

A Qualitative Analysis on Trends in Fruit Consumption in Four European Countries

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Abstract

The aim of this paper is to present future fruit consumption trends in four European countries using expert interviews. Experts from both outside and within the food fruit sector in Greece, the Netherlands, Poland and Spain were asked to elaborate on the trend factors that have influenced fruit consumption in the past and on the trend factors that are expected to have an impact in the future. Furthermore, they were asked to draw possible future scenarios on fruit consumption. As expected, the most important past trend factor that emerged in all countries was the importance of people's health in relation to fruit consumption. Besides the health trend, which is expected to become even more important, convenience is also indicated as an important determinant of fruit consumption in the future. In addition, future scenarios drawn by the experts were concerned with health aspects, convenience and a decreasing impact of economic factors. Moreover, all experts predicted that future fruit consumption in Europe will increase significantly.

INTRODUCTION

Over the past decades, research has confirmed that consumption of fresh fruit and vegetables contributes positively to people's health (WHO, 2003). The World Health Organization recommends a daily intake of more than 400 g of fruits and vegetables per person. Consumption of sufficient amounts of fruits and vegetables can lead to a reduced risk of obesity, several types of cancer and coronary heart disease (Block et al., 1992; Dauchet et al., 2006; Gerster, 1991; Hertog et al., 1993; Key et al., 1996).

Moreover, a study by Joffe and Roberstson (2001) has shown that 26,000 deaths before the age of 65 years could be prevented annually in the EU if European citizens would consume fruits and vegetables according the recommended amount.

The aim of this study was to identify the major factors driving fruit consumption. This paper will present the qualitative results of interviews with experts inside and outside the fruit sector in four European countries: Greece, the Netherlands, Poland and Spain.

This study was part of a broader project, called the Isafruit Project. The mission of Isafruit is to improve human health through increased consumption of fruit that is produced in a sustainable way. The overall vision was that better fruit quality and availability, as well as a higher level of convenience and improved consciousness of consumers, would lead to higher fruit consumption. As an expected consequence, higher consumption could lead to increased health gain and well-being for European citizens. Isafruit has been in strong cooperation with economic and technical researchers in order to attain the goals of the project (Isafruit Annex I, 2006).

METHOD

Respondents and Sampling

In this study, expert interviews were held to gain a first insight on the trends of fruit consumption and consumer perception. In four selected countries, a number of experts inside and outside the fruit sector were asked to identify the trend factors that have determined fruit consumption in the past, and that are forecast to determine fruit consumption in the future. In particular, 10 experts were interviewed in Greece (5 outside and 5 inside the food fruit sector), 12 experts were interviewed in the Netherlands (6 outside and 6 inside the food fruit sector), 12 experts were interviewed in Poland (6 outside and 6 inside the food fruit sector), and 12 experts were interviewed in Spain (6 outside and 6 inside the food fruit sector). The selection of countries was based on the analysis of Schreuder et al. (2007) to present a representative view of the entirety of European countries. The criteria used were: geographical, more or less urbanized population, economic factors and trends in fruit consumption (see Schreuder et al., 2007).

Procedure

In the first part of the interview, the experts had to sum up five past trend factors that could have influenced fruit consumption in their own country. Furthermore, they had to elaborate on the reasons why these factors could have influenced fruit consumption. The same procedure was used for the future trend factors. Finally, the experts inside fruit sector were asked to elaborate on possible future scenarios concerning fruit consumption.

Besides qualitative answers, experts had to state the possible impact (in percentages) of the factors on fruit consumption. They also had to state for each specific factor when (in which year) the maximum impact on fruit consumption would be reached. This rating was used for a Trend-Impact-Analysis (TIA) (Gordon, 1994), in which statistical data and human judgement are combined to produce realistic future scenarios on fruit consumption in Europe. The results of the TIA will not be presented in this paper, as it is beyond the scope of this study. For further details on the results of the TIA, see Groot et al. (2008).

Based on the qualitative results of the first round of expert interviews, a second round of expert interviews was conducted employing several features of a Delphi-study. The Delphi-method is a systematic procedure for evoking expert opinions (Dalkey and Helmer, 1963). According to Dalkey and Helmer (1963), there are three features to Delphi: (1) anonymity; (2) controlled feedback; (3) statistical group response. In the Delphi of this study, only anonymity and controlled feedback were used.

