# ORGANIC CONVENIENCE

Possibilities of distributing local products via child day care centers



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MSc Thesis Organic Agriculture July 2005



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# Abstract

Growth of the market for organic produce is accompanied by a shift in distribution, form direct sales to sales via supermarkets, the mainstream channel. Mainstream channels follow a strategy of operational excellence. This strategy shows certain side effects providing challenges for producers of organic products in relation to marketing their products profitably. This study focuses on the possibilities to distribute locally grown organic products via an alternative distribution channel: a child-day-care center.

From a producers perspective this involves communicating the Unique Selling Proposition of organic produce via direct marketing. By enhancing consumer credibility, which is necessary for product purchase to increase, dependency on retailers and organic labels can be abandoned. This channel envisages combining a competitive advantage, in terms of price and convenience by focussing on consumer segments interested in organic produce and supplying them through clustered delivery. This means offering the products at a place where consumers in this segment necessarily meet for a given reason (clustered) in the sense that it is convenient to consumers in this segment (delivery).

Following current trends consumers possibly appreciate regional products, as this appeals to a need for transparency, providing in a kind of security. The local aspect furthermore contributes to "the desired connection with the direct environment." Parents with young children develop an interest in organic products. However, bringing up children does not allow them, financially, to express their desired behavior. Price and availability form obstacles, although benefits in terms of health and environmental friendliness are recognized.

Several benefits are assumed. At the level of parents convenience is offered. Clustered delivery reduces logistical costs, which can have a positive effect on consumer prices. At the level of management a competitive advantage is expected due to an increased range of products and services offered. At the producer level better producer prices are expected, due to a short distribution chain. A sustained supply is expected based on consumer satisfaction and confidence through a course of customer intimacy complying with individual customer demand.

Interviews are conducted with child-day-care center managers and a survey is held among parents to verify the assumptions. Staff members are optimistic. Parents show an interest in local organic products. Price is an obstacle, availability issues, however, are not encountered when purchasing organic products. CDC centers and supermarkets are perceived as attractive market channels, however, a daily visit to a one-stop-shop is part of peoples daily routine.

# Acknowledgements

To the reader this report might seem a result of comparing and combining scientifical theories, a handful of interviews and many filled out questionnaires related to the subject of organic products and marketing strategies. To me, however, this report is the product of a process mastering internal barriers like frustration, confusion, anger and despair, time and again. In that respect I am grateful to Ynte van Dam for his guidance and inspiration. I would like to thank Erica van Herpen for her support in structuring this report, and Ariena van Bruggen for her guidance and advice.

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# Introduction

In 1984, Werner and von Alvensleben pointed out that the market for organic produce had potential, predicting growth rates of no less than 20% on a yearly basis. At the turn of the century marketing surveys still revealed a promising interest for organic produce among consumers (Voeding nu, 2001; Food Management, 2000). On the basis of a tasty, quality product which insures food safety as well, producers were said to be able to create their own 'license-to-sell'. Lotter (2003) shows that this development has indeed persevered related to all stages of the producer-consumer chain. Favorite among Dutch consumers seem the so-called "agricultural commodities" (potatoes, eggs, fresh fruit and vegetables) as they are purchased most frequently (Viester, 2003).

In recent years, however, the market for organic products has shown a leveling off with regard to consumption (Hallan, 2003). Based on reports from Biologica (2004), consumers in the Netherlands spent approximately 400 million Euro on organic produce, which represents 1,7% of the total market for food. Organic production in the Netherlands shows a decline over the last few years. The total acreage and number of farms under organic cultivation in the Netherlands has dropped since 2002 (Biologica, 2003).

It has been argued that this is due to an increased distribution of organic products via the mainstream marketing and distribution channel: the (organic) supermarket. This channel is characterized by economies of scale and a large number of links in the producer consumer chain providing a challenge in communicating the Unique selling Proposition of organic produce (Park, 2000; Zenner *et al.*, 2000).

The developments provide challenges for producers to profitably exploit their farm. This challenge is amplified by price wars in Dutch supermarkets in recent years (Remmers, 2004).

According to Hamm and Michielsen (2000) solutions could be found in changing the distribution strategy. Experiences from other countries show that it is possible to unite the demands and requirements of producers and consumers and that the use of communication strategies is of utmost importance to take advantage of demand forces. This study aims to serve Dutch (small scale) organic producers in exploring the possibilities of an alternative distribution channel for their produce.

In order to discover such solutions the production and distribution of organic products is studied. The first chapter discusses the market of products from (small scale) organic producer's point of view. Trends in consumer demand serve as a second source of information with regard to the market for organic produce. The second chapter studies consumer demand in the Netherlands in relation to organic products. Both views are compared and offer a basis for empirical research with regard to distributing locally produced organic products via child-day-care centers. The child-day-dare sector is discussed in chapter four. The design of the study is set out in chapter five. The research questions are proposed as well as the methods used to acquire answers. In chapter six the results are given, followed by the conclusions in chapter seven. In the final chapter the conclusions are discussed in a broader context. The limitations, of this study, and recommendations for further research are given.

# 1. Outlook from supply

This chapter views the organic sector from a producer's point of view. Producers can choose from a range of distribution channels and related strategies to market their produce. They are discussed in this chapter. Before discussing them a theoretical background is provided marketing theory. Then issues and entrepreneurial aspects related to both mainstream and direct market channels are described. In the last paragraph the theory is confronted with the entrepreneurial aspects, leading to possible opportunities for a new market channel.

# 1.1 Theoretical background

#### Organizational theory

Storbacka *et al.* (1994) state that in order to realize profits, companies should provide quality of service, but how to define quality of service? Contemporary views suggest companies to consider a value strategy when developing a market channel. Hoekstra (2001) distinguishes three value strategies:

- Operational excellence
- Product leadership
- Customer intimacy

In essence, operational excellence encloses supplying trustworthy products against competitive prices, assuring maximum convenience for consumers. The logistical process is an essential quality of this value strategy (Hoekstra, 2001). The price wars in Dutch supermarkets are a shining example of operational excellence in practice.

Product leadership is related to constant innovation based on creativity and quick response to new commercial ideas. Quality awareness and status are examples of aspects related to this value strategy (Hoekstra, 2001).

Customer intimacy focuses on constant adaptation of supply to the demand of consumers, based on knowledge from individuals. Decisions are based on long term targets. Customer loyalty is the aim with customer satisfaction at its base, which in turn will drive relationship strength and relationship longevity, ultimately leading to profitability (Storbacka *et al.*, 1994). Unlike general food stores, initiatives in the organic sector follow a strategy, which is more inclined towards customer intimacy or a combination of strategies (Zenner *et al.*, 2000; Jolly, 2000). The strength of these initiatives is based on offering certain services to customers, which general food stores find difficult to compel with due to contradictions in efficiency of the logistical process. They are related to direct marketing and are discussed in the next paragraph.

#### Direct marketing

Direct marketing is based on gaining and maintaining direct relations between suppliers and customers. Marketing activities are based on knowledge of individual customers. Direct communication and direct delivery are key aspects of direct marketing (Hoekstra, 2001). According to Hoekstra (2001) direct marketing can be practiced with an internal focus or an external focus. Activities with an internal focus aim at short-term effects. Supplier-consumer relations are engaged with the aim to sell and deliver. Suppliers entice customers time and again with attractive offers. Direct marketing with an external focus, on the other hand, specializes on offering superior customer value with a view to a long-term effect based on reaching a win-win situation in a cooperative relationship between supplier and consumer. With regard

to in- and external focus, Kumar *et al.* (2003) apply the terms transaction marketing (TM) and relationship marketing (RM). They state that although both strategies have their own advantages, managers should preferably choose their strategy based upon the *intention of the customer* in order to reach profitability (Kumar *et al.*, 2003). The term relationship intention is proposed as "the willingness of a customer to develop a relationship with a firm while buying a product or a service attributed to a firm, a brand and a channel" (Kumar *et al.*, 2003, pag.1). This term is a continuum with no relationship intention on the one hand and a high degree of relationship intention on the other.

### 1.2 Mainstream channel

Marketing channels can be differentiated based on the 'service outputs' which a specific channel offers to its customers. These services typically meet the demands of consumers. Traditionally 'service outputs' are rather economical inclined and focus on reducing end-users search, waiting time, storage and other costs (Coughlan *et al.*, 2001). In this respect, organic sections of regular warehouses have an advantage in being a one-stop shopping facility with high quality goods (Schafer, 2000).

Organic products differ from conventional products in terms of production process. This is the Unique Selling Proposition of organic produce. The communication of this proposition is important to convince consumers to purchase these products and pay the price premiums. Braun (2000), however, revealed credibility to be a general problem in conventional food stores: customers do not always accept that products are truly organic, staff lacks enthusiasm and inconsistent pricing structures create confusion. Furthermore product transparency is hampered due to the large number of links connecting producers to consumers. This is visualized in Figure 1. Although this figure is general in nature, it shows that (1) mainstream channels are confronted with a challenge of stature in terms of product transparency and (2) that producers are depending on different links in the chain.

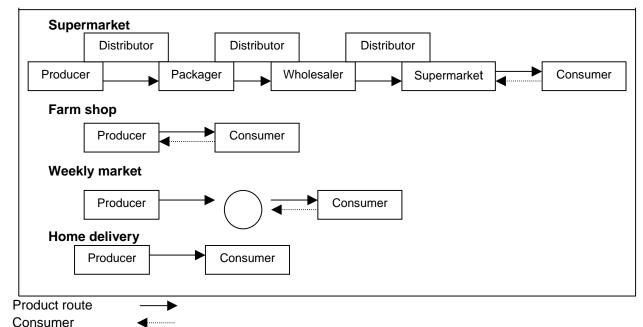


Figure 1: Overview of product routing via different market channels.

Organic labels are introduced to enhance consumer confidence. To serve this purpose, labels need to be clear and unequivocal. There is a need for transparency which is amplified by a development where products are increasingly distributed in a global market. However, current research on codification by Giovannucci (2003) and Fotopoulos and Krystallis (2002), indicates that so far, labeling of organic produce is still confusing, following the distaste registered among producers, retailers and consumers.

The importance of labels, however, will increase with increasing sales of organic products via the mainstream market channel. In the Netherlands, organic product purchase therefore increasingly depends on consumer confidence in the information provided by the EKO label. Dependence on product labels results in an increased responsibility and power of the certifying agent, SKAL. Producers will depend on the (good) reputation of the EKO label. This is a vulnerable position with a view to possible scandals in the organic sector (Richter and Schmid, 2000).

Supplying the mainstream market in general means selling to wholesalers and cooperatives. Wholesalers and cooperatives follow a strategy of operational excellence. This strategy is based on cost price competition. It logically follows that to make a profit, producers have to focus on improving the production and logistical process (Park, 2000; Zenner *et al.*, 2000). To maximize attention given to production and logistics, consideration between producers and buyers is preferably kept to a minimum (van der Meulen *et al.*, 2004). This is achieved through producing large quantities based on producer-buyer contracts with uniform standards in terms of product quality and, preferably large, quantity. In general wholesalers and cooperatives set product prices in accordance with (global) market prices. In effect producers are, to a great extend, depending on few customers and fluctuating prices. To provide insight into the different entrepreneurial aspects related to the market channels an overview is provided in Table 1. The varied characteristics are interwoven with each other.

