

**Consumer Market Research Strategic Study for Fresh  
Grapes and Fresh & Processed Apples & Tender Fruit**

**&**

**Orchard Fruit & Vineyard Quality Assessment throughout  
the Value Chain**

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*The views contained in this report are those of the Value Chain Management Centre, the George Morris Centre, and Ipsos Forward. They are not necessarily the views of Agriculture and Agri-Food Canada or the Ontario Ministry of Agriculture Food and Rural Affairs*

## Executive Summary

This project served two primary purposes. The first was to quantify consumers' satisfaction with and perception of Ontario fruit versus imported fruit and competitors for market share. The specific fruits included in the research were fresh apples (fresh and processed), pears, peaches, plums and table grapes. The second purpose was to assess the effectiveness of current practices and procedures that Ontario's fruit industry uses to manage quality, and whether the quality of Ontario fruits meets consumers' definitions of quality and value. The objective was not to criticize or apportion blame to any individual(s) for inefficient or ineffective operations found to exist across the researched sectors of Ontario's fruit industry. Researchers sought only to objectively assess the effectiveness of representative value chains for delivering recognized value to consumers of Ontario fruit by successfully managing quality in order to reduce costs and, potentially, increase revenue along the entire value chain, from the orchard through to consumers.

The project was completed in four stages:

Stage 1: Literature Review

Stage 2: Consumer Research

Stage 3: Value Chain Research, including SWOT analysis

Stage 4: Recommendations

An extensive literature review was undertaken, pertaining to consumers' perceptions toward fruit. The purpose was to identify factors that previous studies had identified as driving consumers' purchasing habits. Also reviewed was the literature pertaining to the management of fruit quality and the successful management of fresh produce value chains.

Stage one findings shaped the subsequent primary research methodology. The primary research comprised the second and third stages of the project. This involved identifying 'traditional' and 'new Canadian' consumers' attitudes and behaviours toward Ontario versus imported fruits, and mapping and observing a series of value chains (from farm to consumer) to identify the effectiveness of current quality management practices.

The fourth stage of the project included synthesizing the project findings and presenting a series of recommendations for improving the quality management systems used to produce and deliver Ontario-grown fruit to consumers.

The literature review revealed that today's consumers expect not one, but a number of attributes in the products they purchase. These include freshness, taste, nutrition and convenience. It identified that the majority of food purchases are made at major supermarkets, and although consumers also frequent alternative outlets such as farmers markets, they account for a relatively small volume of overall sales. Researchers found that although price is a key driver of purchasing behaviour, the concept of value is perhaps more important. For instance, a number of authors report that many consumers show a willingness to pay more for fruit that matches their quality expectations, particularly if they trust the product to deliver on taste.

It was also found that consumer trends such as "buy local", organic and an aging demographic overlap and share similar drivers. For example, they all reflect underlying consumer concerns such as good health. Ultimately, food purchasing is a complex issue that differs by food type, place of purchase and meal occasion. To be effective in driving increased sales, rather than just awareness, marketing programs must specifically communicate how Ontario fruit delivers on benefits that are valued by key market segments. If players situated along the value chain take greater responsibility and accountability for understanding and delivering on consumer needs, they can more effectively work together to plan and execute branding programs that are profitable for all.

The literature also identified that the key factors determining the effectiveness of quality management practices occurring along the value chain are relationships, information and technology. As well, the level of strategic alignment between organizations situated along the value chain directly impacts the chain's ability to innovate in relation to consumer demands and to reduce the costs associated with meeting or exceeding consumers' expectations of quality. The review ends with a presentation of a benchmarking framework suited to the fruit sector, and describes the commercial benefits of benchmarking, which include motivating producers to look at their farms as businesses.

The primary objective of the consumer research was to understand the fruit purchasing process of consumers, and the drivers of behaviour. The research included 24 ethnographic retail shop-alongs to identify how Ontario consumers shop for fruit, and the cues that influence their purchasing behaviour. This was followed by two quantitative online surveys that together researched the attitudes and purchasing habits of 1,600 consumers. Amongst other findings, results revealed similarities and differences between 'traditional' and 'new' ethnic Canadians regarding fruit consumption and purchasing. Further insights into the purchasing behaviour and drivers of behaviour of new Canadian consumers of fruit were provided through eight qualitative focus groups. The overall research results show that Ontario's fruit industry can do more to positively influence the purchasing behaviour of consumers and increase their loyalty toward Ontario fruit through improved marketing and promotional practices. For instance, it was found that, while the ethnic market is a rapidly expanding market, it is largely not being served by the Ontario fruit industry. Similarly, it was also found that many traditional Canadian consumers do not consider the quality of Ontario fruit to be meeting their expectations. This is particularly the case with Ontario plums and table grapes.

