



Know-how for Horticulture™

**Vegetable Industry
Market Research
Analysis and Plan,
November 1998**

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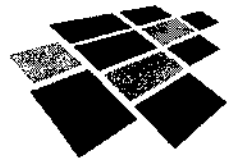
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**VEGETABLE INDUSTRY
MARKET RESEARCH
ANALYSIS AND PLAN**

NOVEMBER 1998

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INTRODUCTION

BACKGROUND

In May 1997 the Vegetable industry prepared its first national and coordinated Research and Development plan. One of the fundamental principles adopted by the planning group in developing the R & D plan, was the recognition that the industry must maintain a strong customer focus. That is, if the industry is to grow and prosper, it must strive to meet its customers' (consumers) needs and expectations – particularly in areas such as quality, size, variety, packaging, value for money etc.

Further, it was noted that comprehensive and reliable information about vegetable consumers and markets is essential in:

- Framing and executing the industry's R & D Plan;
- Devising and implementing marketing strategies (whether as an industry or by industry participants); and in
- Preparing an Industry Development Plan for Vegetables.

Therefore, that first Vegetables R & D Plan lists the following consumer-related 'Issues' to be addressed.

Iss. No.	ISSUE	PRIORITY
1.1	Consumer Information Need to know people handle, prepare and consume our products; what they think of them and what they prefer.	1
1.2	Consumer Trends Must identify consumer trends (ie. eating, lifestyle, age, family composition etc). What impact will these have on consumption of our products and how can we take advantage?	1
1.9	How to Increase Consumer Demand Need to understand the various things that can be done to increase consumer demand; and their impact on sales and profitability (eg. different packaging, part processing etc).	2
1.10	Consumer Education Determine what is needed in terms of consumer education about vegetables (types, varieties, storage & handling, preparation etc).	2
1.11	Our Industry Image – Consumers Need to understand the image of our industry in the eyes of consumers (including quality of products, pesticide usage etc).	2

2.1.2	Value Adding What are the options for value-adding to our products?	2
2.1.5	New Market & Product Identification An ongoing program to identify new markets and products is needed.	2

There was a strong feeling among the planning group that the industry did not have all the information required. Or if the research had been done and relevant information was available, that it was fragmented and not gathered together in any formal, structured and easily accessible way.

This project, is designed as the first step in dealing with the issues listed. It is designed to:

1. **Identify, source and conduct an independent evaluation of any current and recent past consumer market research.**
2. **Linked with 1, provide a summary report on all the sourced research so that industry participants can easily see what is currently available and how to access it.**
3. **Determine to what extent the sourced research meets a set of formal 'Market Research Objectives' and identify where there are gaps – thus establishing the industry's immediate market research needs.**
4. **Provide recommendations on a structured Market Research Plan that will address the gaps identified in 3 and provide the information needed to meet the established Market Research Objectives, on an ongoing basis.**

METHODOLOGY

A staged approach to the project was developed with the HRDC Program Manager and confirmed by the project Advisory Committee (see later section). The stages were:

STAGE	OUTCOMES
1. Meeting with AUSVEG Board. ▪ Preparation for and then meeting and workshop to develop input in areas such as scope, objectives, research sources etc.	<i>Notes from the meeting.</i>

<p>2. Confirm Direction Meeting with Program Mgr. to:</p> <ul style="list-style-type: none"> ▪ Confirm project approach. ▪ Confirm scope. ▪ Determine project Advisory Committee & obtain details 	<p><i>Approach, scope, and Committee all determined.</i></p>
<p>3. Objectives, Methodologies & Sources (<i>of research to be reviewed</i>).</p> <ul style="list-style-type: none"> ▪ Discuss and then prepare draft. Forward to Program Manager for distribution to Ausveg Board. ▪ Forward to and consult with Advisory Committee. ▪ Refine – ready to start. 	<p><i>Confirmed and approved Objectives for the Market Research Plan; methodology for the project; and list of potential research sources.</i></p>
<p>4. Sourcing Research Reports</p> <ul style="list-style-type: none"> ▪ Determine contact at each source, discuss project, establish if they have research and ask for reports. ▪ Forward project details as required ▪ Follow-up calls, obtain reports, collate & Catalogue. 	<p><i>All potential sources contacted.</i></p> <p><i>Reports received and catalogued.</i></p>
<p>5. Review</p> <ul style="list-style-type: none"> ▪ Review with Program Manager & Advisory Committee before next stage 	<p><i>OK to proceed</i></p>
<p>6. Audit Reports</p> <ul style="list-style-type: none"> ▪ Set up database, report formats etc ▪ Check report formats with Program Manager (phone). ▪ Review reports and prepare one-page summary of each plus attach executive summary if available. ▪ Analyse against Objectives and Methodologies. ▪ Enter all information onto database ▪ Review, edit & print reports 	<p><i>Outline of separate reports including for each, the task, researchers, scope, methodology etc.</i></p>
<p>7. Gap Analysis & Prepare Plan</p> <ul style="list-style-type: none"> ▪ Compare all studies reviewed against Objectives to identify gaps. ▪ Develop comprehensive Market Research Plan 	<p><i>Market research plan identifying what research is needed, recommended methodology, estimated cost etc.</i></p>

SCOPE

At Stage 2 it was determined that this project's scope (that is, what both the research review and market research plan would cover) would be:

1. Domestic markets (ie not export).
2. Consumer markets (ie that is consumers, both in-home and eating-out, but not institutions or food service operators).
3. Fresh vegetable (including fresh-cuts and part processed) purchasing and consumption – but not processed (such as canned or frozen) except where they are relevant as competition to fresh.
4. All vegetables under 3, except potatoes, mushrooms, tomatoes and onions.

ESTABLISHING MARKET RESEARCH OBJECTIVES

At an early stage in the project it was important to establish a clear set of Market Research Objectives. That is, objectives that could be used both:

- As a yardstick against which the research studies to be reviewed, would be measured and gaps identified; and
- As the focus for the recommended market research plan. That is, stating clearly what information the industry wants its market research to deliver.

Input to objectives was obtained from the Stage 1 meeting with the AUSVEG Board. Objectives were then framed, checked with the Program Manager and then circulated to the project Advisory Committee. Some final minor amendments were then made.

So, the 5 market research objectives established for the industry are:

OBJECTIVE	DETAIL
1. Market Trends & Influences To understand the major factors influencing vegetable consumption.	<i>What things are influencing the total market for vegetables. Consider a wide range of areas such as lifestyle, social, economic, population structure, dietary patterns etc.</i> <i>How are these factors likely to have impact in the future and what broadly are the threats and opportunities for vegetables.</i> <i>Be sure to cover the 'meal solution' trend.</i>

<p>2. Purchasers & Consumers To understand who purchases and consumes vegetables, why and when, their attitudes and preferences.</p>	<p><i>Qualitative and quantitative description of current purchasers (and consumers), their attitudes and habits.</i></p> <p><i>Include appropriate demographic (eg age, sex, socio-economic) and other information to identify market segments.</i></p> <p><i>Be sure to cover:</i></p> <ul style="list-style-type: none"> ▪ <i>What are the barriers to purchase and increased consumption.</i> ▪ <i>Understand the quality/price issue as it relates to different consumer segments.</i> ▪ <i>'Safe food' and what it means to purchasers and consumers</i> ▪ <i>Which vegetables are fashionable or 'in' and which are not and reasons why.</i>
<p>3. Competition To understand the nature of competition as it relates to Vegetables and the characteristics of Vegetables' competitors.</p>	<p><i>How do vegetables compete with each other?</i></p> <p><i>What other 'competition' is there (eg processed v/s fresh, local v/s imported)? What are their strengths & weaknesses?</i></p> <p><i>What threats to these various competitors represent to current and future vegetable sales.</i></p> <p><i>What are the price limits (or cut-off points) leading to product substitution.</i></p>
<p>4. Market/Product Opportunities To identify, describe and prioritise the opportunities for increased vegetable sales and/or profitability</p>	<p><i>How can we sell more vegetables, or sell at a higher price. Consider all options including:</i></p> <ul style="list-style-type: none"> ▪ <i>Value-adding</i> ▪ <i>Packaging</i> ▪ <i>Processing</i> ▪ <i>Convenience</i> ▪ <i>Pricing</i> ▪ <i>Branding & positioning opportunities</i> ▪ <i>Country of Origin, including identification as Australian.</i> ▪ <i>Seasonal availability influence.</i> ▪ <i>Ways to increase or influence children's consumption.</i> ▪ <i>The role of 'education' (basic home economics type)</i> ▪ <i>What influences which vegetables are fashionable or 'in' and which are not.</i> ▪ <i>Regional, State or local/smaller group opportunities</i>

<p>5. Total Market Develop a clear picture of the total vegetable market.</p>	<p><i>Identification and quantification of all major segments such as:</i></p> <ul style="list-style-type: none"> ▪ <i>Consumer v/s Food Service</i> ▪ <i>Domestic v/s export</i> ▪ <i>Supermarkets v/s other retailers</i> ▪ <i>Packaged v/s loose</i> ▪ <i>Includes an understanding of trends in each sector.</i>
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It will be seen that these are central to both the following Market Research Plan and Market Research Analysis sections of this document.

MANAGEMENT

The project has been undertaken by Richard Strategic Services and overseen by the HRDC's Program Manager for Vegetables, Jonathan Eccles.

An Advisory Committee made up of members of the AUSVEG Board has provided input along the way. The Committee was:

- Noel Harvey
- Jeff McSpedden
- Brian Newman
- Tom Schreurs
- Clive Stevens

Other input was also provided by the whole AUSVEG Board during mini-workshop session as part of their Board Meeting held in Sydney on May 12, 1998.

SECTION A

**MARKET RESEARCH PLAN
RECOMMENDATIONS**

INTRODUCTION TO THE RECOMMENDATIONS

In this section we detail our recommendations for the industry's ongoing Market Research Plan. In it we will describe:

- The research studies that need to be undertaken.
- Desired outcomes for each study.
- Recommended structure and methodology for each study.
- Likely cost.

The recommendations have been developed to:

- Fill the gaps not already answered (in meeting the Market Research Objectives).
- Provide for the industry's ongoing market research needs.
- Lay a foundation of market focussed information upon which Marketing, R & D and Industry Development plans can be prepared.