Market channel	Direct sales	mainstream	
Characteristic			
Transparency	high	low	
Value strategy	Customer Intimacy	Operational excellence	
Focus	External	Internal	
Dependency	low	high	
Product aspect	Quality	Quantity	

 Table 1:
 Entrepreneurial characteristics related to different supply strategies.

### 1.3 Direct sales

In light of organizational theory some pronouncements can be done, although general in nature, concerning direct marketing of organic products. Direct marketing offers producers the opportunity to make consumers aware of the origin of the product, which contributes to product transparency especially when produced locally. Zenner *et al.* (2000) mention the value of locally/regionally produced food as a unique selling proposition. Producers focus on customer intimacy, they invest in long term relationships with customers based on a win-win situation. Preferred outlets for direct marketing are on farm shops, weekly markets and (home) delivery. When producers can manage to organize their distribution in such

manner, they, in general, will serve a large number of customers. This in turn leads to a decreased dependency towards customers and fluctuating (global) market prices. However, it requires an external focus and adapting production to individual customer demand. Many activities are related to promotion or marketing. Production is based on offering quality and meeting individual customer demand. Schafer (2003) mentions the importance of weekly markets as a means to spread information and create emotional impressions, which provides consumers with a unique shopping experience.

### 1.4 Economic considerations

A detailed overview of the economic consequences for producers with regard to following a specific distribution strategy is difficult to offer. This is related to the following factors:

- Prices at farm gate level vary depending on product quality, harvest quantity and season.
- Retailers are reluctant to give insight in margins, due to price sensitivity.

Experts in direct marketing, however, mention that prices at farm gate level can increase by 30% to 50% when agricultural commodities are marketed directly, depending on the type of outlet. However, extra labor for distribution and marketing has to be considered, and can be expected to increase significantly with increasing farm size.

### 1.5 Conclusions with regard to supply

The idea of a market channel arose after confronting existing theory with the issues and entrepreneurial aspects of the current market channels. This is based on the following line of thought. When the Unique Selling Proposition is communicated through direct marketing, displaying an internal focus (a product with a face<sup>\*</sup>), consumer credibility could be gained which is necessary for product purchase to increase. Succeeding in this dependency on retailers and organic labels is abandoned.

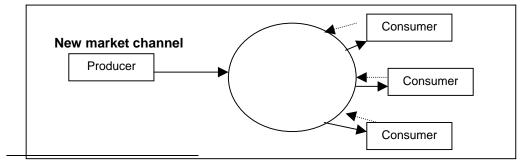
This channel envisages combining a competitive advantage, in terms of price and convenience by focussing on consumer segments interested in organic produce and supplying them through *clustered delivery*, visualized in Figure 2.

*Clustered*: offering the products at a place where consumers in this segment necessarily meet for a given reason.

Delivery: in the sense that it is convenient to consumers in this segment.

Clustered delivery reduces costs and simplifies logistics in comparison to home delivery. Customer intimacy can be achieved through producer-customer contact at the place of exchange. Which consumer segment(s) should be served? The next chapter deals with this question.

Figure 2: Product routing via proposed market channel.



<sup>\*</sup> Dutch translation: Een product met een gezicht.

# 2. Outlook from demand

An attempt is made to look at consumer demand from many different angles in order to minimize the risk of oversimplifying consumers in relation to organic products. Two different tools are used to reveal consumer demand, first, trends that can be recognized among Dutch consumers. Second segmentation of the consumer market. Peter and Olson (1993) distinguish several bases for segmentation. The conclusions from this perspective are summarized in the last paragraph.

# 2.1 Consumer trends in Dutch society

Trends focus on changing conditions and circumstances within a consumer society and can be recognized at three general levels: megatrends, fashions and hypes. Trends are interrelated and their impact is measured over time (Dagevos *et al.*, 2004).

To clarify this concept, three examples are given of current trends. Western societies are characterized by increasing individualization. This is a megatrend and is revealed through demand for convenience foods, lack of time, material welfare etc (Dagevos *et al.*, 2004). 'Adopteer een kip' is a hype, it has a short-term character and is related to a specific phenomenon. Possibly this hype results in consumers purchasing organic produce more regularly due to increased awareness of animal maltreatment which in its turn is a trend.

The following consumer trends, relevant for this study, can be recognized in Dutch society.

- A flight from the Beehive. This refers to the development of counter urbanization. "People are increasingly able to escape living in large cities in order to search for a small piece of land to live in individualistic freedom " (Dagevos *et al.*, 2004, pag. 19) The vast amount of new magazines related to 'the Outdoors' serves as evidence.
- **Regionalization**: as a reaction to the process of globalization, a counter movement is taking place. People feel a need to be connected with their direct environment (Hendriks, 2004). Regional slow foods and dishes match with consumers' desire for authenticity, integrity, purity and quality. Dagevos *et al.* (2004) mention the term 'White Collar Farming', which refers to the development of farmers focussing on consumer oriented activities.
- **Emotional trace ability**: Due to food scandals there is an increasing wish to be able to trace the origin of food (Intermediair, 2004). Emotional trace ability refers to a feeling of security based on the surveyability and the 'human dimension' of a production process (Hendriks *et al.*, 2004). An indicator of this need is the General Food Law, currently introduced by the Dutch Voedsel en Waren Autoriteit. (Nieuwe Groene Carriere, 2004).

Trends offer insight into societal developments, they are supportive, however, general in nature. Through segmenting the consumer market interesting groups possibly appear.

# 2.2 Segmenting the consumer market

Four segmentation bases are described by Peter and Olson (1993)

- Demographic segmentation based on a consumer profile and family life cycle.
- Benefit segmentation based on perceived benefits and risks related to the consumption of organic products.
- Segmentation based on the individual person or situation.

• Psychographic segmentation based on consumer lifestyles.

#### Demographic segmentation

Compared to previous research on *potential* behavior among consumers, regarding organic consumption, Davies *et al.* (1995) conducted research on *actual* consumer behavior to exclude 'lip-service'. Age appeared to be of importance, however, disposable income plays a leading role in organic food purchase. Those consumers with children, in the highest income bracket are the largest purchasers of organic food. They concluded that women aged 30-45 with children, who can afford to buy organic, will act accordingly. Those in the lower personal income bands may wish to do so. A recent study among German consumers regarding buying behavior of branded organic products showed similar outcomes, stating that those on higher income purchase more frequent at a wide range (Ziemann and Thomas, 2003).

However, further research on this topic showed that various studies sometimes deliver varied results. Byrne *et al.* (1991) performed a study among American consumers. Their findings showed that females with lower education bought more organic products. Advancing age, higher education and income led to increased sensitivity to price differences between organic and conventional products. Supporting evidence comes from Fotopoulos and Krystallis (2002, pag. 238): "Disposable income seems to affect mainly the quantity of organic products bought and not the general willingness to pay... despite high price premiums for organic food, higher household incomes do not necessarily indicate higher likelihood of organic purchases." Reicks *et al.* (1997) report that males are more likely to purchase organic products and the role of children, positively influences organic purchase, in families. Williams and Hammitt (2000) concluded however that, "Few socio-demographic differences between buyer types were observed." It seems that, studies disagree on the effect of certain demographic aspects on the purchase of organic products. The modern family life cycle might be helpful to gain a clear view.

The family life cycle is divided in several stages (Peter and Olson, 1993). Reports from Biologica, based on regular studies of consumption behavior in the Netherlands, show interesting changes in the purchasing behavior of households throughout the various stages of this cycle. Compounded households (with young children) purchase organic products with increasing frequency. Larger households with older children do not belong to the frequent buyers of organic products, whereas 'empty nests'<sup>\*</sup> are frequent buyers of organic products, whereas 'empty nests'<sup>\*</sup> are frequent buyers of organic products (Biologica, 2003; 2004). This could be interpreted as a contradiction, it is acceptable however, when put in the context of findings by the CBS. In a report on trends in Dutch society, they make notice of the effect of changes in household configuration in relation to spending power of consumers. "Living together leads to an increase of spending power, yet the birth of a child results in a decrease" (CBS, 2004 pag. 82). Here a motive is revealed which hampers expressing the favorable behavior towards purchasing organic products, which is the topic of the next paragraph.

#### Benefit segmentation

Segmentation on the basis of benefits is related to consumers, recognizing common benefits in consuming a specific product (Peter and Olson, 1993). Kuchler *et al.* (2000) mentioned that a share of consumers do not recognize the benefits that the organic lobby is claiming. These consumers have different cognitions about the effects of the use of pesticides. Are pesticides a hazard for personal health and environment, and if so, to which degree? These findings are in line with conclusions by Saba and Messina (2003).

<sup>&</sup>lt;sup>\*</sup> Households with adult children

They conducted a study on consumer attitudes towards organic products and the risk/benefit perception in relation to pesticides. A certain group of consumers felt that the use of pesticides is above all beneficial. These consumers in general were less positive about benefits related to organic products.

Repeated food scandals and outbreaks of animal disease, however, have led to a decrease in consumer confidence towards the conventional food chain. It resulted in a growing interest in organic food among an increasing amount of consumers (Werner and von Alvensleben, 1984; Tregear *et al.*, 1994; Schifferstein and Oude Ophuis, 1998). This in turn led to an increasing demand for organic products driven by health reasons and environmental friendliness (Hirshberg, 2000; Ramisch, 2001; Canavari *et al.*, 2002; Magnusson *et al.*, 2003). As years went by other motives are added to this list: 'fair trade', local production of food and know how have gained interest as concluded by Tanner and Kast (2003) in a recent study among Swiss consumers.

Although attitudes towards organic products are increasingly positive (Biologica, 2003), situational obstacles exist for consumers when trying to express their behavior (purchase organic products). The most dominant factor here is the price. 'Eating organic means to pay more' as concluded by Saba and Messina (2003). A second obstacle is the factor time versus the availability of the produce. In today's society efficiency plays an important role and time is subject to economic considerations. This has a direct influence on the purchase of food, therefore availability is a determining factor. Although this issue became apparent from research in the early nineties (Tregear *et al.*, 1994) contemporary studies give to show that availability remains an important bottleneck for a growing consumption of organic produce (Tanner and Kast, 2003; Hirshberg, 2000).

#### Person/situation segmentation

Markets can be divided on the basis of the usage situation in conjunction with individual differences of consumers (Peter and Olson, 1993). A possible basis for this segmentation is the usage rate of a certain product or service by individual consumers, which can be split up in several levels (none, light, medium and heavy users). Viester (2003) used this basis to segment Dutch consumers of organic products regarding their purchase frequency in diverse product categories. After comparing her findings with data from 2001 and 2002, she noticed a small decrease in the number of heavy users and an increase of the percentage of light users. Furthermore she found that light users are typical users of agricultural commodities.<sup>\*</sup> These products are similar with the products from organic farmers, therefore this development is positive in developing the market channel that we have in mind.

