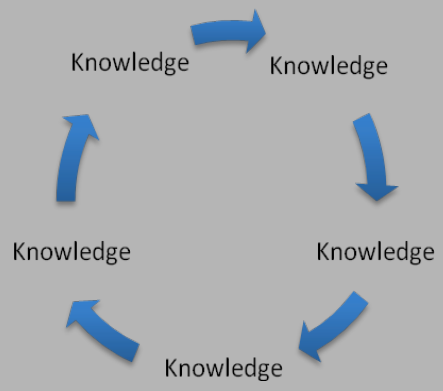
2.1.3 Hermeneutics

First of all, we believe hermeneutics to be consistent with our view on science and the development here of, as described above, as we believe that there is a consistency between the view on science as being created in a continuous process, and the hermeneutic view on how knowledge is created.

Second of all, we do not believe it possible to be completely neutral when conducting our interviews and analyzing data, as our background and scientific knowledge base will unconsciously effect, the way by which we conduct and interpret our research. Hermeneutics acknowledge that scientists cannot be estranged from the context of the phenomenon that is being examined (Kvale & Brinkmann, 2009).

The hermeneutic concept is often described on the basis of *the hermeneutic circle*.

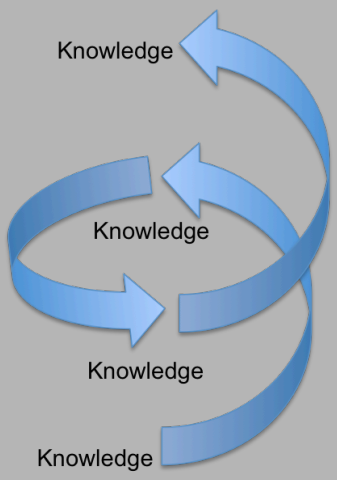
Figure 2.2: The Hermeneutical Circle



Source: Own creation

We believe this illustration to be somewhat misleading, as it implies that the investigator is not moving onward, but stays in the original point of departure when re-investigating a phenomenon. Instead we see the process as a hermeneutical spiral (Kjørup, 1997).

Figure 2.3: The Hermeneutical Spiral



Source: Own creation

Instead of finishing at the point of departure, a spiral goes around and around, while continuously moving forward. The 'circle' is not an accurate representation, as we as researchers will have a different knowledge base when investigating the phenomenon the second time, compared to the knowledge we had when commencing. We will thus have changed our basis, and when re-investigating a phenomenon our knowledge base will be different, giving us a better set-off (Kjørup, 1997).

2.1.4 View of Human Nature

We have chosen to adopt a holistic view of human nature. The holistics believe that parts of a whole are in intimate interconnection, such that they cannot exist independently of the whole, or be understood without reference to the whole, which is thus regarded as greater than the sum of its parts[13].

Our focus is therefore on humans as "a whole". We will therefore focus on both the physical and psychological needs of humans, and will chose a research strategy accordingly.

We see holism as essential for this research, as we wish to investigate how consumers perceive CCL+, and we do not wish to reduce our investigation to focus on only one aspect on humans.

2.1.5 Prior Understanding

Our prior understanding influences the way we perceive the surrounding world. It influences our everyday life, science etc. Our prior understanding is often unconscious, as the process of socialization into a specific way of perceiving the world starts when we are children. The correct understanding can be called prior knowledge, whereas erroneous prior understanding can be characterized as prejudices (Thurén, 2008).

Our prior understanding is in a general sense based on the society we are a part of, the culture, the norm etc. As we are both Danes and living in Copenhagen we have a certain way of perceiving things unconsciously, that have been created throughout our lives.

More specifically in relation to this study, our prior understanding is based on the preliminary research we have conducted, as we have invested a lot of time in gaining an in-depth

[13] Den Store Danske Encyklopædi

understanding of the different dynamics influencing the market for functional foods in Denmark and Sweden. We have read and analysed numerous articles, reports and research from the industry, the media, consumers, the consumer council, and other interested parties. These have undoubtedly created a foundation for the way we perceive this phenomenon, and could be both prior knowledge and prejudices.

We have furthermore investigated the research, which has previously been conducted in the field. Mainly the different studies conducted by MAPP[14] have been interesting and relevant, and their findings and conclusions regarding the consumers and their relationship with functional foods, have had a great role in our perception of the phenomenon.

The hermeneutical circle (or spiral in this case) is said to be a suitable method for overcoming the possible prejudices that might exist, and to reach a better and more real understanding. The prejudices are slowly being abdicated because you get more and more actual knowledge about the phenomenon under investigation as the research proceeds (Thurén, 2008).

As we have chosen the hermeneutics to be the foundation for our understanding, we believe to be able to refrain from letting possible prejudices influence our analysis and conclusions.

2.2 Methodology

Methodology can be characterized as the study of the different procedures available in relation to the investigative activities, and what consequences these choices have for the results of the research (Andersen, 2005).

There are principally two methodological possible ways of producing knowledge: deduction and induction.

Deduction and induction both indicates approaches in which we can draw scientific conclusions. Deductive inferences are when we, based on general principles, draw inferences about individual incidents. Inductive inference is when we, starting in a single incident, seek to find a principle or a general regularity.

As we are conducting an explorative study, where we on the basis of some qualitative research, want to say something in general, we have an inductive perspective in this thesis.

[14] MAPP – Centre for research on customer relations in the food sector

2.2.1 Research Design

The following section can be characterized as "the blueprint" or framework for our research – the foundation for conducting our research. We will outline and specify the details of the procedures necessary for obtaining the information needed to answer our research question (Malhotra & Birks, 2006).

2.2.1.1 Type of Research

A research design can be classified as being either exploratory or conclusive. The primary objective of exploratory research is to gain insight or understanding to phenomena, which are difficult to measure. It is preferred in situations a measurement will not yield particular qualities. On the contrary, the conclusive research is primarily preferred in situations where the goal is to measure clearly defined phenomena (Malhotra & Birks, 2006).

Based on the objective of our research, we believe that an explorative research is the appropriate design for this thesis. The fact that it will be a study of relatively unknown phenomenon and conditions, further advocates the choice of an explorative study (Andersen, 2005).

The data analysis could, in an explorative study, be both qualitative and quantitative, although often used with qualitative data. Qualitative research can be defined as being based on small samples, intended to provide insight and understanding. Qualitative research encompasses a variety of methods that can be applied in a flexible manner to enable respondents to express and reflect upon their views or to observe their behaviour.

> *"It seeks to encapsulate the behaviour, experiences and feelings of respondents in their own terms and context"* (Malhotra & Birks, 2006, p. 133).

By investigating this specific phenomenon in-depth, and by letting the respondents express themselves in their own terms and context, we believe that we can provide Coca-Cola with new perspectives of their consumers.

We will conduct an explorative study with a qualitative approach in order to obtain the information needed to answer our research question.

2.2.1.2 Research Strategy

There are numerous different research strategies – each with a different way of collecting and analyzing empirical data following its own logic. Among the most popular are experiments, survey, archival analysis, history and case study (Yin, 2003).

Yin (2003) believes that a common misconception of many social scientists is that the different strategies should be arranged hierarchically according to purpose. The traditional hierarchy lists case studies as being appropriate for the exploratory phase of a research, surveys and histories as appropriate for the descriptive phase, and experiments as the only research strategy that enables explanatory analysis.

Yin (2003) questions this hierarchical view, and argues that all the different strategies can be used for all purposes whether being exploratory or conclusive, and that it is not the purpose that should determine the research strategy. According to Yin (2003), we *could* principally use all research strategies for our explorative study, and will therefore consider the different alternatives before choosing one.

2.2.1.2.1 Choice of Research Strategy

Even though the strategies all have their distinctive characteristics, the boundaries between them are not clear-cut and there are large overlaps. In order to be able to determine the best suited strategy, Yin (2003) has developed some conditions to serve as guidance in finding the most appropriate design for ones study.

The conditions are[15]:

1. The type of research question
2. The extent of control the investigator has over the actual behavioural events
3. The degree of focus on the contemporary as opposed to the historical events

[15] Robert K. Yin 2003, p. 5ff

1. The type of research question

The research question we have chosen for this thesis concerns ***what*** determinants in the means-end chain influences consumers'.

Research questions containing "*what*" are often answered through the use of surveys or archival analysis as research strategy (Yin, 2003). It is however implicit in our research question that, in determining what the influencing MEC determinants are, we need to investigate *how* they perceive the products attributes, consequences and values, and *how* they link these together, as this is the central element of the MEC according to Gutman (1988). We therefore believe, that experiments, history or a case study would be more appropriate as they are designed to answer *how* or *why* questions (Yin, 2003).

2. The extent of control the investigator has over the actual behavioural events

The only research strategy that requires control over events is the experiment. The investigator can manipulate behaviour directly and systematically, and the studies are usually conducted in a laboratory setting, and may focus only on a couple of variables (Yin, 2003). As we are conducting an explorative study we do not believe it to be a requirement to have control over the events, and furthermore we do not wish to focus on only a predefined number of variables. We will therefore not choose the experiment as our research strategy.

3. The degree of focus on the contemporary as opposed to the historical events

The matter of consumer's cognitive structure of functional foods in Denmark and Sweden is a contemporary event. We do not wish to conduct a research of the historical events regarding functional foods in the two countries, and will therefore not choose a research strategy focused on historical events.

Based on Yin's (2003) conditions we have eliminated all but one research strategy, the case study, and have determined this strategy to be the best suited for our study.

2.2.1.2.1.1 The Case Study

A case study is defined as an empirical enquiry that (Yin, 2003):

- Investigates a contemporary phenomenon within its real-life context, especially when
- The boundaries between phenomenon and context are not clearly evident.

It is therefore suited for our case as we wish to investigate the contemporary phenomenon of CCL+ in Denmark and Sweden, and we believe the context to be significant. We see the context of this case study to be society, personal relations, legislation, authorities, market conditions, etc. Everything that affects and influences the consumer is important to be conscious about. We therefore perceive the boundaries between the context and the CCL+ phenomenon to be hard to separate.

The case of CCL+ represents a combination of not very well known conditions, and which have not been the basis for any in-depth research. Some research has been conducted on the topic of functional foods, but not on a specific soft drink, and not on CCL+ to our knowledge. According to Yin (2003) and Andersen (2005) these are characteristics that advocates for the choice of conducting a case study. As we wish to only deal with CCL+, and a specific group of people, it will be a single case study.

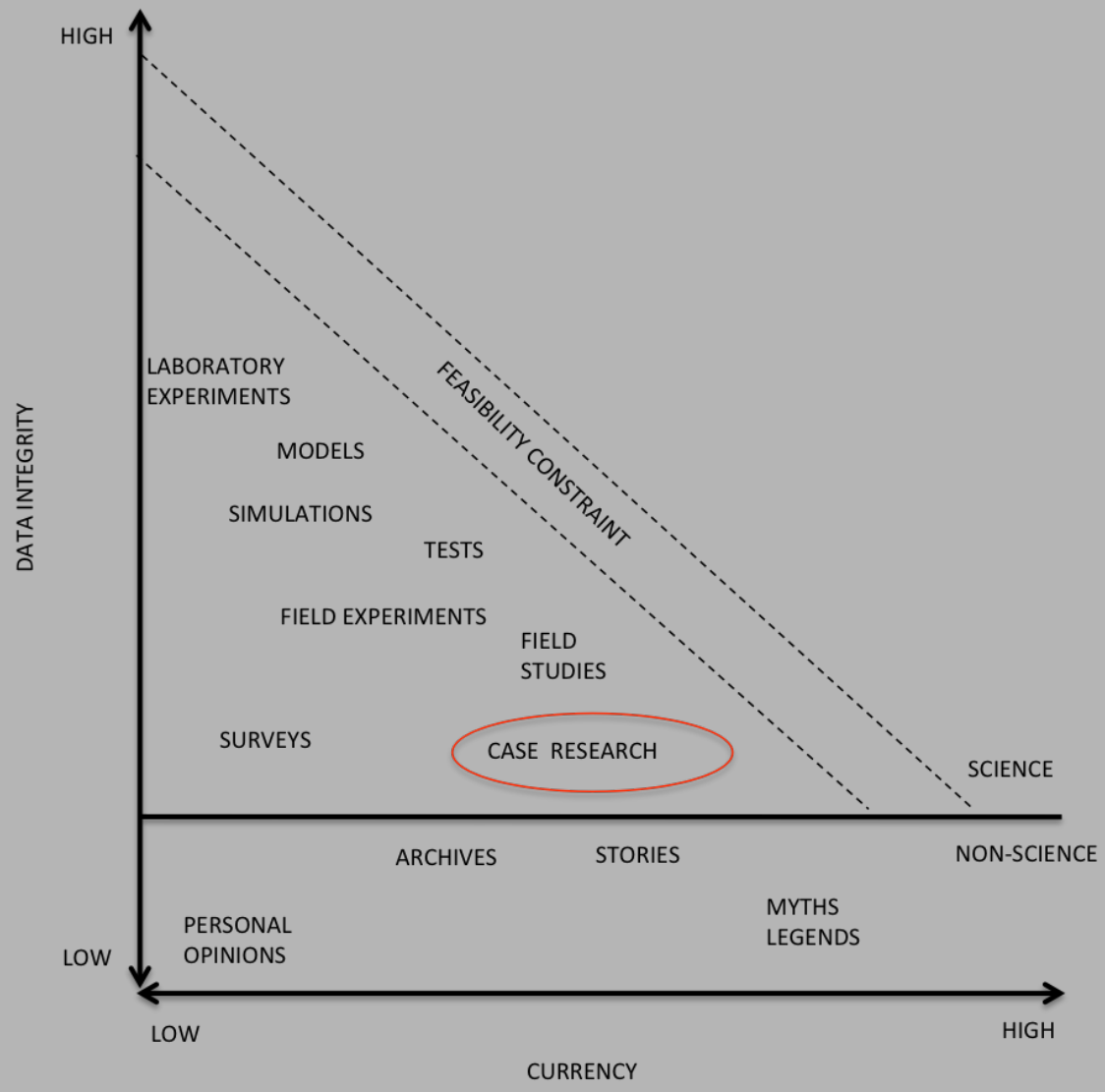
2.2.1.2.1.1.1 Limitations and Critique of the Case Study Method

All the research strategies have different strengths and weaknesses. By choosing one, the positive elements of the other methods are discarded. We believe it is important to be aware of the consequences the choice of method will bring, as this knowledge will enable us to design the best possible study, and we will therefore elaborate on the critique of the case study method.

Thomas V. Bonoma (1985) has in his article *"Case research in marketing: Opportunities, problems and a process"* graphically illustrated some of the most common research strategies in relation to each other.

As illustrated on Figure 2.1 the different research strategies are positioned on a two dimensional graph with two primary objectives of doing research representing the axes: "Data Integrity" and "Currency".

Figure 2.4: Research Strategies



Source: Thomas V. Bonoma (1985, p. 200)

The X-axis "Currency" affects the contextual relevance of findings *across* measures, methods, persons, settings, and time. It refers to the generalization of results – whether or not it is possible to generalize beyond the immediate case study (Yin, 2003). The concept is often also referred to as “external validity” (Bonoma, 1985).

The Y-axis "Data integrity" refers to the characteristics of the research that affects errors and biases in the results - it is also often referred to as "internal validity" or “reliability” (Bonoma, 1985). It is concerned with both establishing a causal relationship and also with demonstrating that the operations of a study can be repeated with the same results in a later study, and the goal is therefore to minimize the errors and biases (Yin, 2003).

Bonoma’s (1985) point in illustrating the different strategies in this manner is, that no matter which research strategy is chosen, there will always be a ‘feasibility constraint’ that leads to a trade-off between Currency and Data Integrity. Ideally, all research should seek high levels of both data integrity and results currency, but by choosing a specific method, researchers are also choosing which dimension on the figure should be dominating, because in reality, no single research strategy is able to minimize threats to data integrity and currency simultaneously (Bonoma, 1985).

Yin (2003) also discusses the validity and reliability of the case study method, and has some recommendations and consideration to be aware of when constructing the design.

We will discuss both Bonoma (1985) and Yin (2003) in relation to the creation of our design, in order to assure that all considerations and limitations are dealt with, so we arrive at the best possible design.

2.2.1.2.1.1.2 Designing the Case Study

We have chosen to base our case study design on Yin’s (2003) propositions. Our choice of research question has however made it necessary to make some slight alterations and modifications to the design proposed by Yin (2003) in order to suit our specific study in the most appropriate manner. We will in the following outline the design of our study and explain our choices.

A central part of a good research design is the ability to test the quality of the research (Yin, 2003). In order to test the quality of our study we will deal with the following elements:

- Construct validity
- Reliability

- Internal validity
- External validity

2.2.1.2.1.1.2.1 Construct Validity

A research's construct validity refers to the establishment of correct operational measures for the concepts of study (Yin, 2003). This concept can also be referred to as "operationalisation", which can be characterized as translating theoretical concepts to empirically measurable variables - creating the connection between the theoretical concepts and empirical variables (Andersen, 2005).

Operationalisation gives a precise meaning to the otherwise intangible key concepts. The process is to make them into operational variables that are measurable and perceived identically by all respondents.
The theoretical variables can be made more accurate through definitions, which act as a guide in clarifying the meaning of concepts. It reduces the risk that the respondents are responding to something other than the intended, because they have less leeway to establish their own opinion about a concept.

Yin (2003) propose some strategies on how to maximize the construct validity - multiple sources of evidence and establishing a chain of evidence - but as they are all related to the data collection, we do not believe it to be possible to incorporate his recommendations in a favourable way. We will include multiple sources of evidence in the section that discusses the perspectives of the thesis to give a broader picture.

Our perspective on construct validity is to ensure that all respondents have the same point of departure regarding knowledge of CCL+ and functional foods in general. In order to make sure that all participants have a minimum of knowledge on the subject we will compose a manuscript that clearly defines the main points that are relevant in relation to this specific subject and CCL+.

2.2.1.2.1.1.2.2 Reliability & Internal Validity

Bonoma (1985) incorporates both internal validity and reliability in his "data integrity", and it

is this dimension he believes to be sacrificed for the external validity when conducting case studies. We will therefore do our outmost to ensure the highest possible level of data integrity in our research, and make the necessary adjustments to our study.
According to Yin (2003), the internal validity is not an element of concern in an explorative study, as it is only a concern in a causal case study in which the researcher is attempting to determine whether a certain event led to another. He therefore has no recommendations on how to maximize it in an exploratory case study.

Even though we are conducting an explorative study, a causal relationship is one of the assumptions that the MEC is built on. We are however not presuming a predefined causal relationship. We wish to investigate the linkages between the elements, but we are not concerned with a specific causal chain, which will be elaborated on in section 2.3.1.3. We are therefore of the same belief as Yin - that the internal validity is not a cause of concern in our study.

Reliability on the other hand is concerned with demonstrating that the operations of a study can be repeated with the same results in a later study, and the goal is therefore to minimize the errors and biases in the study (Yin, 2003).

Yin (2003) argues, that the best tactics to secure reliability is to document the procedures followed in the study by creating a case study protocol or a case study database, or by making as many steps as operational as possible. The operationalisation is also one of Bonoma's (1985) recommendations for securing data integrity, and we will therefore ensure our reliability by operationalising as many steps as possible.

It is in the nature of our analysis that we rely on the methodology in the Means-End Chain analysis. Because we are structuring our gathering of data on the laddering technique we are naturally creating a sort of protocol and are documenting our steps in this manner, and will therefore not create a separate protocol or database. We will however enclose our interviews as digital files and create ‘Hierarchical Value Maps’, which sum up the essence from every single interview. We will furthermore operationalise key concepts by clearly defining them for all respondents. Finally, we will produce a detailed description of the process, which can

serve as both a preliminary guide for ourselves in how to conduct the interviews, but also serve as a research protocol.

By doing this, we believe to have secured the highest level of data integrity possible within the boundaries and limitations of a study of this kind.

2.2.1.2.1.1.2.3 External Validity

External validity refers to the generalizability of results – whether or not the results are generalizable beyond the immediate case study (Yin, 2003).

It is a common criticism of the qualitative case study, that the dependence on small samples leads to an incapability of generalizing the conclusions (Myers, 2000), but according to Bonoma (1985) the case study has a relatively high degree of currency in comparison to other methods.

Yin (2003) argues for the use and value of every single case study. Yin (2003) believes that much of the criticism is due to lack of rigor in many studies. A way to assure the external validity is therefore to have a strict methodology of the study and to pay attention to the rigor with which the study is constructed.

Yin (2003) concludes that studies do not require a minimum amount of cases and therefore that it is possible to generalize based on a single case study, if the above mentioned is satisfied. He does however make some recommendations regarding the external validity, and therefore posits that the use of theory in a single-case study will maximize the external validity.

In order to assure the methodology and rigor of our research, we will therefore apply theory depicting consumer's cognitive structure.

According to Yin (2003) the use of theory will:

- Help specify what is being explored when doing an exploratory case study
- Help delimit a case study inquiry to its most effective design
- Help ensure the generalizability to other cases

The theory will be our methodological base, and will provide the design of research steps (Yin, 2003).

As we wish to analyze the cognitive structure of consumers regarding CCL+, we find the "Means-End Chain" (MEC) theory appropriate to apply to our analysis. The MEC theory has a well-defined methodology, and we believe it to strengthen our research.

It is a theory that is based on the consumers cognitive structures, depicting the way in which product characteristics are linked to valued end stated desired by the consumers (McIntosh & Thyne, 2005, Grunert et al. 1995, Bredahl, 1998).

We therefore see it as a useful model for gaining insight into the perception of CCL+ in Denmark and Sweden.

2.3 Method

A 'method' can be described as the way the research approach to the investigation process (Andersen, 2005).

Consumer's cognitive structures that deal with consumption related aspects have many times been modelled in Means-End Chains (Grunert et al. 1995, Krystallis et al. 2008): for example in clarifying consumer perceptions of functional foods (Jonas and Beckmann, 1998), an investigation of Danish consumers cognition regarding low involvement products (Bech-Larsen et al. 1996), cognitions regarding genetically modified foods (Bredahl, 1998), motivations and cognitive structures of consumers in their purchasing of functional foods (Krystallis et al. 2008).

2.3.1 The Means-End Chain Theory

Gutman's (1982) Means-End Chain (MEC) theory posits that behavioural motivation to consume is derived from how consumers cognitively relate the product to themselves. He proposes a hierarchal cognitive structure, in which the motivation to consume is derived from cognitive linkages between the *attributes* of the product, the *consequences* of consumption and finally to the individual attaining his *values* (A-C-V). It is therefore a central perspective that each consumer has their own individual MEC, even though there might be some similarities.

The perspective suggests that consumers think about product attributes subjectively in terms of personal consequences – consumers see most products as a *'means to an end'* (Peter &

Olson, 2005). The *means* can be thought of as products or services and the *ends* as values important to consumers (Gutman, 1982).

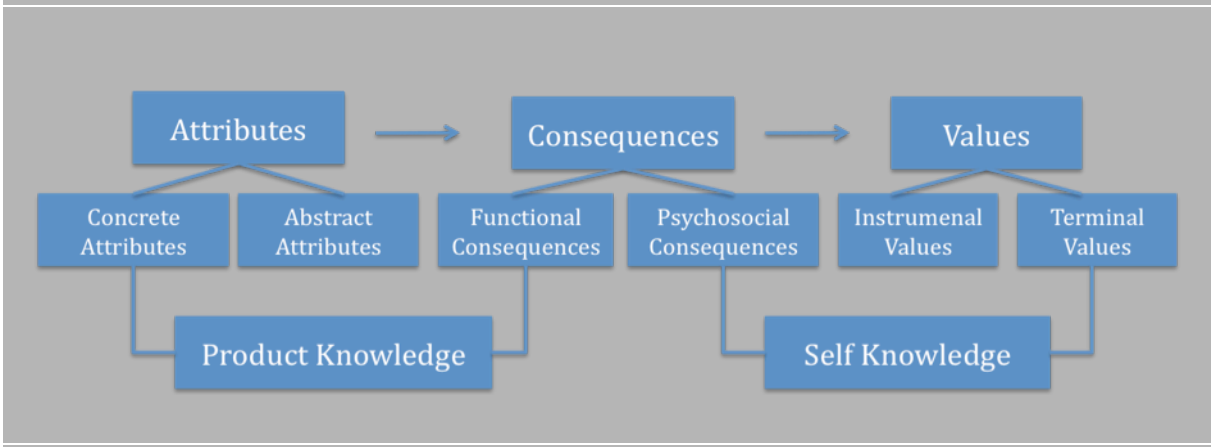
2.3.1.1 The Purpose of MEC Theory

MEC theory is a framework that offers marketers a practical method for obtaining knowledge about the motivations driving consumers' buying behaviour (Gutman, 1982, Mort & Rose, 2006). It is therefore a tool useful for marketers when designing strategies in knowing which things are important to communicate to the consumers, and which are redundant, and we have therefore chosen this framework to examine the cognitive structures of consumers regarding CCL+, even though the purpose is not to develop a marketing strategy, but to aid Coca-Cola.

2.3.1.2 The Elements and Linkages in MEC Theory

We will base our analysis on a MEC that has elaborated on the classical links (attributes, consequences and values), and thus have a structure as illustrated below in Figure 2.2 with six different levels of abstraction:

Figure 2.5: The Means-End Chain



Source: Own creation based on Gutman (1982), Reynolds & Gutman (1988), and Peter & Olson (2005)

Consumers can have two different types of product knowledge: knowledge about the concrete and abstract attributes of the product, and knowledge of the functional consequences of purchasing or consuming the product. The knowledge of self, is the knowledge of the

psychosocial consequences of purchasing or consumption, and the instrumental and terminal values the product can help the consumers satisfy or achieve (Peter & Olson, 2005)

2.3.1.2.1 Attributes

The least abstract level is the first level in the chain and concerns the knowledge of a product's attributes. The knowledge of attributes has been divided into two different levels: **concrete** (tangible, physical characteristics) and **abstract** attributes (subjective, intangible characteristics such as quality etc.). We have chosen this elaborated version because we believe it is necessary to distinguish between aspects that are literally part of a product or service and those that are attributed to a product because of those attributes (Gutman, 1982).

It is important to know which product attributes are most important to consumers, what those attributes mean to consumers, and how consumers use this knowledge in cognitive processes such as comprehension and decision making (Peter & Olson, 2005).

2.3.1.2.2 Consequences

A central aspect of the model is that consumers will choose actions that produce desired consequences and minimizes undesired consequences (Gutman, 1982).

Consequences arise from consuming products or services and can be either desirable (benefits) or undesirable (risks). They can occur directly from consuming the product, indirectly at a later point in time, or from others' reactions to the consumer's consumption behaviour. (Gutman, 1982)

Consumers can have knowledge about two types of product consequences (Gutman, 1982, Peter &Olson, 2005):

1. Functional
2. Psychosocial

Functional consequences are tangible outcomes of using the product that consumers experience directly (the immediate physiological outcome – for example; satisfy your thirst). These consequences also include the physical, tangible outcomes of using or consuming the product (dries your hair).

Psychosocial consequences refer to the psychological and social outcomes of product use. Psychological consequences are internal, personal outcomes such as how the product makes

you feel – most have an affective quality. This leads to another aspects consumers have knowledge about, knowledge about the social consequences of product use (respect, envy etc.)

People's cognitive systems interpret these consequences of product use and form knowledge and beliefs about these functional and psychosocial consequences in memory.

The perceived benefits are the desirable consequences consumers seek when purchasing and using/consuming product and brands.

The perceived risks concern the undesirable consequences, that consumers want to avoid when purchasing and using/consuming products, e.g. physical risks, financial risk etc. Perceived risk include consumers' knowledge or beliefs about unfavourable consequences, including the negative affective responses associated with these unpleasant consequences.

The amount of perceived risk a consumer experiences is influenced by two things (Peter & Olson, 2005):

1. The degree of unpleasantness of the negative consequences
2. The likelihood that these negative consequences will occur

In cases where consumers do not know about the potential for negative consequences, perceived risk will be low. In other cases, consumers may have unrealistic perceptions of product risk because they overestimate the likelihood of negative consequences.

In a purchase decision consumers will consider the benefits and risks of each choice alternative by integrating information about positive and negative consequences.

2.3.1.2.3 Values

Values can be characterized as people's broad life goals. Recognizing when a value has been satisfied or achieved is an internal feeling that is intangible and subjective (Peter & Olson 2005).