The value chain analysis was designed to provide an objective assessment of the effectiveness of representative value chains for delivering recognized value to consumers of Ontario fruit through successfully managing quality along the entire value chain, from the orchard or vineyard through to consumers. The research included more than 100 semi-structured interviews with individuals from businesses that together span the chain from the orchard through to the retail store. Interviewees included operational managers and executives from organizations operating downstream of the orchard (e.g. packers, shippers, distributors, wholesalers, independent and corporate retailers, and industry groups). In-depth interviews were also conducted with individual fruit producers. Insights into orchard practices were also gathered through focus groups held with approximately 80 fruit producers from across Ontario. In addition to the structured data gathering process, informal interviews were also conducted in situ with staff working in a number of retail stores' produce departments.

The analysis of research findings was conducted using mapping and analytical tools developed to understand the current state of the value chain said to typify Ontario's fruit industry. This enabled researchers to identify inefficient or ineffective activities that impact the performance of individual elements of the chain or the entire chain, and then propose actions that could help address the present situation. Inefficiency or ineffectiveness commonly results from bottlenecks in information or material flow, lack of belief in commitment between chain participants, wasteful or non value-adding activities, or incompatible cultures or structures.

Researchers expected to find more differences than similarities among the five fruit sectors in terms of how well they manage the quality of the fruit they produce in relation to consumers' expectations. This was not, however, the case. Rather, it was discovered that the effectiveness of quality management systems used in each of the chosen fruit sectors depends on a series of common factors. These include the extent to which orchard, post harvest, and grading/packing practices all too often negatively impact the quality and value of fruit from customers' and

consumers' perspectives. Simultaneously, practices occurring at the grower and packer level in particular incur unnecessarily high costs that impact their own and the overall value chain's profitability. So too do flawed practices that commonly occur with retailers' distribution and merchandizing operations. As detailed in the body of this report, the extent to which each of these situations occurs and impacts the operations of individual businesses and value chains differs markedly according to the individual organization's management capabilities. They also differ due to the impact of external factors, such as legislation and regulations.

At an industry level, researchers identified that distinct stakeholder groups exist at each link along the value chain. Each of the groups is characterized by distinct differences in relation to a specific issue, such as their strategic focus, or occurrence in the overall population. Amongst growers, the two dominant groups were descriptively named "leaders" and "laggers". In the packing and distributing links of the value chain, the more innovative and strategic players are referred to as "progressive", while those who follow more of a trading than strategic approach to business are referred to as "transactional". One point worth noting is that the apple sector appears to have the highest proportion of leaders and progressive stakeholders, versus the laggers and those who follow a more transactional approach to business. Given that demarcations between retailers were commonly based on their target markets or internal structures, for reporting purposes retailers were categorized as "corporate" or "independent".

The research concluded that the effectiveness of quality systems employed by the majority of Ontario's fruit industry is significantly less than that of leading importers. The factors that lie behind this difference appear to be that the majority of Ontario's industry trails competitors in the four factors with the greatest impact on how effectively businesses are able and motivated to manage quality. These are information (*including access to and ability to use both consumer and performance related information*), relationships (*including the ability to develop and maintain constructive relationships*), technology (*including access to and ability to use appropriately*), and governance (*making individuals responsible and accountable for their performances*).

The quality management capabilities of Ontario's fruit industry and the extent to which they deliver on consumers' perceptions of quality are essentially divided into two groups. The more progressive group is largely comprised of leaders from Ontario's apple industry. The less progressive camp is largely comprised of those involved in the sectors subject to legislated marketing. The effectiveness with which these sectors manage quality is impacted by business relationships that, for the most part, were characterized as adversarial, segmented and opportunistic. This results in stakeholders viewing each other with suspicion and limited respect. It also results in them losing sight of consumers.