#### Psychographic segmentation

This segmentation is based on the difference in lifestyles between consumers. A wide variety of different lifestyle segmentations exist but they are not relevant for this study. Furthermore, several sources make notice of validity issues with respect to psychographic segmentations, due to different conclusions concerning number and nature of different lifestyle categories (Roomer, 1990; Peter and Olson, 1993; Lockeretz, 2003). However, I would like to mention a conclusion from Lockeretz to point out something specific. He recognizes three groups of consumers.

- Those who see organic produce as a part of a 'natural lifestyle', possibly reflecting on spiritual and religious values.
- Those who are aware of health and environmental issues, they recognize the tangible benefits of organic food, and emphasize the fact that there are lower pesticide levels in the food and less contamination of soil and water.

<sup>\*</sup> The 'Odin groente-tas'

• Another group, according to Lockeretz, is greatly underestimated. This group consists of people who appreciate values like taste and quality and buy organic products simply because they are more attractive then conventional foods (Lockeretz, 2003).

So far marketing of organic products has emphasized mainly aspects regarding the first two groups. By focusing on other qualities of products, which are organically produced, possible a market emerges.

### 2.3 Conclusions consumer demand

Following current trends consumers might appreciate organic products when produced locally, since this enhances product transparency, which in turn seems to provide a kind of security. The local aspect furthermore contributes to "the desired connection with the direct environment."

Young couples develop an interest in purchasing organic products. However, bringing up children does not allow them, financially, to express their desired behavior. Price and availability form obstacles, although benefits in terms of health and environmental friendliness are recognized. A share of the consumers does not recognize the benefits of organic products. Promotion and education can possibly be helpful in this respect. Among consumers in the Netherlands the number users interested in basic products (organic agricultural commodities) has increased. This is promising with a view to setting up an alternative market channel for agricultural commodities.

# 3. Proposing a market channel

Young families are increasingly interested in organic products. Availability and price of organic products hamper consumers to buy organic products. Due to their busy lifes, people have a desire for convenience with regard to buying and preparing food. This need for convenience might be experienced especially by young parents in case they, next to raising their kids, have a job. Based on these thoughts, parents might be interested in collecting their organic (locally grown) products as they pick up their child in the afternoon. Therefore the proposed market channel is day nursery. This chapter deals with the development of child-day-care in the Netherlands. Furthermore some preliminary conclusions are given.

# 3.1 Definition

In this paragraph some terms used in the day nursery sector are briefly discussed. The Ministry of VWS defines day nursery as follows: Organized nursing of children aged 0 to 12 years on the basis of a compensation, carried out by others then the (foster) parents at times that they themselves are not available due to work or study.

Day nursery is divided in two classes:

- Child day care is meant for children from 0 to 3-years of age.
- Extracurricular care is meant for children 4- to 12-years of age.

At this point I would like to mention that next to these services, also other services are offered: the 'playgroup' and 'host parent agency'. They are sometimes part of the corporate organizations, but organized in a different way and will not be part of this study. The term child day care (further referred to as CDC) will be used throughout this study unless further specification is required.

### 3.2 Development

Figures from the Ministry of VWS show that the formal capacity to host children in the Netherlands grew from 116.007 places in 1999, to 157.161 places in 2001, and have reached a number of 185.288 in 2003, divided over 4.230 accommodations. This number has been increasing over the past years (Berg-le Clercq *et al.*, 2003).

Participating children are taken care of for 12 hours a week on average. Young children are hosted more hours a week, 17 hours, than those of older age, 6 hours a week, due to the latter attending school. For 9 out of 10 parents the motivation to make use of a day nursery is work (www.brancherapporten.minvws.nl).

Differences exist between the number of child places offered and the number of participating children. An accommodation will host more children throughout the week then the number of child places indicates. This is supported by CBS figures: the number of participating children in 2001 was 280.018 (recent figures not available).

This will have consequences with regard to supplying to parents. More households can be served than indicated by the number of child places but it raises barriers related to reaching them. This follows from the following example: if 2 children, from different households, are using one child place throughout a

week and both households show interest in the service offered, then this implies that the shopping will have to be delivered at least twice a week. Both the children will not be present at the day nursery at the same day.

Interesting for this study is a law enforced in January 2005, which regulates varied aspects concerning day nursery. Among other things, this law regulates the financing of daycare costs. Previously, parents made use of subsidized child places or so called 'company places.' Financial agreements were made between either employers and day nursery or the local government and day nursery. The introduced law encourages the sector to privatize, stipulating that parents are responsible for making financial agreements with day nursery. It can be expected that parents, transformed to paying customers, will become (more) sensitive to products and prices offered by a particular day nursery. As a result competition between day nursery organizations will increase. Due to this development day nurseries might be (more) sensitive and interested in offering the proposed service.

At the moment many parents keep their children at home due to uncertainties with financing nursery costs in the future. This in turn has led to financial difficulties for some providers of day nursery and has evoked a wave of consolidations among suppliers of child-day-care (Brabants Dagblad, 31/03/05).

Other developments are related to the integration of day nursery and the rural area. A report published by het Centrum voor Landbouw en Milieu and het LEI, on the possibilities for agricultural entrepreneurs (farmers) to offer services related to care, nature and environmental education revealed interesting conclusions (Kloen *et al.*, 2001). This study focused on the offer and demand of such services in the Waterland region, which includes Amsterdam and the rural area bordering it. Although it should be mentioned that this study is based on few sources it appeared that there is an interest to organize day activities in relation to day nursery. With regard to nature and environmental education of elementary school children a latent demand is detected among the population, which should be developed parallel to developing the offer (Kloen *et al.*, 2001). Some initiatives have started to provide occasional day nursery on farms. Although not scientifically proven, day nursery on farms is said to contribute to the motor system and social-emotional development of children (www.agriholland.nl).

Supporting developments in the sector are related to:

The importance of healthy food in relation to child health is a topic for media in the Netherlands. "The importance of healthy food should be pointed to todlers, starting of in kinder garten" (De Telegraaf, 11/03/05; De Limburger, 09/03/05; Milieudefensie magazine, 2005).

Health themes are being launched by educational organizations. "Schools and parents need to realize they can make a change by promoting a healthy diet." (Kidsstuff, 2005, <u>www.kennisnet.nl</u>)

Government and societal organizations express their concerns regarding obesitas among young children in relation to its long term effects (De Telegraaf, 11/03/05).

These developments support adopting a healthy lifestyle. This is in line with the intention of this market channel.

# 3.3 Conclusions this market channel

The possibilities for a new market channel of locally produced organically grown agricultural commodities might prove to be worthwhile, based on the theory and developments mentioned in previous chapters. This channel involves supplying consumers, parents of children participating in day nursery, via a day nursery. The strength of this market channel is based on the combination of varied strategies and their respective qualities, leading to benefits at several levels. The levels and assumed benefits are set out

below. Three levels are proposed (1) Consumers, parents and children, (2) Management of day nurseries and (3) Producers.

- 1. From the perspective of parents, the market channel can offer convenience; it allows parents to collect the daily shopping as they pick up their child at the day nursery. Clustered delivery, at the day nursery, reduces logistical costs, which can have a positive effect on consumer prices. Direct sales can contribute to fulfilling the need of transparency and trace ability.
- 2. At the 'management' level a different benefit is assumed. The exploitation of this market channel enables a CDC to enhance the range of products and services offered to its paying customers, parents, in multifarious ways. First of all, the aspect of convenience related to daily shopping as was mentioned above. Another aspect is related to both children and parents, and deals with promotional and educational activities.
- Several sources mention the importance of promotion in order to enhance consumer awareness 3. (Zenner et al., 2000; Hamm and Michielsen, 2000; Brul, 2004). It will be of value to briefly elaborate on the topic of awareness. I think it is safe to assume that in general education leads to awareness. Fotopoulos and Krystallis (2002, pag. 760) state that "education is the key factor that differentiates users from non users." From their research, among Greek consumers, it became apparent that despite declared high awareness of the organic concept, a large share of consumers is either unable to give a true definition of organic or is completely misled. Interestingly, they conclude, a lack of real awareness is correlated with the proximity to organic production areas (Fotopoulos and Krystallis, 2002). Promotional and educational activities like excursions for (young/future) consumers possibly allow for the stated 'proximity' to decrease. Developing relationships between organic producers and management of a day nursery reveals opportunities to organize activities of such nature. The need for educational activities is maybe shown best through the outcome of a currently held study by the NIPO: there is a common belief among children, that organic milk is "coming from cows which are milked by hand" (Wb, 2005). Other then that, such activities could enhance the development of children in ways described in this chapter. For children, group supervisors, and even parents, such activities might make a welcome change in the daily routine, which could be used by the management as a PR tool, even more since they require little financial input.
- 4. At the producer level, several benefits could be gained. Direct sales allows for better producer prices, because a large share of the distribution chain has been cut out. Logistical expenses can be minimized due to clustered delivery. Customer confidence can be enhanced through a combination of product transparency and direct producer-consumer contact. This market channel offers the capacity to offer tailor-made products through customer intimacy based on individual customer demand. These aspects can be of value with a view to a profitable and sustained supply. Based on conclusions from Hendriks *et al.* (2004) and Wieringa and van Boxtel (2004) other aspects can be of value with a view to long term beneficiary effects. Both reports notice an increased knowledge concerning positive effects of organic agriculture in terms of ecological, social-economic and cultural aspects. More attention is given to the common grounds of organic agriculture with other areas of policy, such as 'ruimtelijke ordening', care, nature, environment, tourism and recreation<sup>\*</sup>. In setting up a particular distribution channel, offering the services as mentioned above, producers could possibly establish a (re)integration of their farm with their direct surrounding affirming their 'license to produce' in numerous ways.

These conclusions were the direct cause leading to setting up a study examining the possibilities of supplying parents with locally organic products via CDC centers. The design for this study is given in the next chapter.

<sup>&</sup>lt;sup>\*</sup> Dutch: beleidsterreinen ruimtelijke ordening, zorg, natuur & milieu en toerisme & recreatie

# 4. Design

In this chapter the research questions are set out and the geographical region for this study is defined. To be able to answer the central research question, both qualitative (phase 1) and quantitative (phase 2) methods are proposed. The first phase deals with the advantages, obstacles and requirements at the management level. In the second phase attitude and interest at the consumer level is measured.

# 4.1 Research questions

The central question is:

What are the possibilities for local producers to supply parents with regional organic products via childday-care centers?

This question can be divided in several sub questions:

- What are the perceived advantages, obstacles and requirements at the management level?
- Is the target group (parents) interested in regionally and organically grown products?
- What is their motivation?
- Is the target group interested in specific product categories?
- Does the target group favor a CDC center as a supply channel in comparison to conventional distribution channels?
- What are overriding factors with regard to preference for this type of supply channel?

# 4.2 Definition of the region

The region is defined based on the following reasons:

In adhering to consumer wishes and recognized trends, products should be distributed locally. This study focuses on the possibilities to distribute products from 'research and experimental farm Droevendaal'. Second, the area is chosen to guarantee access to a reasonable number of possible consumers.