As will be seen, we have linked these recommendations directly to the agreed Objectives (as detailed earlier on page 4 of the 'Introduction' section). So, when considering the recommendations it is worthwhile referring also to the Objectives.

SUMMARY OF RECOMMENDATIONS

To summarise, our recommendations together with an indication of likely costs, are as follows:

PROJECT	DESCRIPTION	LIKELY COST
1. Major Market Trends and Influences - Special Study	To identify and describe the major (consumer related) trends and influences on food markets and food consumption, with particular emphasis on their impact on Vegetable purchase and consumption.	\$20,000 to \$30,000
2. Qualitative Consumer Research	A detailed Qualitative analysis of Vegetable purchase and consumption including particular investigation of matters specifically identified by the industry (through its Market Research Objectives) as important.	\$36,000 to \$42,000
3. Quantitative Consumer Research	Comprehensive analysis of attitudes and habits in relation to Vegetable purchasing and consumption including identification of market segments and their characteristics.	\$100,000 to \$150,000

4. Tracking Purchase and Purchasers	To provide ongoing information about who is buying which vegetables, where, in what quantities, at what price and how often	\$175,000
5. Market Structure – Special	Develop a clear picture of the total vegetable market with estimates of size, value and trends in each sector.	\$10,000 to \$20,000

AN EXPLANATION OF TERMS USED

Within these recommendations there are projects which are described as either 'qualitative', 'quantitative' and 'tracking' and so it is appropriate to provide a brief explanation of these terms.

Qualitative

Qualitative research is essentially exploratory in nature. Usually conducted as either individual or group interviews it involves selected people and seeks to uncover the important attitudes, beliefs and behaviour which drive the market.

Quantitative

In Quantitative research we are essentially aiming to measure things. So much larger numbers of people are involved to ensure that the results are statistically reliable.

Through a structured questionnaire (usually by phone, mail or face-to-face interview) we are able to determine the numbers, proportions and groupings of things such as the attitudes, beliefs and behaviour revealed at the qualitative stage.

Tracking

Tracking research provides information over a period of time. It enables an analysis of trends (for example seasonal, pricing and shifts in purchaser profile). It can also provide a prompt indicator of the impact of particular influences (such as an advertising campaign, imported product, competitor activity etc).

Traditionally these three forms of research work hand-in-hand to reveal the full and accurate market research picture.

A WORD ABOUT COSTS

We imagine that the total cost of the market research recommended here may come as a shock to some in the industry. But the reality is that quality and comprehensive market research, accompanied by good interpretation and sound strategic recommendations, is not inexpensive. The industry's direct competitors, be they processed foods, fast food, meal solutions or whatever will use the power of good research to guide their strategies. So too should fresh vegetables.

In an industry which has production conservatively estimated to be valued at \$1.6 billion (farm gate), an investment at this stage of say \$420,000 (ie 0.03% of farm gate value) to provide vital market and consumer information upon which short and long term plans can be based, seems very worthwhile.

RECOMMENDATION 1

MAJOR MARKET TRENDS AND INFLUENCES - SPECIAL STUDY

TO IDENTIFY AND DESCRIBE THE MAJOR (CONSUMER RELATED) TRENDS AND INFLUENCES ON FOOD MARKETS AND FOOD CONSUMPTION, WITH PARTICULAR EMPHASIS ON THEIR IMPACT ON VEGETABLE PURCHASE AND CONSUMPTION.

OVERVIEW

There are a number of 'macro' trends which are having an increasing influence on Australian consumer markets. Some are demographic (such as the ageing population or the increase in single-parent families); some are economic (such as the strong growth of the hospitality industry) and some are behavioural (such as the trend to increased away-from-home eating).

It is vital that an industry of the size and value of Vegetables, have a good understanding of these trends, their impact now and their implications for future food consumption patterns. This will help in identifying opportunity areas and in longer-term strategic planning.

SPECIFIC RESEARCH OUTCOMES

Outcome	Addressing
An analysis of the various trends plus specific comment on their current and projected future impact on vegetable purchasing and consumption.	Objective 1
Includes identification of broad areas of possible threat or opportunity that could be more specifically probed in Qualitative and Quantitative consumer research (see Recommendations 2 and 3)	

SUGGESTED METHODOLOGY

A very considerable amount of work has already been done in this area by other organisations and researchers (including government, social and private research companies).

Therefore this project could involve:

1. Some form of workshop (not necessarily of Vegetable industry people) to identify the issues and trends for further analysis.
2. Desk research (ie sourcing and analysing the studies undertaken by others).
3. Possibly extended interviews with particular professionals with expertise in the areas identified in 1.
4. Preparation of a report and specific recommendations for the industry's consideration.

REPORTING

Two reports should be prepared.

- The first would summarise the outcomes of the Stage 1 workshop and propose the scope of Stages 2 & 3.
- The second, at the completion of Stage 4.

It is very important that this study be focussed on identifying what the industry needs to do to cater for, or capitalise on the trends analysed. So the industry does not just want a report which describes the trends. A clear detailing of implications and provision of specific recommendations is very important.

COST

A budget of \$20-30,000 should be allowed. Bear in mind that it may be necessary to purchase specific syndicated research studies.

TIMING AND FREQUENCY

This is 'foundation' work and has implications for other studies detailed in these recommendations. Therefore we recommend it be undertaken as soon as possible (say early 1999).

The project should take no more than 3 months.

A general overview such as this is worthwhile conducting say every 10 years.

RECOMMENDATION 2

QUALITATIVE CONSUMER RESEARCH

A DETAILED QUALITATIVE ANALYSIS OF VEGETABLE PURCHASE AND CONSUMPTION INCLUDING PARTICULAR INVESTIGATION OF MATTERS SPECIFICALLY IDENTIFIED BY THE INDUSTRY (THROUGH ITS MARKET RESEARCH OBJECTIVES) AS IMPORTANT.

OVERVIEW

This review notes that the industry has quite a deal of good Qualitative consumer information currently available (particularly through the work done by QFVG). However this work was done in 1995 and is probably nearing the end of its value (in terms of describing 'current' consumer behaviour and attitudes.

Furthermore, the industry's Market Research Objectives seek to specifically understand a number of issues that have not been adequately covered in recent studies. Among these are:

- The barriers and triggers to increased purchase and consumption.
- Which vegetables are fashionable and which not, and why.
- Consumers' understanding of and attitudes to 'safe' food.
- The quality v/s price issue and trade-off.
- The nature of competition as it relates to vegetables including (but not only) issues such as processed v/s fresh; local v/s imported; price limits and substitution
- Market and product opportunities in areas detailed in Objective 4

Also, we have noted that no recent work has been done to date to identify and quantify market (purchaser) segments according to any criteria other than age or life cycle stage. Segmentation based on consumers' habits (ie purchasing and consumption) and attitudes is very important for future strategic planning – particularly marketing.

This study would seek to update our knowledge and investigate the specific issues noted.

SPECIFIC RESEARCH OUTCOMES

Outcomes

A detailed qualitative understanding of consumers habits and attitudes in relation to vegetables. Objectives 1, 3, 4

Clear recommendations of matters (and their priority) to be covered in flow-on Quantitative research.

SUGGESTED METHODOLOGY

- Focus group discussions will be the most appropriate methodology. It allows plenty of opportunity for cross flow of ideas and development/discussion of issues.
- Twelve (12) focus groups should provide adequate coverage and depth of input.
- Groups should be composed both on household composition/life cycle factors (eg *Young couples or single parents with children under 15 still living at home*) and also their impression of current trend in fresh vegetable consumption in the household (eg *People in the household are eating more vegetables than say a year ago*)
- Groups need only be conducted in 3-4 State capitals, though for 'political' reasons it may be appropriate to cover more.
- Ensure that discussion covers individual vegetable types as well as vegetable groups (researchers might refer to the major study conducted in 1990 as a guide).

REPORTING

Standard qualitative reporting would be required. The researcher should be instructed to ensure that, wherever possible, findings are reported in a way that they relate directly to the stated Market Research Objectives.

The report should also specify areas for particular emphasis in the subsequent Quantitative research (see next Recommendation)

Note that strategies should be developed to appropriately communicate the results of the research to industry participants.

COST

A budget of \$36,000 to \$42,000 (ie \$3,000 to \$3,500 per group) should be allowed. This should cover all research costs (including researcher travel and accommodation, group recruiting etc).

Note that this cost estimate does not include any provision for industry or HRDC overall management of the project and any associated costs.

TIMING AND FREQUENCY

The most recent comprehensive study is now some 3 years old. We would recommend that this project be undertaken in mid 1999 (after the 'Trends and Influences' study (see Recommendation 1).

Similar comprehensive qualitative research should be repeated approximately every 5 years.

RECOMMENDATION 3

QUANTITATIVE CONSUMER RESEARCH

COMPREHENSIVE ANALYSIS OF ATTITUDES AND HABITS IN RELATION TO VEGETABLE PURCHASING AND CONSUMPTION INCLUDING IDENTIFICATION OF MARKET SEGMENTS AND THEIR CHARACTERISTICS.

OVERVIEW

As with its qualitative research, the industry does have available some fairly comprehensive quantitative data (through 2 studies conducted for QFVG). However this data is some 3 years old now and may not be reflecting the true picture today.

Furthermore, the QFVG studies look at capital city consumers only and we consider it essential that the industry have a good overview of the total population of vegetable buyers/consumers.

Also, segmentation of the vegetable market is going to be critical in the development of future marketing and other strategies; as is looking at threats and opportunities, by vegetable type. Neither of these have been covered adequately in recent research.

Lastly, as noted in Recommendation 2, there are a number of specific issues covered in the Market Research Objectives which need to be investigated. These must be covered both qualitatively (Recommendation 2) and quantitatively through this study.

Therefore, this study is designed to build on the two previous projects (Recommendations 1 & 2) and provide solid strategic recommendations to assist industry planning.