Rokeach (1973) defines values in the following way: "*A value is an enduring belief that a*

specific mode of conduct or end-state of existence is personally or socially preferable to an opposite mode of conduct or end-state of existence"[16].
He therefore beliefs that: *"Values serve as criteria for selection in action"*[17]

Values can be classified in different ways, but a common classification in MEC, and the one we will adopt, is to identify two levels: instrumental and terminal values. The **instrumental** values can be characterized as "preferred modes of conduct" – ways of behaving that has a positive value for a person (having fun, being independent etc.). **Terminal** values can be characterized quite differently, as preferred states of being (happy, successful, etc.) (Peter & Olson, 2005).

2.3.1.3 Critique and Limitations of the MEC Theory

Means-End Chain theory builds on the following four assumptions (Beckmann, 2002):

- Cognitive-emotive categories are hierarchically structured in relation to the level of abstraction
- Cognitive-emotive categories are saved in semantic form in memory
- Cognitive-emotive categories contain declarative knowledge that can be verbalised and explained
- Associations between cognitive-emotive categories are causal, i.e., A leads to B, B leads to C, etc.

Some of these assumptions have been the basis for some debate regarding the application and usefulness of this framework. In order to assure the applicability for our research question we will in the following section discuss the main points of critique of these assumptions to ensure we make the necessary precautions and possible adjustments.

- ***"Cognitive-emotive categories are hierarchically structured in relation to the level of abstraction".***

According to Gutman (1982) it is the values that drive the overall direction, the consequences that select the specific behaviour in specific situations and the attributes are what the products

[16] Milton Rokeach, The Nature of human values, 1973. The free press
[17] Milton Rokeach, Understanding Human Values, 1979. The Free Press.

contain, that produces the consequences (see Figure 2.2 above for graphic illustration).

The theory therefore assumes that behaviour is value-driven, whereby it is the personal values of a consumer that ultimately influences their purchase decisions (McIntosh & Thyne, 2005). This assumption has caused some debate and general critique of imposing a relationship between values and behaviour that might not exist.

Peter & Olson (2005) argue that not all purchases are influenced and determined by consumer's values. They believe, that low-involvement (for example, routine purchases and many food products) in most cases, will not be influenced by the consumers values, and therefore that MEC is not an applicable framework in these cases.

Our purpose is not to discuss whether or not CCL+ is a high- or low involvement product, as it has characteristics that would allow for a classification of being both. According to Peter & Olson (2005) involvement refers to consumer's perceptions of importance or personal relevance for an object, event or activity.

Consumers that perceive CCL+ to be beneficial in relation to their health may lead to stronger affective responses such as emotions and strong feelings – leading the product to be a high-involvement product. On the contrary, consumers that perceive CCL+ as yet another relatively cheap soft drink may characterize the product as a low involvement product. CCL+ can thus be categorised as both a high- and low involvement product.

But although the consumers associations between their personal values and low involvement products can be assumed to be weak and few, it can be expected that some aspect of a low involvement product – and especially low involvement foods, e.g. health-related aspects (effects of the food, nutrition, diet and health) – will be associated with personal values (Bech-Larsen et al. 1996).

We believe the perception of CCL+ to be value driven and therefore that the MEC framework is applicable to our case.

- ***"Associations between cognitive-emotive categories are causal, i.e., A leads to B, B leads to C, etc." (A-C-V)***

The structure of the MEC is created by researchers who believe, that there is a consistent connection between a product's attributes, consequences, and the individual consumer's values (Mort & Rose, 2006).

Other research suggest a much more immediate role for values in the consumers motivation and Mort & Rose (2006) suggests, that the explanation for these conflicting positions on the role of values might be explained by differences in product type. The critique has been that the conclusion of the interconnections of links has been based on products with a high degree of functionality – utilitarian products.

There are thus two conflicting approaches of understanding and looking at values. In the first, the role of values can be understood only in the context of the hierarchical linkages of the MEC. In the second, a product's attributes can be linked directly to values and thereby explain the motivation to consumption. It is suggested by Mort & Rose (2006), that the product type can clarify this area of conflict.

Their main point of argument is that MEC theory has mistakenly credited the centrality of the link between the attributes and consequences of consuming a product, whereas this link is central only when the product is utilitarian.

We will not engage in a deeper discussion of CCL+ being primarily a utilitarian or hedonic product, as it could be characterized as both product, and as we do not believe it to be central for our research or whether or not we are able to identify all the predefined layers.

Peter & Olson (2005) also states that a MEC can skip a link for some consumers, but they do not see this as a limitation of an assumption that calls for some alterations to the model, but merely as a fact – and we will take the same stand.

We believe it is important and central to understand the linkages between these elements (A-C-V) because it reveals something about the individual's cognitive structures. If the link 'consequences' is missing for example: attributes such as sunny beaches and blue water can directly link to values such as happiness. There is no need to demonstrate that you get a tan, feel clean from the water etc. (Mort & Rose, 2006).

This is why it is not essential that all the links as stated by Gutman (1982) are present – nor does it determine whether or not we can apply the MEC theory. Our purpose of applying the theory is to gain insight into the cognitive structure of the consumers, and therefore, if the

consumer skips a link, we will still gain important and useful knowledge. We will therefore use the structure illustrated in Figure 2.2 as a foundation for our research, but will not assume that all linkages will necessarily be there, and will not try to "force" our respondents to define all links.

2.3.1.3.1 General Application

There has also been some critique of the practical use of the model. Grunert and Grunert (1995) argue that it is difficult to evaluate the usefulness of MEC as a tool to explain or predict consumer behaviour. Their critique concentrates on the fact that the model analysis a cognitive structure, and that this structure cannot by itself explain or predict behaviour, but has to be supplemented with assumptions about cognitive processes. They therefore identify MEC as missing a theoretical link. However, the scope of our MEC analysis is not to predict or explain behaviour, but to understand and determine the cognitive structure of consumers regarding this functional food product, and for this purpose we deem MEC to be a useful and appropriate tool.

2.4 Research Technique & Research Instrument

A research technique can be described as the way of using a set of research instruments, and the research instrument can be described as the instrument used in the actual research.

These concepts can be combined in our thesis, and described by the use of the laddering technique, as it will also serve as our instrument.

2.4.1 Laddering

Laddering is an in-depth interviewing and analysis methodology. The technique can be characterized as a semi-structured[18] qualitative method and refers to one-to-one interviewing.

[18] Definition: A semi-structured interview is a method of research which allows the interviewer to be more flexible. The semi-structure allows new questions to be brought up during the interview as a result of what the interviewee says. The semi-structured interview tends not to have a specific framework but a more explorative approach (Andersen, 2005).

Laddering is commonly associated with the Means-End Chain theory, as it was specifically developed to uncover the linkages in the MEC (Reynolds & Gutman, 1988). The laddering technique specifically focuses on the linkages between the attributes that exist in products (the "means"), the consequences for the consumer provided by the attributes, and the personal values (the "ends") the consequences reinforce (Valette-Florence, 1998).

2.4.1.1 Objectives for Laddering Interviews

We will use laddering to elicit the six levels of abstraction, and thereby develop an understanding of how consumers translate the attributes and consequences of CCL+ into meaningful associations with respect to self (Gutman 1982, Reynolds & Gutman 1988). By applying the laddering technique we want to obtain the target group's current perception of CCL+ (Reynolds & Gutman, 1988).

The objective is to uncover the sets of linkages between the determinants across the range of attributes, consequences and values.

2.4.1.1.1 The Actual Technique

Laddering's most important virtue is that the collection of raw data is driven by the respondent's cognitive structures and processes rather than by us as researchers as it allows the respondent to use free speech. We therefore minimize the risk that the collected data reflects our own perceptions or ideas rather than those of the respondent (Grunert & Sørensen, 1996).

Instead of forcing the interviewee into a predetermined box of answers, as mostly done in quantitative research, we will by the use of this technique enable the respondents to define personal answers in their own terms and context. The associations the consumer has regarding CCL+ are thus self-defined. This enables laddering to facilitate a consumer-oriented perspective taking the consumer's personal value perspective into account (McIntosh & Thyne, 2005, Reynolds & Gutman, 1998).

We will execute these laddering interviews by obtaining reasons behind the respondent's preferred product choice by the use of probing questions based on some version of the "*why is this important to you?*" question.

2.4.1.1.1.1 General Considerations and Strategies

Even though probing the same question again and again could appear to be a simple task, the interviews have to be planned carefully in order to assure consistency and success.

The following can be regarded as our research protocol as we will explain every step and the exact procedures we will take. As mentioned under section 2.2[19] this section is very important in securing the reliability of our study.

The following procedures and considerations are based on recommendations and advice developed by Reynolds & Gutman (1988), as well as from various research conducted by the use of MEC in food related studies. Reynolds & Gutman are some of the founders and prime exponents of the MEC theory and the laddering interviews and therefore have in-depth knowledge of the technique. We do however also believe it to be important to learn from the previous research conducted by this method, as their experiences and findings regarding the use of the technique will give us important insight and can serve as an aid in creating the optimal procedure.

2.4.1.1.1.1.1 Situation specificity

It is important to be aware of the special considerations of gathering data through laddering interviews. According to Bech-Larsen et. al. (1996) one should specify the exact situation of product use to the respondents. This is a way of operationalising as it will give the respondents a common starting point, and ensure that they have the same base for answering.

We will therefore outline the following situation for the respondents: *"You are at work or school. It is afternoon and you need something refreshing to drink"*.

We have chosen this situation, as we believe it is a situation all respondents will be able to relate to and a situation where the respondents could actually consider drinking a diet soft drink.

[19] Paragraph: 2.2.1.2.1.1.2.2

2.4.1.1.1.1.2 The Interview Environment

A comfortable interview environment must be created in order to make the respondent feel relaxed and be willing to reveal motivations behind their perception of CCL+.

To create this, we will conduct these interviews in the homes of the respondents. We believe that this will also ease the process of recruiting the respondents, as we will not inconvenience them with transportation to a specific location.

We will also stress the fact, that the reason for this interview is merely that we, as researchers, want to understand the respondent's perception of CCL+, and that the interview has nothing to do with testing them or their knowledge. Furthermore, we will state from the beginning that there are no right or wrong answers.

2.4.1.1.1.1.3 Relationship between the Respondents and the Interviewers

Reynolds and Gutman (1982) suggest that showing a *slight sense* of vulnerability can be helpful in creating a bond with the respondent. This can be necessary due to the personal nature of the questions, and will allow the respondents to feel secure in revealing their perception on a high level of abstraction. The best way to accomplish this is by initially stating that the questions may seem obvious and foolish, and then associating this with the specific guidelines necessary to follow.

We will let the respondents know that we are genuinely interested, and by creating this sense of caring and involvement, the respondents will hopefully feel more at ease and comfortable. This will make the respondent act more naturally and open-minded and will allow the interview to go deeper than the mere rationalizations to discover the more fundamental reasons underlying the respondent's perception.

We will therefore do our best to be perceived interested and caring, but at the same time neutral recorders of information.

2.4.1.1.1.1.4 Hard vs. Soft Laddering

There are basically two different approaches of conducting these interviews: hard- and soft laddering.

Hard laddering is a very structured way of probing and forces the respondent to strictly follow the line of thought in the MEC theory. In this situation respondents only have the opportunity

to express whether an attribute is important or not (Grunert, Grunert & Sørensen, 1995). This approach is most often used in the context of computerised data collection devices (Grunert & Grunert, 1995).

Soft laddering, on the other hand, is characterized by the respondent's flow of speech being restricted as little as possible. With this approach, the respondents are encouraged to say everything they want about the product, and can thus reflect both the positive and negative evaluations, and allow them to explain in greater detail (Grunert, Grunert & Sørensen, 1995).

Our respondents could, as we have previously mentioned, structure their perception of the product in other ways than in the hierarchically way proposed by Gutman (1982).
By using a soft laddering method, the consumer is able to form his or her own structure, and is therefore not forced to follow the hierarchical linkages.
The use of the soft laddering approach has also proved to be the most appropriate method to use when conducting research regarding relatively new products, and products which the consumers have limited knowledge of (Bech-Larsen et al. 1996, Grunert & Grunert, 1995). We believe it to be the case with CCL+, so we have chosen to conduct our interviews using a soft laddering approach.

We furthermore believe this choice to increase the validity of our study, as it will limit the influence of our own cognitive structures as researchers, but instead focus solely on the cognitive structure of the respondents. As data collection method that does not allow the respondent to use some kind of natural speech is likely to be influenced by the researchers (Grunert & Grunert, 1995).

The soft laddering approach does however give us an extra interpretation task as investigators, as it is necessary that we are able to relate the answers given to MEC theory. It is important to stay focused and analyse what category (A-C-V) the answers fall into in terms of the level of abstraction (Grunert, Grunert & Sørensen, 1995). It is therefore necessary to have an in depth knowledge of the MEC theory before conducting the interviews, but after studying the theory in details, we believe to possess the necessary knowledge.

We will furthermore conduct a pilot study. One of the purposes of this will also be to test our abilities, and if it turns out that our knowledge of the theory is insufficient, we will naturally engage in another study of the MEC theory.

2.4.1.1.1.1.5 When to Stop Probing

The question of when to stop probing has been mentioned as one of the most difficult aspects of conducting the laddering interviews (Grunert, Grunert & Sørensen, 1995).

The most natural way of ending a laddering interview is when the highest level of abstraction, the values, is reached. However, in situations where the cognitive structure is weak, the respondent could quite quickly become unable to answer the questions for the more abstract categories (Grunert, Grunert & Sørensen, 1995). A weak cognitive structure is to be expected in relation to products consumers are not very familiar with, and as CCL+ as previously determined falls in this category, extra care has to be placed in this regard.

Our choice of a soft laddering approach reduces the risk of pressuring the respondent into giving an answer, even though they cannot think of one. The consequence of pressuring, could lead to a study that does not measure the cognitive structure, but a measurement of some other perspectives the respondents have been pressured into, by for instance creating a hypothetical situation in giving the answer (Grunert, Grunert & Sørensen, 1995).

Our choice of the soft laddering approach naturally reduces this issue, as we will not pressure the respondents into giving answers. We will however be very attentive, as the construction of a hypothetical situation etc. will often be noticeable due to breaks, pauses, unfinished sentences etc. (Grunert, Grunert & Sørensen, 1995).

Our strategy, for when to stop the interview, will be to stop when the answers no longer make sense or when the respondent has no further answers to give. However, in situations where the respondent cannot immediately think of an answer, we will try to help by rephrasing questions and/or elaborating, but in no way pressuring the respondent to provide an answer. We will also keep the above mentioned signs in mind, both under the actual interview, but also in analyzing the data in order to detect answers that the respondent has felt pressured into giving (Grunert, Grunert & Sørensen, 1995).

2.4.1.1.1.1.6 Basic Concerns and Considerations

The higher the cognitive level of abstraction the interview reach, the more personal and sensitive the questions get. This can result in silence, avoidance behaviour or even a negative verbal attack regarding the interview-process or the interviewer (Gutman, 1982).

The probing technique is furthermore rather unique, and the respondents could therefore get annoyed and feel attacked by the "why" questions. If this occurs we will immediately stop the interview and find an alternative respondent, as we would in this case not believe the answers to reflect the respondent's real perception, as they would probably have been influenced by the negative attitude to the interview.

An additional concern could be that we as interviewers are not professionals. First of all, we do not have any experience in conducting laddering interviews. We will however conduct a pilot study, in order to test the conditions we have stated. This will allow us to make the possibly necessary alterations, before engaging in the actual gathering of data. We will thoroughly evaluate the outcome of this pilot study, and gain some experience in this way.

We are aware of the fact, that at least the Danish respondents will probably have a negative attitude towards CCL+. A negative attitude means that the perceived elements of CCL+ might not be important to the respondent. This has been the case in previous research conducted on the Danes attitude towards functional foods, and has meant that the ladders stopped before reaching high levels of abstraction (Jonas & Beckmann, 1998). As previously mentioned, we do not assume all levels are necessarily present in the minds of the respondents, and therefore believe that all responses will give us valuable information.

2.4.1.1.1.1.7 Selection Criteria for Respondents

We have chosen to focus our research on the target group of CCL+ as defined by TCCC. This focus will assure the relevance and helpfulness for TCCC of our study, and we also believe the target group to be coherent with the product.

The defined target group for CLL+ is women between 20-39 years of age in both Sweden and Denmark.

The target group is more specifically defined as: modern and active women, who prefer low-calorie/light soft drinks[20].

- We will recruit 10 respondents in both Sweden and Denmark. We have decided to conduct 10 interviews in the two countries, as we believe it to provide a varied picture

[20] BazarOnline.dk, 2009 (Statements by: Business Manager, Camilla Munkholm Fischer, The Coca-Cola Company)

within the limits of our study. The number of 10 is however a temporary target. If the responses are very different after the 10 interviews, we will conduct supplementary interviews.

- There is a chance that we can affect the answers of the respondent because we, ourselves, have created the problem statement. We have acquired a lot of knowledge about the subject at hand, which means that we beforehand have some expectations, which could influence the respondents. We will therefore choose respondents whom we do not have close relations to.
- We will attempt to recruit respondents in front of convenience stores in Copenhagen and Malmö. We will do this by explaining that we are students from Copenhagen Business School and would like to ask them a couple of questions regarding their perception of a product. We will thus try to arrange an appointment, preferably in their homes.
- We will aim at reaching an even spread regarding age in the target group, so all ages are represented. Furthermore, respondents with different occupations will be preferred, as it will mirror real life in general.
- We will only interview people who are fond of carbonated cola drinks, as we do not believe it to be interesting to gain insights into the cognitive structure of people who basically dislike the cola taste. Furthermore, these laddering interviews would probably never reach a high level of abstraction, as the attributes are not perceived as important.
- All respondents should have consumed a light soft drink within the last month. We will not solely focus on the regular Coke light drinkers, as the others will also be receptive. We believe, that only focusing on Coke light drinkers will not necessarily generate more consumers, but instead possibly cannibalise the market.

Previous studies show, that the Danes know less of functional food as for example the British, and this has been interpreted as part of the answer to, why Danes are more sceptical towards the concept (Jonas & Beckmann, 1998). As we know from the research conducted by

YouGov Zapera (2008), the Danes are more sceptically to the concept of something being enriched than the Swedes.

Naturally we cannot control the general knowledge of functional foods of our respondents, and it is not the purpose of this thesis to analyze the level of knowledge of functional foods in Denmark and Sweden, but it seems a fair concern, as functional foods is a larger food category on the Swedish market.

We have therefore chosen to create a manuscript explaining the concept of functional foods and CCL+[21]. This will hopefully reduce some of the partiality that might exist, and also give the same point of departure for all our respondents. Another reason for doing this, is the fact that our own experience on the matter is, that many consumers believe it to be illegal in Denmark. By giving them the facts, we avoid focusing the interview on legal matters, e.g. the respondent reacting negatively because it is believed to be an illegal product, and can instead focus on the actual product.

- Knowledge of functional food or CCL+ is therefore not a selection criterion for our respondents.

All of the above are our preliminary goals, and we will elaborate on the actual respondents in the analysis.

2.4.1.1.1.2 How to Begin the Interview

There are several ways to commence the laddering interviews. The right approach depends on the type of product and on the purpose of the research.

The laddering probes begin with the distinctions made by the respondent concerning perceived differences between products.

According to Gutman and Reynolds (1988) there are three different elicitation techniques that have proven successful: (Reynolds & Gutman, 1988, Grunert, Grunert & Sørensen, 1995).

1. **Triadic Sorting** is an approach that provides the respondent with different products. The respondent is thus asked to evaluate the differences.

[21] See appendix 3

2. **Preference-Consumption Differences** is a way of eliciting distinctions, which takes its starting point in letting the respondent rank some products or brands. The respondent thus ranks the products by stating why one product is preferred over another. To proceed, the interviewer will ask *why* one is preferred compared to another.
3. **Differences by Occasions.** The respondent is presented with a personally relevant context within which to make the distinctions.

We will use the "*Preference-Consumption Differences*" and will therefore use another product to compare CCL+ to. We have chosen this approach, as it seems appropriate, due to the limited level of knowledge of our product as explained previously. For this reason we have chosen to provide the respondents with a concrete attribute before commencing then interview. We will thus tell them, that one of the differences between the two products is, that CCL+ is enriched with vitamins B12 and Niacin.

In our case we have chosen Coke light versus CCL+, and we will use a 0,5L Coke light bottle to compare CCL+ to, as they have the same price, and therefore give the respondents a good basis for comparison as we believe the price could have an influence.

We will hereafter, ask the respondents to rank the two products, and ask *why* one was preferred to the other.

Some chains could be characterized by "forked answers" – situations in which one attribute in the mind of the respondent leads to two or more consequences for example (Grunert, Grunert & Sørensen, 1995). In these situations, we will proceed with the laddering for all the individual answers, in order to cover as many perspectives on the matter as possible.

2.4.1.1.1.2.1 Pilot Studies

After conducting four separate pilot studies, we have learned the following:

- We were able to gain insight to the cognitive structure of the respondents by applying the MEC theory.

- The respondents needed some encouragement and direction in order to keep focus and to reach the higher levels of abstraction, and soft laddering is therefore a good approach.
- It requires some efforts from our side as interviewers to keep focus and to connect the elicitation to the different levels on the MEC. We will therefore both be present during all the interviews, to ensure the best results, but we will let one be the primary interviewer.
- The manuscript had to be altered to a shorter version, as it was too long and thorough for the respondents to listen to it all.
- Presenting them with a specific way in which they were choosing between the products was a good way to commence the interview.
- We took notes during the interviews to be able to remember the different answers and ladders, but it made the respondents very uncomfortable and curious as to what was being written. We will therefore instead tape the interviews if the respondents will allow it[22].

Overall, we found that the results were satisfying as we were able to gain insight into the consumer's cognitive structure, and we are therefore confident that our research design will yield interesting and valuable results.

2.4.1.2 Hierarchical Value Map

It is not solely the elicited elements that give valuable insights to the cognitive structure, the linkages that are formed between these elements are, as mentioned, also of great importance (Gutman, 1982).

A *hierarchical value map* is therefore an essential element of the MEC theory, as it provides a graphic illustration of the associations and perceptions most frequently elicited as it is created on the basis of categorized laddering data for all respondents (Reynolds & Gutman, 1988).

[22] These are included in appendix no. 10

In order to construct the map, an 'implication matrix' will firstly be constructed in order to be able to identify the strongest linkages from our respondents. The matrix displays how many times one element leads to another, both directly and indirectly.

The first step is a content analysis of all the different MEC's obtained from the respondents and by thorough meaning-based interpretation of all mentioned concepts the data will be coded into broad categories. After getting a sense of the elements elicited, the first step is to classify all elements in A-C-V categories, and then hereafter create the summary codes and classify the elicitations into these (Bech-Larsen et al., 1996, Reynolds & Gutman, 1988, Bredahl, 1998).

It is important to make sure that the original meaning of the elicitation is not lost in the coding of the data, and it is therefore recommended that it is the gatherers of the data that perform this coding in order to assure the respect and understanding for the individual respondents elicitations (Grunert & Grunert, 1995).

When the codes are established they are all assigned a number. These numbers are then used to score each element in each of the respondent's ladders with the sequential elements of the ladder corresponding to the consecutive column designations.

The individual researcher must determine whether or not each mentioning of an element by the same respondent should be included in the matrix, as both choices will have an influence on the overall result. The significance of an element can be argued to be a function of the number of connections it has with other elements, but it will however distort the result of the map (Reynolds & Gutman, 1988).

Both direct and indirect relations will be counted. The direct will stand to the left of the dot, and the indirect to the right[23].

2.4.1.2.1 Constructing the Map

The HVM is constructed by connecting all the chains formed by the linkages in the matrix. It can be necessary to determine a 'cut-off level' and only include an association on the map if it can meet a minimum frequency requirement (Bech- Larsen et al., 1996).

[23] See appendix no. 4 & 5

The literature does not provide any guidelines in establishing the cut-off level; just that one should choose the one that appears to be the most informative, and that one could try with different levels.

In the study comparing the Danes and the British, Jonas & Beckmann (1998) corrected the 'knowledge irregularity' in the choice of "cut off level". It turned out, that the British were able to mention more attributes, and as a result, more ladders, than the Danes. As a solution, they chose a lower cut off level for the Danes (Jonas & Beckmann, 1998). We will therefore also consider this in great detail in our analysis of our gathered data in section 3, in order to reduce the possible irregularity.

It is also up to the individual whether or not to include both direct and indirect elicitations when deciding on the cut-off level.

Without including the indirect relations, a situation might occur in which there are paths by which two elements may be indirectly connected but where none of the paths are represented enough times to represent a significant connection (Reynolds & Gutman, 1988).

A map is then drawn illustrating the paths that are strong enough based on the cut-off level.

This technique can be used as a way of combining qualitative with quantitative analysis in some studies. It is not our purpose to analyze our data in a quantitative manner, but in comparing the two countries we have chosen to construct a total value map for each country. It will serve as a foundation for our comparison of the two countries, as it will clearly illustrate the main paths and determinants for the two countries. Before the comparison we will analyse all the respondents' elicitations in detail, and the creation of the map will therefore not lead us to disregard elicitations from some of the respondent's, and the comparison will not solely focus on these maps, as we are able to include distinct elicitations in the comparison also due to our qualitative approach.

2.5 Summary

Our scientific approach in this thesis is based on the principles of hermeneutics. We thus acknowledge that our scientific knowledge and background affect the way we conduct and interpret our research. We have chosen this approach, as we believe that this is the way science is created. On the base of existing knowledge, new knowledge will be created, and the hermeneutic spiral can thus illustrate our work process best.

We have a holistic view on humans, which means that we will consider the individuals in question as a whole, and not separated in physical and psychological needs.

We will conduct an explorative, qualitative case study of CCL+, and thus have an inductive perspective.

We will apply the *Means-End Chain theory* in order to gain insight to the target group's cognitive structure of CCL+. By applying MEC theory, we will identify the abstract and concrete attributes, functional and psychosocial consequences and instrumental and terminal values as perceived by our respondents.

The research technique we will use is *the laddering technique*, which is an in-depth interviewing technique that will identify the determinants related to CCL+.

When we have identified the determinants of the Danes and the Swedes we will create a *hierarchical value map* for both countries. This will be the basis for the comparison of the two nationalities.

3 Analysis

3.1 Introduction to the Analysis

In the following section we will analyze our gathered data. We will commence by elaborating on how the interviews were actually conducted and how we will proceed with the analysis.

3.1.1 Respondents: Validity & Reliability

We quickly discovered that we were unable to recruit respondents on the street, and were therefore forced to take another approach, and we therefore used our social network to recruit respondents instead.

As we know this approach could have consequences for the external validity and reliability our gathered data, we only chose respondents whom we did not have a strong personal relation to. Instead we asked acquaintances to help us find respondents in our target group who were two-three links away, and whom we had no relation to.

We did not experience any biases in relation to us being the writers of the thesis as well as the interviewers, e.g. situations where the respondent felt reluctant to answer, so we do not believe this approach to have made our data less valid.

All interviews were conducted in the respondent's home, or at their workplace, and were completed without any trouble. We would ideally have liked the interview to take place in people's homes to make them feel comfortable and secure, but it turned out not to be possible with all respondents. By interviewing people in their workplace, we were also in surroundings familiar to the respondents, and they did not seem uncomfortable. All respondents allowed us to tape the interviews, and we therefore did not have to take notes simultaneously. We ensured them that the sole purpose of the taping was for us to be able to listen to the exact answer and probe at a later point in time if necessary. We furthermore assured them that they would be anonymous, and no one seemed uncomfortable or reluctant.

We chose to conduct them in Danish, as this would make it easier for the respondents to explain themselves in their mother tongue, and also make them feel more relaxed and not

concerned about proper pronunciation or grammar. This would furthermore enable them to use a wide vocabulary, and thereby to express and explain themselves in more detail. Some of the Swedes did however seem a little hesitant in explaining themselves, and sometimes had to search for the word, and the language barrier might have caused this. This can have influenced their answers to some extent, and we do see from our gathered data that we did not reach the highest level of abstraction for many of the Swedes, which can possibly be explained by them feeling a bit uncomfortable and insecure. This will be accounted for in the analysis, as this is a point of difference between Denmark and Sweden.

As we chose to conduct the interviews in Danish, we have translated the interviews into English ourselves. We believe we have been able to translate them without losing data or altering the meaning of the elicitations, as we began the process by translating the elicitations separately and then afterwards comparing them to see if they differed. In situations where differences occurred, we listened to the interview again and assured the right translations of the quotations.