A third reason is related to the ability to draw conclusions about this sector which reach beyond the region of research.

It is assumed that Wageningen residents will be more inclined towards purchasing organic food, compared to residents in other municipalities in the Netherlands, based on the presence of Wageningen UR. I offer no strong evidence to proof this assumption, however, a comparison between municipalities regarding the distribution of seats (Table 2) shows differences in political preferences. To generalize the conclusions of this study municipalities Ede and Veenendaal are taken up in the study.

#### Child day care in the defined region

The area of Ede Wageningen and Veenendaal counts several CDC centers, about 20 in total, offering day nursery. They are either privately or corporately owned.

In Ede municipality the Welstede corporation is responsible for a large share of CDC. Facilities are offered at 6 different locations. 4 day nurseries are private and 3 locations of regional day nurseries operate in this municipality. In Veenendaal municipality the corporation Kwink is responsible for day nursery. CDC is offered at five locations. In Wageningen, corporation the Koepel offers CDC at 7 locations. One privately owned nursery operates in Wageningen. Locations offer CDC and sometimes

extracurricular care. Children are hosted in groups of 12 guided by 2 supervisors. A manager heads each center.

Municipality	Wagening	en	Ede		Veenenda	al	Netherlan	ds
		seats		seats		seats		seats
	PVDA	6	CDA	10	Christ. Unie	7	CDA	44
	Groen Links	5	SGP	6	VVD	7	PVDA	42
	CDA	4	Christ. Unie	5	CDA	7	VVD	28
	VVD	4	VVD	5	Groen Links	4	SP	9
			PVDA	4	SGP	4	LPF	8
			Groen Links	3	PVDA	3	Groen Links	8
			Gem Bel	2	D66	2	D66	6
			Liberaal Ede	2			Christ. Unie	3
			D66	1				
			Edese Jaap	1				
			-					
Inhabitants	35.000		100.000		65.000		16.000.00	)0

#### Table 2:Comparing the distribution of seats.

### 4.3 Phase 1: the management level

"Qualitative research is justified when a certain topic needs to be explored" (Creswell, 1998). In this study, requirements, obstacles and possibilities perceived by the management, with regard to the proposed distribution channel, need to be explored. Interviews will be conducted with the management of child-day-care centers in the defined region. Creswell (1998) offers a schedule for setting up a topic list and analyzing the data using categories. Each category is divided into properties to dimensionalize the data. An overview of categories, properties and dimensions used for the interviews in this study is given in Appendix I Table 1.

The first step was the process of 'open coding'. Interviews were conducted until each category was saturated: no new findings occurred. This process of taking and comparing information is called the constant comparative method of analysis.

This was followed by a process called "axial coding" of the data. In this phase, data from the interviews was compared to check for corresponding answers and dissimilarities. Findings are visualized in a matrix.

Armed with a basic understanding of how day nursery is organized, the individual centers were approached. To get acquainted I contacted private branches and tried different approaches. Speaking to branch managers is very effective in different ways. Regarding the importance of support from within the company, it is essential that these people are interested in this idea.

If branch managers are interested they can play a significant role in contributing to the success of a project in both directions: encouraging group supervisors and parents on the one hand and influencing colleagues and management of the cooperation on the other hand. As a result I focused on approaching and interviewing branch managers.

Next to branch managers, group supervisors play an important role. They have a close relation to children

and parents and their interest and support is of importance for the success of this distribution channel. They perceive possible practical issues in view of setting up such a service and offer ideas concerning suitable activities, which can be offered in return.

CDC centers were contacted by phone. In total 10 branch managers were spoken to. The idea was introduced and an interview was asked for. Three branch managers turned down the proposal immediately. Stating arguments like "Our customers will not be interested", "We can not allow commercial activities to interfere with child care" and "Let the cobbler stick to his last", they refused an interview. They were the branch managers who were contacted first, which I later on found not to be surprising due to several reasons. First, the new law, discussed in chapter 4, is a source of concern among parents and management of day nurseries. It has caused an upheaval and is accompanied by stress due to reorganizations. Due to this situation at the moment the management is reluctant to investigate this idea. A second reason is related to the fact that I was not able to respond adequately in the first phone calls. The idea was at times perceived as quite complex and leading to extra work for group supervisors. As I spoke to more supervisors I learned how to introduce the idea properly. Factors of importance were being able to create enthusiasm and providing clarity about the aim (a thesis instead of a pilot project).

#### Focus group interview

The opportunity arose for group supervisors to share their opinion on the subject in a focus group interview. To ensure the quality of the interviews the focus groups are set up using indicators offered by Morgan (1993) and Morrison (1998).

### 4.4 Phase 2: the consumer level

Descriptive research provides answers to questions concerning interest and attitude (Burns and Bush, 1998). A self-administered survey on paper will be conducted to answer the research questions at the consumer level. The decision is based on the following aspects:

- A survey allows tabulation and statistical analysis.
- Self-administration is relatively inexpensive in terms of time and finances, compared to a person administered survey.
- A paper version is attractive: access to respondents can be achieved through children's mailboxes at the CDC centers.

#### 4.4.1 Survey

#### Sample

The survey is conducted among parents with children attending CDC centers which (1) operate in the defined region and (2) have an interest in this study. 800 surveys have been handed. This relates to 1/3 of the population (approximately 1.850 households have children attending a CDC center in the defined region). In total 600 surveys are handed out in Ede at 9 different locations. 200 surveys were handed out in Wageningen at 5 locations. CDC centers in Veenendaal refused to cooperate.

Sample frame error is expected in the following cases:

- Child daycare centers in the region refusing to cooperate in the study.
- Households living in the defined region, hosting their children in a child day care center outside the defined region.
- The opposite can be expected as well. Households living outside the defined region, hosting their child at a daycare center in the defined region.

• The first error and the second error are difficult to control. The third error is controlled by asking respondents to state their residential ZIP-code.

#### Procedure

Copies of the survey are handed out to the branch managers of participating child-day-care centers and spread among parents via the mailboxes of children at the child- day-care centers. Parents could fill out the questions at home and were asked to return the survey to the child-day-care center. Every week locations were contacted and returned surveys collected at the locations. Measures were taken to improve the response rate of the survey: (1) a letter was sent out in advance to respondents via the CDC centers (except parents de Kleine Wereld due to time pressure) informing parents about the upcoming survey, (2) posters were put up at the centers.

#### Structure

In the introduction of the survey a sentence is taken up stating: "Survey questions should preferably be answered by that parent who is most involved in dealing with the children."

Variables are drawn up from the research questions. Additional information is gathered from remarks and questions expressed by interviewees from depth and focus group interviews. The variables investigated can be divided into attitudinal variables, behavior variables, and consumer characteristics.

The first part measures the attitude towards regionally and organically grown organic products and preferences related to different channels of supply and product assortment. Attitude is measured using a five point Linkert agreement scale adopted from a survey conducted by Viester and adapted using her recommendations (Viester, 2003). Preferences are measured using different constructs. Respondents are asked to rank the alternative channels of supply, including delivery at a their child-day-care center. This is followed by a question related to 'attractiveness' per channel using a five point Linkert scale. One question measures the intensity of possible obstacles for delivery at a child-day-care center.

The second part measures general attitudes towards organic food and actual shopping behavior of respondents. Questions used in this part are adopted from Fotopoulos and Krystallis (2002). They conducted a study with regard to the purchasing motives and profile of the Greek organic consumer. Labeled scaled-response questions, measuring reasons not to purchase organic food and questions measuring attitudes towards convenience in food purchase and preparation are adopted. These questions are included to reveal possible differences in attitude towards organic products in general compared to products from a specific local farm.

Viester (2003) asked respondents to state their actual buying behavior with regard to individual product categories. This question serves several purposes. It reveals the need for specific product categories. It allows classifying respondents in user groups. Viester (2003) distinguished three levels: light, medium and heavy users. Finally this classification can be used to compare stated attitudes in previous parts with actual behavior. This question was adopted.

One set of questions is added measuring the use of convenience products in terms of ready to use vegetables and potatoes. These products are not offered yet in organic quality. Margins of these products in general are higher witnessing relatively large price differences. Providing organic convenience products could be considered, should the use of such products be substantial among respondents.

The third part deals with questions related to the use of child daycare services. These questions are included to measure the suitability of delivery at individual weekdays and to determine the means of transportation used by parents to drop off and pick up children.

The fourth part of the survey measures socio demographic variables. These variables aid in determining the sample validation. This is achieved by comparing the data with results from a report by the Ministry of Social Affairs, which is currently conducting a study among users of child day care services in the Netherlands. Furthermore, data can be used to compare the target group (parents with young children) with the general profile of the organic consumer in the Netherlands.

Some open-ended questions were added to allow respondents to offer additional remarks. These remarks can be helpful in interpreting data and in revealing valuable information with regard to specific demands or obstacles perceived by the respondents.

The survey was pre tested with the help of 7 parents. They read the questions and ventilated thoughts, doubts and remarks. Based on this input the survey was adapted and tested again. This process was repeated several times until major problems with regard to interpretations and clarity of the questions were solved. The survey is added in Appendix III.

#### 4.4.2 Data Analysis

First the response rate is calculated and the sample validation test is performed. This is followed by results from the survey using the research questions as a guideline.

The data is analyzed using SPSS. Descriptive analysis is used to determine average scores for individual questions. T-tests have been conducted to test the mean scores between questions (paired T-tests). Using One-way-ANOVA the mean scores between more then two groups were tested, with Post hoc and Tukey to visualize differences between groups.

Factor analysis is carried out in order to reveal questions measuring the similar constructs. Multiple regression is performed to reveal predictors and obstacles responsible for the attractiveness of the proposed distribution channel.

# 5. Results

First the results from interviews held with the management will be dealt with in this chapter, followed by the results from the survey.

### 5.1 Interest at the management level

Seven in depth interviews were conducted on site. Apart from information related to categories as described in the chapter 'design' I started the interview by asking the participants how they felt about the idea. This resulted in a range of answers from: "It is in line with our vision" or "We support this development and we do not mind propagating it" to "I can see possibilities." Although from these answers it became apparent that the intentions to cooperate vary, all participants perceived the idea as positive.

#### Advantages

The varying intentions are reflected in the dimensions of the individual categories. This becomes apparent from combining the perceived advantages. Those branch managers who expect exclusiveness of this service in return mention the competitive advantage. Whereas those managers who state that this service fits with the mission of the nursery perceive this service as an opportunity 'to practice what you preach' or recognize an advantage in the ability to offer extra educational activities. As far as the exclusiveness of the service is concerned they stated that there is nothing wrong with a sound competition.

#### Expectations

Some branch managers indicated to appreciate an opportunity to organize excursions to the supplying farm. Excursions could be organized in relation to a theme. Day nurseries in general offer varied themes to children and group supervisors to work with. Returning themes are the four seasons. Young farm animals for example could be part of the spring theme. Not all branch managers however see the benefit of organizing excursions. According to some, children in the age 0-4 years are too young, other issues are related to excessive costs or effort in organizing such an activity. As an alternative they suggested to receive farm animals for a day in order for children to play with.