SPECIFIC RESEARCH OUTCOMES

Identification and description of relevant market segments, their characteristics and size. Objective 2

Comprehensive quantitative understanding of consumers' attitudes and habits in relation to Vegetables and identification of particular characteristics in relation the identified segments. Objective 2

A clear understanding of consumers' usage and attitudes by vegetable type – providing an insight to each vegetable's current positioning, strengths, weaknesses, opportunities and threats. Objectives 2, 3 & 4

SUGGESTED METHODOLOGY

- A considerable amount of information needs to be gathered and so the most appropriate methodologies would be either face-to-face interviews or by telephone. However to maximise coverage (geographically); maintain quality control; and ensure a better random selection of interviewees we recommend a telephone survey approach.
- In view of the amount of data to be collected it will be appropriate to split the sample (ie not ask all questions of all people) – thus keeping each interview to a manageable length and minimising interviewee fatigue.
- Therefore a national random sample of 3,000 households is recommended.

REPORTING

Good preparation will be essential with:

- A thorough review of the questionnaire (to ensure it will generate the information sought) and
- Determination beforehand of just what is to be reported and how. This will streamline the researchers task and minimise the need to go back to seek subsequent analyses at possible additional cost.

The successful researcher should be encouraged to make good use of tables and graphs to aid in understanding and interpretation of the information gathered.

Note that strategies should be developed to appropriately communicate the results of the research to industry participants.

COST

A budget of \$100 to \$150,000 (should be allowed. This should cover all research costs (including data input analysis and reporting).

Note that this cost estimate does not include any provision for industry or HRDC overall management of the project and any associated costs.

TIMING AND FREQUENCY

We would recommend that this project be undertaken in mid 1999 (immediately after the Qualitative study - see Recommendation 1).

Similar comprehensive quantitative research should be repeated approximately every 5 years.

RECOMMENDATION 4

TRACKING PURCHASE AND PURCHASERS

TO PROVIDE ONGOING INFORMATION ABOUT WHO IS BUYING WHICH VEGETABLES, WHERE, IN WHAT QUANTITIES, AT WHAT PRICE AND HOW OFTEN

OVERVIEW

Qualitative research undertaken to date takes a 'snapshot' of consumer behaviour at a particular point in time. And in terms of accuracy there are some limitations as it relies largely on what the interviewers say they do, rather than reporting actual behaviour.

A tracking study such as the one recommended here can provide a wealth of real, accurate and timely data on such things as:

- What types of households are buying which vegetables and who in the household did the purchasing.
- When purchased – day & date
- Where purchased – type of outlet
- Volume purchased
- Price paid
- What else was purchased at the same time.
- Seasonality and the relationship with price.

And all these factors can be cross-tabulated and reported in different ways.

The point here is that for the first time ever, the Vegetable industry will have available to it, reliable data that maps exactly what is happening with vegetable purchasing, over time. This is the same sort of information that other food manufacturers and producers use all the time to assist in developing marketing and product development strategies.

SPECIFIC RESEARCH OUTCOMES

Comprehensive and up-to-date data on actual purchasing.	Objectives 2 & 3
The ability to analyse this data by customer demographics and build appropriate profiles.	Objective 2
The ability to clearly identify and track shares by retailer type.	Industry Development Strategies
The ability to track and analyse the actual prices paid by consumers.	Objectives 2, 3 & 4.

SUGGESTED METHODOLOGY

There are a number of ways to go about collecting this sort of data and to date all have been either too costly or have had some limitations in their methodology and therefore results accuracy.

One company, AC Nielsen, has recently introduced fresh fruit and vegetables to their already popular 'Homescan' product. This methodology uses an Australia-wide panel of households (representative of the total population) and tracks all their grocery and fresh food purchases by means of electronic scanning and data download direct from homes.

The methodology is too detailed to explain here, however it is appropriate to point out that it has been widely used (by grocery manufacturers and supermarket chains) for other grocery items for some years now. Nielsens has fresh produce well established as part of their 'Homescan' research product in the UK and US.

We are aware that supermarket chains in Australia are already accessing Homescan fresh produce data.

REPORTING

Reports are structured to meet exactly the needs of each client and can be provided electronically or printed within days of the data being collected.

Once again, it would be critical to have strategies in place to promptly report the findings and implications to industry participants.

COST

A budget of approximately \$175,000 would be required to cover all vegetables except Mushrooms, Potatoes, Tomatoes and Onions – though we imagine that cost-sharing with these industries may lead to some overall savings.

In view of the significance of the business and as this is a new research product being established in Australia, there may be room to negotiate on the price or enhanced services.

TIMING AND FREQUENCY

Homescan is currently being purchased by 2 or 3 fruit industries through the AHC. We suggest it would be appropriate to evaluate the product and their satisfaction with it, before committing. This evaluation could take place in June 1999 with possible commencement from say July 1.

RECOMMENDATION 5

MARKET STRUCTURE SPECIAL STUDY

DEVELOP A CLEAR PICTURE OF THE TOTAL VEGETABLE MARKET WITH ESTIMATES OF SIZE, VALUE AND TRENDS IN EACH SECTOR.

OVERVIEW

To date estimates of the total size, structure and segments of the Vegetable market have been largely ad-hoc. For example:

- It is not known what proportion of vegetable sales go to the huge and growing food service sector.
- Nor is there a clear idea of the current impact and trends of supermarket sales.
- Nor is there much information at all about what volume (and maybe price/quality) of retail sales is as loose, or select packaged or bulk packed.

Indeed there appears to have been no definitive study to provide this sort of information that the industry might use in overall strategic planning, political lobbying etc. It is basic information that most industries would have at their fingertips.

This project seeks to fill, as far as possible, the information gaps so that all in the industry have a common understanding of the situation and so that planning can be based on information that is considered to be reliable, current and as accurate as possible.

SPECIFIC RESEARCH OUTCOMES

Outcome	Addressing
A description (with supporting data) of the total vegetable market size and structure together with estimates of various segments size and value.	Objective 5

SUGGESTED METHODOLOGY

- This project will use a combination of methodologies. Basically the task involves accessing the latest or best possible information and then pulling it together and presenting in an easy-to-understand format.
- A degree of desk research will be needed – identifying and reviewing the data, reports and information currently available. Indeed some of the information will come from other studies covered by these recommendations.
- Then, we imagine it will be necessary to supplement this with a series of personal interviews and maybe some specific, confidential research.
- The process of collecting data and method of analysis should be clearly documented so that the exercise can be repeated, using similar methodology,

REPORTING

Understanding how the information is to be used will help in designing the report(s) required. However for tasks such as this, good use should be made of graphs and tables.

The information once published will be of very great interest both inside and outside the industry. Therefore consideration must be given to how it will be disseminated and used to the industry's advantage.

COST

Assigning a budget to a project like this is extremely difficult because the cost involved is going to be directly related to the amount of time it takes to locate, access and analyse the relevant data.

However we estimate a budget of \$10-20,000 would be appropriate

TIMING AND FREQUENCY

The project could commence virtually straight away with completion say 6 months later.

Then, it would be appropriate to repeat the exercise every 3-5 years.

SECTION B

**MARKET RESEARCH
ANALYSIS**

INTRODUCTION

SOURCING RESEARCH STUDIES

In attempting to identify and source research studies that could be included in this review it was decided to cast the net fairly widely. We had a strong suspicion that the Vegetable industry itself had not conducted recent consumer/market research but felt that other groups associated with the industry may have done so.

So, initially we contacted:

- All State government Departments of Agriculture, or Primary Industries etc.
- The central wholesale markets in each State.
- Three major supermarket chains
- Australian Consumers' Association
- Australian Horticultural Corporation
- Australian Mushroom Growers Association.
- Australian Supermarket Institute
- Horticultural Research & Development Corporation
- Queensland Fruit & Vegetable Growers
- Rural Industries R & D Corporation
- Queensland Horticulture Institute

After this first line of inquiry it was then decided to widen the search to also include each of the State departments of health.

In each case, we asked if they had carried out any consumer or market research in say the last 5-6 years into (or in some way related to) either:

- Consumer purchasing, habits and attitudes in relation to fresh vegetables.
- Establishing the size, segments and structure of the total vegetable market.

On many occasions it was necessary to make a number of calls to an organisation to finally get in touch with the person most able to answer our queries. Also often, if they were unable to assist they would refer us on to another organisation. We went around in circles a number of times!

SOME COMMENTS ON PAST RESEARCH

From all our inquiries it appears that only a limited amount of research (of the type we were seeking) has been recently conducted. With the exception of the QFVG, consumer and market research seems not to have been a priority for the industry or associated organisations. This is not surprising though, given that marketing and a consumer focus have not been the primary interest of most groups and organisations.

As will be seen in the following reports, there are a number of studies that have obviously been commissioned to meet specific research objectives (for example, measuring the effectiveness of a health department campaign promoting fruit and vegetable consumption). And some of these do contain information which starts to answer some of our market research objectives.

But as a general observation, it must be said that there are many gaps in our knowledge which must be filled if the industry is to base its market-focused plans on sound, up-to-date information.

MARKET RESEARCH OBJECTIVES AND REVIEWER'S COMMENTS

The industry's market research objectives form an integral part of the following two reports and while they are detailed at the start of this document, it is appropriate to re-state them on the following page, as introduction. We have also shown the 'Reviewers Comments' so that it is easy to see what has been done and what is still needed.