One of our criteria was that our respondents should all be drinkers of Cola drinks, and should have been drinking a light cola drink within the last month. Even though we fulfilled this criterion a few of the respondents stated that they preferred regular Coca-Cola. We do not however believe, that this has made their interviews of less value, as their elicitation were not concerned with the light versus regular perspective, as they believed both of them to be unhealthy products. Furthermore, they drink light products even though they prefer the regular variant.

We presented all the respondents with the same situation in which they were making their choice. They did quickly relate the product to themselves and the situations in which they would normally drink cola drinks. As we are interested in their line of thought in the actual situations in which they would make their choice, this has not jeopardized the results of our study, and the situation we specified for them only served as a way to commence the interviews.

3.1.2 Approach

We will divide our analysis in five different sections in accordance with our research questions, and will therefore for each country identify the attributes, consequences, values and lastly the linkages between them. The fifth section will be a comparison of the two countries.

As mentioned in section 2.3.1.3 we have chosen an extended version of the MEC, which means that the different levels of abstraction have been divided into two. This means, we will concentrate on the concrete and abstract attributes, functional and psychosocial consequences, and both the instrumental and terminal values.

As the majority of our respondents turned out to be negative towards the product, it is natural that they did not perceive CCL+ as a product that would help them achieve the values they strive to achieve – their desirable end states. Instead some perceived the product to have the opposite effect. Obviously none of the respondents strived for ‘a bad feeling’ or ‘a bad life’. In reality their values was ‘well being’ or ‘a good life’, but as the CCL+ was perceived to have the opposite affect we have categorised the answers for example ‘bad feeling’ or ‘bad life’ as values, as it makes the point clearer.

Other researchers who have conducted laddering interviews on products respondents felt negative towards, for example Bredahl (1998), who investigated consumers cognition in regards to genetically modified products, have chosen to illustrate these in the HMV by putting a ‘-‘ (minus) in front of the linkages, for example, instead of ‘bad life’ they have illustrated it by linking to‘-’ ‘good life’. We tried this initially, but as we found it confusing and misleading, and therefore chose the other approach.

We will analyze our data on three different levels, following Kvale’s (1997) three different levels of interpretation (understanding), and will therefore have three different parts.

3.1.2.1 Self-Understanding

The first step is to create a rephrased summarization of the meaning of the respondent’s statements, and group them into categories.

We will commence by analysing each individual respondents determinants, and then create a total HVM for each individual illustrating their ladders.

The categorized laddering data for all respondents will afterwards be inserted in a summary matrix, and based on these results we will create a HVM for each country. The map will give

a graphic illustration of the associations and perceptions most frequently mentioned by the respondents in each country.

We will include both direct and indirect relations, as we believe both are useful and important in determining the most dominant paths between the determinants.

We have decided to include the determinants mentioned by a respondent only once. We believe the distortion is too significant if we included all the mentioning's of an element by one respondent. This decision is based on the interviews, as we know that many of the respondents repeated and rephrased their answers, which will distort the total map. By only including the elicitations once we believe to have a clearer and truthful result.

As recommended, we experimented with different cut-off levels. As we only have ten respondents per country, we initially believed a cut-off level to be superfluous. As a result, we constructed a HVM based on the total amount of elicitations. This map did however turn out to be very complex and not helpful in illustrating any clear points, so as part of our hermeneutic approach to this, we took a step backwards, and based on our new knowledge decided to create a new HVM with a cut-off level. The knowledge irregularity did not lead the Danes to a lower number of elicitations compared to the Swedes, and we have therefore decided to have the same cut-off level in the two maps. As we have a rather small number of respondents we have decided to create a cut-off level of two, as we believe this to be able to illustrate the most dominant associations without reducing the data to a degree that causes valuable information to be lost. We furthermore analysed all respondents' elicitations in detail, so the functioning of the map is to give an illustration that will serve as the foundation for comparing the two nations.

3.1.2.2 Critical Common Sense-Understanding

Based on the coded elicitations from our respondents we will discuss the elicited attributes, consequences and values. We will both discuss the individual statements, but also interpret them within a wider frame of understanding than the respondents own. We will have a critical approach to what is actually being said, and also focus on the actual content of the statement, and the specific respondent stating it.

3.1.2.3 Theoretical Understanding

We will include theoretical knowledge and other relevant analysis and knowledge of the field and the context into the interpretation in the perspectives paragraph. These perspectives are valuable, but not in the answering of our research question and we will therefore discuss them in the last paragraph in order to try to explain our findings, give recommendations and put our research into a broader perspective.

3.2 Denmark

As shown in Table 3.1 we recruited ten respondents in Denmark. We were able to reach an overall spread in the previously defined target group. There is a 60/40 representation of the 20's and 30's in the target group. We were able to recruit people of different occupation and our respondents thus represent individuals, who are students, no/short education to long educations. We were, however, only able to recruit respondents situated on Zealand, and the majority in Copenhagen.

Table 3.1: Danish Respondents

Respondent no.	Age	Occupation	Residence	Seen the product	Tasted the product
1	21	Student	Copenhagen	No	No
2	23	Shop assistant	Copenhagen	No	No
3	24	Student	Gentofte	No	No
4	25	Nurse	Copenhagen	Yes	Yes
5	26	Student	Copenhagen	Yes	No
6	26	Designer	Copenhagen	No	No
7	31	Marketing	Ishøj	No	No
8	34	Student	Slagelse	No	No
9	35	IT	Hvidovre	No	No
10	38	Dentist' assistant	Slagelse	No	No

Source: Own creation

Only two out of ten of the Danish respondents had ever seen or heard of the product. Of these two, only one had actually tasted it. Generally speaking, the respondents were all very attentive to their bodies, and what they eat. 6/10 took vitamin pills on a regular basis.

It was only two out of our ten respondents who ranked CCL+ over the regular Coke light. This has great influence on our data as this meant that the majority of associations of CCL + are negative.

In accordance with Kvale's (1997) first level of understanding, self-understanding, we have summarized the meanings of the respondent's statements by grouping them into categories. See appendix 6 for greater detail on the coding.

The following section will deal with the next level of understanding, a common-sense interpretation.

3.2.1 Attributes

3.2.1.1 Concrete Attributes

The concrete attributes elicited by our respondents are illustrated below in Table 3.2.

Table 3.2: Concrete Attributes

Concrete Attributes
Vitamins
Yellow
Sun
Tall shape

Source: Own creation

As previously mentioned, we chose to give the respondents a concrete attribute before commencing the laddering interview, and therefore told them that a difference between CCL+ and Coke light is that CCL+ is enriched.

Other concrete attributes were mentioned by the respondents and were regarding the physical characteristics of the can: the shape, colour and images.

3.2.1.2 Abstract Attributes

As for the more intangible characteristics, our respondent's elicited abstract attributes have been coded into the ten different categories illustrated below in Table 3.3.

Table 3.3: Abstract Attributes

Abstract Attributes
Misleading design
Questionable taste
Incoherence
Unnatural
Unfamiliar
Too large an amount
Appealing
Price premium too large
Unappealing

Source: Own creation

3.2.1.2.1 Unfamiliar

As only one of the respondents had tasted the product, and only two in total had heard of CCL+, it is natural that several respondents mentioned 'unfamiliar' as an abstract attribute.

Six respondents mentioned this determinant, and they all mentioned it several times in different variations, as it is the starting point for many of their paths. 'Unfamiliar' does not solely refer to CCL+, as it is not merely mentioned as a statement confirming the fact that they have never seen or heard of the product before. It also refers to the concept of an enriched product and the intangibility it entails. As one respondent said when comparing CCL+ to Coke light:

"There is something in this one (CCL+)*, which I don't really know what is."* (DK-7)

The regular Coke light was the preferred choice as it was more concrete. The fact that there was an added substance to CCL+ made her uneasy of consuming the product, as she would feel uncomfortable consuming an artificially added substance, of which she had no knowledge. The actual amount of substance in it was also a concern of the respondents as they felt they lacked information of the product and that it was uncontrollable, as they did not know the amount. It is surprising, that they feel this way as the exact amount and content is actually written on the can. It seems as if they find it too intangible and unfamiliar which makes them concerned and they do not even think about searching for the information on the can.

"Maybe if it becomes more familiar, you will see it in more stores, you will get used to it, and then it will not seem more dangerous, than it is to eat a vitamin pill every morning." (DK-6)

The unfamiliarity led to feelings of being scared of the product, in the sense that the concept made them apprehensive towards it. One respondent expressed it by saying:

"There is something scary about it, but maybe it is the unfamiliar factor, because you are not used to it". (DK-6)

This perception can also be seen as a reaction to the concept of being able to enrich products at all. They felt it was a scary development, and that you could never be sure of what you actually consume as technology allows us to alter anything.

"*I think it is scary that you do not quite know what it is you are eating or drinking. Because then you would have to check what have they put in this one".* (DK-2)

This is a reaction to the alteration of the food category itself. The groceries, which we are familiar and comfortable with, are no longer how they used to be. Everything can be changed, altered and modified, and it is hard to control everything you consume. This has therefore led to a feeling of *losing control* with what is actually being consumed.

It was interesting to learn, that even though these feelings of CCL+ being intangible, unfamiliar and even a scary product and concept, were dominating, it was actually only a few respondents that had any strong negative feelings towards it.

All respondents had heard of the concept, and it was therefore not a shock to them that the food category existed even though they had never seen CCL+ before. Several said that they had seen different products abroad, and explained their own apprehension towards CCL+ by the fact that they just had to get used to it. Several also said, that they would be fine with purchasing products that already contained some sort of vitamins in it, as for example juice or rye bread. Several expected to see many more variations of functional foods in the future.

One respondent described it well by saying:

> *"It is just like fashion. You see it and think;" I would never wear that" but then six months later you are wearing it. It is probably the same with this, I just have to get used to it."* (DK-4)

Some respondents mentioned another reason for not wanting the product. They expressed an apprehension for purchasing unfamiliar products due to the disappointment of purchasing a product that turned out not to be of their liking – for this reason they always bought the same products and would never want to try anything new or different.

> *"I am very bad at trying new things. I always eat the same things."* (DK-1)

3.2.1.2.2 Questionable Taste

This leads to 'questionable taste' as many respondents were afraid of how CCL+ tasted and had doubts of whether they would like it or not. Some simply thought it would taste differently; some feared a taste of a vitamin pill in a liquid form, whereas others linked the design of the can to a taste of 'citrus', 'orange' or something other than a 'cola drink.'

3.2.1.2.3 Misleading Design

The design of the can led to elicitations in the category 'misleading design', as three respondents thought it looked like an energy drink or a children's drink.

3.2.1.2.4 Incoherence

'Incoherence' was elicited in different variations. Generally, the respondents thought the concept of mixing vitamins and Coke led to an incoherent product, as they believe that the two has no relation to each other.

> *"In principal I would choose the one without vitamins. I do not like that there have been added something. It is the easy solution to get it like this. There is not supposed to be extra vitamins in a cola. Everybody knows that. That is not where you get your vitamins; you have to find it somewhere else… I do not connect the two."* (DK-4)

They thought that the vitamins were misplaced and that Coke was trying to:

> *" … make it into something it is not." "…Should not call it coke with vitamins, but vitamins with cola flavour if that is what you are going for. Cola is Cola."* (DK-2)

The respondents had trouble placing the product in a category, as they all had a notion of what Coke and Coke light is, and as one respondent stated:

> *"The combination is wrong. I do not understand the product."* (DK-2)

Other respondents focused more on what The Coca-Cola Company is, what they do and what type of products they sell and one said:

> *"It should not be Coca-Cola's mission in life to ensure that people get their vitamins."* (DK-7)

This perception adds to the negativity towards the product. The respondents believe the concept is fundamentally wrong, and that The Coca-Cola Company is trying to be something other than what they are supposed to. As all the respondents know the Coca-Cola brand, they have a predefined perception of it, and see CCL+ as an incoherent product as it is not in accordance with their perception of the brand.

3.2.1.2.5 Unnatural

The fact that it was enriched with vitamins made the product seem unnatural to the respondents. Some saw the enrichment in itself as being unnatural, whereas others were more concerned of the actual vitamins.

> "*…they have added vitamins, whatever…it is probably vitamins with an E in front. I am sceptical towards the vitamins in it. It would not be a substitute for a regular vitamin pill, which you know are real vitamins."* (DK-7)

Her perspective was, that in order to be able to put these vitamins in a Coke product, it could not have been 'real' vitamins as the ones you find in a vitamin pill, but instead artificially created vitamins, which she did not perceive as equally good.

One respondent focused on the additives that had been added in order to be able to enrich the product with vitamins.

> *"How is it possible to enrich it? Has something been added that makes the enrichment possible."*(DK-8)

She is the only respondent who thought about this perspective, but it is worth mentioning that she had previously been sick because of additives and therefore had a general concern of these substances in all that she consumed.

The respondents expressed the view that CCL+ was more unnatural than the ordinary Coke light, and this led them to a negative perception of the product and the choice of not consuming this.

3.2.1.2.6 Unappealing

Two respondents were very direct and stated that they found CCL+ to be basically unappealing. One respondent even used the word "disgusting". These respondents were convinced negative towards the product, and seemed to never want to purchase it. As one respondent put it:

> *"If it was the absolute last thing I could get, and I was very very thirsty."* (DK-10)

This elicitation is an illustration of their initial opinion of the product. It is therefore their reaction to being confronted with an enriched soft drink, which was definitely not to their linking, and something they would avoid. It is therefore a reaction to both CCL+, but also in relation to the concept of enriching a soft drink.

3.2.1.2.7 Appealing

One respondent thought CCL+ looked appealing. She simply liked the design of the product as she thought it was innovative and nice looking. She meant it as a visually fact, and explicitly said that it would not make her want to try it or even purchase it.

3.2.1.2.8 Too Large an Amount

Another disliked the fact that CCL+ is sold in a can, as the amount was too big for her to consume at once. She preferred bottles instead, as they gave her the option of not drinking it all at once.

3.2.1.2.9 Price Premium Too Large

One respondent found the price premium to be too large. A can of 0,33L CCL+ is priced as the same as 0,5L Coke light and this respondent believed that it was too much of a premium due to some added vitamins. Other respondents expressed an understanding for the premium, as they found it to be natural to pay for the enrichment. This is however more of a principal discussion, as they would never actually purchase it due to other determinants.

3.2.1.3 Summary

Other concrete attributes than the one they were initially provided with, was elicited by the respondents. They were all visual facts related to the design of the vessel.

Some abstract attributes focused on the price premium, the size, and whether or not the product was appealing.

'Unfamiliar' was a dominating determinant and it meant a lot to the respondents. They mentioned it as a reference to both the actual unfamiliarity of the product, but also in relation to the idea of an enriched soft drink. The elicitations were therefore made as a reaction to being unsure of the consequences of consumption, and to the concept itself as both something scary, and something they had to get used to.

'Unfamiliar' and 'misleading design' were also mentioned in relation to the taste of the product and the outcome was 'questionable taste', as many of the respondents would never purchase a product they had never tasted before. The design of the can lead them to believe CCL+ tasted of something other than a Coke light, and because some had the perception that an enriched soft drink would taste differently.

CCL+ was seen as being 'unnatural', and some believed it to be more unnatural than Coke light. The added vitamins were also perceived inferior to other vitamins.

The perception of the product as incoherent was also dominating as the respondents had difficulties linking the Coca-Cola brand to vitamins and therefore had difficulties in understanding CCL+ as a concept.

3.2.2 Consequences

3.2.2.1 Functional Consequences

The functional consequences have previously been defined as the tangible outcomes of consuming the product as perceived by the respondents.

The elicitations have been grouped into the five different categories illustrated in Table 3.4 below.

Table 3.4: Functional Consequences

Functional Consequences
Limited effect
Unhealthy
Healthy
Superfluous
Practical

Source: Own creation

3.2.2.1.1 Superfluous

Some of the respondents simply perceived CCL+ to be 'superfluous' as they already got the vitamins they needed. Some because they believed they got what they needed through their daily diet, others because they were taking daily dietary supplements and therefore did not feel the need to alter their routine.

> *"I am capable of getting my vitamins without it."* (DK-1)

At this stage it became clear that the majority of the respondents compared CCL+ to a vitamin pill and not to Coke light even though we showed them the two products. Instead of regarding CCL+ as an alternative to their regular soft drink, they evaluated it as a possible substitution for a vitamin pill. The consequences elicited were therefore focused on the consequences of substituting a vitamin pill with CCL +. Many respondents therefore focused on the actual vitamin content of CCL+ compared to the content of a vitamin pill, and on the option of

drinking CCL+ everyday instead of consuming a vitamin pill. This led to many of the elicitations being negative. As previously mentioned, most of the respondents did not look on the can to check the content, which means that many of the elicitation regarding content and effect is based on the assumptions made by the respondents.

> *"It is a limited variety of vitamins. And you would still lack your minerals. Then it is easier to take one pill that covers your daily dosage."* (DK-10)

This respondent looked at the actual content of the product, and made a direct comparison to the vitamin- and mineral supplement she took every morning. As CCL+ does not contain a variety of vitamins and no minerals, she found no reason to switch from her pill, as a single pill gave her all she needed.

> *"I would not think it was practical. And because it is just B12, it would not give me the same as a vitamin pill. So it is not the same. Just drinking a Coke instead of taking a vitamin pill would not cover you. If it were a multivitamin (content) maybe I would think it was smarter, but I still had to get used to the idea of getting it through a Coke. I would not drink it every day, so it would not be the same as a vitamin pill".* (DK-4)

This respondent also looks at the actual content. It should be noted that this respondent is a nurse and therefore knows what B12 actually is. She was in fact the only respondent who had knowledge of this particular vitamin. She also perceives this product to not have the same effect as a vitamin pill that covers your daily dosage. She furthermore adds that it would not be an alternative for her, as she would never drink it every day – as she perceives it to be unhealthy. The interesting thing about this respondent is that she does not actually take a daily vitamin pill, as she has no '*deficiency symptoms'*. The consumption of CCL + would therefore not serve as a substitute for her, but she stills imagines it hypothetically and would never do it. Her reaction is more the concept of the product, and as she says:

> *"(...) still had to get used to the idea of getting it through a Coke."* (DK-4)

3.2.2.1.2 Limited Effect

Several respondents perceived CCL+ to have a 'limited effect', both in relation to the amount and variety of the vitamins in CCL+, as mentioned above, but also regarding the actual content. Again, this is not a reaction to the actual amount of vitamins in CCL+, as the majority do not have knowledge hereof.

One respondent was sceptical towards the vitamins in CCL+. She has the perception that they are not as "real" as the vitamins in a vitamin pill, and therefore would not consider CCL + as an alternative. She feels CCL+ was very intangible, and that consumption would not make a difference.

> *"It would not be a substitute for a regular vitamin pill, which you know are vitamins…I would just not feel the same security as with taking a normal vitamin pill. It is more concrete. I am used to the classical vitamin pill…from my childhood… I would not feel that it did anything extra. Then it is superfluous. It would not replace the vitamin pill."* (DK-7)

Another respondent was unsure of the effect of the vitamins in CCL+, but did not think they would have a great effect. The reason for the perceived limited effect is that she would not drink it often, and it would therefore not have an effect on her body.

> *"If I drank cola every day it might be a plus. But I do not drink it so often that it would make a difference. I do not think it would have great effect, but I don't know…"* (DK-5)

3.2.2.1.3 Unhealthy

The above stated elicitation is made as both a reaction to the actual content of the product, but also in relation to not wanting to consume the product every day, which is why it would not make much difference. The reason why most of the respondents do not want to consume it every day is that they believe cola drinks and Coke light to be unhealthy per definition.

> *"I do not want to give myself the habit of having to drink a cola to get my vitamins. I do not want to drink cola each day because it is not healthy. It is not good for anything. It would not make the cola healthier that vitamins have been added. It does not compensate for the unhealthy."* (DK-6)
>
> *"Coke every day is not good for you."* (DK-1)

This respondent furthermore adds that the fact that the product is enriched does not make it a healthier product. The perception from some of the respondents was that the enrichment made the product unhealthier.

> *"I think it is unhealthier than the regular variant* (Coke light)*."* (DK-8)

Some respondents perceived consumption of the product to entail a risk, and therefore that it was unhealthy. They perceived it as unhealthy as consumption could lead to an overdose, sickness etc.

"It is not healthy, there are different substances in it, provokes cancer." (DK-1)

This respondent is focused on both the cola drink not being healthy, and on light products not being healthy. She explained that she thinks about how many light products and artificial sweeteners she consumes, as she believes them to provoke cancer.

Some were afraid that overconsumption of the product could lead to an overdose. They were worried of being unable to control their vitamin intake, and therefore feared that it could be possible to consume too many, which would consequently lead to sickness.

> *"One should not eat more than the recommended daily intake. It is uncontrollable. How much do you actually get when you eat food that is enriched. You could get more than you need. I do not know what happens if you get too much. There is a reason why we have an acceptable daily intake."* (DK-10)

The elicitation 'unhealthy' can therefore be related to the perceived risk of the product and a loss of control, as they felt they would lose track of what they consumed when drinking CCL+.

'Unhealthy' is also related to the abstract attribute 'incoherence'. The respondents perceive vitamins as healthy, and Coke as unhealthy, and cannot match the two. Many respondents had the following line of thought:

> *"When I have decided to drink a cola, I have made a decision to be unhealthy. If I wanted vitamins, or felt I had a need for it I would buy an apple or something (...)"* (DK-2)

> *"Coke is a treat. It is unhealthy. Do not try to make it healthy."* (DK-3)

> *"If I have bought a soft drink I have made a choice of not being healthy in this moment, so I would not feel I was compensating by added vitamins."* (DK-7)

All Coke products are perceived as being unhealthy products, but they still choose to consume them sometimes. CCL+ is not perceived as healthier due to the vitamins, and they are not interested in drinking something "healthier" as they perceive the CCL+ as a treat they have made a conscious choice to consume.

3.2.2.1.4 Healthy

Contrary to all the above-mentioned beliefs are the respondents who had a positive perception of the product, and who believed consumption of CCL+ to give them a benefit.

One of the respondents who preferred CCL+ to Coke light did so because she believed the vitamins would compensate for the unhealthy in the product, and therefore perceived CCL+ to be healthier than Coke light. She would therefore 'use' the vitamins as an excuse for drinking CCL+, as she would convince herself that she would be allowed to drink it.

> *"I would not chose it because of the vitamins, but because, when I take something unhealthy I can tell myself that I am allowed because there is vitamins in it. It would only be psychic. It probably has a limited effect, but it is there."* (DK-3)

The other respondents who chose it was allergic to fruits and vegetables and therefore saw it as a convenient and practical way to get some of the vitamins she lacked. She believed that CCL+ would make her healthier:

> *"I could be afraid that I do not get what I need. And it is necessary to get what you need because it is good for you, good for the body."* (DK-9)

3.2.2.1.5 Practical

One of the respondents who would not choose CCL+ also saw it as practical:

> *"I guess it is a fine idea, if you are drinking cola, that it also contains some vitamins." (DK-5)*

She did however have reasons for not choosing the products such as a preference for bottles and a fear of the taste, but thought it was a good concept and would principally be interested in drinking it.

3.2.2.2 Psychosocial Consequences

The elicitations made by our respondents have been grouped into the six different categories illustrated in Table 3.5 below.

Table 3.5: Psychosocial Consequences

Psychosocial Consequences
Good conscience
Embarrassing
Anxiety
Look nice
Look unhealthy
Could be misinterpreted

Source: Own creation

We have previously defined the psychosocial consequences as the psychological and social outcomes of product use. It is therefore not only the perceived personal outcomes of consumption, but also the social consequences that this level deals with. In the coding of our data we have found it necessary to extend this definition by including a perspective of being socially responsible, as it turned out that this perspective influenced the Danish respondents a great deal.

Many of the respondents focused a lot on the influence this product would have on society and other people – what consequences the launch of CCL+ could be. They had strong feelings on this subject matter and we have therefore included them on this level, as we believe them to be very important for their overall perception of the product.

3.2.2.2.1 Could Be Misinterpreted

Part of their negative perception of CCL+ is caused by the perception that the launch is an attempt from The Coca-Cola Company to deliberately trick people by making something unhealthy appear healthy. They therefore see it as trick to make people purchase more Coke.

> *"Tricks people into believing it is healthy."* (DK-3)

> *"I think it is principally wrong to put something healthy in an unhealthy thing because many people would be fooled into think that they are being healthy."* (DK-8)

> *"...people think that now it is really healthy to drink a cola everyday cause then I would get my vitamins..."* (DK-4)

They are concerned that some people will see CCL+ as a healthy product, and then drink large amounts of it. They fear that people will start to drink CCL+ instead of eating vegetables. As one respondent puts it:

> *"It is an excuse for people to give up the salad and drink a cola instead because it has vitamins in it, and then they avoid the bad conscience."* (DK-1)

And they are therefore concerned that people will not be able to separate healthy from unhealthy, and that Coca-Cola in this way is fooling people into purchasing more by letting them believe that it is good for them.

> *"The border between healthy and unhealthy is broken down."* (DK-2)

It is not only their perception of their own personal consequences of consumption, but also a more general critical attitude towards the product, the products purpose and what it might lead to. It also relates to the values of the respondents, as their reaction can be seen as them believing CCL+ is *morally* wrong. We have however decided to include it on this level, as it deals with the perceived social consequences of consumption. We will also take it into consideration when discussing the elicited values.

3.2.2.2.2 Look Unhealthy

One respondent feared consumption of CCL+ would lead to her looking bad:

> *"You are what you eat. If you eat unhealthy, you look unhealthy."* (DK-1)

3.2.2.2.3 Look Better

Another respondent thought she would look healthier and better from consumption:

> *"(...) good for the colour of the cheeks."* (DK-9)

3.2.2.2.4 Good Conscience

The other respondent who preferred CCL+ to Coke light believed she would get a good conscience, because the vitamins would compensate for the unhealthy.

3.2.2.2.5 Embarrassing

Another respondent was worried of what others might think of her if she got her vitamins through a soft drink.

> *"I do not want to give myself the habit of having to drink a cola to get my vitamins. It disturbs the routine – the lifelong routine of eating vitamin pills. It would be embarrassing."* (DK-6)

She was concerned that people would think she is very unhealthy and not capable of taking care of herself in a proper manner.

3.2.2.2.6 Anxiety

The last elicitation 'anxiety' was made by the respondent who has, as previously mentioned, been sick from consuming products containing additives and artificially added substances. The consequences of consuming this product therefore led her to a feeling of anxiety as she perceived the amount of risk to be high, due to the perceived degree of unpleasantness and the likelihood of her becoming sick by consuming CCL+.

3.2.2.3 Summary

An important observation is that most of the respondents compare CCL+ to vitamin pills and the majority of the determinants therefore focus on the necessity and effect of consuming the product, as well as the belief that it is an unhealthy product.

Our respondents consume light product, but are aware of the consequences it might bring and perceive it as unhealthy. They will therefore not consume it every day and would rather take a vitamin pill, which they perceive as being more natural and therefore a healthier option. Some also perceived CCL+ as having a limited effect, due to a limited vitamin content and variety, and due to a belief that the vitamins were not 'real'.

Unhealthy was mentioned as a conscience choice. They would not choose CCL+ as would ruin their *coke moment*[24]. Several of the respondents mentioned the situations in which they drank cola drinks. Almost all of them said, that they did not drink a lot of Coke, but then they would go on to describe the special times when they treated themselves and drank a Coke.

[24] Own definition. "Coke moment": When the individual has a specific desire for coke, and no other soft drink.

Again the brand is an important factor, as they connect it to a special moment in some cases. Here it is in relation to the joy of drinking a coke that would be ruined by adding a healthy substance.

On the positive side the CCL+ was also perceived to be a healthy and practical product as it was a way to getting healthy vitamins. The positive elicitations were however few.

A social aspect appeared as many of the respondents disliked CCL+ as a concept, as they believed it would have consequences for other people in society. They believed that they themselves were capable of knowing that CCL+ is unhealthy and would therefore not drink it every day. Their negative perception is further strengthened by the concern that others would not be able to recognize this and they therefore perceived CCL+ as being a deliberate attempt from The Coca-Cola Company to try and trick people into thinking the product is healthy and thereby make people drink more.

3.2.3 Values

3.2.3.1 Instrumental Values

Only one instrumental value was elicited, and three respondents stated that they felt that enrichment was principally wrong as illustrated below in Table 3.6.