#### Practical matters

Two properties are recognized at a practical level: Product handling and aspects related to interference with the core business. Most managers perceive difficulties in providing space for storage facilities. Laws regulating a certain amount of space per child have tied down day nurseries with respect to (re)structuring individual facilities. Other concerns mentioned deal with ownership of the produce in relation to liability issues and the possible need for certification, like HACCP. This is a certificate, applying transporting, storing and preparing food.

Distributing products via CDC centers could be quite complex. Hence, some managers expressed their concerns about possible interference with the core business, nursing children. They perceive extra work for group supervisors should they allow this delivery service to operate resulting in a decrease of the quality of their work. An overview of the answers is given in Appendix I Table 2.

#### Supplying to day nursery

Throughout the interviews the possibility of supplying to day nursery was discussed as well. In general children are offered a meal at noon next to fruit in the morning and drinks throughout the day. The weekly shopping list includes dairy products (milk and buttermilk), fruit and bread. All branch managers were in

favor of offering the children organic products but, as Appendix I Table 2 shows, the decision to do so depends on the cost in some cases. Others mentioned that the decision would be based on the desire expressed by parents.

#### Results focus group

The group supervisors had to get used to the idea. Many doubts arose with regard to practical matters, and were related to the storage and handling of the products, ordering and billing. Also the range of products was discussed: "Will parents be able to order all their shopping or is a visit to the supermarket still necessary?" Other issues were related to abnormal circumstances: "How to proceed when a child is ill, and does not show up at the nursery?" These issues were helpful in setting up the questionnaire. In general support was expressed provided that offering this service will not result in extra work for them (the group supervisors). They perceived benefits in direct contact with farmers with regard to their own ignorance related to food production, although they were hesitant to organize an excursion to the farm. The importance of direct contact stimulates the emotional development of children. Therefore they would like to receive small farm animals at the nursery on occasional basis (twice yearly).

### 5.2 Interest at the parent level

This chapter deals with the outcome from the parent survey. The response is discussed and validated. The results are given in phases using the research questions as a guideline. First interest for regional organic products among parents is measured using different constructs. Motivation for interest is measured and current purchase behaviour of organic products is measured. Then the attractiveness of supplying via a CDC centre and overriding factors, like convenience, price and product assortment, is measured. Finally segmentation is carried out on the basis of 1) interest for regional organic products and 2) the current usage rate of organic products.

#### Response and validation

786 surveys were handed out. Three weeks were allowed to respond. At the end of the third week 140 surveys had been returned. This equals to a response rate of 18%. Swanborn (1981) mentions that a non-response error of approximately 70% should be taken into account when conducting a survey. More recent sources however mention that refusals to participate in surveys increase world wide, even more so in the Netherlands (Burns and Bush, 1998; Dijkstra and Smit, 1999). In that respect, 18% is probably acceptable.

Differences in response rates vary between individual centers and municipalities. They are shown in Table 3. Response rates from 'Dijkgraaf' (48%) and 'Jennies Kindercentra' (9%) catch the eye. Furthermore response is higher for CDC centers in Wageningen, indicating that comparison between CDC centers and municipalities can be worthwhile. 6% of the respondents resides outside the defined region, hosting their child within this region. This percentage is spread evenly over the municipalities.

#### Profile of CDC user

Respondents are mainly female (90%), aged between 30 and 35 years (73%) and received education at higher or University level (78%). They are married or live together. Most households have either 1 or 2 children and an average household income between €45.000 en €56.000/year. The respondent works 25 hours (24.6 hours, 95% conf. Int., between 23.0 and 26.0; P<.001), and the partner 36 hours (36.0 hours 95% conf. Int., between 35.0 and 37.0; P<.001).

Municipality	CDC			Response/ Municipality	Origin <sup>1</sup> Respondents
	<b>Respondents (%)</b>			(%)	(%)
	Pienoo	16	17		
	kalfje	23	20		
	Toverbos	9	11		
	Mengelmoes	16	15		
	Hummelhof	13	14		
	Jenny's	9	9		
	kindercentra				
	Dijkgraaf	19	48		
	kinderkunst	20	25		
	Kleine wereld	15	20		
Outside region					6
Missing value					3

#### Table 3: Response rates for individual CDC centers and municipalities<sup>1</sup>

1 Residential address of respondents

The sample is validated by comparing the socio-demographic data of respondents with the profile of the typical user of child day care in the Netherlands as defined by Jongsma and Luiten (2005). From Table 4 it becomes apparent that the profiles correspond to a high degree. Educational level and family income, however, catch the eye (see Appendix II Table 1/2).

Table 4:	Sample validation:	Comparison of socio-demographic variables
	Sumpre (unaution)	

	This study	Jongsma & Luiten
<b>Respondent's:</b>		
Gender	Female (90%)	Female (86%)
Age <sup>1</sup>	30-40 years	35 years
Education level <sup>1</sup>	78% high/university	50% high/university
Family income <sup>1</sup>	23% between	33% between
	56.500 and 89.250	20.000 and 30.000
Employed <sup>2</sup>	36 hours	32-40 hours
Partner employed <sup>2</sup>	25 hours	25 hours
Children <sup>2</sup>	1.6	1.7

1 Modus displayed

2 Mean displayed

#### 5.2.1 Organic products

75% of the respondents stated to be *interested* in regionally and organically grown products, compared to 62% of the respondents currently *purchasing* organic products with a varying frequency.

#### Interest and motives

Although the interested respondents considered all motives valid, it is mainly based on care for environment (1.16) and health reasons (1.14), which is visualized in table 5. The motives are measured on

a scale of -2 (do not agree) to +2 (agree). Factor analysis revealed two factors on the basis of (internal) health related motives and external motives (environment, authenticity and taste). The rotated component matrix, is depicted in Appendix II table 3 ( $R^2 = 61.4\%$ , P<.0001, variable 'added value' excluded).

	N	Mean score	Std.
			Deviation
Environment	106	1.16	.906
Health food	108	1.14	.891
Safe food	108	.99	.972
Added value	108	.89	.900
Authenticity	107	.84	.933
Tasty	107	.81	.870
View of life	108	.62	1.190
Fit in diet	107	.58	1.182
Valid N (listwise)	105		

 Table 5:
 Motives measuring interest in regional organic products<sup>1</sup>

1 on a scale of -2 to +2.

One-way-ANOVA showed that non-buyers are satisfied with conventional products and organic offers nothing special. To put it in simple wording: organic products lack value for money. Availability of products is *no* issue ( $F_{(1,57)} = .4$ ; P=.509). Outcomes are shown in Table 6.

#### Table 6:Motives for non-buyers

Price	$(F_{(1,60)} = 11.5; P = .001)$
Poor quality	$(F_{(1,59)} = 4.2; P < .05)$
Organic offers nothing special	$(F_{(1,58)} = 12.1; P = .001)$
Content with conventional	$(F_{(1,64)} = 23.5; P < .001)$

#### Purchase frequency

Attitude and behavior is measured in relation to demand for specific organic products to reveal the product categories respondents are interested in. First *interest* is measured for different product categories using a one-way-ANOVA ( $F_{(2,314)} = 35.995$ ; P< .001). Although a full organic service is perceived positive, the interest for a basic (potatoes & vegetables) and extended product assortment (dairy, bread, eggs and meat) proved to be significantly higher. This is shown in Appendix II Table 4.

Stated *behavior* regarding purchases of organic products was measured on a scale 0 (never) to 3 (always). Similar product categories were revealed compared to stated interest. These products received higher mean scores, which is visualized in Table 7. Next to the 'basics', organic baby food seems to be bought frequently. Organic bread is less favorite.

Viester (2003) differentiated respondents on the basis of their 'usage-rate' by taking the sum scores of the purchase frequencies per product. She classified respondents in light users (score < 16.5), medium users (score 16.5 –27.5) and heavy users (score > 27.5). Using this classification system the majority of the respondents can be classified as light users (82%) medium users reflect 16% of the respondents. Mere 2% can be classified as a heavy user. This is visualized in Graph 1.

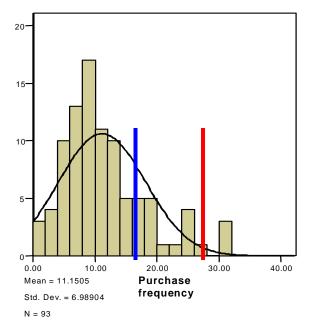
To detect a possible market for organic convenience products, the demand for convenience products is measured on a scale of 0 (never) to 3 (always). Respondents stated to use such products to little extend with scores varying from .54 to 1.18. This is visualized in Table 8.

			Std.
	Ν	Mean	Deviation
Eggs2	91	1,75	1,141
Dairy <sup>2</sup>	93	1,67	,864
Baby food	92	1,62	1,561
Potatoes <sup>2</sup>	92	1,54	1,217
Meat <sup>2</sup>	92	1,47	1,074
Vegetables & fruit <sup>2</sup>	92	1,39	,838
Proteine cariers	91	1,10	1,334
Beverages	92	,84	,893
Nappies	92	,75	1,494
Ready meals	92	,73	1,376
<b>Bread</b> <sup>2</sup>	92	,68	1,016
Herbs	92	,58	,892
Valid N (listwise)	90		

#### Table 7:Average purchase intervals of specific products<sup>1</sup>.

1 measured on a scale: 0 (never), 1(sometimes), 2 (regularly), 3 (always) 2 basic product categories

#### Respondents



Graph 1: Average purchasing frequencies of respondents.

```
Score < 16.5 = light users
Score 16.5 –27.5 = medium users
Score > 27.5 = heavy users
```

			Std.
	Ν	Mean	Deviation
Prepacked salad	137	1,18	,806
Ready vegetable	139	1,16	,870
mixes			
Peeled carrots	137	,95	,973
Precut vegetables	139	,80	,693
Peeled potatoes	138	,54	,696
Valid N (listwise)	134		

#### Table 8:Use of convenience products1.

1 measured on a scale ranging from 0 (never), 1 (sometimes), 2 (regularly), 3 (always).

#### 5.2.2 Supply channel

The likelihood of respondents to make use of a CDC channel to purchase local organic products is positive (0.67), measured on a scale of -2 (very little chance) to +2 (very big chance).

Furthermore preference for individual supply channels is measured with two constructs. First respondents ranked channels CDC, super market, farm shop and alternative channel on a scale 1 (most attractive) to 4 (least attractive). One-way-ANOVA revealed significant higher ranks for 'CDC' and 'Supermarket' compared to 'Farm shop' and 'Alternative' channel ( $F_{(3,391)} = 23.241$ , P<.001). This becomes apparent from Table 9. Then attractiveness per channel was measured on a scale, ranging from -2 (unattractive) to +2 (attractive). Differences were measured using a paired samples T-test. Supermarket and CDC are perceived attractive channels of supply. Scores and P-values are displayed in Appendix II Table 5.