OBJECTIVE	DETAIL	REVIEWERS COMMENTS
<p>1. Market Trends & Influences To understand the major factors influencing vegetable consumption.</p>	<p>What things are influencing the total market for vegetables. Consider a wide range of areas such as lifestyle, social, economic, population structure, dietary patterns etc.</p> <p>How are these factors likely to have impact in the future and what broadly are the threats and opportunities for vegetables.</p> <p>Be sure to cover the 'meal solution' trend.</p>	<p><i>This Objective seeks to understand the - macro picture looking at the broad factors influencing food purchase and consumption patterns and in particular, for vegetables.</i></p> <p><i>Some of the studies reviewed provide a limited amount of information in some specific areas(such as for 'Asian Vegetables') but overall there is not enough data to provide the comprehensive overview sought. Furthermore, where studies do have some data, they do not go on to provide comment on the implications of the trends/factors noted; any threats or opportunities analysis; or strategic recommendations for the industry to consider.</i></p> <p><i>We believe that much of the information and direction sought in this objective is available through a combination of studies conducted by or on behalf of various and diverse organisations. What would be needed is a degree of 'bench research' to identify and review the studies and draw out the findings relevant to vegetables. Then, against a background of knowledge of the Vegetable industry, the relevant implications, threats, opportunities should be identified and strategic recommendations developed.</i></p>

OBJECTIVE	DETAIL	REVIEWERS COMMENTS
<p>2. Purchasers & Consumers To understand who purchases and consumes vegetables, why and when, their attitudes and preferences.</p>	<p>Qualitative and quantitative description of current purchasers (and consumers), their attitudes and habits. Include appropriate demographic (eg age, sex, socio-economic) and other information to identify market segments.</p> <p>Be sure to cover:</p> <ul style="list-style-type: none"> ▪ What are the barriers to purchase and increased consumption. ▪ Understand the quality/price issue as it relates to different consumer segments. ▪ 'Safe food' and what it means to purchasers and consumers ▪ Which vegetables are fashionable or 'in' and which are not and reasons why. 	<p><i>Studies 5,6 and 9 (commissioned by Queensland Fruit & Vegetable Growers) are reasonably recent and thorough qualitative and quantitative analyses of consumer markets. We believe they go quite some way to addressing this objective and are an important resource for the industry. They were conducted only in Sydney and Brisbane, however we do not see this as a significant shortcoming. Information gleaned from those two capitals should be a reasonable indicator of consumer behaviour and attitudes in the other capital cities.</i></p> <p><i>Our only reservation about these three studies is that they do not cover any non-capital city consumers - and as with other consumer research studies, we could well find that behaviour and attitudes in regional areas differs from that in capital cities. So the key question here is, how much does the industry feel it needs to gather information in relation to consumers in regional Australia. Or more importantly, to what extent might the availability of such information modify industry plans and strategies.</i></p> <p><i>Looking again at the objective and the reviewed studies, it is surprising that there appears to have been no attempt (other than Study 14 which is now out of date) to segment the vegetable purchasers/consumers by any criteria other than by broad demographics. Quantitative market segmentation based on behaviour and attitudes, as we suggest, an essential pre-requisite for the development of marketing and industry development plans.</i></p> <p><i>Further, the objective specifically seeks information in relation to:</i></p> <ol style="list-style-type: none"> 1. <i>The barriers and triggers to increased purchase & consumption.</i> 2. <i>Which vegetables are fashionable and which not - and why.</i> 3. <i>Consumers understanding and attitudes to 'safe food'.</i> 4. <i>The quality v/s price issue and trade-off.</i> <p><i>None of these four specific areas is covered in any detail in the studies reviewed.</i></p>

OBJECTIVE	DETAIL	REVIEWERS COMMENTS
<p>3. Competition To understand the nature of competition as it relates to Vegetables and the characteristics of Vegetables' competitors.</p>	<p>How do vegetables compete with each other?</p> <p>What other 'competition' is there (eg processed v/s fresh, local v/s imported)? What are their strengths & weaknesses?</p> <p>What threats to these various competitors represent to current and future vegetable sales.</p> <p>What are the price limits (or cut-off points) leading to product substitution.</p>	<p><i>There is very little relevant and recent information in the studies to address this objective. The only data really appears to be at the macro level, say looking at total volumes of an imported vegetable compared with local production.</i></p> <p><i>As already identified by the industry (through the framing of this objective) a thorough understanding of competition, from the purchaser/consumer's perspective, is important in understanding how best to market vegetables. Studies 5, 6 and 9 (commissioned by QFVG) do this to a limited extent - but not in any great detail and not with any assessment of the threats and opportunities posed by vegetables' competition.</i></p> <p><i>For this objective to be properly answered, further research is needed</i></p>

OBJECTIVE	DETAIL	REVIEWERS COMMENTS
<p>4. Market/Product Opportunities To identify, describe and prioritise the opportunities for increased vegetable sales and/or profitability</p>	<p>How can we sell more vegetables, or sell at a higher price. Consider all options including:</p> <ul style="list-style-type: none"> ▪ Value-adding and Packaging ▪ Processing ▪ Pricing and Convenience ▪ Branding & positioning opportunities ▪ Country of Origin, including identification as Australian. ▪ Seasonal availability influence. ▪ Ways to increase or influence children's consumption. ▪ The role of 'education' (basic home economics type) ▪ What influences which vegetables are fashionable or 'in' and which are not. ▪ Regional, State or local/smaller group opportunities 	<p><i>Quite a number of reports mention areas or strategies that are considered opportunities for increased sales or consumption. However, with the exception of reports 19 and 20 (on Asian Vegetables) there is insufficient depth or detail upon which the industry or its participants could plan business development strategies.</i></p> <p><i>The two Asian Vegetables studies, when combined, do however provide a good summary of opportunities (and the relevant issues) in that product group.</i></p> <p><i>We would note that the very comprehensive 'Consumer Study of Fruit & Vegetables' (Report 14, 1990) does imply numerous opportunities for increased sales and consumption. And its approach of looking at the market by each separate vegetable type, makes it easy to see what the situation was when the study was conducted and what might be done to increase consumption of that vegetable. The significant problem however is that the study is now almost 10 years old and so much has changed in markets and products in that time, that the results and recommendations would no longer be reliable.</i></p>
<p>5. Total Market Develop a clear picture of the total vegetable market.</p>	<p>Identification and quantification of all major segments such as:</p> <ul style="list-style-type: none"> ▪ Consumer v/s Food Service ▪ Domestic v/s export ▪ Supermarkets v/s other retailers ▪ Packaged v/s loose ▪ Includes an understanding of trends in each sector. 	<p><i>The ABS data contained in Report 2 (Australian Horticultural Statistics) provides an overview of total production. And reports 19 and 20 which deal with Asian Vegetables provide a good overview of that particular segment.</i></p> <p><i>But overall, the industry is unable to answer this objective. The information needed in this most important area is just not available. Or if it is, it is not being collected, interpreted and reported.</i></p> <p><i>It would seem to us that having a thorough understanding of the areas covered by this objective is an essential pre-requisite to preparation of the industry's Development, Marketing or R & D Plans.</i></p>

REPORT BY OBJECTIVE

The following report details what information is available, in the reviewed studies, to answer each of the industry's agreed market research objectives.

STRUCTURE OF THIS REPORT

There are five sections to this report, one dealing with each objective. In each section:

- The 'Objective' is listed.
- Then follows the name of each of the reviewed research studies together with its date (to provide an indication of how up-to-date any information it may contain is), plus our comment on the extent to which the report addresses the objective.
- A final 'Reviewers Comments' section which provides an overview of the total information available and the extent to which it provides the information sought in the objective.

Objective 1

Market Trends & Influences

To understand the major factors influencing vegetable consumption.

What things are influencing the total market for vegetables. Consider a wide range of areas such as lifestyle, social, economic, population structure, dietary patterns etc.

How are these factors likely to have impact in the future and what broadly are the threats and opportunities for vegetables.

Be sure to cover the 'meal solution' trend

Research Reports

- 1 Public Reaction to Victoria's "2 Fruit'n 5 Veg Everyday" Campaign and Reported Consumption of Fruit and Vegetables. 01-Aug-98

(*'Preventive Medicine'* - Not yet published)

No relevant information

- 2 The Australian Horticultural Statistics Handbook 97/98 01-Jan-98

Statistical data on production, exports and imports provides some overall trend information. No interpretation or analysis though.

- 3 "Australia Fresh" Qualitative Positioning and Brand Research 01-Sep-97

An extract from "Domestic Australia Fresh Consumer Research" 1997.

No relevant information

- 4 Public Health Nutrition Campaign to Promote Fruit and Vegetables 01-Jan-96

No relevant information

- 5 Vegetables - Consumer Attitudes and Marketing Strategy
QUALITATIVE Research Report 01-Oct-95

Some good consumer-based information is included.

6 Vegetables - Menu and Market Study Emphasis on Heavy Produce QUANTITATIVE Research Report	01-Mar-95
Little relevant information	
7 Vegetables - Wholesaler & Retailer Attitudinal Research QUALITATIVE Research Report	01-Jul-95
Some observations on the overall trends in retailing (i.e. supermarkets v/s independents and direct purchase v/s central markets) as well as observations on future developments in this area. Note however that the research is limited to Queensland.	
8 Vegetables - Food Service Industry Study QUALITATIVE Research Report	01-Jul-95
Some good insights to (not quantified) into the structure and trends in the food service industry.	
9 Vegetables - Menu and Market Study QUANTITATIVE Research Report	01-Mar-95
Little relevant information	
10 Consumer Consumption Patterns, Purchasing Habits and Attitudes to Fruit and Vegetables	01-Oct-94
No relevant information	
11 "Opportunities and Analysis for Australian Vegetables in Specific Markets" - still being edited not yet published	01-Jun-98
Results of study not yet published	
12 Apparent Consumption of Foodstuffs Australia 1994-95 and 1995-96 ABS No. 4306.0	01-Apr-98
No relevant information	
13 National Nutrition Survey and Selected Highlights Australia ABS No. 1995 4802.0	22-Dec-97
No relevant information	

14 Consumer Study of the Fruit and Vegetable Market 1990	30-Jun-90
HRDC Project No. HG808	
No relevant information	
<hr/>	
15 The Attitudes of Independent Fruit and Vegetable Retailers towards Skilling and Promotion.	30-Sep-93
HRDC Project No. VG205	
No relevant information	
<hr/>	
16 Review of Consumer Market Research in the Fruit & Vegetable Industries	30-Nov-94
HRDC Project No. HG323	
Some very general information, dating back to 1991 but possibly still relevant.	
<hr/>	
17 Complete Reference to the Rural Industry and Australian Agriculture	01-Jan-97
1997-98 6th Edition	
No relevant information	
<hr/>	
18 Emerging Trends in the International Vegetable Industry	01-Aug-97
ExpHORT 2000 Publication No 14	
Some useful and recent observations in this area, though primarily based on observations of US markets.	
<hr/>	
19 Australian Asian Vegetables - Assessment of Market Demand in Australia	01-Jan-96
Some useful information in relation to Asian vegetables(only).	
<hr/>	
20 Audit of the Australian Asian Vegetables Industry	01-Jan-95
No relevant information.	