Respondents stated that the role legislated marketing plays in diminishing the Ontario industry's ability to manage quality and react to consumers' expectations comes via cushioning growers from the market forces that have motivated international competitors to adopt new management processes and quality management systems. Part of this is due to the way the current system enables many stakeholders to take a free-rider approach. They believe that focusing on quality will not improve their prices, or that their efforts will be lost amongst mediocrity – so why do it? Therefore, rather than proactively manage quality; many industry stakeholders seek only to meet minimal standards. This practice undermines many consumers' perceptions of the quality of Ontario fruit versus imports. It also results in a lower level of innovation than is required for businesses to remain competitive in an increasingly global industry through ensuring that their processes are suited to delivering products that meet changing consumer demands.

This situation is exacerbated when the approach taken by the majority of Ontario's fruit industry is the opposite of that being taken by increasingly capable and more innovative importers, many of whom have redesigned their entire business model to suit a changing market. The resulting

differences between the quality of Ontario fruits and imports heighten the relative costs incurred by the Ontario industry (from growers through to retailers). They also lessen wholesalers', customers', and consumers' willingness to select Ontario fruit over imported fruit, or pay prices equal to those paid for imported fruit. The combined effects of a fragmented value chain and inefficient/ ineffective operations include many millions of dollars in unnecessarily high costs and missed market opportunities.

The overall findings are that while Ontario fruit undoubtedly has enormous opportunities due to the emotional connection consumers have with Ontario fruit, large swaths of the industry are failing to fully translate this opportunity into economic and strategic strength. This is not the fault of one person or organization. It is the result of a system that sees the two sides of the industry becoming increasingly distant and polarized in their attitudes toward each other. The present system also results in the majority of growers being isolated from the market and looking for ways they can survive the next season, not ten seasons from now. In the meantime, consumers' loyalty to Ontario fruit appears to stem from an emotional connectivity due more to a climatic situation than consistently high quality. The question the industry needs to ask itself is whether this situation is likely to continue, given changing consumer demographics and that all consumers are becoming more discerning in their purchasing behaviour.

The following recommendations were developed in light of these findings. The recommendations are grouped into those that are relevant for each of the key stakeholder groups analyzed during the research, and overall value chains. While recommendations related to quality management do not apply as much to the apple sector as they do to the tender fruit and grape sectors, the research found that there remains room for improvement in the apple sector too.

**Vineland Research & Innovation Centre (or other deliverers)**

<b>Provide coaching services to improve producers' orchard management and husbandry skills</b>
Many producers do not adequately manage the determinants of quality, which results in them incurring higher than necessary costs and receiving lower than possible revenues. A commonly cited reason why Ontario fruit producers do not implement innovative orchard management practices is that, compared to competing jurisdictions such as New York State's apple industry, few if any effective extension services for applied research exist in Ontario.
<b>Streamline and 'commercialize' plant breeding programs</b>
A common frustration voiced by many respondents (from all levels of the value chain) was the lack of innovative plant genetics available to Ontario's fruit industry versus competing jurisdictions. Even when superior genetic material has been developed, it is not uncommon for growers to wait years before they can introduce it into their cropping practices. This places the Ontario industry at a disadvantage.
<b>Provide producers with quality management and process improvement training</b>
Many Ontario fruit producers do not possess the quality improvement skills required to compete in an increasingly competitive market, which negatively impacts their profitability. Quality management need not require a high level of technical proficiency, though it does require the existence of formal processes and the ability to gather, analyze, and act upon specific types of information.
<b>Provide producers with opportunities to increase their business management skills</b>
Many producers do not possess the full suite of management skills (e.g. financial management, human resource management and marketing) required to operate a commercial business. Not possessing these skills impacts their profitability and the industry's long-term competitiveness.

**Provide packers and distributors with the opportunities to improve their quality management, business, and process improvement training**

Many Ontario fruit packers do not possess the quality, business management, and communication skills required to compete in an increasingly competitive market, which negatively impacts their profitability and the industry's overall competitiveness. Implementing effective quality management programs does not necessarily require a high level of technical proficiency. It does, however, require the existence of formal processes and the ability to gather, analyze, share, then act upon specific information.

**Offer exclusive licensing arrangements**

A downfall of Ontario's fruit industry is that multiple suppliers often undercut each other to supply the same or similar products to all (or many) retailers. This means that no one is able to offer a unique value proposition, so price becomes a key influence in customers' and consumers' purchasing decisions. Allowing suppliers to possess exclusive varietal rights could motivate Ontario's fruit industry to become more innovative and market-focused. It would also encourage the development of closer chain-length relationships.