Table 9:	The average channel rankings on a scale of 1 to $4^1$ .
Lable 7.	The average channel rankings on a scale of 1 to 4 t

		Subset for $alpha = .05$		
		1	2	
Supermarket	101	1.99		
CDC	103	2.12		
Alternative	99		2.80	
Farm shop	100		3.01	
Sig.		.826	.474	

1 Mean scores displayed

#### Practical issues

Perception of practical issues related to supply via a CDC is measured on a scale of -2 (do not agree) to +2 (agree). The issues were obtained during a focus group interview with CDC users and throughout the pre-test of the survey. The descriptives reveal no explicit difficulties regarding these issues. Respondents clearly view excursions to local farms as a positive aspect (mean score 1.48). The mean scores are depicted in Appendix II Table 6.

#### **Overriding factors**

Which factors are related to the attractiveness of supply via a CDC center? Five factors, related to purchasing via a CDC center, were measured on a scale ranging from -2 (not important) to +2 (very important). Means are shown in Table 10. The one-way ANOVA revealed that convenience, price and product assortment are perceived important ( $F_{(4,523)} = 28$ ; P<.001). The mean scores are displayed in Table 10. Note that a 'time reduction', expected to be of interest for parents regarding availability of organic products, was perceived to be of minor importance.

The same variables were analyzed by multiple regression to explain the chance of using a CDC to order products. Chance was measured on a scale of -2 (no chance) to +2 (very big chance). The regression was a very poor fit ( $R^2$ = 22.5%), but the overall relationship was significant ( $F_{(5,99)}$  = 5.75; P <.001). With other variables held constant, the chance of usage was positively related to price, increasing by .224 for every extra scale point ( $t_{99}$ = 2.061; P<.05), and positively related to convenience (at point of transaction), increasing by 0.314 for every extra scale point ( $t_{99}$ = 2.502; P<.05). Other variables were not significant. Coefficients are displayed in Appendix II Table 7.

Factor	Ν	Subset for $alpha = .05$	
		1	2
Time reduction	106	22	
Convenience at point of transaction	106		.79
Convenience of ordering	106		.82
Price	105		.99
Product assortment	105		1.11
Sig.		1.000	.159

#### Table 10: The importance of factors related to supply via a CDC.<sup>1</sup>

1 Mean scores are displayed, measured on a scale ranging from -2 (not important) to +2 (important)

#### 5.2.3 Segmentation

A segmentation is carried out on the basis of interest for regional organic products and 2) the current usage rate of organic products.

#### Interest

Respondents interested in regional organic products were compared with respondents not interested. Oneway-ANOVA revealed that respondents displaying an interest pay more attention to the product origin ( $F_{1.130} = 29.5$ ; P<.001) and the production process ( $F_{1.131} = 33.8$ ; P<.001) when purchasing food. Marketing products using the regional aspect is valued positive ( $F_{1.131} = 57.5$ ; P<.001) and the opportunity to purchase regional products is appreciated ( $F_{1.131} = 51.9$ ; P<.001). The descriptives are shown in Appendix II Table 9.

A cross tabulation revealed 25 respondents (19% of the respondents) displaying interest in local organic products although currently not purchasing organic products, possibly indicating a market for regional products. They are referred to as 'interested non-buyers'. Results are displayed in Appendix II Table 8. The majority (20) of this group lives and host their children in Ede, this will be discussed in the segmentation on Usage rate. Buyers and interested non-buyers were compared on the basis of several

motivational and behavioral variables and no basis for this stated interest could be revealed.

#### Usage rate

One-way-ANOVA revealed differences between CDC centers after the average usage-rate was calculated per CDC center. The Tukey post hoc test showed significant lower usage rates for Puk en Muk, Nijntje, Kalfje and Mengelmoes compared to Kinderkunst ( $F_{(10,129)} = 4.805$ ; P< .0001). Differences between municipalities are not significant. Respondents displaying high purchase frequency reside in Wageningen, but the interested non-buyers mainly reside in Ede. This is visualized in Appendix II Table 10.

# 6. Conclusions

Staff members of the CDC centers under study, in general are positively inclined towards the idea of distributing regional organic products via their centers to parents. Although forecasting some practical issues, they perceive offering this service as a competitive advantage, which can be helpful in troubled times. In return some CDC centers are interested in scheduling excursions to the farm with children and parents.

The majority of parents is interested in organic products. Their motivation is based on personal health and environmental considerations (§5.2.1). This is in line with findings from previous research (Hirshberg, 2000; Ramisch, 2001; Canavari *et al.*, 2002; Magnusson *et al.*, 2003).

Price is an obstacle to purchase organic products for non-buyers, also revealed in previous research (Tanner and Kast, 2003). However, it seems to be an issue of *perceived* value for money: the non-buyers are content with conventional products and do not recognize or agree with the 'added value' of organic products (§5.2.1).

An overriding motive to conduct this study was related to the availability of organic produce for the target group; parents of young children. Availability, however, is not an overriding factor, preventing parents from purchasing organic produce. In fact availability of organic products proved not to be an issue at all (§5.2.1 and §5.2.2). This is not in line with earlier findings (Tregear *et al.*, 1994; Hirshberg, 2000; Tanner and Kast, 2003).

Supermarkets and CDC centers are perceived as attractive distribution channels for regional organic products in relation to farm shops, organic stores and weekly markets. Convenience, price and product assortment are overriding factors regarding supply via a CDC (§5.2.2). They are the service outputs related to a strategy of operational excellence: the strength of supermarkets (Coughlan *et al.*, 2001). As one parent stated: "The decision about what to have for dinner is made in the afternoon, followed by a quick visit to the supermarket, nowadays, this is part of peoples daily routine", thereby constituting a major challenge for farmers trying to distribute their products via CDC centers.

The interested non-buyer does not reveal a new market for regional organic products. The attitudinal and behavioral variables between buyers and interested non-buyers were compared to "exclude lip service to the current fashion" (Davies *et al.*, 1995, pag. 22) and no basis for this stated interest could be found.

Yet a genuine interest is revealed among parents and management of CDC centers to learn about current farming practices and to offer children a possibility to interact with animals (§5.2.1). Furthermore the regional aspect of produce is appreciated offering a possible marketing tool regional organic products (§5.2.2).

# 7. Discussion

This study offered insight into the possibilities of an alternative distribution channel for organic produce. A share of information is gathered from theory, management and parents regarding organic products and the possibilities to supply via CDC centers. This chapter deals with the limitations of this study, which need to be kept in mind when interpreting the results. Furthermore recommendations are given for further research.

#### Limitations

A note regarding the method. The CDC centers used for this study were based on the willingness from management to cooperate, which led to the exclusion of some centers in Ede and Wageningen and all centers in Veendendaal. Furthermore, management of CDC centers was responsible for distribution of the surveys. Surveys were handed out at different dates, therefore respondents had differing periods to respond. A number of managers wrote children's names on the survey before distribution to the parents, giving the questionnaire a personal touch, which can have been of influence in the decision to cooperate.

The response rate was acceptable and the profile of the respondent showed many similarities with a national survey among users of child-day-care. It should be noted however that the sample was not chosen at random. The survey was filled out by those respondents who consciously decided to do so. It is likely that respondents positively inclined towards organic produce showed greater willingness to cooperate with the survey, influencing the results in a positive way.

Occasionally a respondent interpreted a question (ranking of options) differently which can have been of influence. Notwithstanding these limitations, the conclusions from this study are clear and unequivocal in my opinion.

#### Recommendations

Availability of organic produce is not an issue for the most promising consumer segment, which is satisfied purchasing products in supermarkets. Which distribution strategy should organic farmers follow?

The regional aspect of food products is appreciated. Basic products like eggs, potatoes, fruit and vegetables and meat are purchased frequent with regard to organic products. In general these products can be supplied locally. Consumers indicate to prefer purchasing products via supermarkets. Based on these findings possibilities could exist for producers to distribute their produce through local retailers. Although Schmid and Richter (2000) mention that retailers tend to decrease the number of suppliers, experiments are currently carried out by several initiatives in the Netherlands, trying to create a regional benchmark (Bronsvoort *et al.*, 2005).

Consumers appreciate the opportunity of excursions to local farms. Previous research has indicated that promotional activities like excursions can be helpful in decreasing the proximity between consumers and farmers and raising consumer awareness (Zenner *et al.*, 2000; Hamm and Michielsen, 2000; Fotopoulos and Krystalli, 2002). Several initiatives are currently developed in the Netherlands (www.agriholland.nl).

Abstinence of chemical fertiliser and pesticides has been the hobbyhorse in promoting organic products since time immemorial. According to Voragen (2005) values like attention, contact, harmony, respect, care and involvement are more appealing to consumers. Should producers focus on these personal values when addressing consumers? Further research will probably reveal the answers.

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## Appendix I

	Property	Dimension
Category		
	Regarding parents	Extra service
Advantage	Regarding management day nursery	Competitive advantage
		Extra educational activities
Expected in	Farm visit	How often
return	Animal visit	How often
Teturn	Supplying day nursery	Ho much
	Storage	Space
		Cooling
Practical	Delivery	When
matters		How often
	Interaction nursery	Required efforts group
		supervisors

#### Table 1: Overview of interview checklist.

#### Table 2: Matrix showing answers from individual respondents.

Respondents	1	2	3	4	5	6
Category						
Advantage	competitive	Competitive	Educational activities	Fits in mission	Pr function	Pr function
Expected in return	Exclusiveness farmer contact	exclusiveness excursions	Yearly excursions	Yearly Excursions	No expected Services	Excursions Twice yearly
Practical matters	Cooling extra work interference nursery	space Liability matters	space interference nursery	no expected issues	Space Interference nursery Extra work	Space
<b>Supplying</b> Day nursery	Depending on costs	Depending on costs	Depending on parents	Depending on parents	Depending on parents	no

**Respondents:** 

1 Liesbeth Kroone, 't Kalfje

2 Jolanda Kisters, Mengelmoes

3 Doreen Keurentjes, Kinderkunst

4 Jenny vd Berg, Jennies Kindercentra

5 Jose Lamers, de Dijkgraaf

6 Gerrie vd Pest, Kwink

# Appendix II

				Cumulative
		Frequency	%	%
Income	Up to 13.194	2	1,4	1,4
	13.194 to 20.494	7	5,0	6,5
	20.494 to 29.749	4	2,9	9,4
	29.749 to 45.000	15	10,7	20,3
	45.000 to 56.500	25	17,9	38,4
	56.500 to 89.250	33	23,6	62,3
	Over 89.250	9	6,4	68,8
	I do not mention	43	30,7	100,0
	Total	138	98,6	
Missing	999	2	1,4	
Total		140	100,0	

Table 1: Household income of respondents this study

Table 2: Average Household income in the Netherlands  $(2003)^1$ 

	%	Cumulative %
Income		
< 10.000	2.3	2.3
10.000 to 20.000	7.6	9.9
20.000 to 30.000	33.1	43.0
30.000 to 40.000	31.0	74.0
40.000 to 50.000	14.6	88.6
> 50.000	11.4	100.0

**1** households with young children source: statline

### Table 3:Rotated Component MatrixLoadings of motives measuring interest in regional organic products.

		Component				
Motive	Health	Environment				
Health	.863	.204				
Fit in diet	.836	.028				
Safe food	.775	.191				
View of life	.740	.244				
Authenticity	.151	.793				
Environment	.333	.663				
Taste	.032	.606				

category	N	Subset for $alpha = .05$		
		1	2	
Full service	107	.2897		
Extended <sup>2</sup>	105		1.2762	
Basic <sup>3</sup>	105		1.3619	
Sig.		1.000	.816	

#### Table 4: Interest for product categories<sup>1</sup>

**1** measured on a scale ranging from -2 (not attractive) to +2 (attractive)

2 dairy, bread, eggs and meat

**3** potatoes and vegetables

 Table 5:
 The attractiveness of a supply channel

	CDC	Farm shop	Alternativ	Supermarket
			e	
CDC	0.74	.001	.021	.064
Farm shop	1.086	- 0.34	.001	.001
Alternative	.390	689	.35	.001
Supermarket	314	-1.406	-7.17	1.07

**Diagonal** mean score/channel (on a scale of -2 to +2) **Above diagonal** significance's of differences between channel **Below diagonal** mean differences between channels N = 105

Table 6:Issues related to supplying via CDC1

		Mean	Std.
	Ν		Deviation
Excursion	108	1.48	.870
Content current channel	107	.42	1.082
Storage issues	107	.36	1.276
No such activity in CDC	107	05	1.356
Still Supermarket visit	107	43	1.229
Transportation issue	107	45	1.361
Extra time needed	107	56	1.083
Valid N (listwise)	107		

1 measured on a range of -2 (do not agree) to +2 (agree).