Reviewers Comments

This Objective seeks to understand the - macro picture looking at the broad factors influencing food purchase and consumption patterns and in particular, for vegetables.

Some of the studies reviewed provide a limited amount of information in some specific areas(such as for 'Asian Vegetables') but overall there is not enough data to provide the comprehensive overview sought. Furthermore, where studies do have some data, they do not go on to provide comment on the implications of the trends/factors noted; any threats or opportunities analysis; or strategic recommendations for the industry to consider.

We believe that much of the information and direction sought in this objective is available through a combination of studies conducted by or on behalf of various and diverse organisations. What would be needed is a degree of 'bench research' to identify and review the studies and draw out the findings relevant to vegetables. Then, against a background of knowledge of the Vegetable industry, the relevant implications, threats, opportunities should be identified and strategic recommendations developed.

Objective 2

Purchasers & Consumers

To understand who purchases and consumes vegetables, why and when, their attitudes and preferences.

Qualitative and quantitative description of current purchasers (and consumers), their attitudes and habits. Include appropriate demographic (e.g. age, sex, socio-economic) and other information to identify market segments.

Be sure to cover:

- * What are the barriers to purchase and increased consumption.*
- * Understand the quality/price issue as it relates to different consumer segments.*
- * 'Safe food' and what it means to purchasers and consumers*
- * Which vegetables are fashionable or 'in' and which are not and reasons why.*

Research Reports

- 1 Public Reaction to Victoria's "2 Fruit'n 5 Veg Everyday" Campaign and Reported Consumption of Fruit and Vegetables. 01-Aug-98

(*'Preventive Medicine' - Not yet published*)

Quite a deal of statistical data on actual levels of fruit & vegetable consumption (in servings, not by type or variety) compared with the amounts respondents felt they should be consuming.

Also covers the role and influence of various forms of promotion on fruit & vegetable consumption.

- 2 The Australian Horticultural Statistics Handbook 97/98 01-Jan-98

No relevant data

- 3 "Australia Fresh" Qualitative Positioning and Brand Research 01-Sep-97

An extract from "Domestic Australia Fresh Consumer Research" 1997.

A good general look at consumers' habits, attitudes and preferences in relation to fruit & vegetable purchasing. Particular emphasis on the issues of branding in the fruit & vegetable markets and the importance of country of origin identification.

4 Public Health Nutrition Campaign to Promote Fruit and Vegetables 01-Jan-96

No relevant information

5 Vegetables - Consumer Attitudes and Marketing Strategy 01-Oct-95
QUALITATIVE Research Report

A very comprehensive qualitative insight. Contains much useful information.

6 Vegetables - Menu and Market Study 01-Mar-95
Emphasis on Heavy Produce
QUANTITATIVE Research Report

Contains a considerable amount of good, quantitative information. But covers households in Sydney & Brisbane only. Therefore, is probably relevant to capital city markets but may not be indicative of consumers in regional areas.

Note also that the consumption data is a 'snapshot' of one week in the research period (March-April) so takes no account of seasonal differences.

Contains no segmentation of the market by behaviour or attitudes - only by traditional demographic segments.

7 Vegetables - Wholesaler & Retailer Attitudinal Research 01-Jul-95
QUALITATIVE Research Report

Some very limited information on what wholesalers and retailers see as current and future consumer trends/preferences.

Note however that the research is limited to Queensland.

8 Vegetables - Food Service Industry Study 01-Jul-95
QUALITATIVE Research Report

Some qualitative assessment of food service customers (consumers) preferences, habits and attitudes overall and, to some extent, in relation to vegetables.

9 Vegetables - Menu and Market Study 01-Mar-95
QUANTITATIVE Research Report

Contains a considerable amount of good, quantitative information. But covers households in Sydney & Brisbane only. Therefore, is probably relevant to capital city markets but may not be indicative of consumers in regional areas.

Note also that the consumption data is a 'snapshot' of one week in the research period (March-April) so takes no account of seasonal differences.

Contains no segmentation of the market by behaviour or attitudes - only by traditional demographic segments.

10 Consumer Consumption Patterns, Purchasing Habits and Attitudes to 01-Oct-94
Fruit and Vegetables

Some very limited information - but note that it relates only to customers of one supermarket in Perth WA and therefore can not be considered nationally representative.

11 "Opportunities and Analysis for Australian Vegetables in Specific Markets" - still being edited not yet published **01-Jun-98**

Results of study not yet published

12 Apparent Consumption of Foodstuffs Australia 1994-95 and 1995-96 **01-Apr-98**
ABS No. 4306.0

No relevant information

13 National Nutrition Survey and Selected Highlights Australia **22-Dec-97**
ABS No. 1995 4802.0

Statistical information on overall vegetable consumption by sex and age group. Much more detailed information would be available in the full study.

14 Consumer Study of the Fruit and Vegetable Market 1990 **30-Jun-90**
HRDC Project No. HG808

A considerable amount of qualitative and quantitative information on purchase and usage, however it is almost 10 years old and so is of very little relevance to the development of strategies today.

15 The Attitudes of Independent Fruit and Vegetable Retailers towards Skilling and Promotion. **30-Sep-93**
HRDC Project No. VG205

No relevant information

16 Review of Consumer Market Research in the Fruit & Vegetable Industries **30-Nov-94**
HRDC Project No. HG323

Some information but the relevance is questionable as it is some 8 years old.

17 Complete Reference to the Rural Industry and Australian Agriculture **01-Jan-97**
1997-98 6th Edition

No relevant information

18 Emerging Trends in the International Vegetable Industry **01-Aug-97**
ExpHORT 2000 Publication No 14

No relevant information

No relevant information

No relevant information

Reviewers Comments

Studies 5,6 and 9 (commissioned by Queensland Fruit & Vegetable Growers) are reasonably recent and thorough qualitative and quantitative analyses of consumer markets. We believe they go quite some way to addressing this objective and are an important resource for the industry. They were conducted only in Sydney and Brisbane, however we do not see this as a significant shortcoming. Information gleaned from those two capitals should be a reasonable indicator of consumer behaviour and attitudes in the other capital cities.

Our only reservation about these three studies is that they do not cover any non-capital city consumers - and as with other consumer research studies, we could well find that behaviour and attitudes in regional areas differs from that in capital cities. So the key question here is, how much does the industry feel it needs to gather information in relation to consumers in regional Australia. Or more importantly, to what extent might the availability of such information modify industry plans and strategies.

Looking again at the objective and the reviewed studies, it is surprising that there appears to have been no attempt (other than Study 14 which is now out of date) to segment the vegetable purchasers/consumers by any criteria other than by broad demographics. Quantitative market segmentation based on behaviour and attitudes, is we suggest, an essential pre-requisite for the development of marketing and industry development plans.

Further, the objective specifically seeks information in relation to:

- 1. The barriers and triggers to increased purchase & consumption.*
- 2. Which vegetables are fashionable and which not - and why.*
- 3. Consumers understanding and attitudes to 'safe food'.*
- 4. The quality v/s price issue and trade-off.*

None of these four specific areas is covered in any detail in the studies reviewed.

Objective 3

Competition

To understand the nature of competition as it relates to Vegetables and the characteristics of Vegetables' competitors.

How do vegetables compete with each other?

What other 'competition' is there (e.g. processed v/s fresh, local v/s imported)? What are their strengths & weaknesses?

What threats to these various competitors represent to current and future vegetable sales.

What are the price limits (or cut-off points) leading to product substitution.

Research Reports

- 1 Public Reaction to Victoria's "2 Fruit'n 5 Veg Everyday" Campaign and Reported Consumption of Fruit and Vegetables. 01-Aug-98

(*'Preventive Medicine' - Not yet published*)

No relevant information

- 2 The Australian Horticultural Statistics Handbook 97/98 01-Jan-98

Statistical data on imports provides some insight to competition from overseas product. No interpretation or analysis though.

- 3 "Australia Fresh" Qualitative Positioning and Brand Research 01-Sep-97

An extract from "Domestic Australia Fresh Consumer Research" 1997.

Deals with imported product competition and consumer perceptions/attitudes as well as the relative merits (from the consumers' perspective) of local v/s imported.

- 4 Public Health Nutrition Campaign to Promote Fruit and Vegetables 01-Jan-96

No relevant information

- 5 Vegetables - Consumer Attitudes and Marketing Strategy
QUALITATIVE Research Report 01-Oct-95

Some limited but useful qualitative information about vegetables' competition generally.

6 Vegetables - Menu and Market Study Emphasis on Heavy Produce QUANTITATIVE Research Report	01-Mar-95
<p>Some limited coverage of vegetables' competition from a number of different aspects, with particular emphasis on Rice and Pasta s competition or accompaniments to vegetables.</p>	
7 Vegetables - Wholesaler & Retailer Attitudinal Research QUALITATIVE Research Report	01-Jul-95
<p>No relevant information</p>	
8 Vegetables - Food Service Industry Study QUALITATIVE Research Report	01-Jul-95
<p>Limited information in relation to food service operators choice of vegetables and why.</p>	
9 Vegetables - Menu and Market Study QUANTITATIVE Research Report	01-Mar-95
<p>Some limited coverage of vegetables' competition from a number of different aspects.</p>	
10 Consumer Consumption Patterns, Purchasing Habits and Attitudes to Fruit and Vegetables	01-Oct-94
<p>No relevant information</p>	
11 "Opportunities and Analysis for Australian Vegetables in Specific Markets" - still being edited not yet published	01-Jun-98
<p>Results of study not yet published</p>	
12 Apparent Consumption of Foodstuffs Australia 1994-95 and 1995-96 ABS No. 4306.0	01-Apr-98
<p>No relevant information</p>	
13 National Nutrition Survey and Selected Highlights Australia ABS No. 1995 4802.0	22-Dec-97
<p>Some statistical data on consumption of competitor products such as rice & pastas.</p>	

14 Consumer Study of the Fruit and Vegetable Market 1990 **30-Jun-90**

HRDC Project No. HG608

Little relevant information and any that is included is outdated and therefore unreliable.