The summaries of the results of the expert-interviews in the first round were sent back to the 46 experts via email for a second round. In all four countries, the Delphi technique was used for the experts outside the fruit sector and inside the fruit sector separately. The following four questions were asked to all experts: What do you think is the single most important aspect in the summary? Why is it the most important aspect? What do you think is the most important aspect that is not in the summary? Why do you think this aspect is missing? Finally, the results of the expert answers in the second round were used to finalize the summaries on past and future trends and to create possible future scenarios for European fruit consumption.

RESULTS

Trends in the Past

1. Experts Outside Fruit Sector. In Greece, health and well-being was considered to be the most important trend factor for the experts outside the fruit sector, followed by convenience, then demographic changes and then economic factors and marketing activities.

Sustainability, product variation and quality seem to influence fruit consumption at a lesser level than these factors.

In the Netherlands, the experts outside the fruit sector pointed out the trend factors of health, convenience, (product) innovation, availability and lack of identity. Fruit as a healthy product was associated with prevention of problems concerning obesity. Convenience appeared to be important in consuming more fruit, meaning that the healthy choice could be turned into an easy choice by better packaging, availability of fruit at a greater diversity of places and new fruit products such as juices, fresh cut salads and ready to eat fruit. An important negative trend that was mentioned was that fruit still does not have its own identity or consumption moment. According to the Dutch experts, many consumers do not seem to have a fixed fruit consumption moment during or in between meals. Furthermore, many people have also lost contact with the origin of fruit. Consumers are unable to identify where fruit was grown or how it was produced. However, the experts mentioned that this trend is already changing.

In Poland, experts pointed out that the trends influencing fruit consumption could be divided into positive and negative factors. The trends negatively influencing consumption are the slow development of real incomes of households, consumption traditions (habits), limited access to supply of fruits year round (seasonal availability) and change in supply factors (replacement of old distribution systems, which led to low marketing intensity and lower availability). The trends pro-health lifestyle and the increase in the supply of imported fruits (diversity and attractiveness of supply) positively influence consumption.

In Spain, experts suggested that both health and product variation were the most important past trends that had an impact on fruit consumption. Health and well-being has been mentioned to be the driving force, since people are more aware of the importance of good nutrition habits. The Spanish experts had different views on product variation. Product variation refers to the availability of new fruits, new varieties, convenience aspects, and even new ways of storing and packaging (e.g., smaller portions). Quality issues have also been mentioned several times related to income aspects and to food safety aspects. If people have higher income, they prefer to buy higher quality fruit with more food safety guarantees.

2. Experts Inside Fruit Sector. In Greece, based on the number of times an existing trend factor is mentioned by an expert, the following factors appeared most important: quality (i.e., quality assurance of products), marketing (i.e., modern logistics, promotion of fruit consumption in schools) and economic factors such as stabilization of fruit retail prices. Besides these factors, health and well-being was also mentioned. Convenience, sustainability, perception and demographic changes appeared to be trend factors with minor importance according to the Greek experts inside the fruit sector. Furthermore, out-of-home consumption was not stressed by the experts as an important determinant of fruit consumption.

In the Netherlands, health, product variation and food safety appeared to be the most important past trends influencing fruit consumption. Besides these factors, convenience was also mentioned. Product variation was not only regarded as the broadening of the fruit assortment with new categories and varieties but also as the modification of characteristics of the existing fruit categories (like improved health value or better possibilities for processing). Based on the expected impact of the trend factor, the experts consider product variation the most important consideration, followed by health and convenience. Other trend factors mentioned are: identity and experience, increased environmental awareness and changes in the supply chain.

In Poland, the expert interviews inside the fruit sector pointed out some additional factors affecting fruit consumption. The experts were basically consistent in identifying the main factors affecting the trend. According to them, the factors of utmost importance could be effectively divided into positive and negative factors. The factors negatively influencing consumption were: slow development of real incomes of households, consumption traditions,

limited access to supply of fruits year round and the proficiency of the distribution system (supply factors). The factors positively influencing consumption were: market infrastructure development (supermarkets), marketing activities, pro-health lifestyle and the increasing supply of imported fruits (diversity and attractiveness of supply).