Table 3.6: Instrumental Values

Instrumental Values
Principally wrong

Source: Own creation

3.2.3.1.1 Principally Wrong

It was the general concept of enriching Coke light plus that led to these elicitations. The fact that it was a Coke light (something unhealthy) had an impact on the perception.

> *"I think it is principally wrong – especially when it is two opposites, then you notice it more. You are meddling with nature."* (DK-2)

It was however also the concept of being able to enrich products that the respondents reacted to. The ability to alter natural substances seemed principally wrong to them.

> *"I think the enrichment is wrong. It is not just because I eat my vitamin pill every morning. I think it seems wrong."* (DK-6)

These respondents are considering the moral perspective in being able to enrich foods – the ability to be able to change and meddle with natural products. Their judgement is that it is principally wrong and they do not care for this development in science, and therefore not the products that are a consequence of this.

As mentioned, the questions of ethics and morale were also present at the consequence level in relation to the respondents believing CCL+ would fool people and lead people to drink more. They feared the consequence of the launch would be that many people would misinterpret the product. The elicitation can also be seen as an illustration of the respondents believing it is principally and ethically wrong to enrich an unhealthy product, because it will be perceived as being healthy.

3.2.3.2 Terminal Values

The Danish respondents elicited three different terminal values, and they are listed below in Table 3.7.

Table 3.7: Terminal Values

Terminal Values
Insecurity
Good life
Bad life

Source: Own creation

3.2.3.2.1 Good life

One of the two respondents who preferred CCL+ to Coke light elicited 'good life' as she believed the product would help her achieve this desirable state of being. In her perception, the consummation of these extra vitamins would lead to her being healthier, and therefore have a better life, and clearly stated:

> *"I think it is good for me. I think I will get a better life."* (DK-9)

The other respondent who chose the product, did not link it to a value. Instead she believed that it would make her healthier and give her a good conscience, but her ladder stopped here. She was very complex and had both positive and negative elicitations towards the product even though she chose CCL+. The fact that her ladder did not make it to the value level can be interpreted as her not being completely convinced of the effect and importance of the product.

3.2.3.2.2 Bad life

Two respondents made the opposite elicitation and connected consumption of CCL+ to a 'bad life'. They perceived the consequences of consumption would lead them in the opposite direction of their preferred states of being.

One linked the fear of looking unhealthy, meaning looking bad, to having a bad life. She believe drinking CCL+ would make her unhealthy, and therefore lead to an unhealthy look and not appear as she would prefer. By looking bad she did not feel she would reach her optimal and preferred state of being.

> *"…If you eat unhealthy, you look unhealthy, and do not have a long and good life."* (DK- 1)

The other respondent feared that drinking CCL+ would make her sick due to the extra additives that have been added in order to be able to enrich the product. By being sick she would have less energy, which, in her mind, would lead to an in-optimal performance, and no quality of life – basically a bad life, as a direct consequence of CCL+. It should be noted that this is respondent DK- 8, who had previously been sick due to artificial products.

They were therefore of the belief, that consumption of CCL+ would lead them in the opposite direction of a long and happy life.

3.2.3.2.3 Insecurity

Two of the respondents felt CCL+ lead to 'insecurity'. The product has been characterized as 'being scary', 'entailing a risk', 'unfamiliar' and 'being unhealthy', which led the respondents not to feel secure of drinking it, because they did not quite know what they would be consuming, compared to a vitamin pill:

> *"I would just not feel the same security as with taking a normal vitamin pill."* (DK- 7)

As mentioned, feelings of losing control were evoked in some of the respondents, and it is this value that is affected. They were unsure of what they would actually consume when drinking CCL+, and what the consequences would be, which led them to feel concerned – and not have the sense of security they desired.

3.2.3.3 Summary

Four different values were elicited 'principally wrong', 'good life', 'bad life', and 'security'.

'Principally wrong' was mentioned as a reaction to the concept itself. The respondents saw it as a technological development that was principally and morally wrong, which they did not approve of. Another aspect was the fact that it was perceived to fool people, and therefore that it was ethically wrong.

'Bad life' and 'good life' falls in the same category, as it is the same value affected – the pursuit of a good life. The respondents, who elicited it, simply have completely opposite perceptions of what effect consumption of CCL+ will have in their pursuit of this goal.

'Insecurity' refers to feeling secure. It was elicited, as the respondents were so unsure of CCL+ and what consumption would lead to, that they felt that their pursuit of feeling secure was threatened.

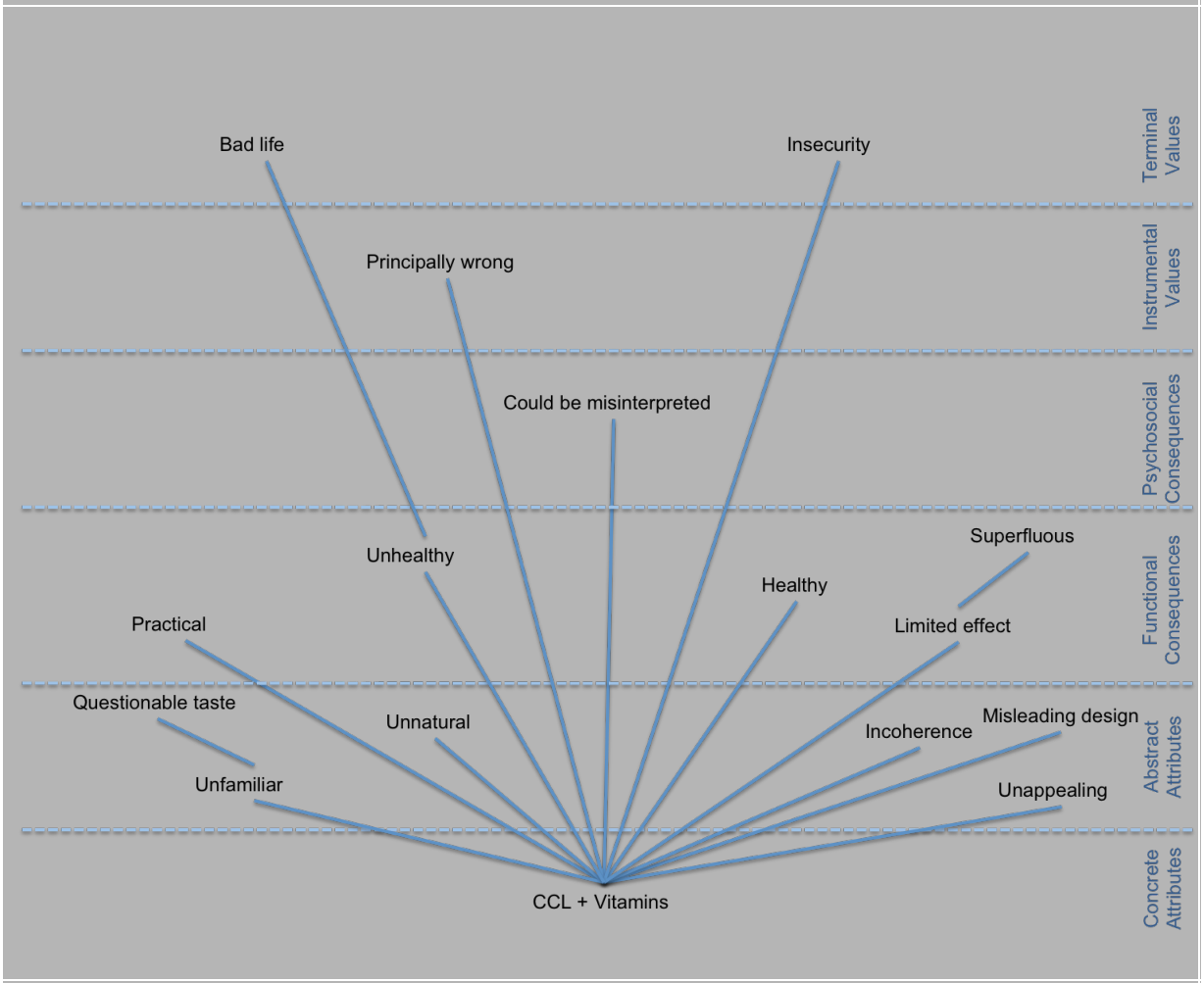
3.2.4 Linkages

On the basis of the matrix in appendix 4 we have constructed the total Hierarchical Value Map as illustrated in Figure 3.1 below[25]. From this we are able to see the main determinants influencing the Danish respondents. The linkages are very important and informative, as they not only show the individual elements, but also how the individuals relate the elements to

[25] See appendix no. 7 for individual maps

each other. All paths have their origin in CCL+ vitamins, as this is the concrete information we provided them with at the beginning of the laddering interviews.

Figure 3.1: Hierarchical Value Map, Denmark



Source: Own creation

As we have chosen a cut-off level of 2, the total HVM does not illustrate all determinants, but only the strongest.

As nine out of the 12 paths only have one link, we have already described the structure of the respondents' line of thought in the previous sections, and will not repeat it in details here. The two main reasons for the short paths: one is the fact that the respondents have had different paths to the determinants, and they have therefore not been illustrated in the map. The other is the fact that many of the elicitations are negative, and therefore do not go further than the mere observations and opinions of the respondents without relating the product to themselves.

We will furthermore in this paragraph comment on the causal and implicit linkages that exist between the determinants and paths.

3.2.4.1 CCL+ to Unappealing

There is a direct link from CCL+ vitamins to 'unappealing'. All the links to this element were direct from CCL+, and illustrates an instant reaction and judgement of both the exact product, but also the concept of enriching a cola drink.

3.2.4.2 CCL+ to Misleading Design

The link to 'misleading design' is made directly from CCL+ and relates solely to the design. This link represents the fact that the design of CCL+ gives associations to other products, and thereby confuses the perception of what kind of beverage it is. The design made the respondents question the taste of the product and what type of beverage it was, as they associated the design with other products and flavours than Coke light.

3.2.4.3 CCL+ to Incoherence

The path to 'incoherence' represents the overall perception of CCL+. It illustrates a critical attitude to the concept of mixing Coke light with vitamins. It was perceived as being a wrong match for several reasons: it was mixing an unhealthy product with a healthy substance, it was changing a brand into something completely different than what the brand was perceived to be by the respondents, and the respondents simply had difficulties in connecting Coke light to vitamins.

3.2.4.4 CCL+ Through Limited Effect to Superfluous

The path going from CCL+ to 'limited effect' to 'superfluous' illustrates the comparison to a vitamin pill. As mentioned, CCL+ was evaluated as an alternative to a vitamin pill, and not as an alternative to soft drinks. The content of vitamins in CCL+ was therefore seen as limited in both amount and variation. Furthermore, the vitamins in the product were also seen as inferior to those found in foods or vitamin pills, and were therefore also seen as having a limited effect. The respondents therefore linked these beliefs to the product being superfluous as it was not perceived as being a real alternative and therefore unimportant.

3.2.4.5 CCL+ to Insecurity

The link to 'insecurity' illustrates the intangibility of this new product and product category. It describes the feelings of not knowing exactly what would be consumed and the consequences it would have. It illustrates a feeling of losing control due to the intangibility of CCL+ and the concept as a whole.

3.2.4.6 CCL+ to Could Be Misinterpreted

The direct link to 'could be misinterpreted' characterises the perception that CCL+ fools people into purchasing an unhealthy product by disguising it as something healthy. They believed the consequences of CCL+ would be that some people would consume substantial amounts, as they would believe they were being healthy, as they would not be able to distinguish between healthy and unhealthy. This perception led to a very negative attitude towards CCL+, as it was basically seen as something that would harm people in society.

3.2.4.7 CCL+ to Principally Wrong

The link to 'principally wrong' is also concerned with this issue, but also includes the belief that the ability to be able to enrich substances is a technological progress that is morally wrong. It is therefore primarily a reaction to the technology, and the concept itself, which is perceived as meddling with nature and being basically wrong.

3.2.4.8 CCL+ through Unhealthy to Bad Life

The path going through 'unhealthy' to 'bad life' in the end shows that drinking CCL+ was perceived as being unhealthy, and that being unhealthy meant having a bad life. The respondents linked CCL+ directly to unhealthy, as they perceived the consequences of consumption to be, that their bodies would be unhealthy. The path went further, and they related being unhealthy to having a bad life. They would have a bad life as they would not be feeling well, comfortable and happy, and therefore would not live a long and good life.

3.2.4.9 CCL+ to Unnatural

The link to 'unnatural' illustrates that CCL+ was perceived to be an unnatural product. Coke has never been a natural product, but the fact that it was enriched made it seem more unnatural than conventional products. Furthermore, the vitamins in CCL+ were perceived to be unnatural vitamins compared to the ones in fruit, vegetables, and vitamin pills.

3.2.4.10 CCL+ to Healthy

The direct link to 'healthy' is obviously made by the two respondents who chose CCL+ to Coke light, as their reason for choosing it was, that they believed the added vitamins to make them healthier. This direct therefore illustrates their belief that the benefit of consuming CCL+, would be that they would be healthy.

3.2.4.11 CCL+ to Practical

The link to 'practical' is complex, as two respondents who had different opinions of the product mentioned it. One respondent thought it was practical, but would never purchase the product. The other saw it as a practical opportunity and would purchase it.

3.2.4.12 CCL+ through Unfamiliar to Questionable Taste

The last path goes from CCL+ through 'unfamiliar' to 'questionable taste'. It illustrates the fact that concerns over taste were very dominating as the product has never been tasted, and therefore many different beliefs concerning the taste dominated this path. Many of the respondents would never by a product they did not know what was as they were afraid of disappointment.

3.2.4.13 Causal and Implicit Links and Determinants

The following section will describe the links, which are not illustrated on the map, as they are causal or implicit in the minds of the respondents.

The overall factor, which influences the cognitive structure of our Danish respondents, is the vitamin pill. A vitamin pill is something all respondents were familiar with and it is a natural part of our society. As the respondents are not used to functional foods, they use the well-known vitamin pill as a point of reference. The elicitations, and the links between these, should therefore be seen as a reflection of this as the fact that CCL+ is compared to a vitamin pill is implicit in most elicitations.

The perceived unnaturalness of CCL+ can be linked to many different elements, and is therefore a dominating determinant. The degree of unnaturalness seems to have an influence on their perception of the healthiness of the product in several ways. It has influenced the

perceptions of the vitamins in the product, as they were perceived as unnatural and therefore not as healthy as 'normal' vitamins (pills). Furthermore, on the consequences of consumption as the enrichment was perceived as making the Coke light unhealthier.

Unnaturalness also influenced the perception of the overall concept of CCL+. It was seen as 'incoherent' as vitamins in a cola drink were perceived as unnatural. A cola drink was for the respondents per definition something unhealthy. They saw it as unnatural to add vitamins in it, as it had never been associated with, or been in contact with vitamins. The perceived unnaturalness therefore has great influence of the overall perception of CCL+, as the respondents perceived vitamins naturally in food products and vitamin pills as natural.

The perceived unnaturalness is therefore implicitly linked to many other elicitations.

There is a causal link from 'unhealthy' to 'superfluous', as one of the reasons for perceiving it as 'superfluous' is the fact that it would never be an alternative to a vitamin pill because CCL+ is to unhealthy to drink every day. Besides being perceived as having a 'limited effect', the fact that it is perceived as unhealthy means, that it is considered 'superfluous', as it would not be an option.

There is also a causal link between 'practical' and 'healthy', as it is only perceived as being a practical option, because it is perceived to be healthy.

'Could be misinterpreted' is also linked to 'principally wrong' as some of the respondents implicitly believes CCL+ to be. It is not the technology that they feel is wrong – it is the disguising of an unhealthy product into something healthy, as they see it. It is designed to fool people into purchasing more Coke, and is ethically wrong.

3.2.4.14 Summary

The respondents have not elicited long paths with many links. The direct links going from CCL+ to the elicitations have therefore already been described in detail. We have in this paragraph therefore presented the strongest paths elicited by the determinants, and graphically illustrated the determinants on a HVM. The paragraph does not call for much summation, as it is a clear and precise section, which summarises many of the points made during the analysis of the attributes, consequences, and values elicited.

We were however able to establish, that some causal and implicit links exists between the determinants. We found that some underlying assumptions are of great influence, and also that some of the determinants have a causal link, as they are related in the lines of thought of our respondents.

3.3 Sweden

The respondents recruited in Sweden are shown in Table 3.8. We were also able to recruit ten Swedish respondents, and again there is a 60/40 spread in the age grouping within the target group. The occupation of the Swedish respondents is similar, and the spread is not as wide as ideally projected. Our relations to Swedes were limited compared to the Danish, and as a consequence most are found through connections at Copenhagen Business School. The majority are students and people of no- or short education, and furthermore the majority are situated in the southern part of Sweden. This is a natural limitation due to our resources, but could mean that the respondents have been influenced in greater detail by the short distance to Denmark and the Danish culture, than would have been the case if they have been from the northern part. In this sense, they could have been more negative towards functional foods as the Danes are. Their general attitude towards the concept itself was generally quite positive, but the fact that only two respondents chose CCL+ could have been a reflection of this. We will have this in mind in our analysis.

Table 3.8: Swedish Respondents

Respondent no.	Age	Occupation	Residence	Seen the product	Tasted the product
1	20	Student	Stockholm	Yes	No
2	21	Student	Lund	Yes	No
3	22	Shop assistant	Gothenburg	Yes	No
4	24	Sales clerk	Malmö	Yes	No
5	24	Student	Stockholm	Yes	No
6	26	Communication Assistant	Malmö	Yes	No
7	30	Shop assistant	Malmö	Yes	No
8	32	Butcher	Malmö	Yes	No
9	35	Sales clerk	Malmö	Yes	Yes
10	39	Shipping agent	Malmö	No	No

Source: Own creation

It was *one* of the Swedish respondents who had never seen the product, and *one* who had tasted it.

It was two out of our ten respondents who ranked CCL+ over the regular Coke light, which influenced the nature of the elicitations.

In the following section we will deal with our data in a common sense interpretation.

3.3.1 Attributes

3.3.1.1 Concrete Attributes

As the Danes, the Swedish respondents were initially given a concrete attribute of CCL+. The common starting point for them all was therefore the vitamins.

Table 3.9: Concrete Attributes

Concrete Attributes
Vitamins

Source: Own creation

The Swedish respondents did initially focus on the concrete attribute we had given them, but they were fast to relate CCL+ to their abstract attributes. Mainly the can had the focus of the respondents.

3.3.1.2 Abstract Attributes

After analysing and coding the individual elicitations we have divided them into the 6 categories illustrated in table 3.10 below.

Table 3.10: Abstract Attributes

Abstract Attributes
Dislike cans
Appealing design
Taste
Unnatural
Unfamiliar
Incoherence

Source: Own creation

3.3.1.2.1 Dislike Cans

One of the most common determinants in relation to the products was the vessel as it was mentioned by half of the respondents. When comparing the CCL+ in a can to an ordinary Coke light in a bottle many Swedish respondents focused on the vessel itself. They mentioned

it as they had a preference for bottles, and simply disliked cans. The fact that they disliked cans, was reason enough to chose Coke light over CCL+, and therefore had no relation to the content. They had different reasons for disliking cans, and as one respondent explain:

> *"I would not choose CCL+ over Coke light as the CCL+ is in a can. I prefer to drink from bottles. Also, bottles can be closed again after taking the first sip, which is practical when at work or when you cannot drink the entire amount at once."* (S-5)

She knew that she would rarely be able to finish the entire amount at once and therefore preferred to be able to seal it and drink some again later.

Another respondent disliked cans, as she simply did not like to drink from them.

> *"I never buy drinks in cans, as I do not like drinking from them. It would be more likely for me to choose the CCL+ if it was marketed in a bottle."* (S-6)

For her, the vessel is the sole determinant of her choice, and the content has no influence.

This attitude was common, and several said, that they would have been likely to have chosen CCL+ if it was in a bottle instead. The vessel was therefore a determinant with great influence on the Swedish respondent's perception and attitude towards CCL+.

3.3.1.2.2 Appealing Design

Four respondents found the design of the can appealing. These elicitations are based on the design and visual look of the can, and have no relation to preferring bottles or cans. The following quotations were mentioned of some of the respondents, who had strong preferences for the vessel and preferred the bottle.

As one respondent expresses herself:

> *"I am drawn by the design of the can; it looks summer-like and fresh"* (S-6)

She was drawn by the design even though she normally chose to drink from bottles and believe that she would probably have taken a Coke light with a similar design in a bottle, if it stood next to an 'old fashioned'-design Coke light.

Another respondent held the can in her hand for several minutes and finally uttered:

> *"The can looks very appealing."* (S-5)

Finally, a respondent who did not care much about the vessel specified that she would have chosen CCL+ due to the design as she found it appealing, but the difference in content made her chose Coke light.

> *"If I did not know that there was a difference of the content I would chosen the CCL+ as the design of the can is very appealing to me."* (S-2)

These determinants are merely subjective opinions of the design of the can. But it is opinions that apparently do not have large influence on the consumers, since it did not influence their choices.

3.3.1.2.3 Unfamiliar

As previously mentioned all but one of the respondents had seen the product before, and only one who had tasted it.

This is reflected in the determinant 'unfamiliar', which is mentioned by many of the respondents, as seven of the ten directly or indirectly mentions 'unfamiliar' as an attribute of the product.

The design of the can is also related to the elicitation 'unfamiliar'. One respondent related the shiny, tall can to energy drinks, and immediately thought it was a Red Bull or something alike. Because CCL+ was so unfamiliar to her, she immediately rejected it, as she feared a substantial amount of caffeine or sugar.

One of the younger respondents did not believe that there were actually vitamins in the product. She perceived CCL+ as being incredible as she did not believe the vitamins were actually in the product. She therefore perceived it as being a *sales trick* or some kind of gimmick.

> *"If it was proven to me, I would buy the product… I do not mind the enrichment, but just do not believe that it is real." (S-8)*

She had no problem with consuming functional foods in her daily diet, and would have preferred CCL+ to Coke light, if she believed that they did contain the vitamins stated. She found the product to be interesting, and did see it as a possibility to cover her intake of vitamins from CCL+, but she wanted documentation specifying the vitamin-content before she would start drinking CCL+. Documentation from the government, that is. She did not seem to know about the product or about functional foods in general. If she had known more about CCL+ or the product category she might have had a different perception.

Another respondent also complained about the information of the vitamin content. She could not figure out what the dosage of vitamins was in the product.

Other respondents also mentioned 'unfamiliar' in reference to the content because they were hesitant to try a product they had never tasted before. As one respondent said:

> *"In general I would pick products that I already know of."* (S-2)

When asking the same respondent *why* she felt like this, she continued:

> *"I would not choose CCL+ as I imagine that it would taste artificial. I perceive the enrichment to influence the taste."* (S-2)

3.3.1.2.4 Questionable Taste

The unfamiliarity mentioned by the respondents often related to the perceived taste of CCL+, as the respondents were unsure of the taste and expected it to be different than the familiar taste of Coke light.

The question of taste was enough for them to choose the ordinary version of Coke light. They would not be willing to *take a chance* regarding the taste, when being thirsty or when wanting a 'Coke moment'.[26] One respondent feared that the taste would be similar to the CCL+ with green tea:

> *"I would choose the ordinary Coke light. I have tried the CCL+ with green tea and did not like the taste. Therefore I am not willing to try this vitamin-enriched variant.*
>
> *Taste is important to me."* (S-7)

Another respondent had also tried CCL+ with green tea. She did not like it either and clarified that she would not choose the enriched CCL+ because she is afraid of the taste being unlike normal Coke light. As she expresses it herself, she would pick the normal Coke light:

> *"…to avoid the 'non' -coke taste"* (S-2)

Finally a respondent specified, as she had no knowledge of the taste, she did not feel like choosing it over Coke light.

[26] Own definition. "Coke moment": When the individual has a specific desire for coke, and no other soft drink.

3.3.1.2.5 Unnatural

One respondent perceived CCL+ as being too unnatural and therefore preferred Coke light. She felt the added vitamins made CCL+ more unnatural than the regular Coke light.

> *"I do not like eating unnatural products. For example I prefer eating broccoli instead of iron (pills) and fish to omega3 pills. It is more natural."*(S-6)

This particular respondent perceived both CCL+ and Coke light to be unnatural due to additives, but is quite complex and contradictory. She was very focused on eating natural ingredients, but did however allow herself the treat of drinking a Coke light once in a while because she simply likes the distinctive taste of Coke light.

> *"I try not to eat light products. BUT I really like the Coke light taste. (...) I do not believe that aspartame is good for the body, which is why I do not eat light products. In USA they eat light products and the people are fat, but in France they do not eat light products, and they are not fat, and seem healthier. I know it is a bit contradictory as I drink Coke light, but I also think of it as being unnatural. I just drink it because of the taste."* (S-6)

Another respondent did not find the vitamins in CCL + to be alternative to natural vitamins – natural, as in the vitamins that food products naturally contain. She perceived the added vitamins in CCL+ with unnatural vitamins, and therefore she did not like the product.

3.3.1.2.6 Incoherence

Three of the Swedish respondents saw CCL+ as being an incoherent product. They related the Coca-Cola brand to unhealthy contrary to vitamins, which are perceived healthy. They could not understand why Coca-Cola was marketing a product with a healthy perspective. One said;

> *"Coke has nothing to do with vitamins in my mind…. I would be willing to drink enriched orange juice."* (S-6)

She said it would be unnatural for her to drink something she perceived as unhealthy in a situation where she was trying to be healthy. She could see the relation between enhancing an orange juice with additional c-vitamins, but not Coke light with b-vitamins, as it does not contain any vitamins in its *natural* version.

It is interesting that the Swedish respondents often mentioned other functional drinks they would like to drink such as orange juice and vitamin water. They found these products more appealing as they are either a natural product (water) that has been enriched, or a product that already contains vitamins that has been enhanced (juice).

Another respondent said;

> *"(…) Getting the vitamins from a Coke seems ridiculous. I see the product as being unhealthy. What is the reasoning?"* (S-10)

She preferred to get her vitamins in their natural form, from fruits and vegetables. Sometimes during winter she ate vitamin pills if she was not drawn by the seasonal selection of fruits and vegetables.

> *"I prefer vitamins in fruit and vegetables, then in pills. Last in functional foods."* (S-10)

She assured us, that vitamins from a Coke would be the last solution for her, if she needed vitamins or minerals. But she did not mind the product, she just preferred to be either unhealthy and have a Coke, or be healthy and get vitamins from natural products.

3.3.1.3 Summary

It is interesting to learn that many of the Swedish respondents based their choice of products on other grounds than the concrete attribute we initially gave them. The fact that CCL+ is enriched was not an attribute they ascribed great importance or reflection, and they seemed positive towards the concept of functional foods.

Instead, half of the Swedes had strong feelings towards the vessel of the product, and preferred a bottle to a can, which influenced their choice of product.

Furthermore, the question of the taste was an influencing determinant. The respondents were hesitant to purchase unfamiliar products that they had never tasted before. Here the enrichment did have an influence on choice, as some believed the taste to be unnatural due to the enrichment. Some also believe the vitamins in CCL+ to be more unnatural compared to vitamins in fruits and vegetables.

The design of the can led some to have questions regarding the taste, whereas others simply commented on the design as a fact that would have no influence on their motivation to purchase the product due to more influencing determinant (the can).

Incoherency as an attribute is related to the Coca-Cola brand and to the added vitamins. As all the respondents knew the Coca-Cola brand, they all had their unique perception of what the

brand is. All of the respondents either insinuated or directly mentioned that one of the attributes they ascribe to the brand is 'unhealthy'.

The respondents therefore had difficulties relating the vitamins to the brand, as they perceived it as being an unhealthy product and the vitamins as being healthy. This incoherency will be specified in the following section where we compare the consequences 'healthy' and 'unhealthy'.

3.3.2 Consequences

3.3.2.1 Functional Consequences

The functional consequences elicited have been coded into the five categories illustrated below in Table 3.11.

Table 3.11: Functional Consequences

Functional Consequences
Healthy
More energy
Unhealthy
Superfluous
Practical

Source: Own creation

3.3.2.1.1 Superfluous
Three of the respondents perceived CCL+ to be superfluous. One argued:

> *"I always choose what I need (vitamins and minerals) in their natural organic form. I get enough vitamins from my diet. "*(S-6)

She varied her food to get the required amount of vitamins and minerals and therefore has no need for additional vitamins. She continued:

> *"I do not need extra vitamins. I believe it is unnatural to enrich and I prefer to eat the vitamins in their organic form."* (S-6)

Another respondent explained that she ate a vitamin pill every morning, making it unnecessary to consume further dosages.