15 The Attitudes of Independent Fruit and Vegetable Retailers towards Skilling and Promotion. **30-Sep-93**

HRDC Project No. VG205

No relevant information

16 Review of Consumer Market Research in the Fruit & Vegetable Industries **30-Nov-94**

HRDC Project No. HG323

No relevant information

17 Complete Reference to the Rural Industry and Australian Agriculture **01-Jan-97**

1997-98 6th Edition

Contains some observations on aspects of competition - but more at the macro level (i.e. imports etc) rather than at the consumer level (i.e. purchasing and consumption).

18 Emerging Trends in the International Vegetable Industry **01-Aug-97**

ExpHORT 2000 Publication No 14

No relevant information

19 Australian Asian Vegetables - Assessment of Market Demand in Australia **01-Jan-96**

Some limited information about the various sources of Asian vegetables for the Australian market.

20 Audit of the Australian Asian Vegetables Industry **01-Jan-95**

No relevant information

Reviewers Comments

There is very little relevant and recent information in the studies to address this objective. The only data really appears to be at the macro level, say looking at total volumes of an imported vegetable compared with local production.

As already identified by the industry (through the framing of this objective) a thorough understanding of competition, from the purchaser/consumer's perspective, is important in understanding how best to market vegetables. Studies 5, 6 and 9 (commissioned by QFVG) do this to a limited extent - but not in any great detail and not with any assessment of the threats and opportunities posed by vegetables' competition.

For this objective to be properly answered, further research is needed

Objective 4

Market/Product Opportunities

To identify, describe and prioritise the opportunities for increased vegetable sales and/or profitability

How can we sell more vegetables, or sell at a higher price. Consider all options including:

- * Value-adding
- * Packaging
- * Processing
- * Convenience
- * Pricing
- * Branding & positioning opportunities
- * Country of Origin, including identification as Australian.
- * Seasonal availability influence.
- * Ways to increase or influence children's consumption.
- * The role of 'education' (basic home economics type)
- * What influences which vegetables are fashionable or 'in' and which are not.
- * Regional, State or local/smaller group opportunities

Research Reports

- 1 Public Reaction to Victoria's "2 Fruit'n 5 Veg Everyday" Campaign and Reported Consumption of Fruit and Vegetables. 01-Aug-98

(*'Preventive Medicine'* - Not yet published)

No relevant information

- 2 The Australian Horticultural Statistics Handbook 97/98 01-Jan-98

No relevant data

- 3 "Australia Fresh" Qualitative Positioning and Brand Research 01-Sep-97

An extract from "Domestic Australia Fresh Consumer Research" 1997.

Deals only with marketing opportunities in terms of 'Australian' labelling or identification.

- 4 Public Health Nutrition Campaign to Promote Fruit and Vegetables 01-Jan-96

Limited information about the impact of a multi-strategy promotional campaign in increasing fruit & vegetable consumption.

5 Vegetables - Consumer Attitudes and Marketing Strategy 01-Oct-95
QUALITATIVE Research Report

The report implies areas of opportunity but does not deal with them specifically or provide any strategic recommendations in this respect.

6 Vegetables - Menu and Market Study 01-Mar-95
Emphasis on Heavy Produce
QUANTITATIVE Research Report

Mentions some areas that may be market opportunities but does not deal with them in detail or provide any strategic recommendations for the industry to consider.

7 Vegetables - Wholesaler & Retailer Attitudinal Research 01-Jul-95
QUALITATIVE Research Report

No relevant information

8 Vegetables - Food Service Industry Study 01-Jul-95
QUALITATIVE Research Report

Touches on product trends in the food service industry (such as pre or part prepared vegetables) but does not provide any in-depth assessment of potential or strategic recommendations.

9 Vegetables - Menu and Market Study 01-Mar-95
QUANTITATIVE Research Report

Mentions some areas that may be market opportunities but does not deal with them in detail or provide any strategic recommendations for the industry to consider.

10 Consumer Consumption Patterns, Purchasing Habits and Attitudes to 01-Oct-94
Fruit and Vegetables

No relevant information

11 "Opportunities and Analysis for Australian Vegetables in Specific 01-Jun-98
Markets" - still being edited not yet published

Results of study not yet published

12 Apparent Consumption of Foodstuffs Australia 1994-95 and 1995-96 01-Apr-98
ABS No. 4306.0

No relevant information

-
- 13 National Nutrition Survey and Selected Highlights Australia** **22-Dec-97**
ABS No. 1995 4802.0
-
- No relevant information
-
- 14 Consumer Study of the Fruit and Vegetable Market 1990** **30-Jun-90**
HRDC Project No. HG808
-
- Some exploration of marketing (particularly promotional/advertising) opportunities for various vegetables. Though as it is based on research and markets almost 10 years ago, the recommendations would no longer be reliable.
-
- 15 The Attitudes of Independent Fruit and Vegetable Retailers towards Skilling and Promotion.** **30-Sep-93**
HRDC Project No. VG205
-
- No relevant information
-
- 16 Review of Consumer Market Research in the Fruit & Vegetable Industries** **30-Nov-94**
HRDC Project No. HG323
-
- Some very broad suggestions here - but not solid enough to base future strategies or R & D plan upon
-
- 17 Complete Reference to the Rural Industry and Australian Agriculture** **01-Jan-97**
1997-98 6th Edition
-
- A few observations on market opportunities (such as import replacement and processing) but no specific detail or recommendations
-
- 18 Emerging Trends in the International Vegetable Industry** **01-Aug-97**
ExpHORT 2000 Publication No 14
-
- Some broad observations on market or product opportunities, but no specific detail or recommendations.
-
- 19 Australian Asian Vegetables - Assessment of Market Demand in Australia** **01-Jan-96**
-
- Section 9 contains a good summary of Australian market potential (for Asian vegetables) and the key issues involved in capitalising on that potential.
-
- 20 Audit of the Australian Asian Vegetables Industry** **01-Jan-95**
-
- No relevant information

Reviewers Comments

Quite a number of reports mention areas or strategies that are considered opportunities for increased sales or consumption. However, with the exception of reports 19 and 20 (on Asian Vegetables) there is insufficient depth or detail upon which the industry or its participants could plan business development strategies.

The two Asian Vegetables studies, when combined, do however provide a good summary of opportunities (and the relevant issues) in that product group.

We would note that the very comprehensive 'Consumer Study of Fruit & Vegetables' (Report 14, 1990) does imply numerous opportunities for increased sales and consumption. And its approach of looking at the market by each separate vegetable type, makes it easy to see what the situation was when the study was conducted and what might be done to increase consumption of that vegetable. The significant problem however is that the study is now almost 10 years old and so much has changed in markets and products in that time, that the results and recommendations would no longer be reliable.

Objective 5

Total Market

Develop a clear picture of the total vegetable market.

Identification and quantification of all major segments such as:

- * Consumer v/s Food Service*
- * Domestic v/s export*
- * Supermarkets v/s other retailers*
- * Packaged v/s loose.*

Includes an understanding of trends in each sector.

Research Reports

- | | | |
|----------|--|------------------|
| 1 | Public Reaction to Victoria's "2 Fruit'n 5 Veg Everyday" Campaign and Reported Consumption of Fruit and Vegetables. | 01-Aug-98 |
|----------|--|------------------|

('Preventive Medicine' - Not yet published)

No relevant information

- | | | |
|----------|---|------------------|
| 2 | The Australian Horticultural Statistics Handbook 97/98 | 01-Jan-98 |
|----------|---|------------------|

Provides a good picture of Australian production for various vegetables and the domestic/export split.

- | | | |
|----------|---|------------------|
| 3 | "Australia Fresh" Qualitative Positioning and Brand Research | 01-Sep-97 |
|----------|---|------------------|

An extract from "Domestic Australia Fresh Consumer Research" 1997.

No relevant information

- | | | |
|----------|---|------------------|
| 4 | Public Health Nutrition Campaign to Promote Fruit and Vegetables | 01-Jan-96 |
|----------|---|------------------|

No relevant information

- | | | |
|----------|---|------------------|
| 5 | Vegetables - Consumer Attitudes and Marketing Strategy
QUALITATIVE Research Report | 01-Oct-95 |
|----------|---|------------------|

No relevant information

6	Vegetables - Menu and Market Study Emphasis on Heavy Produce QUANTITATIVE Research Report	01-Mar-95
<hr/>		
Provides some data on away-from-home meal consumption and also shopping location (i.e. supermarket v/s others)		
7	Vegetables - Wholesaler & Retailer Attitudinal Research QUALITATIVE Research Report	01-Jul-95
<hr/>		
No relevant information		
8	Vegetables - Food Service Industry Study QUALITATIVE Research Report	01-Jul-95
<hr/>		
No relevant information		
9	Vegetables - Menu and Market Study QUANTITATIVE Research Report	01-Mar-95
<hr/>		
Provides some data on away-from-home meal consumption and also shopping location (i.e. supermarket v/s others)		
10	Consumer Consumption Patterns, Purchasing Habits and Attitudes to Fruit and Vegetables	01-Oct-94
<hr/>		
No relevant information		
11	"Opportunities and Analysis for Australian Vegetables in Specific Markets" - still being edited not yet published	01-Jun-98
<hr/>		
Results of study not yet published		
12	Apparent Consumption of Foodstuffs Australia 1994-95 and 1995-96 ABS No. 4306.0	01-Apr-98
<hr/>		
Statistical analysis of vegetable consumption trends (by per capita volume) for total vegetables and some broad sub groups.		
13	National Nutrition Survey and Selected Highlights Australia ABS No. 1995 4802.0	22-Dec-97
<hr/>		
No relevant information		

14 Consumer Study of the Fruit and Vegetable Market 1990 30-Jun-90

HRDC Project No. HG808

No relevant information

**15 The Attitudes of Independent Fruit and Vegetable Retailers towards
Skilling and Promotion.** 30-Sep-93

HRDC Project No. VG205

No relevant information

16 Review of Consumer Market Research in the Fruit & Vegetable Industries 30-Nov-94

HRDC Project No. HG323

No relevant information

17 Complete Reference to the Rural Industry and Australian Agriculture 01-Jan-97

1997-98 6th Edition

One table dealing with production value by vegetable type in 1993/94, but nothing more specific or detailed.