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.090	.184		.488	.627
	Price	.252	.123	.224	2.061	.042
	Product assormtent	050	.146	039	344	.732
	Convenience of ordering	.390	.156	.314	2.502	.014
	Convenience at point of	.089	.145	.076	.616	.539
	transaction Time reduction	.009	.097	.009	.093	.926

## Table 7:Coefficients of multiple regression.Price and convenience of ordering are related to using a CDC to order products<sup>1</sup>.

1 Dependent Variable: chance of using a CDC to order products

 Table 8:
 A market for regional organic products?

		Currently organ	Total	
		No	Yes	
Interested in regional	No	26	8	34
organic?	Yes	25 <sup>1</sup>	74	99
Total	51	82	133	

1 the interested non-buyers

			<b>1</b>	Std.	95% Co		2.41	
		N	Mean <sup>1</sup>	Deviation	Interval f		Min	Max
	Interested?				Lower Bound	Upper Bound		
Product	no	32	-1.00	1.136	-1.41	59	-2	2
origin?	yes	100	.35	1.250	.10	.60	-2	2
	Total	132	.02	1.351	21	.26	-2	2
Production	no	33	42	1.200	85	.00	-2	2
process?	yes	100	.80	.995	.60	1.00	-2	2
	Total	133	.50	1.172	.30	.70	-2	2
Opportunity	no	33	-1.00	1.000	-1.35	65	-2	1
to purchase regional	yes	100	.42	.976	.23	.61	-2	2
product?	Total	133	.07	1.156	13	.27	-2	2
Use regional	no	33	61	1.144	-1.01	20	-2	2
aspect for marketing?	yes	100	.87	.906	.69	1.05	-2	2
B	Total	133	.50	1.159	.31	.70	-2	2

 Table 9:
 Significant differences between respondents interested/not interested in regional organic products. (Descriptives of one-way-ANOVA)

**1** Measured on a scale from -2 (not interested) to +2 ( interested)

#### Table 10: Average usage rate/CDC center<sup>1</sup> Compared with the origin of interested non-buyers.

CDC center	Ν	Subset for	Subset for $alpha = .05$		
		1	2	non buyers	
puk en muk	3	1,7		2	
nijntje	3	2,7		0	
kalfje	23	4,4		7	
mengelmoes	13	4,6		3	
piennoo	16	5,6	5,6	4	
hummelhof	13	6,5	6,5	3	
toetertjes	6	6,8	6,8	0	
dijkgraaf	19	6,9	6,9	4	
kleine wereld	15	7,5	7,5	0	
toverbos	9	7,7	7,7	1	
kinderkunst	20		16,7	1	
Sig.		,809	,058		

1 Usage rate is the sum of scores (purchases of organic products) per respondent.

## Appendix III

### VRAGENLIJST

- Deze vragenlijst dient bij voorkeur ingevuld te worden door de ouder 'die zich het meest bezig houdt met het kind/de kinderen'
- Onderstaande vragen dienen te worden ingevuld door het hokje van uw keuze aan te kruisen. Als u per ongeluk een verkeerd hokje heeft aangekruist, zet dan bij het juiste hokje een pijl.
- Er zijn geen goede of foute antwoorden, uw mening telt!
- Het invullen van de enquete neemt ongeveer 10-15 minuten in beslag.
- Ik wil u vragen om deze vragenlijst in te vullen en te overhandigen aan de leidsters of het locatiehoofd van uw kinderdagverblijf. Bij voorkeur voor 31 mei.

#### Vragen 1 t/m 12 gaan over de volgende situatie

Stel er zijn een aantal agrarische producenten in uw omgeving die levensmiddelen zoals aardappelen, groenten en fruit, maar ook zuivel en vlees produceren. Zij kiezen ervoor om deze levensmiddelen kleinschalig en op ambachtelijke wijze te produceren zonder gebruik te maken van kunstmest en chemische bestrijdingsmiddelen. Zij vragen zich af of consumenten in hun omgeving interesse hebben in de produkten van hun bedrijf.

1. Heeft u interesse in de produkten die op deze boerderijen geproduceerd worden?

- □ Nee, ga verder met vraag 13
- 🗆 Ja

2. Hieronder volgt een aantal uitspraken, waarover ik graag uw mening wil hebben door middel van een cijfer. Omcirkelt u het cijfer dat het beste bij uw mening past.

Nie	Me	Mee eens			
Deze manier van landbouw sluit aan bij mijn levensvisie.	-2	-1	0	1	2
Ik herken in deze produktiewijze authenticiteit en ambacht	-2	-1	0	1	2
Door deze produkten aan te schaffen draag ik bij aan het	-2	-1	0	1	2
behoud van mijn omgeving/platteland.					
Dergelijke produkten passen goed binnen mijn dieet of dat van	-2	-1	0	1	2
mijn kinderen.					
Ik herken in deze producten gezonde voeding voor mijn gezin.	-2	-1	0	1	2
Met deze producten haal ik vooral lekkere producten in huis.	-2	-1	0	1	2
Ik beschouw dergelijke producten als veilige	-2	-1	0	1	2
voedingsmiddelen.					
Ik zie een meerwaarde in deze produkten ten opzichte van de	-2	-1	0	1	2
produkten die ik in de supermarkt koop.					

Aanbod

Er zijn verschillende manieren om produkten te leveren aan consumenten. De boer wil graag weten welke optie voor consumenten aantrekkelijk is. Deze vraag is opgeslitst in meerdere delen. Eerst verzoek ik u een aantal opties en varianten te rangordenen. Vervolgens verzoek ik u om aan te geven in welke mate u deze opties en varianten aantrekkelijk vindt.

3a. Hieronder ziet u 4 mogelijke opties. Welke optie spreekt u het meest aan? Die optie geeft u dan nummer 1, de optie van uw tweede keus krijgt nummer 2, enzovoort. Deze nummers zet u in de vakjes voor elke optie.

<b>Optie:</b>	Bezorging	op I	het	kinderd	lagverl	oliif
opne	Denoising	<b>v</b> P -	nev	muuuu		, iiji

De boer overhandigt mij deze produkten op het kinderdagverblijf wanneer ik mijn kind op kom halen.



#### Optie: Zelf af halen bij de boer

Ik geef er de voorkeur aan om deze produkten zelf af te halen bij een van deze boer(en).



#### **Optie: Ander afzetpunt**

Ik geef er de voorkeur aan om deze produkten ergens anders bezorgd te krijgen Namelijk...



#### **Optie: Via de supermarkt**

Ik ben geïnteresseerd in de produkten van deze boer

Ik geef er echter de voorkeur aan om ze in de supermarkt te kopen.

3b.Hieronder treft u een aantal aanbod varianten aan. Welke spreekt u het meest aan? Dat aanbod geeft u dan nummer 1, het aanbod van uw tweede keus krijgt nummer 2. De nummers zet u in de vakjes voor het aanbod.

#### Abonnement

- Aanbod: diverse groentes van het seizoen voldoende voor drie a vier warme maaltijden, afkomstig van een tuinderij in uw regio.
- Dit pakket wordt voor u samengesteld en geleverd **op basis van een abonnement**, afgestemd op de grootte van uw gezin.
- Het pakket is beschikbaar in de maanden:

	Mei	Juni	Juli	Aug	Sep	Okt		
--	-----	------	------	-----	-----	-----	--	--



#### Bestelling

- Aanbod: bestaat uit Aardappelen, Groenten en fruit, Brood, Eieren, Zuivel (melk, yoghurt, boter en kaas) en vlees, afkomstig van diverse producenten in de regio.
- Deze produkten worden geleverd op basis van uw bestelling.
- Dit aanbod is het hele jaar beschikbaar:

Jan Feb Mrt April Mei Juni Juli Aug Sep Okt Nov Dec	_		 <u>,</u>	 							
		Jan	Mrt	Mei	Juni	Juli	Aug	Sep	Okt	Nov	Dec

*3c. Kunt u aamgeven in hoeverre u de onderstaande opties en varianten aantrekkelijk danwel onaantrekkelijk vindt?* 

Zeer onaantrekkelijk	Zeer aantr	ekkelijk			
Optie					
Bezorging op het kinderdagverblijf	-2	-1	0	1	2
Zelf afhalen bij de boer	-2	-1	0	1	2
Ander afzet/ophaalpunt	-2	-1	0	1	2
Via de supermarkt	-2	-1	0	1	2
Variant					
Abonnement	-2	-1	0	1	2
Bestelling	-2	-1	0	1	2

4. In hoeverre is het voor u interessant wanneer de volgende produktcategorieën opgenomen worden in het aanbod?

Niet interessant V	Wel interessant				
Basis (aardappelen,groente)	-2	-1	0	1	2
Uitgebreid (zuivel, brood, eieren, vlees)	) -2	-1	0	1	2
Compleet* (biologisch)	-2	-1	0	1	2
Overig, nl:	-2	-1	0	1	2

\* Bij een compleet biologisch aanbod moet u denken aan de volgende produkten:

- Granen/muesli/rijst
- Baby en peutervoeding
- Vleesvervangende producten (bv tofu)
- Thee, koffie, wijn, sap
- Kruiden
- Kant-en-klaar-maaltijden
- Luiers

5. Leveringsfrequentie: ik ontvang deze produkten bij voorkeur:

- □ Dagelijks
- □ Meerdere malen per week
- □ Wekelijks
- $\Box$  Om de week
- □ Eens per maand

6. De produkten worden geleverd op basis van een overeenkomst. Kunt u aangeven in hoeverre u onderstaande mogelijkheden aantrekkelijk danwel onaantrekkelijk vindt?