They both had great focus on covering their daily dosage of vitamins and minerals and one would prefer to do it through varying her diet and another by supplementing it with vitamin pills. Her reason for using a vitamin pill was that it is much easier to monitor the intake of all the various vitamins and minerals that the human body needs on a daily basis compared to only getting for example b-vitamins from Coke light and omega3 from bread.

The last respondent that perceived CCL+ as being superfluous did not perceive the added vitamins to be as good as natural vitamins. She therefore believed that the vitamins in CCL+ could not be an alternative to natural vitamins, and therefore that the product was superfluous.

3.3.2.1.2 Unhealthy

The Swedish respondents were split regarding the perceptions of the product concerning its healthiness – some perceived it as healthy, and some as unhealthy. They stated 'unhealthy' as a reaction to the concept of enriching an unhealthy product with what is perceived as being healthy – the vitamins.

One respondent believed that Coke was generally an unhealthy product, regular or light and the added vitamins did not change that perception:

> *"I do not perceive Coke as being healthy. If I want do drink something healthy I will chose something else than Coke."* (S-1)

After the interview the respondent came back to us. She had thought more about some of the questions and elaborated:

> *"The enrichment does not frighten me, but I have to stress that if a product is enriched, I think that the product should not be an unhealthy product as Coke, but a product that is healthy from the beginning. Like vitamin water[27] for example."* (S-1)

She continued to elaborate and said that if she were to drink an enriched drink, she would rather choose vitamin water, as she does not perceive it as being unhealthy. Furthermore the

[27] Water enriched with vitamins

vitamin water she drinks has a label on the package explaining what effect the content has, which she believed was necessary information, as she does not have much knowledge of vitamins and minerals.

> *"For example, if I were to choose something enriched to drink, I would pick Vitamin Water as it says something about what the enrichment is good for. This motivates me for buying the product."* (S-1)

She lacks information of whether or not CCL+ is healthy or not. As she is not presented with any information, she presumes it is unhealthy as it has always been, but she compares it to other products, which gives that information.

The last respondent thought the product would be unhealthy to drink, as she was afraid consumption would cause palpitation. The reason for this was that she initially thought it was an energy drink due to the design of the product.

3.3.2.1.3 Healthy

On the opposite end of the scale are three respondents who perceived the product to be healthy, as they believe consumption would lead to being healthy because they would get some extra vitamins. They perceive the enrichment to entail a benefit that is not present in Coke light, and therefore that it is healthier.

> *"I like the principle of enriched food. I believe that CCL+ is healthier compared to Coke light." (S-4)*

In fact four of the ten respondents believed that the vitamins were a plus compared to ordinary Coke light.

The following quotation is from the respondent who had tried CCL+:

> *"I like the vitamin coke and would pick it over any other Coke due to the enrichment. I do not eat enough vitamins and it is a great opportunity for me to get some vitamins."* (S-9)

She did not mention an actual effect, but she preferred CCL+ as she assumed it made her healthier.

Another respondent who perceived CCL+ as healthy said:

> *"I have great focus on taking my vitamins. I do regularly take effervescent tablets to cover my A-B-C-D vitamin needs."* (S-5)

She had never tried CCL+ but would definitely drink it if the taste were like the regular Coke light, as she preferred the Coke light taste to any other Coke on the market, and believed CCL+ to be healthy. These two respondents saw CCL+ as an *opportunity* to get some vitamins that they would not have gotten elsewhere.

3.3.2.1.4 More Energy

Another elicitation on the *positive* side is the perception that the product will give more energy.

> *"I feel like vitamins give me more energy."* (S-3)

The two respondents, who mentioned this, perceived that consumption of the CCL+ would lead the added vitamins in the product to have more energy, and one believed this would allow her to perform better in a work situation.

3.3.2.1.5 Good Idea

The vitamin enrichment was also associated with being a good idea, as it was perceived to be a practical way of getting ones vitamins. One respondent drank two litres or more Coke light a day and she saw CCL+ as a good alternative to Coke light as it would allow her to cover parts of her daily dosage of vitamins while drinking Coke light that she would drink no matter what:

> *"I tend to eat very unhealthy and I guess that it would be good for me to get some vitamins."* (S-3)

She did not pay much attention to what she ate, but knew that other people often described her way of living as being unhealthy. Another respondent saw the CCL+ and functional foods in general as a practical development and specified:

> *"I already eat enriched foods. I like the concept. Then I do not have to eat so many vegetables."* (S-5)

Another respondent was also fond of the idea; she rarely drank coke, but would consider having a CCL+ if she needed to ingest more vitamins.

3.3.2.2 Psychosocial Consequences

The Swedish respondents only elicited functional consequences and did not mention any psychosocial consequences. One reason could be that enriched products are a more natural part of the grocery market in Sweden, and they are therefore used to seeing a variety of enriched products in their everyday life, and therefore do not connect it to feelings of e.g. envy, respect etc. or other psychological and social outcomes.

3.3.2.3 Summary

The respondents were split in their perception of what the consequences of consumption would be.

Some would never consume it because they found it 'superfluous', as they had no need for extra vitamins. It was not based on knowledge of either the content or the effect of CCL+, but was a general belief without any specific relation to CCL+.

Others believed it to be healthier compared to Coke light due to the enrichment, whereas other simply perceived Coca-Cola products as being unhealthy, and the addition of vitamins did not alter this.

Their perception of CCL+ can be divided into two categories: as seeing CCL+ as an *opportunity* or seeing it as a possible *substitution*. The respondents who saw it as an opportunity were the ones who believed they would benefit from adding more vitamins to their diet, whereas the respondents evaluating CCL+ as a possible substitution were the ones who believed that they already got their vitamin requirements.

On one side, the perception is that CCL+ is an opportunity to get some vitamins that the individual would not have gotten elsewhere. On the other side, the respondents evaluate CCL+ as a substitute for other products such as vitamin pills or fruits.

The respondents who knew that they were eating unhealthy saw the CCL+ as a practical opportunity to make their diet less unhealthy by adding extra vitamins. Other respondents who paid more attention to their diet did not see CCL+ as an opportunity or alternative as they ate a varied diet or took dietary supplements saw it as either superfluous or too unhealthy, and therefore as something they would never drink to get their vitamins.

3.3.3 Values

3.3.3.1 Instrumental Values

The instrumental values elicited by our respondents have been coded into the two categories illustrated below in Table 3.12.

Table 3.12: Instrumental Values

Instrumental Values
Feel better
Feel bad

Source: Own creation

3.3.3.1.1 Feel Better & Feel Bad

As mentioned, we chose to include 'negative values' to increase the interpretability and make the perceptions clearer. For this reason it was only a single instrumental value that was elicited: feel good. It was elicited for opposite reasons, one believed consumption would lead her to feeling better, and the other believed it had the opposite effect.

Four of the respondents reached the level of instrumental values during the laddering interviews.

One respondent elicited 'feel bad' and did so because she believe consumption would lead her and her body to an undesirable state, a bad feeling.

Two of the Swedish respondents chose CCL+ to Coke light, and these two respondents elicited 'feel better' as they believed consumption would help them reach this feeling. One more respondent had this perception and believed drinking CCL+ would lead to a good feeling, but she did not rank CCL+ over Coke light as she was unsure of the taste.

It was only a few of the interviews that reached the value level of abstraction, and no terminal values were elicited as it was not related to any preferred states of being. We believe there are two reasons that can explain this:

One is that the language barrier could have had an effect as some of the respondents might have felt it was difficult to explain themselves to us, and therefore did not open themselves enough to us. We tried our best to give the respondents enough time to answer during the interviews and explained to them that we had no trouble in understanding Swedish, but some tried to translate some of their sentences into Danish, which might have made them a bit hesitant.

Second, like the MEC theory states, the highest level of abstraction will only be reached if the product has relevance and an importance to the respondent. For several of the Swedes this did not seem to be the case as they were either indifferent or quite positive towards enriched products in general, or believed CCL+ to be superfluous, and therefore were quite indifferent towards CCL+ and did not relate it to either positive or negative states of being.

3.3.3.2 Summary

The value elicited by the Swedes is 'feel better'. It was mentioned, as consumption of CCL+ was perceived to lead to this feeling of well being. One respondent perceived consumption of CCL+ to lead her in the opposite direction than the good feeling she valued.

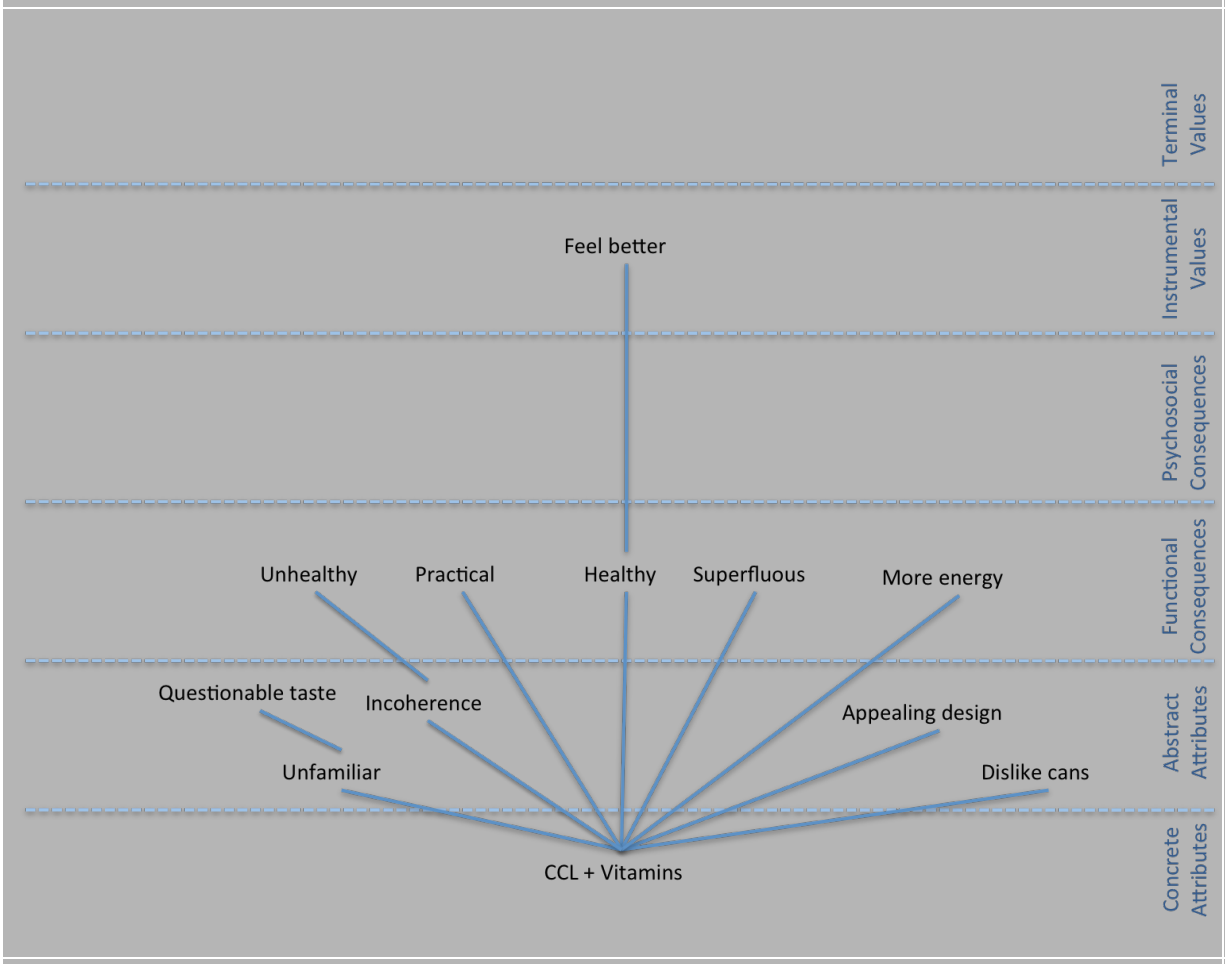
Not many Swedish respondents reached this high level of abstraction, and we believe the explanation for this could be both the language barrier, and the fact that the product was not perceived as important to the respondents, and therefore were not related to themselves.

3.3.4 Linkages

Figure 3.2 shows the strongest ladders between the determinants elicited by the Swedish respondents. The map is based on the individual maps created for each respondent and is created after treating our data in the implication matrix. For individual maps see appendix 7.

All ladders have their origin in CCL+ with vitamins, as this is the concrete information we provided them with at the beginning of the laddering interviews.

Figure 3.2: Hierarchical Value Map, Sweden



Source: Own creation

The map not only shows the individual determinants, but also how they are related to each other, which is also very important and informative. As we have chosen a cut-off level of 2, the total HVM does not illustrate *all* the elicited elements and paths, but only the ones mentioned at least twice.

Five out of the total of eight ladders only have one link. We have therefore already described some of the respondents' line of thought in the previous sections, and will not repeat it in details here. Instead, we will focus on the possible explanation for why the paths stop at the attribute or consequence level to best describe the cognitive structures of the respondents.

3.3.4.1 CCL+ through Unfamiliar to Questionable Taste

Seven respondents linked CCL+ to unfamiliar, as they were unsure of what the product actually was regarding taste.

They fear that the taste is not identical to normal Coke light taste, and the links therefore goes through 'unfamiliarity' of the product. They do not know the product and therefore believe the product to have a different taste. When craving for a Coke light they are not willing to be disappointed and would therefore chose the product they already know. The unfamiliarity of this product therefore led to CCL+ not being chosen.

The ladder stops here, as the respondents question the taste due to the fact, that they have never tasted it, and therefore have no further elicitations.

3.3.4.2 CCL+ through Incoherence to Unhealthy

The respondents who could not link the Coca-Cola brand to vitamins, which they perceived as being healthy, elicited 'incoherence'. They had difficulties aligning the two, as the perceived them to be opposites regarding the health aspect.

The path goes from incoherent to unhealthy, as the respondents went from perceiving the product as 'incoherent' to finally categorising the product as being unhealthy due to their association of the Coca-Cola brand with unhealthy.

3.3.4.3 CCL+ to Practical

This path belongs to the respondents who perceived CCL+ to be an option. For them it was a practical way of getting vitamins they might not have consumed otherwise. They do not relate the practical aspect to any effects or other elements, and the path therefore only has one link. It is however implicit that they perceive the enrichment as something that will give them a benefit.

3.3.4.4 CCL+ through Healthy to Feel Better

Three respondents' line of thought went from CCL+ to 'healthy'. They related the vitamins in CCL+ to being 'healthy', and the entire product to being healthier than a regular Coke light. Two of these respondents had paths that went from 'healthy' to 'feel better'.

They both felt that healthiness was a necessity when striving for a feeling of wellbeing. One of the respondents also said that wellbeing for her meant feeling better both psychological and physical.

3.3.4.5 CCL+ to Superfluous

The reason for the link from CCL+ to 'superfluous' was that the respondents simply already got what they needed in relation to vitamins and minerals. They either ate a varied diet or took dietary supplements, and were confident that they were fulfilling their need and had no requirement for additional vitamins.

This path stops here, as the respondents who perceive the product as superfluous do not see it as important and relevant.

3.3.4.6 CCL+ to More Energy

This path illustrates the belief that consuming CCL+ will lead to the respondents having more energy due to the extra vitamins. The ladder stops here, but it can be argued that it is related to an individualistic value of achievement, as more energy is related to giving a better performance and thereby succeeding and perhaps feeling like having a better life. The respondents did however not make this elicitation, even though they seemed to head in this direction. To illustrate, we asked one respondent *why* more energy was important for her, and she specified that more energy was better than less energy, and the paths therefore stops.

3.3.4.7 CCL+ to Appealing Design

The ladder to appealing design is a reflection of the respondents liking of the new and different design of the product. The path does not go any further as it is elicited as more of a visual fact, than an important aspect as it has no influence on the choice of product, as other determinants have a more direct influence.

3.3.4.8 CCL+ to Dislike Cans

Many of the Swedish respondents based their decision on the products vessels, as it turned out, that half of them disliked cans. This is a ladder with only one link as the discussion stops here. They do not like cans, and would therefore not purchase the CCL+. They did not base their preference on the fact that the CCL+ was enriched as the ascribed the determinant 'vessel' more importance

3.3.4.9 Causal and Indirect Linkages

Many of the Swedes were quite positive towards this food category, as it was perceived to be an opportunity to supplement the daily diet with some additional vitamins. There was however two determinants, which influenced their general cognitive structures – the first was the product's vessel, second, the fact that CCL+ was perceived as unhealthy. All other elicitations came secondary to this.

An indirect link for the Swedish respondents is the link between the two determinants 'practical' and 'more energy' to 'healthy'. This link is not mentioned by the respondents or visualised on the HVM but there is a link, as they would not perceive the CCL+ as practical if it would not be healthy.

The Swedish respondents seemed very comfortable with the concept of enrichment and functional foods. They all knew the concept and could mention several products and it seemed to be natural for the Swedes to consume functional foods as a part of their diet, which led them, seem to be more positive to the possibility of drinking a CCL+.

During the interviews the respondents often specified on what kind of functional foods they knew of, or what products they were consuming already. The products mentioned were all they perceived as being healthy, for example water with vitamins. We believe this is one of the explanations for why the Swedish respondents do not reach higher values – they cannot relate CCL+ to themselves as it is an unhealthy product that is enriched.

The Swedes have two main ladders. One compares CCL+ to other enriched products, and as mentioned mostly to what is perceived as healthy products, and in this way the product is perceived as unhealthy and incoherent, which leads the individual to not buying the CCL+. The other ladder regards CCL+ as an opportunity, when the individual has already decided to drink a coke. They perceive CCL+ to be healthier that the regular Coke light, which leads them to choose CCL+ due to the added vitamins.

3.3.4.10 Summary

The only ladder that reaches the highest value abstraction level in the HVM is the path from CCL+ to 'healthy' and on to 'feel better'. Besides this ladder only two other paths are connected through one determinant, but these linkages do not reach the value level. The remaining ladders are only shorter links that connect the CCL+ to the abstract attributes or functional consequences.

We have chosen not to reiterate the individual linkages in this summary, as they already are explained as it is.

On this basis, we can conclude that that the respondents do not perceive the product to be important to themselves, which is why the ladders are short.

The Swedes cognitive structures and important determinants are visualised in the HVM but the indirect linkages are not. As mentioned above, there are indirect linkages between 'practical' and 'more energy' to 'healthy'. Other important knowledge concerning the Swedes is that they perceive the CCL+ as an unhealthy functional food, as they believe that the Coke product itself is unhealthy. They therefore compare the CCL+ to other enriched products they know, and these are perceived as healthy. Another perception is that CCL+ is perceived as healthier compared to Coke light due to the vitamins.

3.4 Comparison of Denmark and Sweden

The HVM's for each country will be the basis for the comparison, but as these as mentioned are not a complete representation of all determinants, we will also comment on determining factors we perceive to be important even though they are not illustrated on the HVM.

There is a big difference in the number of respondents who had seen the product before the interviews between the Danish and the Swedish respondents.

Only two of the Danish respondents had seen it before whereas only one of the Swedish respondents had never seen it.

There are several plausible explanations to this. One is the fact that CCL+ was introduced on the Swedish market approximately six months prior to the Danish launch. The Swedish consumers have had a longer time frame to discover the product through everyday shopping and through the marketing of the product.

Another factor that is related to knowledge of the product is the question of distribution. As mentioned, the product received some negative publicity in Denmark when it was initially launched. One of the consequences of this was that COOP and Dansk Supermarked removed it from their stores.

The marketing campaign in the two countries has consisted of the same elements and activities, but with a slightly higher budget in Denmark. As the design of the can is furthermore the same in the two countries, it cannot have been these factors that have led to differences in the analysis. We believe that the time frame has had great influence.

General national differences

First and foremost there are some national differences, which affect the general attitude towards functional foods. As previously mentioned, the Swedes have a much more positive attitude towards the category, and this was also the case in our research. The Swedish respondents had a more positive attitude towards the idea of CCL+ and also focused on other attributes than the fact that it was enriched. The Danes were generally more negative towards the concept and more hesitant as they perceived it to be unfamiliar, intangible and scary – but many of them did however mention that they would just have to get used to it.

As a natural outcome of the positive attitude to functional foods and CCL+, several of the Swedish respondents believed CCL+ to entail some benefits that would increase their energy, health level, and make them feel better. This is not equivalent in Denmark, and CCL+ is perceived to have risks and to not entail benefits but detriments.

There are two respondents in Denmark who are positive towards CCL+, and rated it higher than Coke light, as they believed it to be a practical solution and that CCL+ have benefits compared to Coke light. One of these respondents had a structure similar to the Swedes, but the other is very complex. As a consequence of our decision to follow all forked answers, she has both negative and positive elicitations, and is therefore a good illustration of the confusion and hesitance that was typical for the Danes.

Area of focus

The Danish respondents focused primarily on the fact that CCL+ was enriched, and other attributes were secondary. They were therefore focused on both CCL+, but to a large extent also on the concept itself, and had difficulties in separating the concept from the product. The Swedes were only focused on the actual product, and only elicited elements in relation to CCL+.

There is a general difference in their cognitive structure regarding CCL+, and their elicitations and areas of focus are therefore different.

The Danes link vitamins to vitamin pills, and therefore evaluate and judge CCL+ in comparison to a vitamin pill. They perceive the purpose of CCL+ to be a possible substitute for a vitamin pill, and not as a possible supplement.

The Swedes are fundamentally different, and do not make a direct comparison to a vitamin pill. Instead they assess CCL+ as an opportunity for a supplement to their diet, and not as a substitution to a pill.

This diversity has led to differences in their chains of argumentation and their elicitations and has also led them to have somewhat different point of departures in the laddering interviews.

We gave both nationalities the enrichment with vitamins as a concrete attribute in order to assure a common point of departure, but as they all had different requisites the differences quickly unfolded. The Swedes were quick to focus on other elements than the enrichment, whereas the Danes continued to elaborate on the enrichment.

Vessel

In both countries elicitations regarding the design of the vessel were mentioned as visual facts perceived by the individual respondents.

The Swedish respondents were quick to mention that the product was marketed in a can. This attribute was important to them, as many preferred bottles, and was a reason why some of them had greater focus on the vessel itself than on the actual enrichment. The fact that it was in a can made many of the respondents not want to purchase and consume CCL+, and several of the ladders therefore stopped here. This tendency was only seen by one of the Danish respondents.

Unfamiliar

Both nations mentioned unfamiliarity as a determinant and related CCL+ to ‘questionable taste’ through ‘unfamiliar’. As they were unsure of the taste they would not purchase it, as they were afraid it would not be to their liking. The Danes did however also relate this unfamiliarity to the concept of functional foods in general, as they perceived as very intangible. It gave them a mistrust and insecurity of the purpose and consequences of functional foods in general.

Social responsibility

The Danish respondents also had a focus on social responsibility in their reaction to both the product and the concept.

The Danish respondents made an effort in mentioning that the product 'could be misinterpreted'. They had a concern towards other people in society, which the Swedes had not. The Danes did not believe that all people would be able to understand the difference between healthy and unhealthy, and therefore saw CCL+ as something that would fool people into purchasing more under false pretences. Some believed enrichment to be 'principally wrong'. CCL+ made some feel insecure, as they were unsure of the consequences of consumption for themselves and society.

The Swedes did not mention as strong associations to the product, and did not have these concerns regarding other people. None of them mentioned their principal position on enrichment either.

Levels of abstraction

The differences in emotions evoked regarding CCL+ are also illustrated in the differences in the levels of abstraction reached. As previously mentioned, the laddering interview will not rise to higher levels of abstraction if the attributes and consequences are unimportant to the respondent. The Swedes who chose the product perceived the attributes and consequences to be important to them and their health, where as the others, did not have strong reactions to it, beyond thinking it was unhealthy. The interviews therefore stopped here, as no further elicitations were evoked.

The Danish respondents on the other hand elicited values such as 'principally wrong' and 'embarrassing' and perceived the product to give them a 'bad life'. They had strong feelings towards the product and therefore reached higher levels of abstraction in the Means-End Chain.

Both nations elicited 'unhealthy', but in somewhat different relations which illustrates the basic differences. The Swedes mentioned 'unhealthy' as a consequence of CCL+ being 'incoherent', as they thought it was incoherent to mix something unhealthy with healthy, and all had the perception of Coca-Cola products as being unhealthy.

The Danes had the same line of thought, but also related the health aspect much more directly to the product. The fact that it was an unhealthy product had much more importance to the Danes as they, as mentioned, evaluated CCL+ in comparison to the vitamin pill. They judged CCL+ as a substitute for a vitamin pill, and therefore unhealthy was of great importance, as they did not perceive a vitamin pill as something unhealthy. In their mind, it would not make

sense to drink CCL+ instead of taking a vitamin pill, as it would give them unhealthy substances at the same time, which a vitamin pill would not. The Danes elicitations 'unnatural' and 'superfluous' can also be seen as a reaction to this comparison.

The Swedes also mentioned superfluous, but again the basic differences between the nations led them to elicit the same elements, but with very different lines of argumentation. The Danes they perceived CCL+ as superfluous for two reasons: it does not have the same content or variety as a vitamin pill, and they feel they are already covered by their present 'method'. Furthermore it is so unhealthy, that it would never be an alternative for them, making the product superfluous.

The Swedish respondents who mentioned superfluous are similar as they also feel that they are already covering their need. Some also say that they prefer the natural vitamins found naturally in food products, and that CCL+ is therefore superfluous.

The perspective or CCL+ being healthy or not is not something of influence, and as they do not compare it to other alternatives, the content of CCL+ is therefore not a determining factor for the Swedes.

Both some of the Danes and some of the Swedes perceived CCL+ to be a practical solution to getting ones vitamins.

3.4.1 Summary

It is clear that there are some fundamental differences in the way the two nations perceive CCL+. They have different prerequisites and therefore different approaches. Their cognitive structures are different and the elicitations and their lines of argumentations are therefore very different.

The areas of focus are different for the two nations. The Danes concentrate on the actual enrichment and what it entails, and have difficulties separating CCL+ from the category functional foods, which lead them to have elicitations relating to both.

The Swedes focus on other aspects than the actual enrichment, but concentrates on CCL+.

The point of departure for them is different as they have completely different perceptions of the purpose of CCL+. The Danes evaluate it as a possible substitute for a vitamin pill, which

it cannot live up to for several reasons, and therefore discard it. The Swedes on the other hand see it as a possible supplement, and therefore regard it as a beneficial product. Some of them discard it anyways, but the main determining factor for the Swedes, is the fact that it is in a can instead of a bottle.

There is also a difference in the feelings evoked by this product, The Danes are more value driven and CCL+ leads them to questions of moral and social responsibility, whereas the Swedes have a more indifferent attitude and focus only on themselves and the personal consequences of consumption and are therefore only value driven in the sense that it is perceived to lead them to a better life.

4 Conclusion

We have throughout this thesis investigated the phenomenon of functional foods in Denmark and Sweden. Based on a single case study, we have conducted a comparative analysis of Denmark and Sweden and used CCL+ as our case, as it is a product launched in both countries.

We have been able to gain insight into our target group's (women 20-39 years of age) cognitive structure regarding CCL+, and have hereby also contributed to the knowledge base of functional foods in Denmark and Sweden with our findings.

By applying the Means-End Chain theory and the laddering technique, we have been able to identify the determinants influencing the Danish and Swedish respondent's perception of CCL+.

We have identified the perceived attributes, consequences and values by the Danish and Swedish consumers in the target group. Hereafter, we have determined how the elements are linked to each other. The individual paths were summarised in a matrix and illustrated in a hierarchical value map. The map has served as the foundation for a comparison of Denmark and Sweden, and we have thereby determined the differences in determinants and linkages.

4.1 The Danish Respondents

The Danes had difficulties in separating the actual product from the category of functional foods, and elicited reactions to both, which was caused by them being strangers to products in this category as it is rather new in Denmark.

We found, that the main determinant influencing the Danish respondents was the fact that their only reference point to vitamins was regular food products and vitamin pills.

All their perceived attributes, consequences, and values can therefore be seen as a reaction to the comparison between these. Especially the vitamin pill is dominating, as almost all respondents took them.

CCL+ was therefore mainly judged based on the perceived differences to the vitamin pill. Its perceived healthiness, unnaturalness and effect were therefore dominating determinants that influenced the Danish respondent's perception of CCL+. The perception was generally negative, as they found it inferior to the vitamin pill in all three areas.