18 Emerging Trends in the International Vegetable Industry 01-Aug-97

ExpHORT 2000 Publication No 14

No relevant information.

19 Australian Asian Vegetables - Assessment of Market Demand in Australia 01-Jan-96

When combined with the separate RIRDC study 'Audit of the Australian Vegetables Industry' both provide an excellent overview of the size and structure of the (Asian vegetables) industry and its various markets.

20 Audit of the Australian Asian Vegetables Industry 01-Jan-95

When combined with the separate RIRDC study 'Australian Asian Vegetables - An Assessment of Market Demand in Australia' both provide an excellent overview of the size and structure of the (Asian vegetables) industry and its various markets.

Reviewers Comments

The ABS data contained in Report 2 (Australian Horticultural Statistics) provides an overview of total production. And reports 19 and 20 which deal with Asian Vegetables provide a good overview of that particular segment.

But overall, the industry is unable to answer this objective. The information needed in this most important area is just not available. Or if it is, it is not being collected, interpreted and reported.

It would seem to us that having a thorough understanding of the areas covered by this objective is an essential pre-requisite to preparation of the industry's Development, Marketing or R & D Plans.

REPORT BY RESEARCH STUDY

An important aim of this project is to provide industry participants with a precis of the research projects reviewed, so that:

- It is easy to see what information is currently available; and
- If more information is needed it is easy to see where to go to get it.

Therefore this 'Report by Research Study', comprising a separate section dealing with each research study, has been prepared.

STRUCTURE OF THIS REPORT

Following is a brief description of the various sections in each precis:

Report Details	Key information covering the report title; who commissioned; the author/researcher and details of any further information supplied separately as an attachment to this document.
Research Description	Brief background covering the purpose of the study and any relevant information.
Methodology	Description of how the research was done.
Scope	A summary of the report contents to provide an overview of exactly what the report covers.
Copies of Reports	Where full copies of the report may be obtained.
Reviewers Comments	Our assessment of the research study, including comments on such areas as: <ul style="list-style-type: none">▪ The extent to which it addresses the market research objectives.▪ Relevance, in terms of timing.▪ Any limitations or deficiencies.

Report 1

Public Reaction to Victoria's "2 Fruit'n 5 Veg Everyday" Campaign and Reported Consumption of Fruit and Vegetables.

('Preventive Medicine' - Not yet published)

Report Details

Date:	01-Aug-98
Commissioned by:	Victorian Health Promotion Foundation and the Melbourne Wholesale Fruit and Vegetable Market Trust
Researcher:	Helen Dixon BA (Hons), Ron Borland, PhD, Catherine Segan BA (Hons), Hargita Stafford PhD, Colin Sindall M.Com (Hons)
Attachments:	Report

Research Description

This paper (which is yet to be published) describes the Victorian "2 Fruit'n 5 Veg Every Day" campaign which was aimed at increasing awareness of the need to eat more fruit and vegetables via the media. It was also designed to encourage increased consumption of these foods in the Australian State of Victoria. The demand-side component of the campaign, which had television advertising as its focal point, ran from 1992 to 1995.

The paper fully describes and depicts the methodologies utilised and the results achieved over the four years.

The Conclusions reached suggest that relatively small-budget mass media promotion of recommended dietary intake (fruit and vegetables in this case) may result in a significant increase in reported consumption by the public. However, it was also noted that for this change to be sustained campaigns may need to be resourced for several years. (Dixon H., Borland R., Segan C., Stafford H., Sindall C. Public Reaction to Victoria's "2 Fruit 'n' 5 Veg Every Day" Campaign and reported consumption of fruit and vegetables. Preventive Medicine, in press.)

Methodology

Annual postcampaign telephone surveys of approximately 500 Victorians ages 20 and over were conducted with the aim of examining public awareness of the campaign, beliefs about desirable eating habits for fruit and vegetables, and reported consumption of these foods.

Scope

The paper begins with a brief introductory synopsis which described the Background, Methods, Results, Conclusions and Key Words used in the campaign.

The body of the paper comprised seven sections broken up into subsections including seven tables and two figure graphs.

The sections were as follows:

1. INTRODUCTION

2. "The 2 Fruit 'n' 5 Veg Everyday" Campaign.

(i) TABLE 1

Promotional Activities Conducted by the "2 Fruit 'n' 5 Veg Everyday" from Phase 1 to 4 (being 1992 to 1995 inclusive)

3. METHOD

- (a) Samples
- (b) Measures
- (c) Procedure
- (d) Analysis

(ii) TABLE 2

Age and Gender Distribution of the Sample of Respondents Surveyed Following each Phase of the "2 Fruit 'n' 5 Veg Everyday" campaign.

4. RESULTS

- (a) Awareness of the Slogan, Campaign and Advertisements
- (b) Reported Fruit and Vegetable Consumption

(iii) TABLE 3

Percentage of Respondents Aware of Fruit and Vegetable Advertising in General and of Specific Aspects of the "2 Fruit 'n' 5 Veg Everyday" Campaign at each Phase.

(iv) TABLE 4

Percentage of Phase 1 to 4 Respondents Aware of Different Aspects of the "2 Fruit 'n' 5 Veg Everyday" Campaign for Various Demographic Groups (n=2,044)

(v) TABLE 5

Means of the Average Number of Servings of Fruit and Vegetables per day that Respondents Believe they should Eat and Report Eating and Percentage of Respondents Reporting Amounts Greater and less than the 2n5 Recommendations at Each Phase.

(vi) TABLE 6

Means of the Average Number of Servings of Fruit and Vegetables per Day That Phase 1 to 4 Respondents Believed they Should Eat and Reported Eating for Various Demographic Groups (n=2,044)

(c) Awareness of the Segan and Reported Fruit and Vegetable Consumption

(vii) Fig 1

A graph depicting means of the estimate of daily consumption of vegetables Phase 1 to 4 Respondents Report they should and do eat, for those aware and not aware of the "2 Fruit 'n' 5 Veg Every Day" slogan.

5. DISCUSSION

(a) Awareness of Campaign, Slogan, and Television Advertisements

(viii) Fig 2

A graph depicting means of the average number of servings of fruit Phase 1 to 4 respondents report they should and do eat for those aware and not aware of the "2 Fruit 'n' 5 Vegetable Everyday" slogan.

(b) Reported Fruit and Vegetable Consumption

(c) Sociodemographic Effects

6. CONCLUSION

7. REFERENCES

Copies of Reports

The Centre for Behavioural Research in Cancer
Anti Cancer Council of Victoria
1 Rathdowne Street, Carlton Sth, Victoria 3053, Australia
Fax: (03) 9279 1250
E-mail: helend@accv.org.au

Reviewers Comments

Note - This study covers interviews with Victorian consumers only. Further, it details 'reported' consumption of vegetables (i.e. what people 'say' they do) rather than monitoring actual purchase and consumption.

This is a recent paper which is pending publication and therefore confidential at this stage.

The paper has a scientific format and a highly detailed methodology.

The quality of information is of a very high standard and would be of particular interest to academia particularly in the fields of medicine, nutrition and consumer science.

Of particular interest to the Vegetable industry might be the study's conclusions on the merit of an ongoing promotional campaign to lift overall consumption fruit & vegetables.

Report 2

The Australian Horticultural Statistics Handbook 97/98

Report Details

Date:	01-Jan-98
Commissioned by:	The Australian Horticultural Corporation
Researcher:	Monica Richter
Attachments:	Refer to full report

Research Description

This statistical handbook has been developed by the Australian Horticultural Corporation (AHC) as a ready-reference for the horticultural industry and its customers.

It takes an Australian perspective, highlighting fruit, vegetable and nut production in Australia and competitive countries and exports from Australia to major overseas markets. The book also features organic production, horticultural trends and an outline of our main imported items.

Data is depicted in a series of easy to interpret graphs.

Methodology

All data/statistics have been sourced principally from the annual Australian Bureau of Statistics Census and the Dept of Foreign Affairs and Trade (DFAT)

Scope

The publication begins with an alphabetical listing of a variety of vegetables (24), fruits, nuts and nursery which are individually broken up into some or all of a series of graphs (depending on relevance of graph subject to the item).

The graphs depict the following:

- (a) Production by State (Tonnes) from 1991 to 1998 (forecast figure)
- (b) Australia's top export markets for that item
- (c) Imports from Australia and its main Competitors in Selected markets 1996 (Tonnes)
- (d) Supply and Utilisation of Australian Crop and main competitors (tonnes)
- (e) Major Varieties and Availability of Item for Australia and Main competitors
- (f) Production, Supply and Distribution (Tonnes).

The publication follows on with a section on Organic Production.

The second part of the book is called Industry Snapshot and includes 5 graphs depicting

-
- (a) Australian Exports of Fresh Vegetables - by Major Markets 1996/97 (Tonnes)
 - (b) Australian Exports of Fresh Fruit - By Major Markets 1996/97 (Tonnes)
 - (c) Australian Exports of Fresh Vegetables - By Major Markets 1996/97 (\$ Value)
 - (d) Australian Exports of Fresh Fruit - By Major Markets 1996/97 (\$ Value) and
 - (e) Australian Exports of Nuts, Cut Flowers and Nursery Products - by Major Markets 1996/97 (\$ value).

This section also includes 3 colour graphs depicting respectively:

- (a) Horticultural Export Trends for Nuts, Vegetables and Fruit 1990-97,
- (b) Horticultural Exports - breakdown by Region comparing 95/96 to 1997.

Copies of Reports

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Reviewers Comments

This 97/98 edition of the publication is the most recent available.

Information is mainly statistical - depicted through comparative tables, graphs and grids. All fruits, vegetables and nuts are depicted in alphabetical order which makes the handbook easy to refer to for single commodities.

Quality of information is high without being descriptive and the booklet is useful for quick reference.

Report 3

"Australia Fresh" Qualitative Positioning and Brand Research

An extract from "Domestic Australia Fresh Consumer Research" 1997.