According to Spanish experts inside the fruit sector, the trend factors health and well-being, product variation and quality were the most important. Campaigns such as “5 a day” help consumers to be aware of the importance of following a healthy diet. Furthermore, product variation seems to be a growing trend. The year-round availability of products, new fruits and new packaging have also been very important trends in the past years.

Trends in the Future

1. Experts Outside Fruit Sector. Greek experts outside of the fruit sector cite the trend factors of health, convenience, out-of-home consumption, product variation and economic factors as most important. Furthermore, marketing was mentioned as a factor influencing future fruit consumption. Trend factors such as sustainability, quality and demographic changes appeared to be of minor importance. Perception/authenticity was not stressed by the experts as a factor that could play a crucial role in fruit consumption. Generally speaking, experts expected an increase in the supply of fruit products, with special health and high quality characteristics, also due to an expected increasing demand for out-of-home fruit (food service). The supply of convenient fruit products could increase the overall fruit consumption. Most experts expect the maximum impact of the trend factor health and convenience to occur in the next 5 years.

In the Netherlands, experts expect that health concerns will continue to be a trend related to fruit consumption. There will be even more (media) campaigns regarding the positive effects of fruit on health, due to increased scientific evidence in support of the healthy aspects of fruit. The health and convenience aspects of fruit will be integrated and stressed in forthcoming products. Communication about health, convenience and identity will shift to out-of-home demand. Promotional campaigns, funded by government or producers, are expected to target children directly (rather than only through their parents). Another further trend factor that is mentioned is that consumers still want to be seduced in the future. Therefore, even more new varieties, both within existing varieties and from new tropical fruits, are also expected to enter the market. New, attractive and effective packaging could be further developed. Finally, the origin of fruit will become more and more important, as people want to experience the true and pure taste of fruit.

Experts in Poland expect that the consumption of fruits will grow in the future, especially in preserves (jams, juices and nectars) and in organic fruit. The Polish experts state that consumers will appreciate the nutritious value of fruits and relate consumption of fruits with health and physical fitness, changing their consumption habits to follow the example of other Europeans. Consumption of fruits and preserves will still be influenced by the economic factors (incomes and prices); however, some positive changes in these factors are also expected, leading one to expect lower fruit prices. The influence of economic factors is expected to be decreasing consistently until 2020 because the average income is increasing systematically with the availability of fruit products. Additional factors that were mentioned include: proliferation of a pro-health lifestyle (health and well-being) and changes in consumption patterns (out-of-home/demographic changes).

Health and well-being is considered to be the most important trend factor in Spain. Quality was mentioned second, followed by convenience and demographic/economic changes. The awareness of the relation between health and nutrition is growing, and consumers are exposed to a variety of information that encourages increasing their fruit consumption. The quality and convenience issues are strongly related to health. If people consume fruit, it should be adapted to their needs, which implies a demand for quality fruit in

a format that is easy to consume (e.g., washed, peeled, fresh-cut). Experts have also stressed the importance of demographic developments in Spanish society, for instance, an aging population, an increase in immigration, changing economic aspects and the general growth of well-being.

2. Experts Inside Fruit Sector. Experts of the Greek fruit sector reported health and well-being as the most important trend factor, followed by convenience and economic factors. In general, an increase in the supply of fruit products with special health and quality characteristics is expected. Fruit consumption is also expected to increase as availability of new products can suit the increased demand for out-of-home fruit products. Most experts expect the maximum impact of health and convenience within the next 15 years. Although the opinions about the extent of the impact differ among experts, the health trend is expected to have the biggest impact on demand in the coming years.

Experts inside the fruit sector in the Netherlands considered health to be the most important trend factor as well, followed by product variation and convenience. Experts generally expect an increase in the supply of fruit products with special health characteristics and a high guarantee for food safety and sustainability. Due to an increasing demand for out-of-home fruit (food service), the supply of convenient fruit products is expected to further increase. The supply of fruit should become more demand driven, and there will be more focus on the “fruit experience”. All experts have mentioned that future trend factors are more or less obvious already. Most experts expect the maximum impact of the health and convenience trend factors over the next 10 years. Although opinions about the extent of the impact differ among experts, the impact of the health trend factor is generally indicated as the most important in the coming years.

According to the experts in Poland, future consumption will grow, mainly on preserves and fruits produced organically. They have reported that consumption should increase due to an increase in average income and changes in consumption patterns and in the Polish lifestyle and because of the increasing marketing and promotional activities within Poland.