**Producers**

**Get to know consumers and focus efforts on meeting their expectations**

Most producers are more focused on volume than quality, which negatively impacts their profitability. Meaningful consumer insights might convey to producers the importance of viewing quality from consumers' perspectives. It would also enable producers to clearly identify market opportunities and lead to greater understanding and stronger relationships existing between producers and downstream stakeholders. All of which could enable innovative producers to improve their financial performance.

**Develop strategically coordinated grower groups**

Market opportunities exist for growers willing to coordinate their production and marketing to a degree that would enable them to develop the critical mass required to implement modern objective processes. They can then use the resulting data to continually improve their combined performance.

**Measure profitability on a 'per acre' basis (not a 'per unit' basis)**

Producers' views are often polarized towards focusing on volume rather than viewing their full operations in the context of the end market and drivers of consumer choice. Encouraging growers to measure performance on an area rather than a per unit basis would help shift growers' focus away from volume, instead investing greater efforts into better managing the determinants of quality and overall value.

**Marketing Boards (those related to legislated marketing do not apply to the apple sector)**

**Realign marketing boards to reflect the need for market-focused innovation to occur at all levels of the value chain**

The alleged lack of farmers' bargaining power, which defines the traditional role of marketing boards, assumes that all producers are economically similar, have similar management skills, and possess similar entrepreneurial aspirations. The research shows that this is not the case. In seeking to assist all producers, the present system lessens the motivation to innovate amongst the very leaders on which the industry's future lies. The same factors also lessen downstream stakeholders' motivation to innovate.

**Modify marketing legislation to place greater accountability on individual producer's performance**

Current marketing arrangements for tender fruit reduce the motivation of many producers to adapt their management and business behaviour to better suit customers' and consumers' needs; and new markets. Simultaneously it lessens the full value that more capable producers are able to capture from the market. This situation results in a sector that is less innovative and market-focused than it could otherwise be.

<b>Strategically invest check-off funds</b>
A common comment from stakeholders situated at all levels of the chain is that check-off funds should be used more strategically than at present. Using check-off funds to 'reward' retailers for promoting and distributing high volumes of Ontario fruit does little to increase the industry's long term competitiveness.
<b>Facilitate business-level benchmarking, the results of which are shared across the industry</b>
Benchmarking is an effective method of motivating innovation by objectively rating the performance of individual businesses, then sharing the aggregated results across the wider industry. Benchmarking is also a proven method for encouraging producers to view their operations as commercial businesses.
<b>Encourage, champion and enable producers to strategically produce and market new crops</b>
Producers' competitiveness is impacted both by their own and others' capabilities. Producing a wider variety or volume of crops that can be stored (thereby allowing packers and distributors to operate their facilities for longer periods of time), or producing crops that can capture a distinct UVP for a target market(s), can create new opportunities for producers and downstream stakeholders. Marketing boards could play an important role in assisting the development of this type of strategic initiative.

## **Packers and/or Distributors**

<b>Increase operational efficiency and effectiveness through consolidating</b>
Ontario's fragmented fruit industry is handicapped by the inability of many packers to invest in modern labour-saving grading, packing, and reporting technologies, as well as their inability to undertake the type of market research that is enabling importers to continually improve their competitiveness. Overcoming this hurdle is dependent on packers increasing their critical mass, thereby increasing the resources at their disposal.
<b>Invest in and utilize more effective cool chain practices</b>
Lack of cool chain infrastructure and ineffective management of the cool chain (particularly for tender fruit) results in inconsistent quality, which negatively impacts consumers' appreciation of Ontario fruit and their propensity to pay above minimal prices. Investing in modern cool chain infrastructure is critical to the future success of Ontario's fruit industry.
<b>Increase the amortization of investments by developing strategic partnerships with importers</b>
Establishing technologically capable grading, packing and distribution facilities is extremely expensive and difficult to justify if operating for only a few months of the year. Developing strategic partnerships with importers, where bulk imports are graded and packed closer to the end market, will enable packers and distributors to utilize equipment for a longer period and justify investments in modern equipment. It will also allow them to develop stronger less-seasonally reliant relationships with retailers.
<b>Develop resources required to pack and distribute in direct response to market demand, essentially a quasi <i>just in time</i> approach</b>
Most packers pack to suit their processes, not market demand. This can mean that fruit is packed for days prior to shipping, which negatively impacts the quality and consistency of fruit purchased by consumers.



**Develop and share standard operating procedures that are based on objective processes**

While numerous packers share the same brand name or appearance, they do not share standard operating procedures, so the processes used to manage the packing and grading process range markedly across packers and through the season. This exacerbates the inconsistency of Ontario fruit purchased by consumers, negatively impacting their propensity to purchase and willingness to pay.