We found that 'unfamiliarity' was a key determinant, as both CCL+ and the concept was unfamiliar to the respondents, which can also be seen in relation to the comparison to the vitamin pill. The respondents were unsure of the actual consequences of both consuming CCL+ and the development of the product category itself, and therefore felt a loss of control and insecurity.

The question of taste was a determinant that led from 'unfamiliarity'. We found that the respondents were very hesitant in purchasing products they had never tasted before, as they feared the disappointment of having purchased a product that they did not like. The fact that it was an enriched product, and that the packaging made the respondents associate it to something other than Coke light, made this a very strong determinant.

We found that the brand was a determinant. The respondents could not connect the Coca-Cola brand to vitamins, and found CCL+ to be incoherent. As Coca-Cola is one of the world's best-known brands, it is natural that they all had a personal perception of the brand, and we found that they perceived Coca-Cola and vitamins to be opposites, which should not be mixed. The concept of the product was therefore perceived to be incoherent, and therefore not something that appealed to them.

We found that questions of ethic and moral were a determinant that influenced the Danish respondent's perception of CCL+. Again, the reactions were both towards the product- and category level. The technology and concept of enriching products were perceived as being morally wrong, which led to a negative perception of CCL+. On the product level, CCL+ was considered ethically wrong, as it was perceived to be an attempt to fool people into purchasing more by disguising the product into looking healthy. This was a strong determinant, as they related the product to their social responsibility.

4.2 The Swedish Respondents

The Swedes were all positive towards functional foods, and they were all familiar with several products.

There were several respondents who reacted positively towards CCL+ and perceived it as a convenient supplement to their diet. CCL+ was perceived to be healthier than regular Coke light, and the enrichment was therefore perceived as a benefit. This determinant was however not strong enough to influence the choice in most cases.

We found, that the overall determinant influencing the Swedish respondent's perception of CCL+ was the fact that it is sold in a can.

Their main reason for preferring Coke light was therefore their perception and preferences towards the vessel. Many of the respondents said, that they could have been interested in trying CCL+, but the can was the overall determinant for their choice. This led to many of the Swedes having an indifferent attitude towards the product, and therefore we did not reach high levels of abstraction, as they did not relate the product to any self-relevant values.

Other than the physical appearance, the perceived healthiness and naturalness of both CCL+ and the vitamins it had been enriched with were an influencing determinant. The Swedish respondents compared CCL+ to other enriched products, and preferred enriched products that were more natural and healthy. They had preferences for products such as vitamin water and enriched juice. These products were preferred as they were perceived to be healthy in themselves, and therefore did not seem so unnatural.

This led to another major issue for the Swedes, as they could not link the brand with the perceived healthiness of the vitamins. We found, that this perceived incoherence was caused by the respondents' prior opinions of the Coca-Cola brand. They could better relate to products they knew, like milk, juice and water with vitamins. These are products that are perceived as healthy compared to CCL+, which is perceived as unhealthy.

Another significant determinant was the perceived taste of the CCL+. As only one of the respondents had tasted the product this was related to unfamiliarity and was a strong determinant in their ranking of the products. They were not willing to buy products that they did not know the taste of, or products, which they related to products they do not like as Coca-Cola light plus with green tea.

4.3 Comparison

We found that the Danish and Swedish respondents were influenced by different determinants, even though there are some similarities.

The attitude towards functional foods in general turned out to be different in the two countries, but the Danes were not as negative as anticipated. The difference in attitude towards the concept can be ascribed to the Danes being unfamiliar with the concept, which they also mentioned themselves. The concept thus evoked values of the Danish respondents, whereas we found the Swedes to have an indifferent attitude towards both the product and the concept.

The two nations approached the product in different ways, as they had different prerequisites regarding functional foods. This has meant that the Danes and the Swedes have different cognitive structures and lines of argumentation. The Danes concentrate on the actual enrichment and what it entails, and has difficulties in separating CCL+ from the category functional foods, which lead them to have elicitations relating to both. The Swedes focus on other aspects than the enrichment, but concentrate on CCL+.

We found, that the Danish respondents evaluated CCL+ based on its possibilities to be a substitute, whereas the Swedes evaluated it as a possible supplement. Even though they had these different starting points, it was still many of the same determinants that influenced their perception.

The question of taste is a strong influence in both nations. So is the perceived incoherence of CCL+, and the brand is thus a determinant.

The vessel is not a determinant with real influence for the Danish respondents, whereas almost all the Swedish are influenced by the fact that it is in a can.

We did however find that both nations evaluate CCL+ based on its perceived healthiness and naturalness. They compare it to different things, but both conclude that CCL+ is inferior to their other options, and therefore would not choose it.

There are also respondents in both countries that are influenced by the same determinants, but as they know they are not getting enough vitamins, they see CCL+ as an opportunity and see the benefits in CCL+, which leads them to prefer it.

Regarding the reached levels of abstraction, the Danes are more value driven in their perception and CCL+ leads them to questions of moral and social responsibility. The Swedes have a more indifferent attitude and focus on themselves and the individual consequences, and are therefore only value driven in the sense that some respondents perceive CCL+ to lead

them to a better life. This can also be ascribed to the national differences regarding the concept of functional foods, and is a difference that confirms the basic difference in the familiarity and attitude towards the concept itself.

In conclusion, we believe that we have successfully fulfilled our purpose of this thesis: to contribute to the knowledge base of functional foods in Denmark and Sweden by investigating consumer's perception of a specific product, and to give The Coca-Cola Company knowledge of their target groups cognitive structure of CCL+.

5 Perspectives

This section is the third step in our analysis, theoretical understanding, and will include theoretical knowledge, findings from other analysis, and will put our research and conclusions into a broader perspective. We will furthermore provide some recommendations for The Coca-Cola Company, as well as suggestions for further research.

5.1 The Values Elicited

Both Swedish and Danish respondents reached the value level in our laddering interviews, although the Danes were more value driven than the Swedes. To examine the values elicited more thoroughly and investigate what they entail, we have decided to relate them to Schwartz[28], Schwartz Value Index.

5.1.1 Denmark

The value of 'security' can be defined as the pursuit of safety, harmony, and stability of society and self (Schwartz & Sagie, 2000). The reason why this was elicited was that CCL+ was perceived to lead them in the opposite direction. The determinant 'unfamiliarity' caused the respondents to feel a loss of control, and therefore not feelings of safety and stability as they were in pursuit of.

'Good life' falls in the 'hedonism' category, which is characterized as representing pleasure and sensuous gratification for oneself, and is driven by the wish of enjoying life and pleasure for one self and can therefore be characterized as an individualistic value (Schwartz & Sagie, 2000). It is elicited as the respondents wanted enjoyment and quality of life, and CCL+ was perceived to lead in both directions.

'Principally wrong' is more difficult to characterize as it entails, concern for others, society and nature, but we will characterize this elicitation as a pursuit of 'universalism' as it is characterized as both an individual and collectivistic value, and because one of the central

[28] Shalom H. Schwartz. Social psychologist and cross-cultural researcher.

elements is the protection of the welfare of all people and nature (Schwartz & Sagie, 2000). The elicitation can be interpreted as a reaction to the interfering of a value pertaining the relationship between man and nature, which this modern technology interferes with. At the same time it is also as a reaction to the protection of the people in society whom the respondent's feel *needs protection* as they are not as enlightened as themselves. The elicitation 'could be misinterpreted', which we categorized as a consequence, can also be seen as being a very value driven element. This would fall in the same category, as it is the concern for others in society that is the major motivation.

5.1.2 Sweden

Seen in the perspective of Schwartz the elicited value from the Swedes can be characterized as being a 'hedonic' value - the motivation for which is pleasure and sensuous gratification for oneself. It can therefore also be characterized as an individualistic value.

The value for the respondents is therefore joy and quality of life, which they believe consumption of the product, had influence on.

It can be argued that the value of 'achievement' also had influence, as CCL+ was perceived to lead to a better performance and thereby to 'feeling good'. The motivation for 'achievement' is personal success through demonstrating competencies.

5.2 Explanation of the Differences in MEC Determinants

In our analysis and comparison we found that the two nations had fundamentally different perceptions of both CCL+ and functional foods. The difference can be seen as a reflexion of the national differences, which takes base in the different traditions, and history of functional foods in each country.

The difference in the time frame of functional foods is therefore one of the explanations for the differences in their cognitive structures. The Swedes are simply more used to seeing and consuming functional foods compared to Danes, and therefore have no strong reactions to it.

The Danes focused much on the concept of an enriched product, and found it unfamiliar, intangible and in some cases scary. Their reaction to CCL+ was therefore much more value driven compared to the Swedes, who are all used to the idea of food with vitamins etc. The fact that it is not just a new concept, but also one that used to be illegal and which have

received a lot of negative publicity is presumed to influence and increase the scepticism towards the category by the Danes.

We saw that vitamin pills were an element of influence of the Danes. The tradition for taking vitamin pills and other dietary supplements is more common in Denmark than in Sweden[29]. The Danes focus on the vitamin pill, as it is their only reference to vitamins, other than the ones normally found in food products. This point is thus related to the fact that it is an unfamiliar category in Denmark. The Swedes have more references to vitamins due to their variation of functional food products, and therefore do not evaluate CCL+ in comparison to, and as a substitution for, vitamin pills.

Another thing that separates the two nations is the overall focus on diet and nutrition. From the YouGov Zapera (2008) report we know that 62 % of the Danes are generally concerned over food ingredients, contrary to 45 % of the Swedes. Furthermore 44 % of the Danes believe they eat and drink healthy, whereas it is 36 % of the Swedes. This is not a large difference, but it does illustrate a slight difference in the focus of the nations, which might also explain the differences between the elicitations from the two countries, as the Danes have a high degree of awareness of what they consume and possible therefore are hesitant towards functional foods, as they are unsure of the actual content.

5.3 Recommendations to The Coca-Cola Company

Based on the determinants we found to be of influence, we will in this paragraph provide some recommendations for TCCC regarding CCL+.

A general finding from both Denmark and Sweden was that many of the respondents did not want to purchase the product as they were unsure of the taste and perceived the taste to be different form their likings. A priority could therefore be to give away a large amount of samples, or to communicate about the taste on the can itself, so people would not have to guess and wonder what the taste is like.

If people received a free sample or tasted the product, the question of taste would not be a factor that determined whether or not they would purchase it– if they liked the taste, that is. As previously mentioned, they have already done this, but as almost none of our respondents have tasted it, it would be a good idea to prioritise this.

[29] See appendix no. 8, which illustrates that Danish consumers purchase more vitamins and dietary supplements per capita compared to the Swedish consumers.

We found that the effect of the product was something that consumers were very interested in, and TCCC should thus try to communicate facts regarding the effect. The use of health claims is however restricted, but we would recommend that TCCC pay close attention to the development of the EU legislation regarding claims, so they are always able to pass a maximum amount of information on to the consumers regarding CCL+. This information can help consumers perceive the product as less intangible and unfamiliar.

Another way to get people *hooked on the concept* of functional foods, and maybe get a first-mover advantage in Denmark could be to enrich products with vitamins well known to the general public. A lot of people know what c-vitamin is, and what it is good for. D-vitamin has also become better known as there has been a lot of debate regarding the lack of d-vitamins of many Danes due to lack of sun. The point is that if a product were enriched with a vitamin people know and have a need for, the product would be more relevant, instead of a superfluous product enriched with a vitamin no one knows the actual effect of.

Another learning was that the brand was of great importance to our respondents. Even though the launch of CCL+ could be seen as an alternative to the Coke light drinkers, it could perhaps be a good idea to enrich another less-known brand to begin with. The Coca-Cola Company owns a portfolio of other brands in both Denmark and Sweden, and to avoid consumers believing it is an incoherent product, perhaps the more *health related* products should be enriched. The sport drinks for example, which in some sense already, are ‘functional drinks’, or perhaps some of the juices or water brands.

The Danish consumers tend to feel insecure when discussing functional foods, as the food category is unfamiliar to them. They do not know what to expect. We believe that some general education of the consumers would be beneficial. This knowledge has to come from the companies that see the potential in the market as the government and other consumer organisations are sceptical towards the food category and development. We believe that blogs and articles in major newspapers etc. is the way to go. Educate the ignorant. As the consumers do not know much about the food category it is important make them familiar with the principles, and perhaps specific products. This would be a way of making the unfamiliarity disappear.

Furthermore, the strongest determinant in Sweden was that the vessel was a can. The possibility to market it in a bottle might be an opportunity to explore. It could have some production restrictions we are not aware of, but it is worth considering.

As we found, that the Danish and Swedish consumers were influenced by several different determinants, TCCC should probably consider differentiating their strategy in the two markets. Their communication would probably have greater impact if it were adapted to the national differences.

5.4 MEC Determinants Influencing the Perception of Functional Foods

We believe that our findings can also be applied to functional foods in general in both Denmark and Sweden, and thus contribute to the knowledge base. We will in the following section explain our theory for the general perception of functional foods in Denmark and Sweden.

5.4.1 Denmark

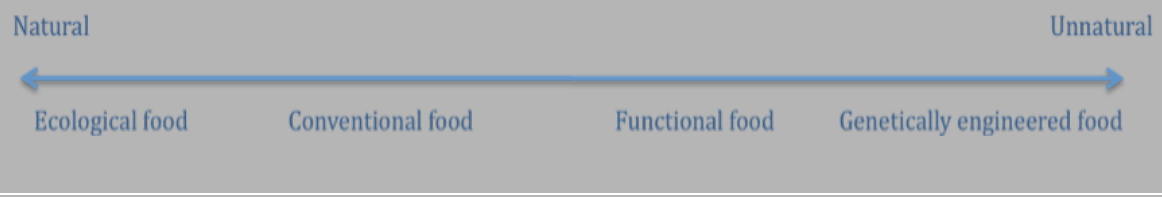
From our research we have created the theory that the Danes perception of a functional food product will depend on the comparison to a vitamin pill.

This might change as the market slowly develops, and as consumers become more familiar with the market, as this will give them another reference point than the vitamin pill.

One thing manufacturers should focus on is therefore to create a functional product that can serve as an alternative or supplement to a vitamin pill, which does not entail risks or leads to being unhealthy, as these products, like CCL+, would be considered inferior.

The fact that many Danes perceived CCL+ as unnatural made several respondents have a negative attitude towards it, as one of the determinants of influence was its 'naturalness'. This is the same result as Jonas & Beckmann (1998) found in their analysis of Danish consumers view on functional foods. The perception can be illustrated by the following figure.

Figure 5.1: Perceived Naturalness of Food



Source: Own creation based on Jonas & Beckmann (1998) p. 19

As previously mentioned, the general trend has in recent years been to move away from modified products, to more natural and ecological products, and the predictions are that functional foods will grow as a category in the forthcoming years, and thus become a preferred category. We can however see from our interviews that our respondents still *prefer* the products on the far left side of the line, and there seems to be long way to go to the right side, as they perceive the products with a high degree of naturalness to be the best.

In our opinion, Danes are ready for functional foods. It does however require some efforts in making the consumers see the benefits, and not only the risks. Furthermore, the Danes have to see it as a supplement instead of a substitution.

They are however not as sceptic as presumed, and many of the respondents even predict that they will be willing to consume functional foods in the future. We believe that if TCCC should market a new functional drink, it should be a product perceived as healthy, such as water or juice, as we believe this would make the consumers more interested in the product.

5.4.2 Sweden

In relation to functional foods in general, the Swedes were not critical towards the concept or the dosages of enrichment as the Danes were. They were more focused on what made the enrichment beneficial, and what the personal consequences of consumption would be. They therefore evaluate each functional food product in relation to themselves and what possible benefits they would get by consuming the products. For this reason, a claim on a product will make a large difference. As some of the respondents explained, they drink water enriched with vitamins because it is written what it is good for (hair, nails etc.). This makes it easier for them to immediately evaluate the benefits the product entails.

5.5 Methodological Perspectives

We believe that MEC theory is a useful method when conducting this kind of research and that it has been a good foundation for approaching our problem statement. We found that it created more in-depth results when applied on the Danish respondents compared to the Swedish. This is, as mentioned in the beginning of the thesis, related to the fact that we presuppose that the consumers are value-driven due to the health perspective. What we learned was, however, that the Swedes did not care much about the product, and were therefore not value-driven. This led the interviews of the Swedes to not reach the highest level

of abstraction, but we believe that no matter what kind of method that is applied, it becomes difficult to attain data from individuals who do not relate themselves to the product under investigation, and the MEC theory is thus not the cause of this.

5.6 Suggestions for Further Research

Based on our findings and conclusions we believe it would be valuable for TCCC and other companies to conduct further research on all the determinants we found to be of influence.

We believe that it would be beneficial for the food industry, and very interesting, to investigate the cognitive structures and individual MEC determinants in relation to an enriched *healthy* product. The possibilities of success would perhaps be better if the product was considered healthy. Perhaps more in Denmark than in Sweden, as it would maybe make it easier for the Danes to understand the purpose of the concept, if the products were perceived as healthy, as it would make the *transition* from a vitamin pill easier.

By conducting this research it could be established if it was solely the perceived healthiness that determines the perception, or if it is the concept itself.

In relation to this it would also be valuable to investigate how consumers would react to a product containing the same amount and variety of vitamins, as a vitamin pill, as this would help determine the differences in the perception of the product and the category as a concept.

In relation to TCCC, we believe it would be interesting to know more about the segment that drinks Coca-Cola regular (with sugar). How would these consumers relate to an enrichment of the regular Coke?

Further research could also compare the cognitive structures of men and women. As we have only engaged in a specific segment (women aged 20-39) it could be interesting for a given company to know more about a broader segment. Perhaps men are more susceptible towards enriched products, or perhaps a younger segment would be more willing to buy and use functional foods, especially in Denmark, as they have not been exposed to the same extent of the negative attitude by the Government and the Consumer Council.

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  - Coca-Cola Light Plus fjernes fra hylderne, 13th of January 2009.
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- Beriget mad i kø til kølediske, 5/3 2004
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- http://ec.europa.eu/
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- BazarOnline.dk, 2009: “Cola med vitaminer”. http://www.bazaronline.dk/Stjerner/Spot/2009_05_cola.aspx

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  http://gl.foedevarestyrelsen.dk/media/db/pm_detalje.asp?nr=70

Reports

- YouGov Zapera A/S: ”Food and Health 2008 – Nordic consumers view on food and health, 2008
- FødevareIndustrien: ”Fakta om Funktionelle Fødevarer”, Januar 2007

Encyclopaedia

- Den Store Danske Encyklopædi

Brief conversation

- Camilla Munkholm Fischer, Business Manager, The Coca-Cola Company

7 Appendixes

Appendix No. 1: Observation Study

- Sampling of CCL+ at CBS on the 14th of April 2009,

The sampling took place from 2 - 4 pm. and the weather was sunny and warm.
Only the Coke light plus with vitamins was sampled.

Three girls handed samples out for free on the main square in front of Copenhagen Business School at Solbjerg Plads. People seemed generally positive towards products and gladly accepted it. There were a number of questions and interest to the product; what it contained, makes good on how the taste is so

There were some who declined the test, but the impression was that they were either of the older population (50-60 +) and people who said they did not drink cola.

Simultaneously, the canteen at CBS ran a special offer. Buy a Coke product and get a Coke light plus with vitamins or green tea for free.
There were signs on refrigerators and displays as well as *roll-ups*. There was therefore extremely high visibility of the CCL+ throughout the canteen. On top of these commercials there were plenty of empty CCL+ cans all over the school, which seemed to make the product visible everywhere.

The following are some of our observations at CBS:
A woman first declined the offer of a free CCL +, but after some reflection she came back and had to see what kind of a new cola product it was. She received a can and studied it carefully

moving away from the point of dispensation. Twenty feet away, as she had her head really close to the can, she turned around and walked back to the girl who gave her the CCL+. She asked her something about the volume of b-vitamins. Afterwards, she wanted to know whether they were also sold in larger sizes. The girl replied that they were only sold in the same can and quantity. She laughed a bit, and replied that it was fortunate; otherwise you could quite quickly get a high intake of b-vitamins.

Another young woman who was offered a free CCL+, asked about the products' content, since it was different form ordinary Coke light. She was told that it contained b12-vitamins and niacin, which helps to strengthen the nervous system. She looked surprised and asked if she could get one for her friend.

Is the taste the good? One asked, and her friend replied; "It tastes like nothing"

One thought that it tasted like Harboe sodas.

Generally people did not understand what the product was and what it could do. People's general ignorance was reflected by the many guesses of what the product contained.
Nobody asked why they should take extra b-vitamins.

We briefly talked to a 30-year-old woman who had received a CCL+ for free.

She explained that it tasted like Coke light. She wondered how much b vitamin it contains / what it contained in general.
She added that she would *not* buy it again at a price of 20 DKR.
She kept asking us, what the b-vitamins were good for.

Finally, she had problems with identifying the benefits of consuming a CCL +.
She was not enthusiastic towards the CCL+. She would normally drink Coke light and did not think that CCL+ was healthy. She specified that she believed it was full of sweeteners and other additives. Things she believed one should not consume in general.

Lastly, we asked three girls, who had tried the product. They would, at any time rather eat varied (they mentioned salad, cauliflower and carrots) than buy some product enriched with

vitamins. They thought that the taste was way off. They all preferred to drink Coke regular, with sugar, rather than Coke light and Coke zero.

They would rather do it *the right way*, or do without. None of the three knew what b-vitamins did for their body, or knew of any symptoms that told them that they lacked it.
They all agreed, it was an unhealthy product, because it was a soft drink. The added vitamins did not mean much to them and they thought that the price was too high.

Appendix No. 2: Pack shots

Danish Can

Source: The Coca-Cola Company

Swedish Can

Source: The Coca-Cola Company

Danish Bottle

Source: The Coca-Cola Company

Swedish Bottle

Source: The Coca-Cola Company

Appendix No. 3: Manuscript

General introduction:

At the moment we are working on our master thesis at Copenhagen Business School. We are currently taking a masters degree in International Management and Marketing.

Our master thesis concerns consumer's perception of functional foods, based on a specific functional food product, the Coca-Cola light plus with vitamins.

Functional foods:

The definition of functional foods is:

> *"A food category in which the products are either a) modified or b) fortified with substances that have a preventive or therapeutic effect beyond their original nutritional value".*

Modified: meaning "customizing" the product by altering the "genetic blueprint" in order to reduce the concentration of certain substance and/or increase the nutritional content.

Fortification: meaning enrichment of products by adding or increasing certain substances in the products.

To summarize: enriched foods and beverages

We would like to emphasize that there are no right or wrong answers. We are merely interested in your perception of this product.

Coca-Cola light plus with vitamins

Coke light plus with vitamins is a soft drink launched by The Coca-Cola Company. It is part of the Coke light brand, as is therefore a light soft drink without sugar containing 1 calorie pr. 100 ml.

One of the differences between the regular Coke light and the CCL+ is that the CCL+ is enriched with b vitamin and niacin.

Interview:

Imagine that you are at work. It is afternoon and you would like something refreshing to drink. Which one would you pick?

Appendix No. 4: Matrix, Denmark

Matrix, Denmark	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1 Vitamins	**3.0**	**3.0**	**1.2**	**5.1**	**5.1**	**7.1**	1.0	1.0	1.0	**5.2**	**5.4**	**2.0**	**2.2**	**2.0**	0.1	0.1	0.1	0.1	0.1	**7.0**	**1.2**	**1.1**	0.1	**0.2**
2 Yellow																								
3 Sun																								
4 Tall shape																								
5 Unappealing																								
6 Misleading design			1.0																					
7 Questionnable taste																								
8 Incoherence											1.0													
9 Unnatural										1.0	1.0						1.0						0.1	
10 Unfamiliar			**2.0**								1.0										1.0	1.0		
11 Too large an amount																								
12 Appealing																								
13 Price premium too large																								
14 Limited effect											1.0		**2.0**			0.1								
15 Unhealthy				1.0	1.0											1.0			1.0					**1.1**
16 Healthy															1.0			1.0					**1.1**	
17 Superfluous										1.0														
18 Practical																								
19 Good counscience																								
20 Embarrasing																								
21 Anxiety																								
22 Look nice																							1.0	
23 Look unhealthy																								1.0
24 Could be misinterpreted						1.0															1.0			
25 Principally wrong																								
26 Insecurity																								
27 Good life																								
28 Bad life																								

Appendix No. 5: Matrix, Sweden

Matrix, Sweden.		**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
1	Vitamins	1.0	**5.0**	**2.5**	**8.1**	**4.0**	**2.2**	**3.0**	**2.0**	**2.2**	**3.1**	**2.0**	**0.3**	0.1
2	Unnatural									1.0	1.0			0.1
3	Dislike cans													
4	Questionable taste													
5	Unfamiliar			**6.0**						1.0				
6	Appealing design													
7	Incoherence													
8	Healthy												**2.0**	
9	More energy												1.0	
10	Unhealthy						**2.0**							1.0
11	Superfluous													
12	Practical												1.0	
13	Feel better													
14	Feel bad													

Appendix No. 6: Coding

DENMARK

CONCRETE ATTRIBUTES

- **Tall Shape**
- **Yellow**
- **Sun**
- **Vitamins**

ABSTRACT ATTRIBUTES

- **Unnatural**
  - Unnatural
  - Artificial
  - Artificial Vitamins
  - Additives (to be able to enrich it)
- **Unappealing**
  - Unappealing
  - Disgusting
  - Looks Dangerous
- **Misleading Design**
  - Looks like a red bull
  - Looks like something for children
  - Looks like an energy drink
- **Questionable Taste**
  - Probably tastes differently (bad)
  - Weird taste (green tea)
  - Fears taste of orange
  - Citrus Flavour
  - Not a cola drink
  - Probably tastes different
- **Incoherence**
  - Not 'Coca-Cola'
  - Vitamins misplaced
  - Incoherence
  - Not supposed to contain vitamins
  - Cannot connect cola and vitamins
  - Wrong combination
  - I don't understand the product
  - Cannot connect coke to vitamins
  - Weird
  - Incredible
  - Is the product not good enough in itself?
- **Unfamiliar**
  - Unfamiliar Content

    - Unfamiliar
    - Not enough information
    - How much is actually in?
    - Just have to get used to the idea
    - Have to get used to it
    - Not used to it yet (might change)
    - How much is in it?
    - Indefinable
    - Intangible
    - New
    - Don't know what the vitamins do
    - Don't really know what it is
    - Uncontrollable
    - Always choose what I know
    - Don't want to change the routine
    - I don't trust it
    - Scary
    - Know what I like, no reason to try something new
- **Too large an amount (prefers bottles)**
- **Appealing**
- **Price premium too large**

FUNCTIONAL CONSEQUENCES

- Limited Effect
    - Limited effect
    - Wouldn't give the same as a vitamin pill
    - B12 doesn't make a difference
    - No effect
    - No effect
    - Probably don't do anything
    - Not a substitute for a vitamin pill
    - Not a substitute
    - Limited vitamin amount
    - Limited variety of vitamins
- **Unhealthy**
    - Unhealthy
    - Unhealthier
    - Vitamins do not compensate
    - Unhealthy
    - Sickness
    - Overdose
    - Cancer
    - A treat, not healthy
    - Bad habit (to drink it every day)
    - Less energy
    - Won't drink it everyday
- **Practical**
    - Practical

    - Convenient
- **Healthy**
    - Healthiness
    - Good for the body
    - Compensate for the unhealthy
- **Superfluous**
    - Superfluous
    - Don't need extra vitamins
    - She already gets what she needs
    - Easier to take a pill

PSYCHOSOCIAL CONSEQUENCES

- **Could be misinterpreted**
    - Could be misinterpreted
    - Should be presented in a right way (otherwise against it)
    - Cheats people
    - Try to make unhealthy appear healthy
    - Gives people an excuse to not eat salad
    - Vitamins makes it look healthy
    - Will make people drink more cola
    - Some people will take it without looking at the ingredients
    - Fools people
    - Breaks down the border between healthy and unhealthy
    - Marketing trick

INSTRUMENTAL VALUES

- **Principally wrong**
    - Principally wrong
    - Meddling with nature
    - Wrong (the enrichment)

Terminal Values

- **Insecurity**
    - Insecure
- **Good life**
    - Better life
- **Bad life**
    - Bad life
    - No quality of life
    - Don't have a long and good life

SWEDEN

CONCRETE ATTRIBUTES

- **Vitamins**
  - Vitamins
  - Enrichment
  - Enriched Product
  - Extra Vitamins
- **Can**
  - Can