Health is also considered to be the most important trend factor by Spanish experts, followed by convenience and quality. Health is regarded here not only as not being sick but also as looking physically attractive. Since fruit is considered to be important for a healthy diet, it will be a crucial issue in the future according to Spanish experts inside the fruit sector. Convenience is a consequence of general changes in habit. As consumers demand other kinds of products, packaging etc., people will also ask for higher quality products in the future.

Future Scenarios for the Fruit Sector

The three most important factors derived from the analysis in each country were used to develop future scenarios. Thus, three possible scenarios were developed for each country. In order to reach the goal of increased fruit consumption, recommendations were given by the experts from inside the fruit sector. The overall recommendations were:

- better cooperation and a more adequate exchange of information within the fruit chain (Greece, the Netherlands, Poland)
- all parties of the fruit chain should be more focused on consumer demands to develop products that better fulfil consumer's expectations (Greece, the Netherlands)
- stabilization of the market (Poland)
- development of more products suitable for preparing and processing (Greece, the Netherlands)
- increase of kind and variety of fruits and preserves (Poland)
- presentation and packaging should be taken into account in development of new products (Greece, the Netherlands)
- in order to avoid negative influences, economies of scale should be applied by growers as:

cost minimization (Greece, Poland) and the margin between grower price and consumer price should be diminished (Spain)

- more sustainable production to meet the health goals (the Netherlands, Spain)
- traceability systems (i.e., “tracking and tracing”) are needed to guarantee quality (Spain)
- more communication about the health aspects of fruit (the Netherlands, Poland, Spain)

For more details see Groot et al. (2008).

DISCUSSION

A main conclusion of this study is that there seems to be quite some overlap between the different countries studied in both expected future trends and scenarios concerning fruit consumption. However, results also show that countries in different stages of (cultural and economic) development will see consequently different development in fruit consumption. Furthermore, it seems evident that the process through which fruit consumption will evolve in different countries will also be different.

Having said this, the experts in all countries have pointed out health as the driving force for past and future consumption. The typical consumer in the EU is expected to become even more health conscious, seeking new ways to turn toward a healthier standard of living. Media campaigns, government legislation and new research information can help trend in that direction. These future developments will also certainly influence the business decisions of all the sector’s members: growers, retailers and traders.

At the same time, convenience and out-of-home consumption are expected to play a major role as people are expected to have less available time for the preparation of meals and cooking. This will lead to the development of new products/packaging that will be more convenient to carry and eat in an out-of-home situation.

Demographic changes (i.e., changes in average family structure) will also shift the demand for convenient products in the different countries concerned. Similar economic factors also help to determine fruit consumption; this is especially true in Greece and Poland. Product variation, such as preserved fruits and functional food, was mentioned as an upcoming trend in all countries. However, the perception of product variation itself seemed to garner various explanations from various experts in various countries.

Almost all experts in the countries studied here have reported that fruit consumption is expected to increase within the next few years. Again, the kind of fruit or fruit products that will cause this increase could differ tremendously between different countries in Europe.

Concerning the trends of the past, a distinction can be seen between experts from inside the fruit sector and experts from outside the fruit sector in both Greece and the Netherlands. In all four countries, the experts from outside the fruit sector recognize additional trend factors for future fruit consumption, which are essentially unrecognized by the experts from inside the fruit sector.

As mentioned in the introduction, the aim of this study was to identify the major driving factors in fruit consumption. The study gives an extensive and structured overview of European experts, both within and outside the fruit sector, sharing ideas on future development. The results of this study highlight the driving forces and the appropriate steps that should be taken by the industry or legislation in order for this increase in consumption to become reality. Since the current study only reports the qualitative results on possible European fruit trends, a quantitative analysis could measure more specifically the impact of each trend factor in future European fruit demand by effectively targeting the consumer.

RECOMMENDATIONS FOR POLICY

Based on the above results, a helpful policy for increasing fruit consumption would be:

- supporting promotion/information campaigns in order to make consumers aware of the

- health aspects of fruit consumption
- supporting the development of and possibilities for effectively combining convenience aspects with health aspects of fruit and fruit products
- supporting the development of and possibilities for a sustainable way of fruit production
- supporting the cooperation between the various parties in the fruit supply chain

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