Zeer	Zeer onaantrekkelijk							
Abonnement	-2	-1	0	1	2			
Vaste boodschappenlijst die ik	-2	-1	0	1	2			
per levering aan kan vullen								
Bestelling per levering	-2	-1	0	1	2			

Zeer	Zeer aa	antrekkelijk			
Schriftelijk	-2	-1	0	1	2
Via internet	-2	-1	0	1	2
Anders nl	-2	-1	0	1	2

7. Bestelling kan op verschillende manieren plaatsvinden. Kunt u aangeven in hoeverre u onderstaande bestelmogelijkheden aantrekkelijk danwel onaantrekkelijk vindt?

Levering

Een aantal vragen met betrekking tot levering op het kinderdagverblijf. Wanneer meerdere ouders hun produkten op het kinderdagverblijf laten bezorgen, kunnen de logistieke kosten beperkt worden. De boer nodigt de kinderen, u en de leidsters op gezette tijden uit voor een excursie op zijn bedrijf.

8. Hieronder volgen een aantal stellingen met betrekking tot bezorging op het kinderdagverblijf. Kunt u aangeven in hoeverre u het eens danwel oneens bent met deze stellingen?

Ni	Μ	lee eens			
Een kinderdagverblijf is niet bedoeld voor een	-2	-1	0	1	2
dergelijke activiteit.					
Ik vind het niet praktisch in verband met het vervoer	-2	-1	0	1	2
van de produkten van het kinderdagverblijf naar huis					
Ik vind het niet praktisch omdat ik alsnog naar de	-2	-1	0	1	2
supermarkt moet voor de overige boodschappen.					
Ik ben tevreden met de huidige manier waarop ik deze	-2	-1	0	1	2
produkten aanschaf.					
Ik denk dat de voorgestelde 'service' mij extra tijd zal		-1	0	1	2
kosten omdat ik mijn pakket moet zoeken/halen.					
Ik voorzie problemen met de opslag/houdbaarheid van		-1	0	1	2
de produkten op het kinderdagverblijf.					
Vanuit het kinderdagverblijf op excursies naar de boer		-1	0	1	2
een leuke en leerzame ervaring voor mij en voor mijn					
kind(eren).					

Is een praktisch aspect volgens u niet aan bod gekomen? Op de laatste pagina kunt u deze verwoorden.

9. Ik zou het op prijs stellen indien de boer zelf of een van zijn medewerkers de uitgifte van de boodschappen op het kinderdagverblijf verzorgd, omdat ik dan

		Belangrijk			
Snel mijn boodschappen heb.	-2	-1	0	1	2
De mogelijkheid heb om vragen te	-2	-1	0	1	2
stellen.					

10. Voor de produkten die ik op het kinderdagverblijf bezorgd krijg ben ik bereid een prijs te betalen die lager/gelijk/hoger ligt dan de prijs van biologisch produkten in de supermarkt. Omcirkelt u het getal dat het best overeenkomt met de prijs die u bereid bent te betalen.

Veel lager ligt		Gelijk ligt		Veel hoger ligt
-2	-1	0	1	2

11. Stel dat voor de mogelijke obstakels een oplossing wordt gevonden. Aan de ouders wordt de mogelijkheid geboden om produkten van regionale producenten af te gaan nemen via het kinderdagverblijf, zodanig dat deze aansluit bij uw wensen. Denkt u regelmatig gebruik te gaan maken van deze service?

<b>Zeer kleine kans</b> -2	-1	0	1	2	Zeer grote kans
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12 Welke factor(en) is (zijn) daarbij voor u van doorslaggevend belang?

Niet	Door	orslaggevend			
Prijs van produkten en service.	-2	-1	0	1	2
Assortiment van het aanbod.	-2	-1	0	1	2
Gemak van bestellen.	-2	-1	0	1	2
Gemak van afhandeling op	-2	-1	0	1	2
afhaalpunt .					
Tijdsbesparing tov huidige manier	-2	-1	0	1	2
van boodschappen doen.					

Zijn er andere belangrijke factoren die nog niet aan bod gekomen zijn?

.....

De vragen 13 t/m 17 gaan over het doen van boodschappen in het algemeen.

13. Koopt u wel eens biologische voedingsmiddelen?

- □ Nee (beantwoord vraag 13a en ga door met vraag 14)
- □ Ja (beantwoord vraag 13b en ga door met vraag 14)
- □ Ik weet niet wat biologische voedingsmiddelen zijn (ga door met vraag 14)

13a Hieronder volgt een aantal uitspraken, waarover ik graag uw mening wil hebben door middel van een cijfer. Omcirkelt u het cijfer dat het beste bij uw mening past. Ik koop geen biologische voedingsmiddelen omdat:

Niet mee eens							
Ze te duur zijn.	-2	-1	0	1	2		
Ze er onaantrekkelijk uitzien.	-2	-1	0	1	2		
Ze niet altijd/overal beschikbaar zijn.	-2	-1	0	1	2		
Ze slecht van kwaliteit zijn.	-2	-1	0	1	2		
Ze niets speciaals te bieden hebben.	-2	-1	0	1	2		
Ik tevreden ben met gewone produkten.	-2	-1	0	1	2		

13b. Kunt u per produktgroep aangeven met welke regelmaat u biologische produkten koopt? Voorbeeld: als u wel eens vlees koopt van biologisch kwaliteit zet u bij de productgroep vlees een kruisje bij 'soms' Als u nooit vlees van biologische kwaliteit koopt kruist u 'nooit' aan. Als u überhaupt geen vlees koopt omdat u vegetariër bent, kruist u het hokje 'niet van toepassing' (n.v.t.) aan.

Produktgroep	Nooit	Soms	Regel- matig	Altijd	N.v.t.
Zuivel (melk yoghurt, boter en					
kaas)					
Aardappelen					
Groenten en Fruit					
Brood					
Eieren					
Vlees					
Baby en peutervoeding					
Vleesvervangende produkten					
(bv tofu)					
Thee, koffie, wijn, sap					
Kruiden					
Kant-en-klaar-maaltijden					
(pizza, ovenschotels)					
Luiers					

14. Hieronder volgt een aantal stellingen met betrekking tot de produktie en herkomst van produkten. Kunt u aangeven in hoeverre u het met deze stellingen eens bent?

Niet mee eens					ee eens
Bij de keuze van voedingsmiddelen let ik op de wijze	-2	-1	0	1	2
waarop produkten geproduceerd worden.					
Ik vind de wijze waarop de produkten geproduceerd	-2	-1	0	1	2
worden belangrijk.					
Wanneer ik aardappelen, groente of fruit koop, probeer ik	-2	-1	0	1	2
zoveel mogelijk Nederlandse produkten te kopen.					
Ik zou graag kunnen kiezen voor een herkenbaar regionaal	-2	-1	0	1	2
produkt.					
Ik vind het positief wanneer dit regionale karakter wordt	-2	-1	0	1	2
gebruikt om dergelijke produkten herkenbaar te maken.					

15. Het is belangrijk dat de voedingsmiddelen die ik elke dag eet:

Niet mee eens Mee eens							
Makkelijk te bereiden zijn	-2	-1	0	1	2		
Qua bereiding niet veel tijd kosten.	-2	-1	0	1	2		
Dichtbij huis of werk beschikbaar zijn.	-2	-1	0	1	2		

#### 16. In de ideale situatie,

Niet mee eens mee eens						
Doe ik al mijn boodschappen in één winkel.	-2	-1	0	1	2	
Krijg ik al mijn boodschappen op één	-2	-1	0	1	2	
bepaalde locatie bezorgd.						
Doe ik mijn boodschappen op verschillende	-2	-1	0	1	2	
adressen.						

17. Kunt u per produktgroep aangeven met welke regelmaat u onderstaande panklare voedingsmiddelen koopt?

	Nooit	Soms	Meestal	Altijd	N.v.t.
Als ik aardappels koop dan koop ik ze geschild.					
Als ik rauwkost koop dan kies ik verpakte,					
voorgesneden rauwkost.					
Als ik wortels koop dan kies ik geschrapte					
wortels.					
Als ik losse groentes koop dan kies ik					
voorgesneden groente					
Als ik meerdere groentes koop dan kies ik					
voorgesneden (roerbak) groente mix					

#### De vragen 18 t/m 22 gaan over kinderopvang

18. Wat is de naam van het kinderdagverblijf waarvan uw kind gebruik maakt?

#### 19. Kunt u de dagdelen aankruisen waarop uw kind op het kinderdagverblijf verblijft?

	Maandag	Dinsdag	Woensdag	Donderdag	Vrijdag
Ochtend					
Middag					

20. Maakt u gebruik van zogenaamde flexibele opvang of verblijft uw kind op vaste dagdelen op het kinderdagverblijf?

- □ Vast
- □ Flexibel
- 21. Van welke dienst maakt u gebruik?
- □ Kinderdagverblijf
- Buiten Schoolse Opvang
- □ Allebei

#### 22. Hoe brengt/haalt u uw kind meestal naar de opvang?

- □ Lopend
- □ Fiets
- Auto
- $\Box$  Anders, nl. ...

#### De vragen 23 t/m 31 zijn van algemene aard.

Sommige van de onderstaande vragen liggen bij soms menigeen gevoelig. Maar door deze vragen in te vullen helpt u mij om aan de uitkomsten van dit onderzoek meer waarde toe te kunnen kennen. Uw antwoorden blijven uiteraard anoniem.

23. Wat is uw geslacht?

- □ Vrouw
- □ Man

24. Wat is uw leeftijd?

- □ 18-29 jaar
- □ 30-39 jaar
- **u** 40+

25. Hoe is uw huishouden samengesteld?

- □ Alleenstaand met kinderen
- Echtpaar/samenwonend met kinderen

26. Uit hoeveel personen bestaat uw huishouden inclusief u zelf?

..... personen

- 27. Bruto jaar inkomen van uw huishouden
- □ Tot €13.194
- □ Van €13.194 tot €20.494
- □ Van €20.494 tot €29.749
- □ Van €29.750 tot €45.000
- □ Van €45.000 tot €56.500
- □ Van €56.500 tot €89.250
- □ Meer dan €89.250
- □ Vermeld ik liever niet

28. Wat is uw hoogst genoten, al dan niet voltooide opleiding

- LO-LBO
- □ MAVO
- □ MBO
- □ HAVO-VWO
- □ HBO
- □ Universiteit/ Universiteit +

29. Hoeveel uur per week werkt u momenteel? (betaald)

. . . . . . . . . .

30. Hoeveel uur werkt per week werkt uw partner? (betaald)

. . . . . . . . .

31. Wat is de postcode van uw woonplaats?

.....

Hieronder is ruimte voor vragen en opmerkingen

Hartelijk dank voor uw medewerking. Mag ik u verzoeken de ingevulde vragenlijst **voor 31 mei** te overhandigen aan een van de leidsters of het locatiehoofd van uw kinderdagverblijf?

De resultaten zullen tezijner tijd kenbaar gemaakt worden via uw kinderdagverblijf.