**Increase consumers' appreciation of Ontario fruit by developing functional packaging and presentation formats**

A commonly cited issue facing Ontario's fruit industry is that fruit is not packed in a format that suits many (sometimes most) consumers' purchasing and usage patterns. Nor does the format offer a practical means of managing quality. Adopting more proactive and constructive relationships with downstream stakeholders than commonly exist will provide Ontario fruit packers with the innovation opportunities required to increase the unique value proposition (UVP) that Ontario-grown fruit offers consumers.

**Get to know the consumer, then partner with downstream stakeholders to exceed their expectations**

To successfully adapt to a changing market and compete against increasingly capable competitors, packers and distributors who have not already done so will need to place themselves firmly in the driving seat by undertaking market research and using the resulting information to develop closer relationships with strategic partners. They must then execute targeted marketing strategies with precision.

**Retailers**

**Ensure merchandizing and marketing practices reflect non-price-related drivers of consumer behaviour**

The research found that, while the majority of consumers purchase fruit for a number of reasons, all too often retailers encourage consumers to purchase Ontario fruit for reasons of price ahead of other factors. While this approach is partly an outcome of the political pressures that retailers face and the quality of fruit they receive, this is a relatively unsophisticated strategy which can have three undesirable outcomes. It can negatively impact the overall appreciation consumers have for Ontario fruit; it can unnecessarily reduce profit margins; and it can result in growers being pressured to harvest fruit too early, which further impacts eating quality and consumers' support for Ontario fruit.

**Improve staff training and incentive programs**

Up to 80 percent of store staff can be part-time and unskilled. This creates enormous challenges for training and motivating staff to treat produce correctly. However retailers could take a more proactive role towards training produce department staff and improving the quality of fruit purchased by consumers.

**Maintain effective cold chain practices throughout retail operations, from receipt of fruit at distribution centres through to its purchase by consumers, by improving flow**

The research identified that retailers' centralized distribution systems often operate more akin to a batch than a flow-through system. This results in inventories, unnecessary handling, and impacts quality. It also compromises the integrity of the cool chain, which adversely impacts consumers' satisfaction with Ontario fruit and increases shrinkage levels / operating costs. Improving product flow would benefit retailers and suppliers through improving quality, reducing costs, and increasing consumers' propensity to pay.

**Improve marketing and merchandizing programs through sharing a wider array of performance information with suppliers**

It is difficult for suppliers to work collaboratively with retailers if they are not willing to share performance data. The research suggests that it is common for retailers to share only minimal transactional data with suppliers, even though sharing a wider array of timely data on sales and shrinkage is a proven method for suppliers and retailers to adapt to changing market situations more successfully than at present.

**Work with key suppliers to create a Unique Value Proposition (UVP) for Ontario-grown fruit, one that appeals to consumers**

The research findings suggest that, compared with other jurisdictions, Ontario retailers are less likely to share the longer term and strategic information required to develop innovative marketing programs in conjunction with key suppliers, even though it is a proven method for improving the performance of retailers and their suppliers. Adopting a more strategic approach to business would undoubtedly help capable players innovate and establish a more effective UVP than presently exists for Ontario fruit.

**Chain-Length Opportunities**

**Establish chain-length performance measures that reflect the processes and information-sharing capabilities required to continually improve performance**

Industry performance is impacted by a series of fragmented reporting systems. Developing chain-length performance-reporting mechanisms could help address the adversarial attitudes which are arguably impacting the Ontario fruit industry's long-term competitiveness more than any other single factor.

**Motivate individuals to consider themselves part of an inter-connected value chain, and behave accordingly**

Attitudes and behaviours are slow to change. Chain-length training and awareness initiatives, supported by governance systems that establish a sense of the need for change and personal accountability (such as that mentioned above) are proven methods for encouraging changes in individuals' attitudes and behaviours, and for improving the performance of businesses situated along the entire value chain.

**Develop meaningful brand(s) through building collaborative relationships along the entire value chain(s)**

The research showed that relying on a generic 'brand' (e.g. Foodland Ontario) does not influence many consumers' purchasing habits in favour of Ontario fruit. Developing closely aligned value chains would help businesses implement the 'orchard to retail' processes required to differentiate themselves in the eyes of increasingly discerning consumers and improve the market appeal of Ontario fruit.