ABSTRACT ATTRIBUTES

- **Unnatural**
  - Additives
  - Unnatural
  - Obviously enriched
- **Dislike Cans**
  - Dislike (can)
  - Prefer bottles
- **Questionable Taste**
  - Taste
  - Different taste
  - Questionable taste
  - Bad taste
  - Associates to CCL+ with Green Tea
  - Unnatural taste
- **Unfamiliar**
  - Unfamiliar
  - Avoid product, prefer a well-known product
  - Incredible
  - Not enough information about the actual vitamin content
  - Associates design with energy drink
- **Appealing Design**
  - Appealing can
  - Appealing design
  - Like the appearance of the product
- **Incoherence**
  - Incoherent to enrich an unhealthy product
  - I do not like the concept of functional foods
  - Coke is not meant to be enriched
  - Coke has nothing to do with vitamins in my mind
  - Last way to get vitamins, after natural and pills

FUNCTIONAL CONSEQUENCES

- **Healthy**

    - Healthier
    - Healthy
    - Necessary
- **More energy**
    - Energy
    - More energy
    - Better performance
- **Unhealthy**
    - Palpitation
    - Unhealthy
    - Not good for the body
- **Superfluous**
    - I get what I need from natural products
    - No need
    - Not important to me
    - Not an alternative to 'natural' vitamins
    - Prefer organic natural vitamins
- **Practical**
    - Cover daily dosage
    - Practical
    - Cover vitamin need
    - Good idea

INSTRUMENTAL VALUES

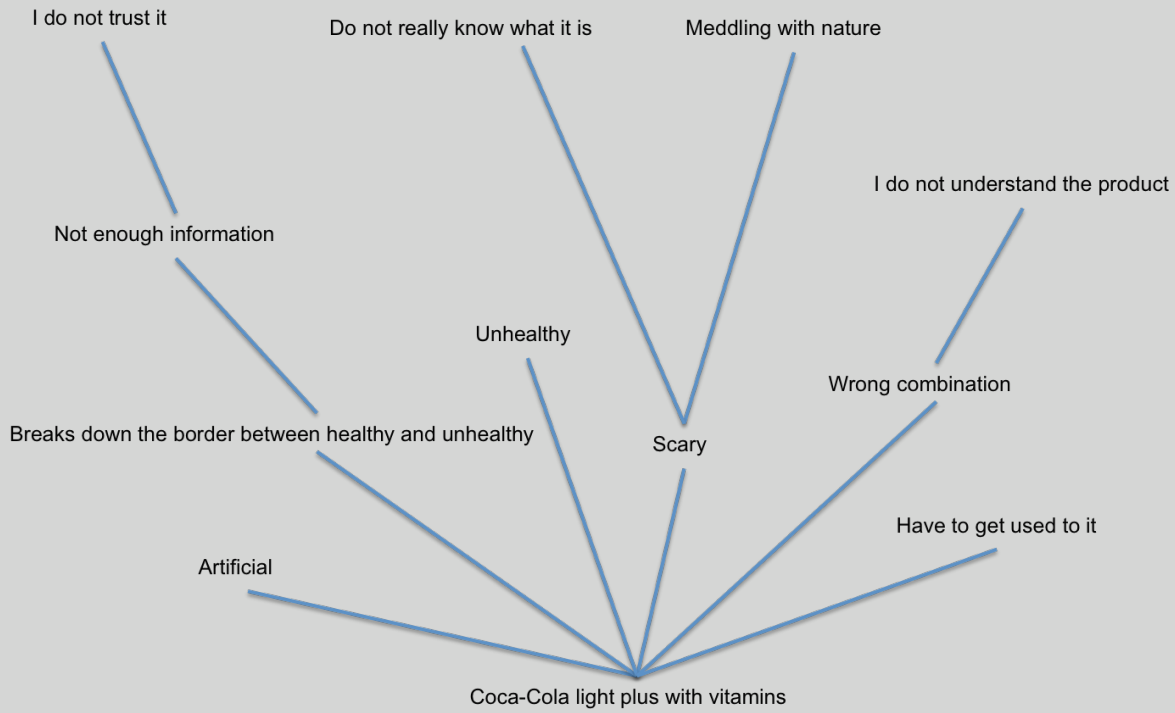
- **Feel Better**
    - Feel better
    - Well-being
- **Feel bad**
    - Feel bad

Appendix No. 7: Individual Maps (Denmark & Sweden)

Respondent: DK1

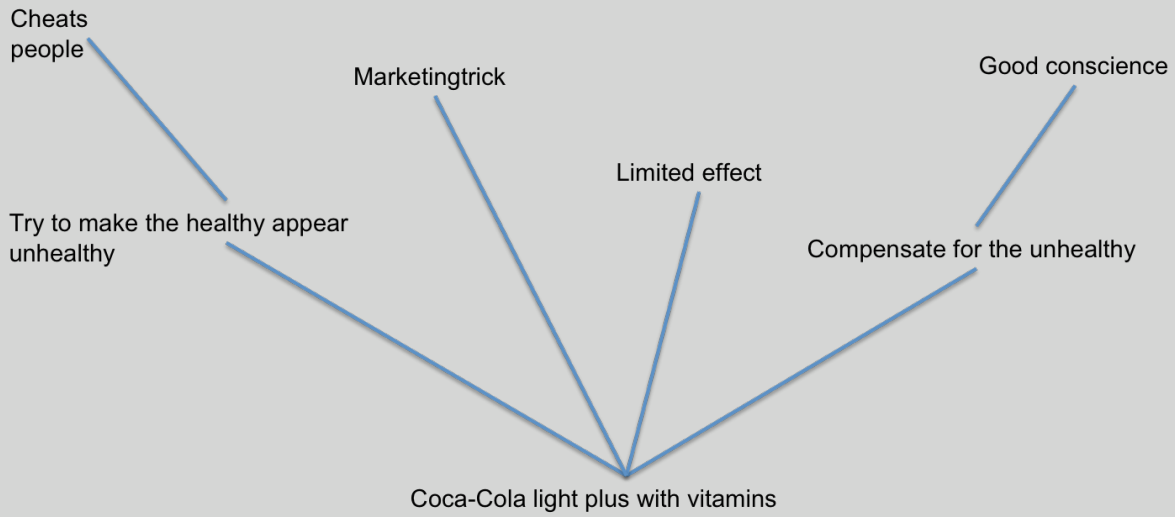
Source: Own creation

Respondent: DK2



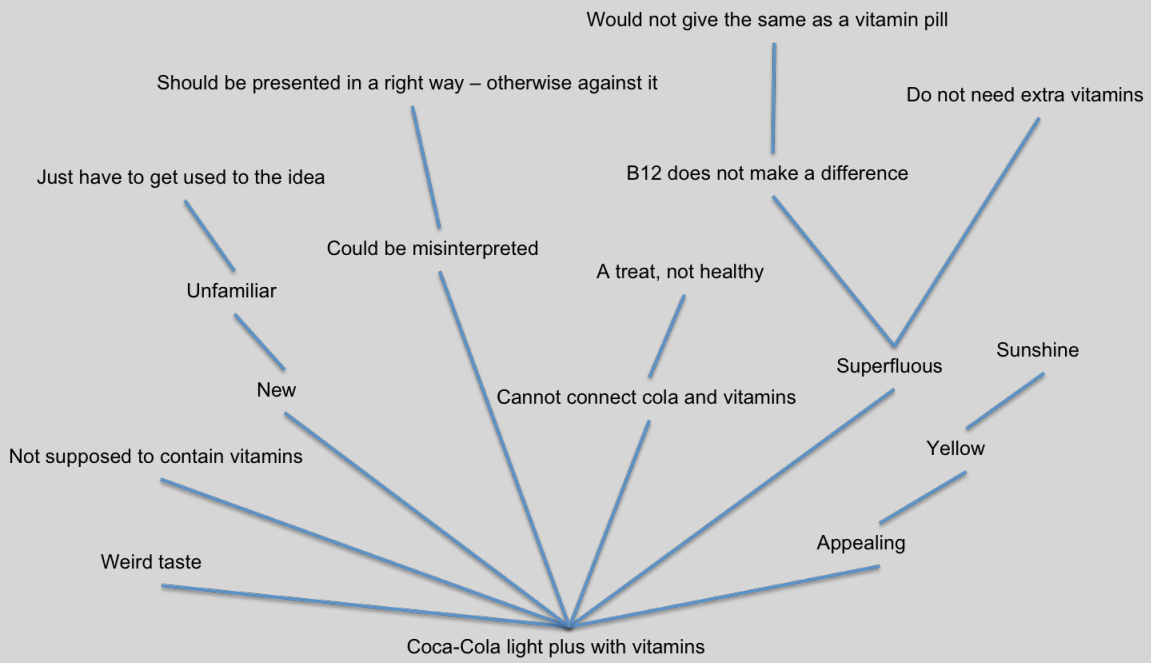
Source: Own creation

Respondent: DK3



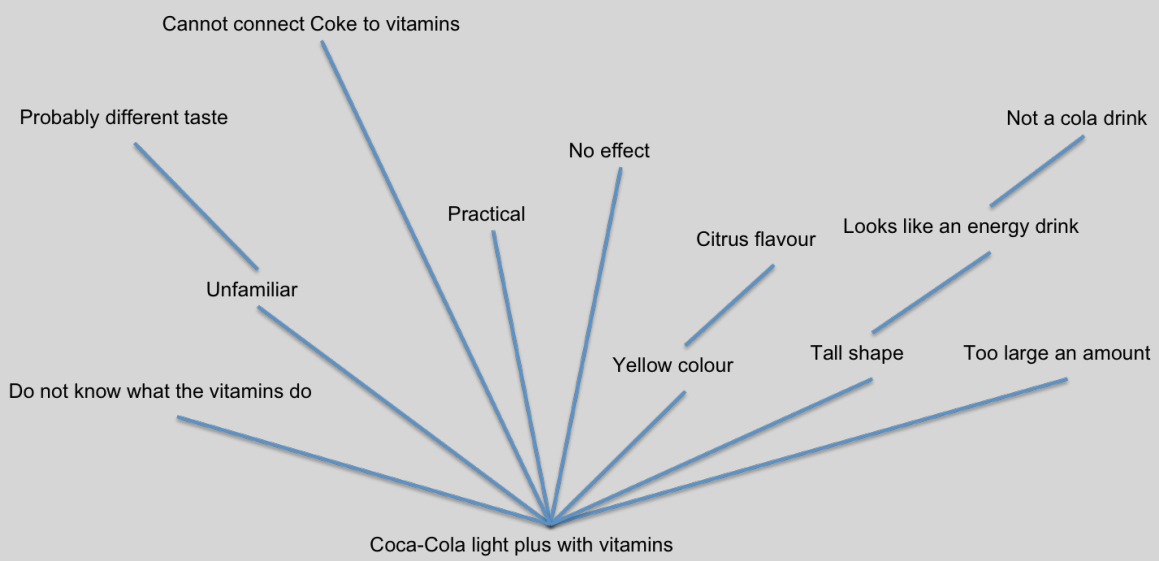
Source: Own creation

Respondent: DK4



Source: Own creation

Respondent: DK5

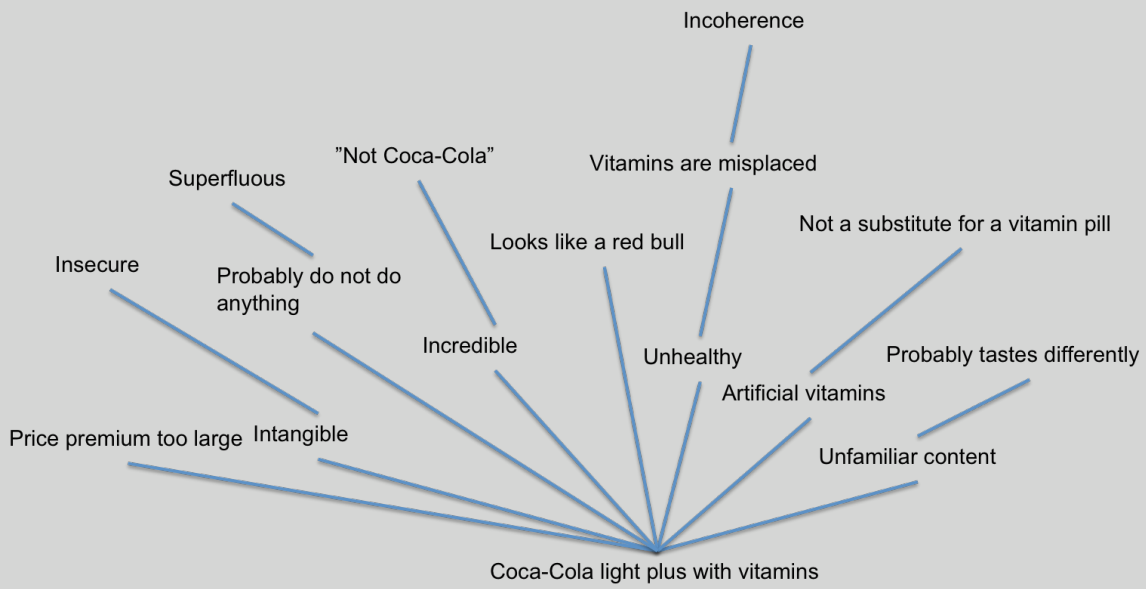


Source: Own creation

Respondent: DK6

Source: Own creation

Respondent: DK7

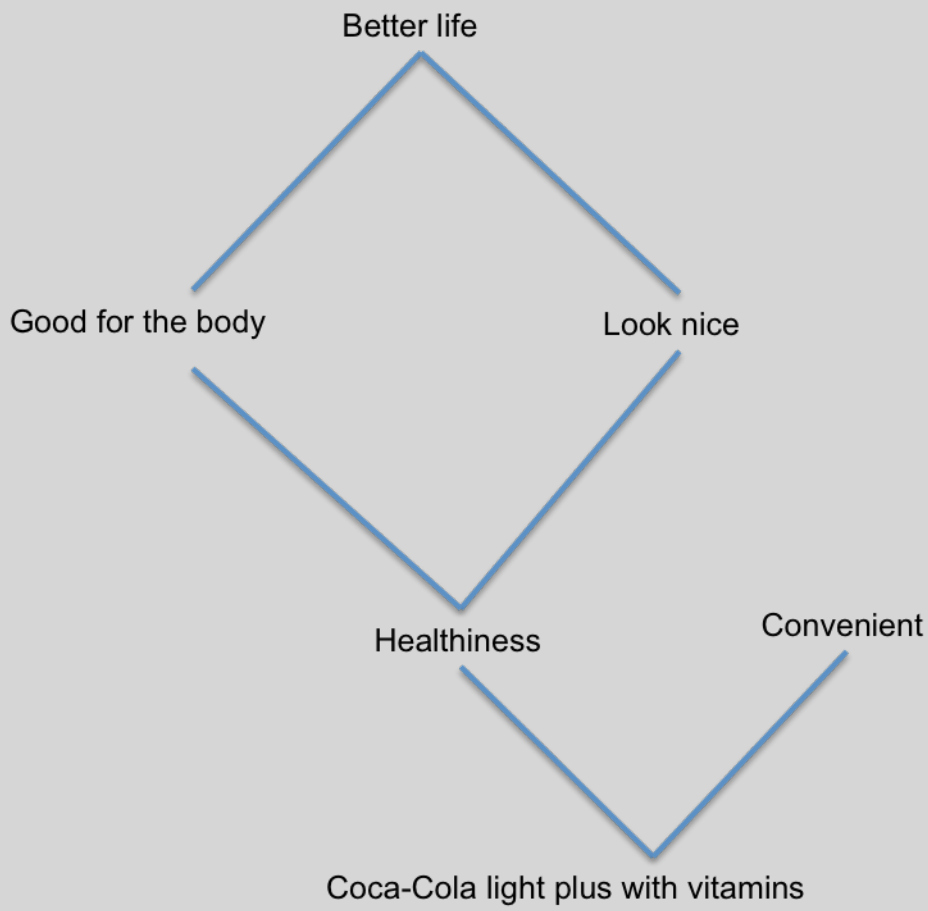


Source: Own creation

Respondent: DK8

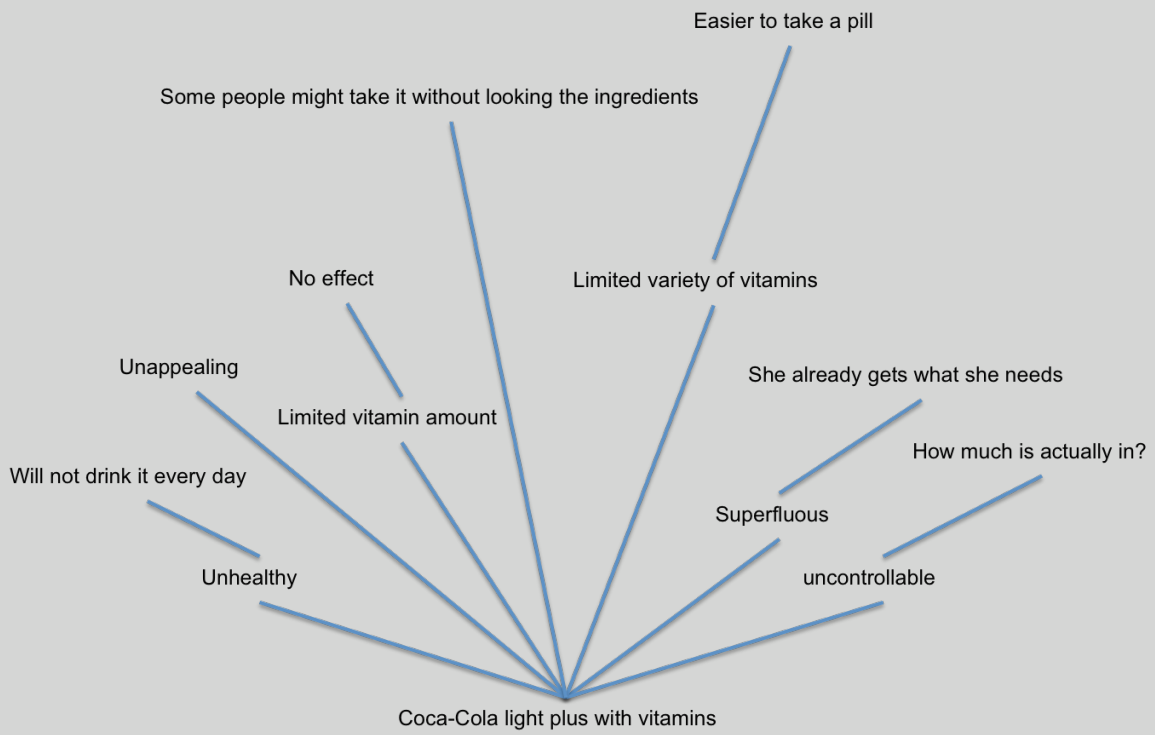
Source: Own creation

Respondent: DK9



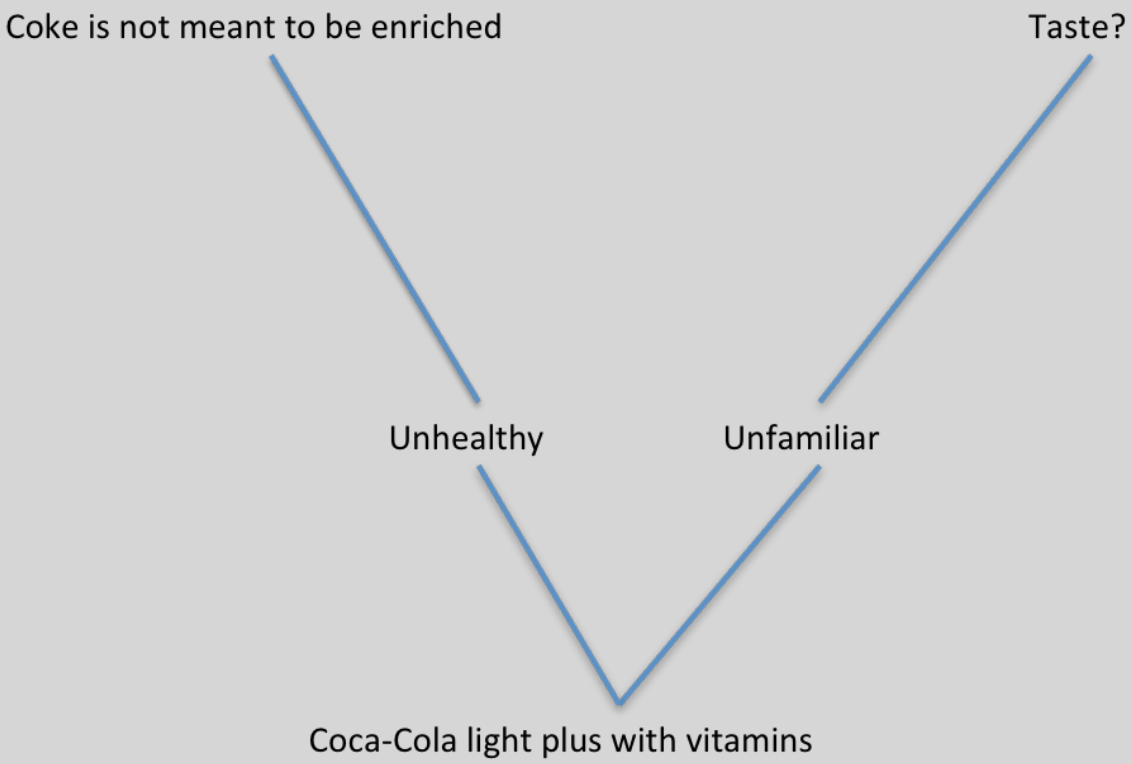
Source: Own creation

Respondent: DK10



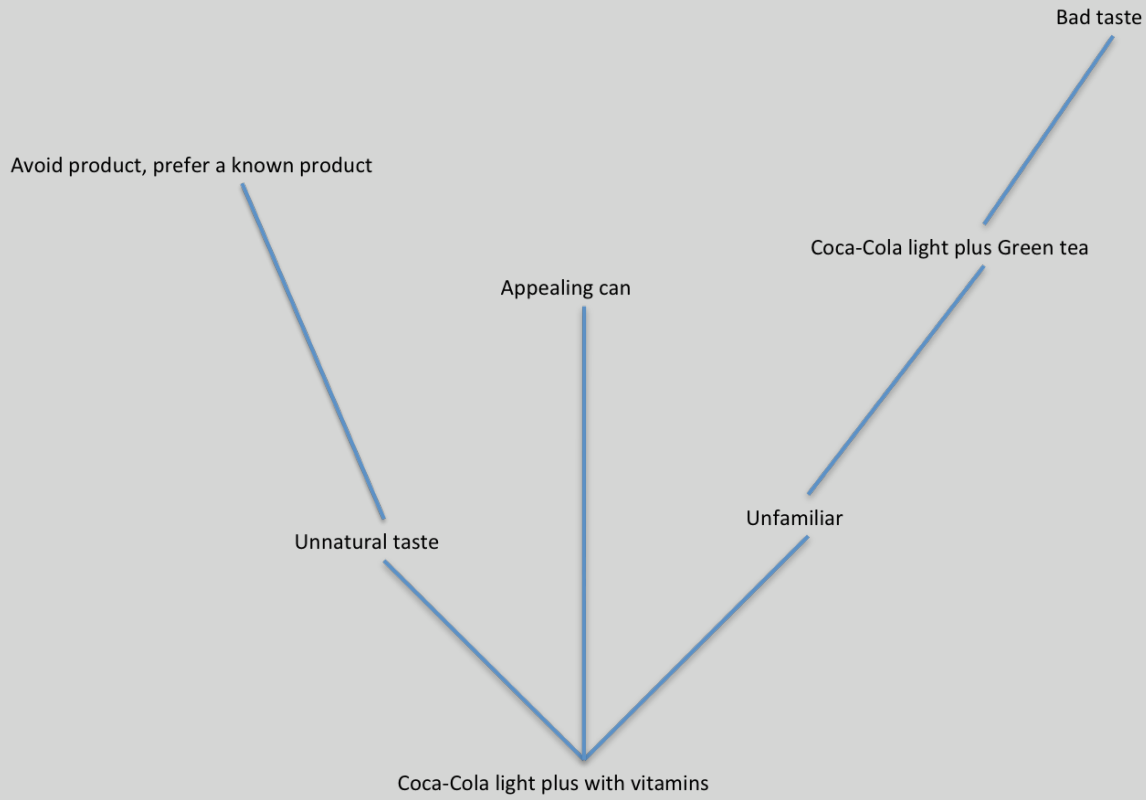
Source: Own creation

Respondent: S1



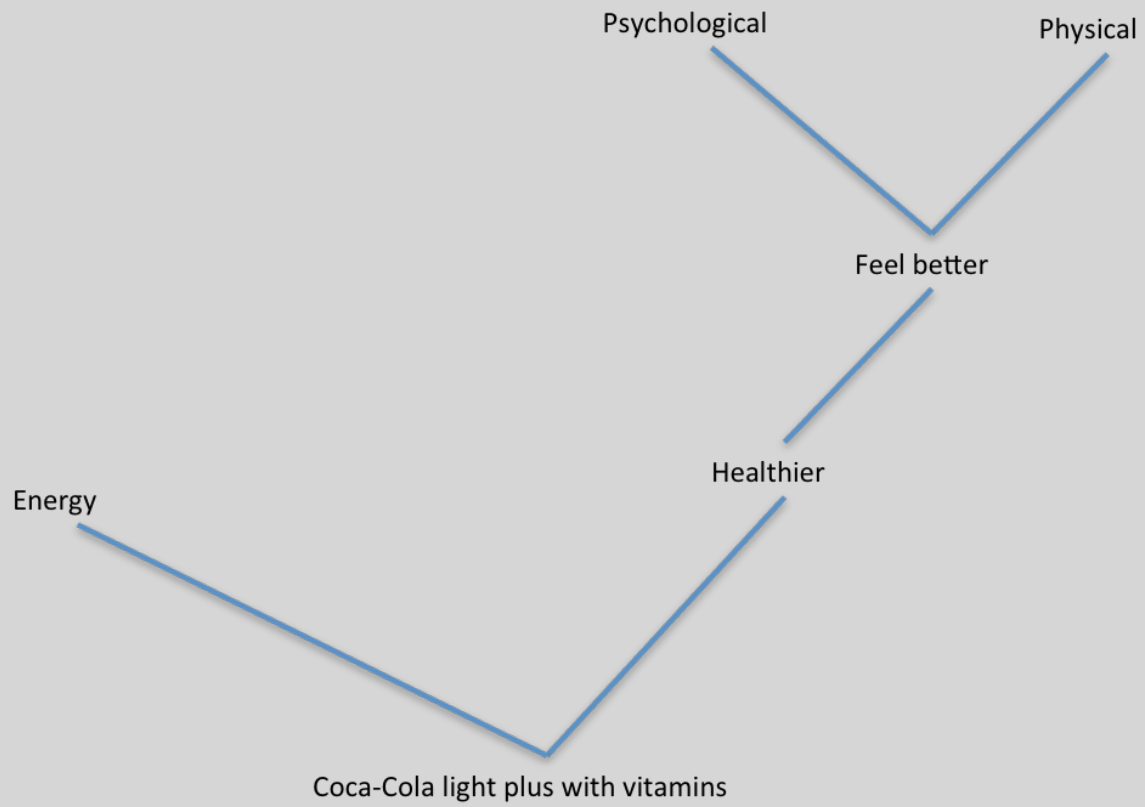
Source: Own creation

Respondent: S2



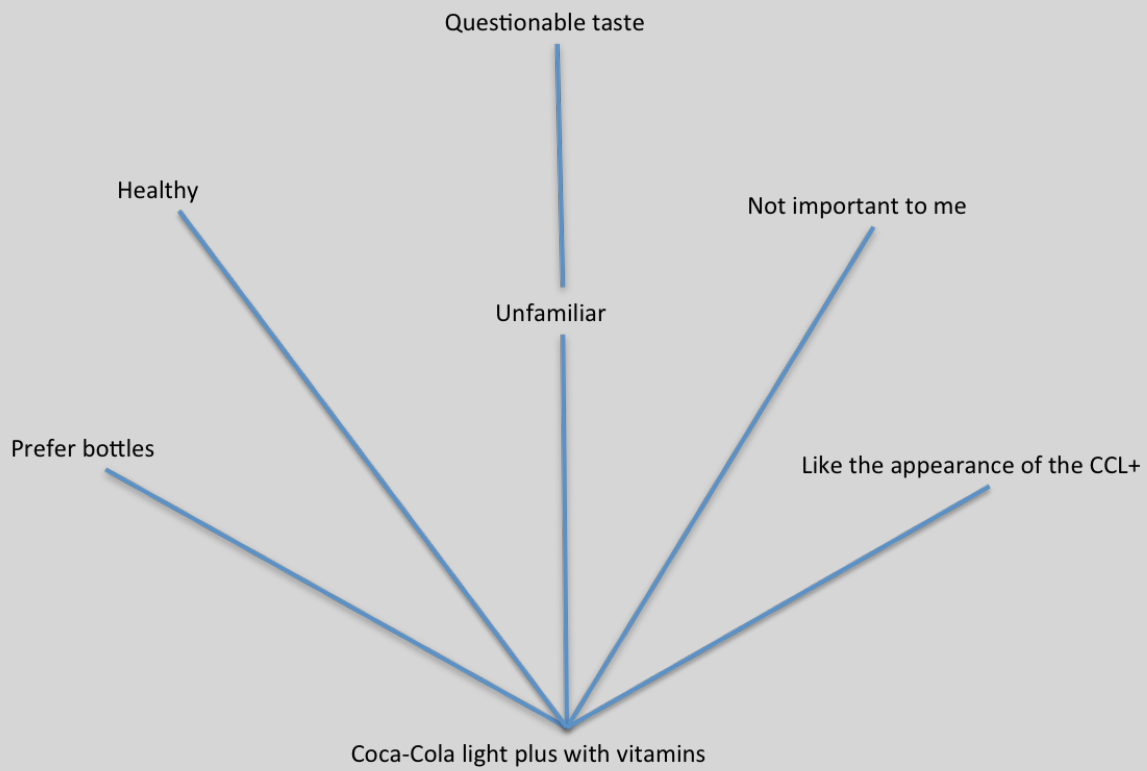
Source: Own creation

Respondent: S3



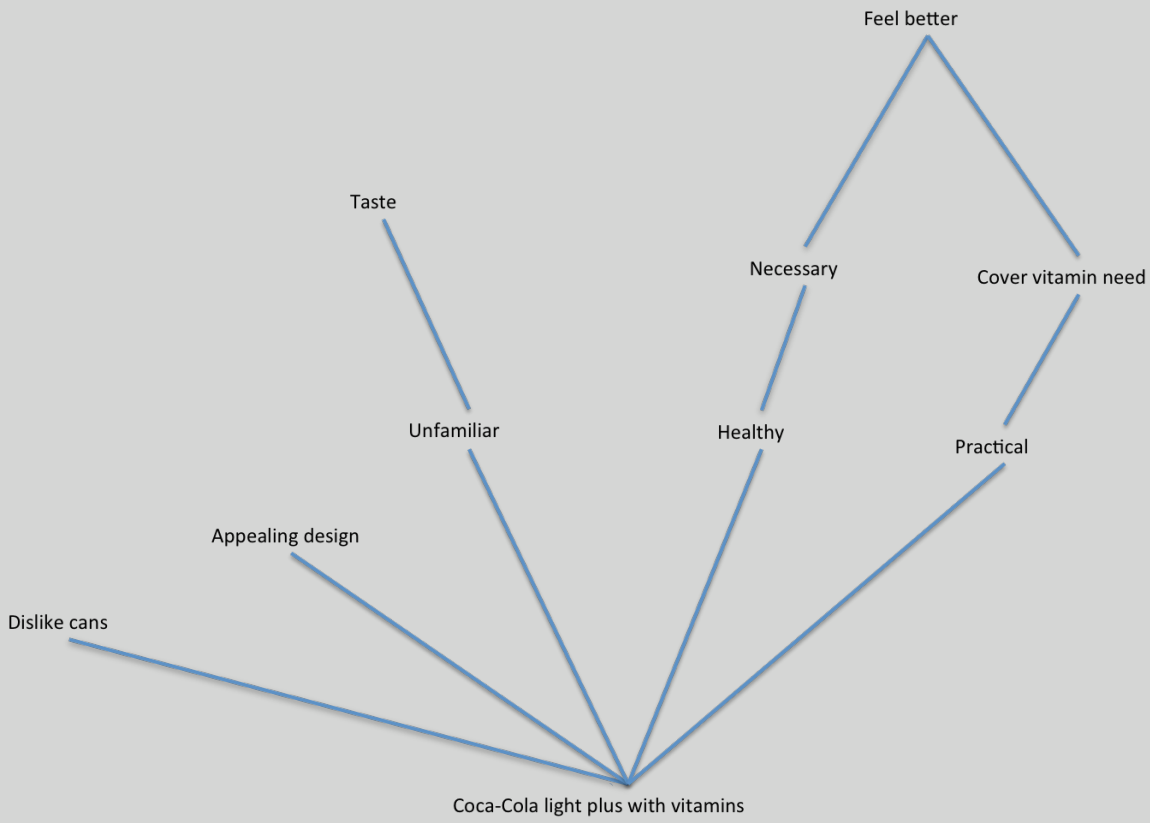
Source: Own creation

Respondent: S4



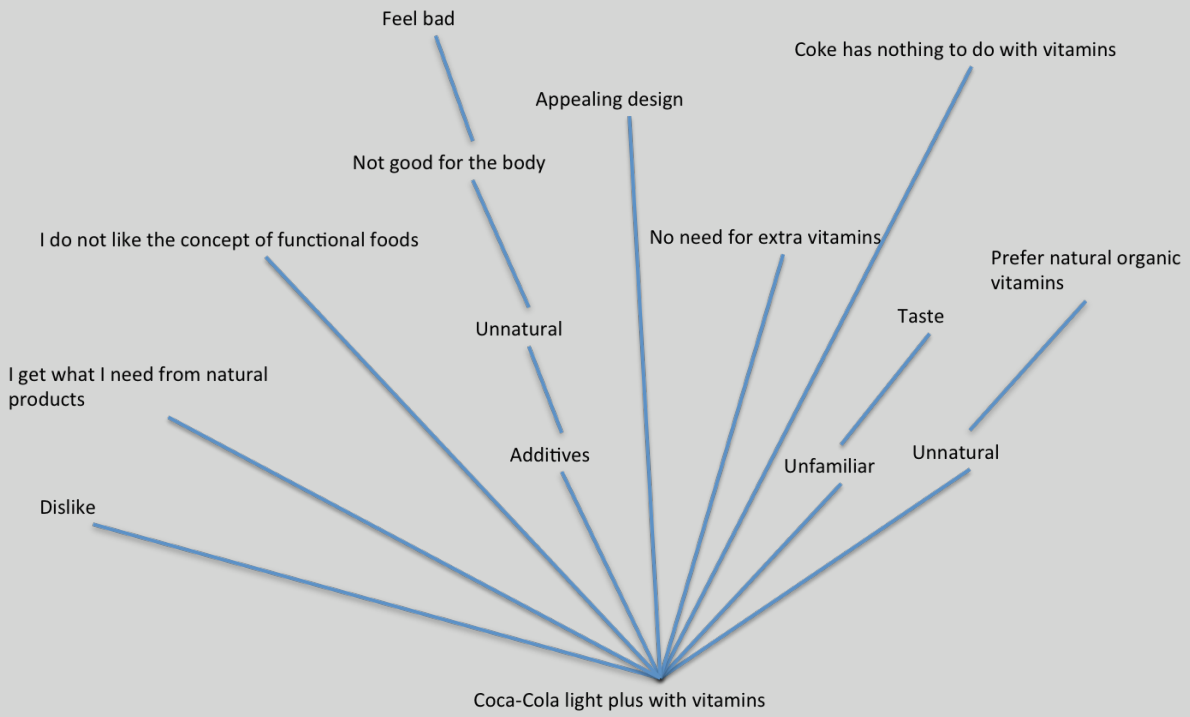
Source: Own creation

Respondent: S5



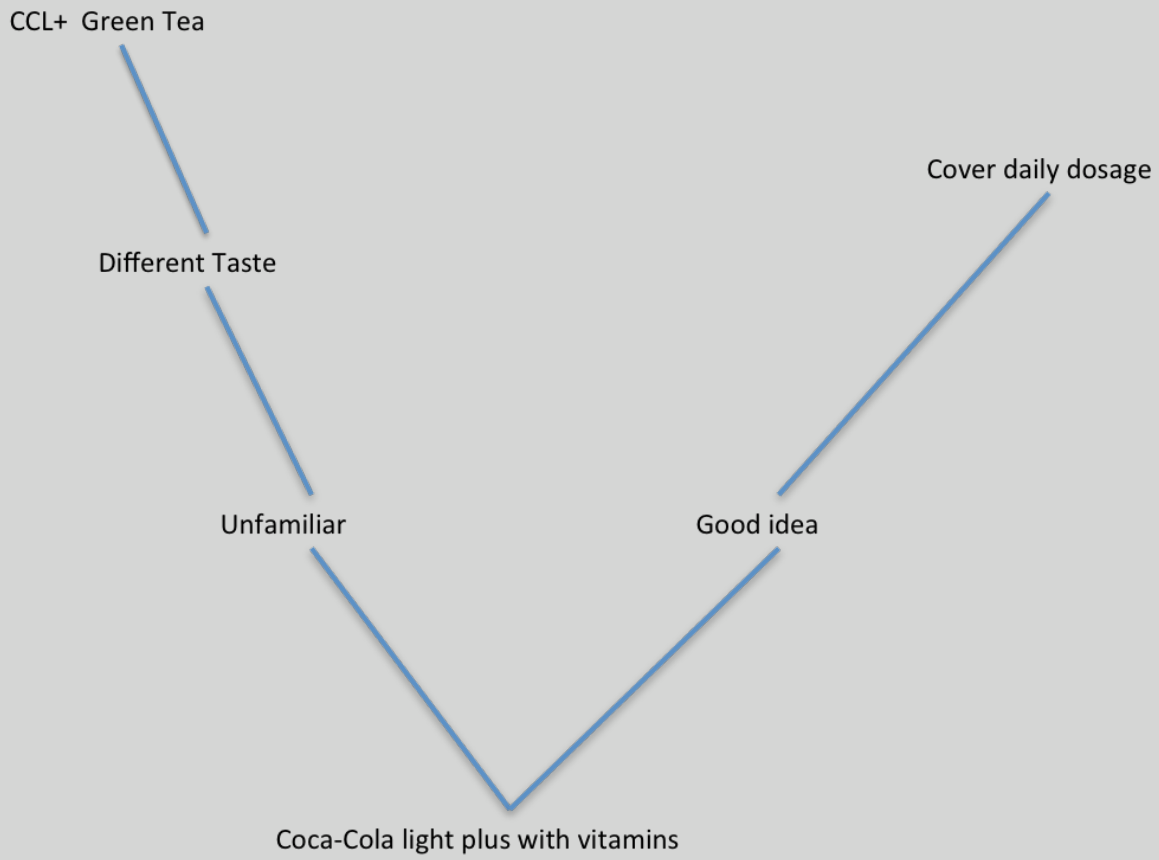
Source: Own creation

Respondent: S6



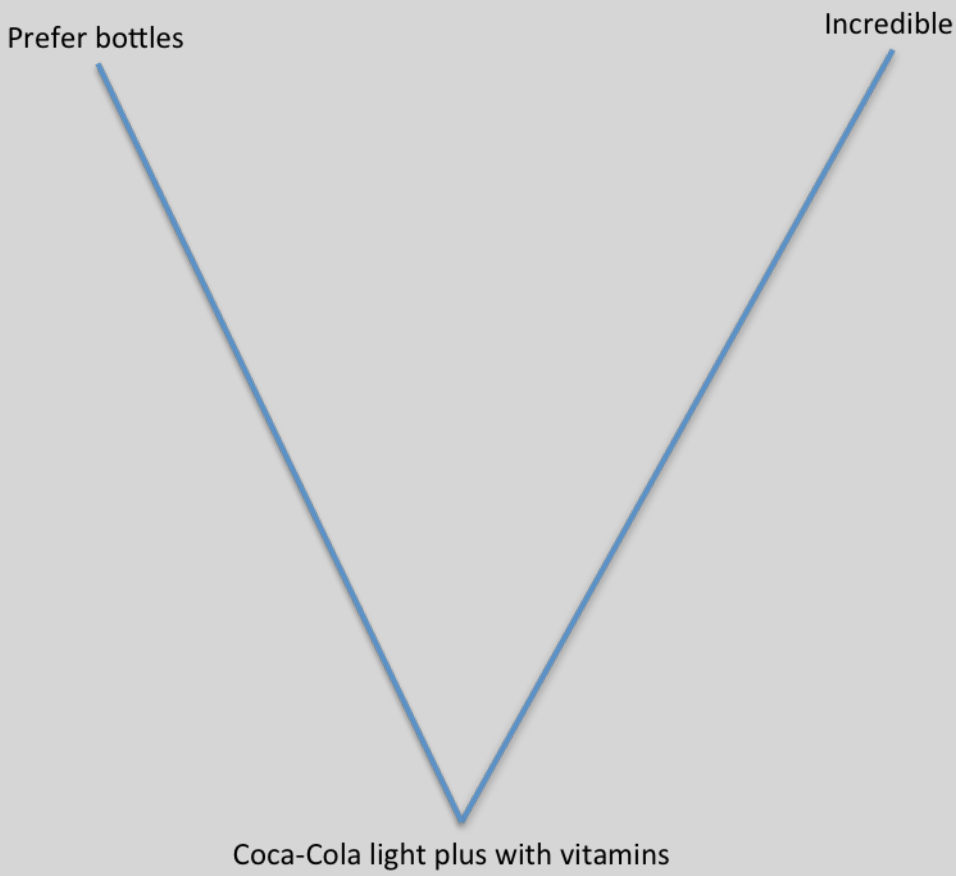
Source: Own creation

Respondent: S7



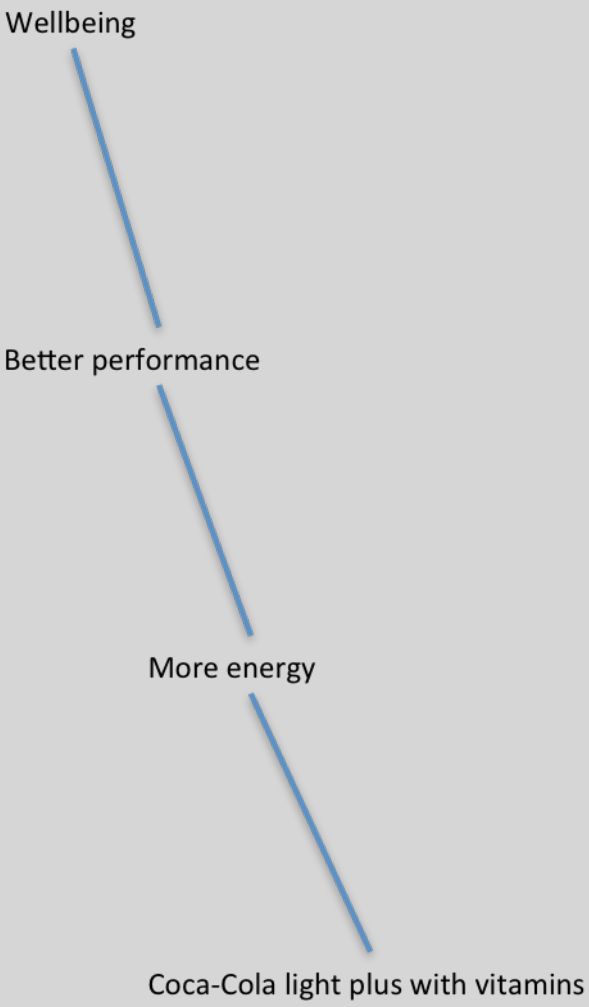
Source: Own creation

Respondent: S8



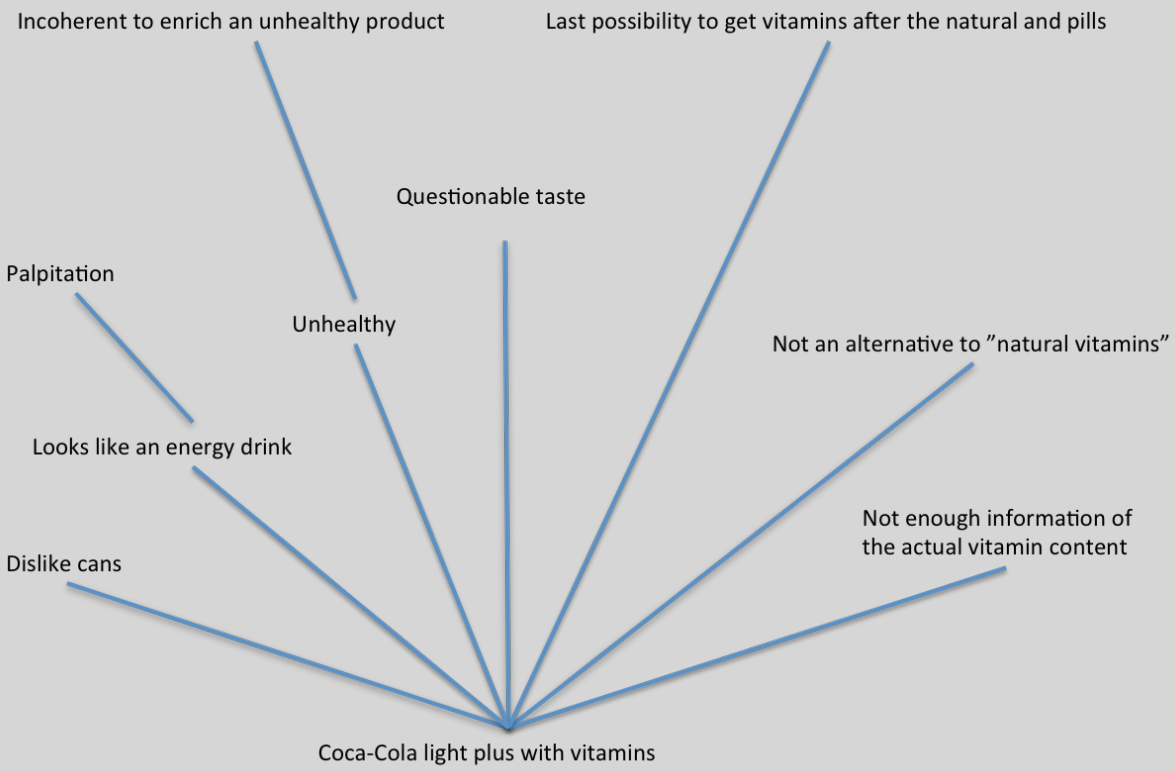
Source: Own creation

Respondent: S9



Source: Own creation

Respondent: S10



Source: Own creation

Appendix No. 8: Vitamin Pills and dietary supplements (Denmark & Sweden)

Market Sizes - Historic - Retail Value RSP - Value at Current Prices

Geographies	Categories	2003	2004	2005	2006	2007	2008
Denmark - DKr mn	Vitamins and dietary supplements	773,7	798,7	778,9	766,8	756,1	834,6
Denmark - DKr mn	Vitamins and dietary supplements	773,7	798,7	778,9	766,8	756,1	834,6
Sweden - DKr mn	Health and wellness - Nutritionals	2.397	2.540	2.666	2.743	2.770	2.840
Sweden - DKr mn	Vitamins and dietary supplements	1.229	1.244	1.253	1.255	1.219	1.235
Sweden - DKr mn	OTC Healthcare	4.043	4.267	4.519	4.780	4.973	5.225
Sweden - DKr mn	Vitamins and dietary supplements	1.229	1.244	1.253	1.255	1.219	1.235

Sources:
1. Health and Wellness Nutritionals: Euromonitor from trade sources/national statistics
2. OTC Healthcare: Euromonitor from trade sources/national statistics

Note on double-counting: Sum of sectors is greater than the total OTC market size because Child-specific OTC healthcare and Allergy healthcare are included in various other categories at a lower level

Note: Sum of sectors is greater than the total market size for Nutritionals to avoid double counting. Herbal dietary supplements, Herbal tonics and bottled nutritive drinks, Herbal child-specific dietary supplements are included in herbal/traditional products as well as in vitamins and dietary supplements.
Date Exported (GMT): 11/09/2009 14:40:00

DKR.	Population	Value/Population
Denmark	5,50	151,7
Sweden	9,25	133,5

Appendix No. 9: Functional Foods in Denmark and Sweden

We will in the following appendix briefly outline the legislation and overall environment for functional foods in Denmark and Sweden.

Functional Foods in Denmark

In 1998 it was decided by the Danish government to make a compulsory add of iodine to salt used in ordinary households and in bread and bakery products because the overall level of consumption of iodine in the Danish population was too low compared to the recommended level. This low level had led to many incidents of enlarged thyroid gland[30].

The Danish Government has had a major role in the limited development and evolution of functional foods in Denmark. Before 2003 it was only allowed to sell an enriched good, if it was considered to fulfil a nutritional need among the entire population. This changed in September 2003 when EU interfered with the Danish legislation as they ruled that the restrictions created unjustified trade barriers within the international market[31].

The authorities therefore now have to prove that the vitamin content in a product entails a health risk, instead of the manufacturers having to prove that there was a real need in the population for the enriched vitamins[32].

There is however a limit to the allowed content.

The Ministry of Food, Agriculture and Fisheries in Denmark was not pleased about this ruling, and considered it a defeat. They have stated in the Danish press that they did not know how many products they would now allow, but assured that it would not be many[33].

The reason for their negative attitude towards functional foods is a concern that it will undermine the basic nutritional and dietary advice, making it difficult for people to know what is healthy and what is not[34].

---

[30] Press realease, Fødevaredirektoratet 1998.
[31] Cowles, Isabel (2009).
[32] Dom fra EU åbner for berigede fødevarer, Berlingske Tidende, Forgæves kamp mod mad med vitaminer, Berlingske Tidende, Beriget mad i kø til køllediske, Berlingske Tidende.
[33] Dom fra EU åbner for berigede fødevarer, Berlingske Tidende.

After the EU instructed the Danish government to change the laws the applicants for approvals to sell functional foods exploded. Many companies, both Danish and foreign, wanted to take advantage of this part of the market, that were not developed.

But the Danish government has not granted many functional food products to the Danish market. They claim that many of the applicants sell foods that in general will worsen public health. If a consumer suddenly thinks, that a product is healthy, when it is not, he or she may start consuming more of it, making it hard to prove that the product will not be harmful for the consumer[35]. The Danish government assesses that consumers can sustain damage from ingesting too many vitamins.

In mid 2004 Kellogg's applied for 18 new products to be marketed. They all got rejected. The reason for the rejection was that they were perceived to be able to worsen public health. This led to great satisfaction for The Danish Consumer Council that fights for the rights of the Danish consumers and is very sceptic towards functional foods.[36] Their main point of argument is that functional foods lead to more risks tan benefits for the consumers[37].

The Consumer Counsel is very sceptic towards functional foods, and influences the environment for these products a great deal. The Consumer Council believes that the use of fortified food products, is a *political scandal*, and believes their use will legitimize unhealthy foods, like chocolate or soda, if it is fortified with vitamins.

The industry denies that they will use the rules to make unhealthy foods to appear as healthy and stresses the fact that the fortified foods should not pose a health risk, but it is about giving the consumers a choice.

The Consumer Council sees this as a responsible attitude and as something positive, but compares Denmark to other countries, where it is the products that should be avoided that are being enriched[38].

[34] Da Danmark blev tvunget til vitaminmad, Berlingske Tidende.
[35] Da Danmark blev tvunget til vitaminmad, Berlingske Tidende.
[36] Nej til vitamin-morgenmad, Politiken.
[37] Teknologirådet, Teknologirådets temawebsite om beriget mad.
[38] Mortensen, 2005: *Berigede fødevarer – For eller imod?*

Studies from Britain, where it is permitted to add vitamins and minerals, also shows that three out of four fortified products are foods, which the authorities usually advises consumers to eat less of, because they either contain large amounts of sugar, salt or fat. Vitamins or minerals do not improve the products, which already is too sweet, salt or fat[39].

The Consumer Council fears that enriched food may cause confusion in the way consumers perceive what a good and healthy diet is.

A fear that is not only rooted in risk of unhealthy foods legitimized. But also the risk that the Danes will get vitamins and minerals in high doses so that it can be harmful, and subsequently result in a worse state of health.

All in all, the environment for functional foods in Denmark is permeated by a negative attitude.

Functional Foods in Sweden

The environment for functional foods is very different in Sweden. To make an easy comparison, all of the 18 Kellogg's products are available on the Swedish market.

In Sweden they started adding vitamins to their cereal 30 years ago, and there is a wide variety of functional products available on the market.

The legislative environment is very different compared to the Danish. The authorities in Sweden have accepted the ability to sell enriched foods. Even though the enriched vitamins are not necessary, they cannot prove the yare harmful, and are therefore not able to prohibit the sales, according to the Swedish Food Directorate[40].

The reason for the two authorities acting differently in the case of Kellogg's can also be found in the way they estimate the risk of consuming the products. The Danish Scientists include dietary supplements in their calculation of risk of crossing the recommended daily intake. The difference can be explained by the fact that in Sweden only approximately ten percent of children have a vitamin pill daily compared to Denmark where 70 percent of children eat vitamin pills. This leads the scientists, who estimate what affect the cereals will have on

[39] Mortensen, 2005: *Berigede fødevarer – For eller imod?*
[40] Flere vitaminer på svenske hylder, Politiken.

public health to consider how many vitamins a normal child in Denmark is exposed to. The Swedish authorities are considering switching to this way of calculating also. [41]

The use of health claims

Both Sweden and Denmark are subject to EU legislation regarding the use of health claims.

"*In December 2006, a Regulation on the use of nutrition and health claims for foods was adopted by the Council and Parliament. This Regulation lays down harmonized rules for the use of health or nutritional claims (such as "low fat", "high fibre" and "helps lower cholesterol") on foodstuffs based on nutrient profiles.*

The Health Claims Regulation will ensure that any claim made on a food label in the EU is clear, accurate and substantiated. In doing so, it will enable consumers to make informed and meaningful choices when it comes to food and drinks. This should also contribute to a higher level of human health protection, as it ties in with the Commissions campaign for healthier lifestyle choices by allowing citizens to know exactly what they are consuming.
The Regulation also aims to ensure fair competition and promote and protect innovation in the area of food. Only products offering genuine health or nutritional benefits will be allowed to refer to them on their labels."[42]

The use of nutritional and health claims in the labelling and marketing of foods is regulated by The European Parliament and Council's regulation on nutrition and health claims. The regulation applies to all food, both packaged and non-pre-packaged foods.

All information, logos, pictures, etc., which indicates a nutritional or health effect, are subject to the rules, including trademarks and brand names. Nutrition and health claims are optional information, but if companies wish to use such claims in the labelling and advertising of foods, they must comply with the regulation[43].

A nutrition claim can be characterized as any claim stating or indicating that a food has

[41] Flere vitaminer på svenske hylder, Politiken.
[42] Guidance on the implementation of Regulation (EC) N° 1924/2006
[43] Fødevarestyrelsen, 2009 (www.fvst.dk) & Swedish Nutrition Foundation, 2009 (www.snf.se)

particular nutritional properties due to a content of energy, nutrients or other substances. Nutrition claims are thus related to a specific content or absence of energy or nutrients or other substances in food. Examples of nutrition claims may be "sugar free", "high fibre" "low fat", "fat", etc.

There has been created a list of approved nutritional claims, which are possible to use if specific conditions are met. Other claims that have been allowed in a European country beforehand are allowed until January 2010.

A health claim can be characterized as a claim that gives or creates the impression that there is a relationship between a food and an ingredient (e.g., nutrient) of a food and health. In other words, health claims are claims of the impact that a food or substance in a food has on health, including reducing the risk of diseases. An example of a health claim can be "calcium is important for the development and maintenance of bones"[44].

The regulation is meant to establish a set of general principles and conditions, which applies to all nutrition and health claims. These rules supplement the general labelling requirements and ensure that claims are scientifically substantiated and are not misleading the consumer.

The commission is creating 'positive lists' of allowed claims, which have been delayed, but should be done in 2010. The two countries thus still interpret the legislation differently based in their previous rules. The Danish regulation is thus stricter than the Swedish[45].

[44] Fødevarestyrelsen, 2009 (www.fvst.dk)
[45] Swedish Nutrition Foundation, 2009 (www.snf.se)

Appendix No. 10: CD - Interviews