Report Details

Date:	01-Sep-97
Commissioned by:	The Australian Horticultural Corporation Australia Fresh
Researcher:	Bennett Research (Aust) Pty Ltd
Attachments:	Executive Summary

Research Description

The extracts in this report contains both the qualitative and quantitative research conducted by the AHC in September/October 1997.

This document reports on the findings from research among domestic consumers and provides recommendations regarding future marketing strategies which include the extension of the "Australia Fresh" sticker and carton branding to the domestic fruit and vegetable market.

The research is intended to help the AHC to determine how best to position the brand, and to avoid the pitfalls of other country of origin campaigns (such as "Buy Australian").

Methodology

Exploratory qualitative research was used in the first instance. Focus groups were used to collect this information. The focus Group methodology allowed the presentation of concept and communication materials for participant evaluation.

Beyond this consumers' attitudes and behaviours were quantified across a number of measures established by the exploratory qualitative research.

Information collection specifically involved market measurement to quantify previously developed exploratory understandings which involved:

- * Omnibus CATA telephone interviews with grocery buyers.
- * Five capital cities including Tasmania.
- * Data quality checked, weighted to reflected population distribution by age, gender, locality.
- * Frequency counts and cross tabulation analysis performed.

The Sample was based on simple random probability design. Total sample size of N=913.

Scope

The report comprises 11 chapters (specific information relating to the possible positioning of Australia Fresh has been removed).

These chapters are:

1. Introduction
2. Marketing Issues
3. Research Objectives
4. Research Design
5. Recruitment and Focus Group Venues (N/A)
6. Data Collection Instruments (N/A)
7. Data Analysis and Reporting of Results (N/A)
8. Conclusions and Recommendations (N/A)
9. Executive Summary
10. Findings in Detail
 - a. Overall Criteria for Purchasing
 - b. Purchasing "Quality" Criteria
 - c. Organic Foods and Pesticides
 - d. Assessments at Actual Point of Purchase
 - e. Product Category Problems
 - f. Quality Variability
 - g. Reasons for Satisfaction/Dissatisfaction
 - h. Unaided awareness of Country of Origin
 - i. Aided Awareness of Country of Origin
 - j. Strengths of Aust Fruits & Vegetables
 - k. Perceived characteristics of Australian Fruits and Vegetables
 - l. Attitudes Towards Overseas Products
 - m. Strengths of Overseas Fruits & Vegetables
 - n. Attitudes to Purchase Outlets
 - o. Attitudes to Stickers
 - p. Perceptions of the Role of Stickers
 - q. Comments made on Concept A
 - r. Comments made on Concept B
 - s. Comments made on Concept C
 - t. Comments made on Concept D
 - u. Name, Logo and Packaging Reactions
 - v. Product Attributes with Concepts
 - w. Overall Reactions to the Concepts

APPENDIX

Research Brief
Group Discussion Topic Guide
Concepts A - D
Name, Logo, Packaging Stimulus
The Strategic Solutions Consultancy

Copies of Reports

Mary-Jane Bottom
Promotions Manager
Lvl 14, 100 William Street

Sydney NSW 2011

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Reviewers Comments

The information in this document is recent, the study having been undertaken in 1997. Note that data relating to the positioning of Australia Fresh removed.

The methodology for both the qualitative and quantitative research is in true marketing research format, with the objectives and research design clearly laid out and described.

The document is comprehensive and very interesting. It provides a broad insight to consumers habits & attitudes in fruit & vegetable purchasing plus takes a more in-depth look at the role of 'Australian' branding/identification.

Report 4

Public Health Nutrition Campaign to Promote Fruit and Vegetables

Report Details

Date:	01-Jan-96
Commissioned by:	Health Dept of WA
Researcher:	Margaret Miller, Christina Pollard and Donna Paterson
Attachments:	Report

Research Description

This paper describes the campaign which promoted the nutritional and health benefits of increased fruit and vegetable consumption by the general public; summarises key evaluation results and discusses the factors which have contributed to the success of the campaign.

The report concludes that the success of the "Fruit 'n' Veg With Every Meal" campaign is due to four factors: development of the campaign based on the results of consumer research and evaluation of each strategy; industry consultation and collaboration; a comprehensive approach using a range of strategies; and the long term nature of the campaign.

Methodology

A number of different methodologies were implemented to define objectives and target groups, and to develop strategies that would best address barriers to increasing fruit and vegetable consumption. They included:

- * Written reports (nutrition and marketing literature) and industry surveys were reviewed to identify issues and successful strategies.
- * Peak industry bodies were consulted.
- * Marketing and fresh produce managers were consulted from both supermarket chains and fresh produce stores to identify effective promotional merchandise and activities.
- * Focus group discussions, written and telephone surveys of household shoppers were used to assess fruit and vegetable shopping; selection and storage habits; point-of-sale information; influences on purchases; and use of point-of-sale promotional materials.

Scope

This report commences with an Introduction which addresses the question, *Why Promote Fruit and Vegetables?*.

The Methodologies utilised follow and are described under the headings:

Campaign Development
Campaign Objectives
Campaign Target Group

Campaign Strategies

Campaign Strategies is divided up into 8 subsections including one Table. They are:

1. Mass Media
2. Public Relations

Table 1.

"Fruit 'n' Veg With Every Meal" Campaign Strategies in Western Australia 1990-93 (a table showing which campaign strategies were implemented in 5 phases within the period 1990-1993)

3. Point-of-Sale Promotions
4. Cookbooks and recipe cards
5. Food service industry
6. Publications
7. Community Activities
8. Sponsorship

The rest of the paper discusses the evaluation process and the key results achieved . The sections which included 2 tables were titled as follows:

Evaluation

Key Results and Discussion (which covered)
Awareness of Campaign Strategies

Table 2.

Target Group awareness and cost per phase of mass reach strategies on the western Australian "Fruit 'n' Veg with Every Meal" campaign. Awareness is measured from 1990 to 1993.

Table 3.

Awareness by 20-40 year old male and female shoppers of point-of-sale promotional strategies in different phases of the Western Australian "Fruit 'n' Veg With Every Meal" Campaign. Awareness is measured over the period 1990 to 1993.

Knowledge of Message

Behaviour Change

Conclusions

References

The report is appended with 2 papers. The first is a review of the campaign entitled "The Western Australian Fruit and Vegetable campaign - Did it work? By Christina Pollard and Margaret Miller.

The paper presents a deliberation regarding the impact of the campaign based on the Fishbein and Ajzen behaviour-action model.

It consists of an introductory review of the campaign; one table and three sub headings entitled:

Table 1.

Stages between knowledge and behaviour

Evaluation Methods

Results in terms of Stages described in Table 1

Conclusion

References

The second paper is the Health Promotion Services Health Bulletin Number 3, 1996 entitled Barriers to increased fruit and vegetable consumption; Baseline, 1990. This paper examines the baseline study on which the campaign was based. It consists of four sections:

Introduction

Methodology and sample

Results

Conclusion

Copies of Reports

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Reviewers Comments

The report was written in 1996 from data collected from 1990 until 1994 inclusive.

The paper describes the multiple integrated strategies developed for the media campaign. It draws a clear conclusion that such a campaign, conducted over an extended period, can lead to increases in fruit & vegetable consumption. It draws a clear correlation between consumer awareness of recommended fruit & vegetable intake levels and subsequent increases in consumption.

Report 5

Vegetables - Consumer Attitudes and Marketing Strategy QUALITATIVE Research Report

Report Details

Date:	01-Oct-95
Commissioned by:	Qld Fruit and Vegetable Growers for the Vegetable Sectional Group Committee
Researcher:	Margaret Olsen Durham Kelly & Olsen Market and Advertising Research
Attachments:	Summary of Findings and Conclusions and Recommendations

Research Description

This report is one of a series prepared for the Vegetable Sectional Group Committee. The Committee was seeking a more profound understanding of the attitudes and actions of those involved in the vegetable marketing chain. It was proposed that this knowledge would act as a basis for more control of the marketing situation and provide an opportunity to develop sounder methods of evaluating marketing decisions. As a result they undertook a series of both quantitative and qualitative research studies. The requirements of the VSGC and the research currently available suggested three overall objectives for the total project:

1. To provide the benchmark consumer and industry data needed to develop a strategic plan which focuses marketing and promotional activities to achieve the best financial returns for growers.
2. To identify any marketing opportunities which can be followed by individual growers or growers as a group.
3. To provide guidance on the best methods of promoting vegetables.

It presents the findings of qualitative research conducted regarding consumer attitudes and marketing strategy for vegetables.

The consumer promotional recommendations included in this report cover the results of all research included in the total vegetable project.

Specifically, the research covers the following areas:

1. Identification of the full criteria involved in selecting which particular vegetable are purchased - including the triggers and barriers to purchase.
2. Exploration of the methods used to select a particular vegetable shopping venue
3. Exploration of the quality - price continuum involved in vegetable selection
4. General purchaser and consumer attitudes to vegetables, including an understanding of how they fit into today's eating habits and any changes people feel are occurring.
5. Understanding what participants know about vegetables and how they respond to the physical characteristics of each.

-
6. Further exploration of the way participants group vegetables, both in purchase and usage terms.
 7. In this area of vegetable groupings, to particularly explore the relationship between cooked and salad vegetables.
 8. Characteristics of "ideal" vegetables - to give an indication of the physical and preparation characteristics of vegetables which may be important and to provide the emotive associations which have the most potential for promotion.
 9. Positives and negatives of vegetables, both as a group and individually.
 10. Understanding the role that nutritional benefits and maintenance of family health play in vegetable image and decision making.
 11. Meal provider perceptions of the attitudes of other family members.
 12. More detailed exploration of the attitude of meal providers to cooking and preparing meals. With an emphasis on where vegetables can be made of more use and appeal.
 13. Identification of the current and potential role of frozen, canned, minimally processed and packed vegetable alternatives.
 14. Exploration of the role of other competitive products.
 15. Exploration of the relationship of dining out, take away food and partially or preprepared meals to the family meal pattern.
 16. Identification and exploration of entertaining at home.
 17. Follow up of any marketing or promotional leads which the above objectives uncover or which have arisen from the earlier studies.
 - 15.

Methodology

A total of 14 group discussions (in Sydney & Brisbane) were conducted in this project.

The first (8) group discussions were made up of men and women across the age range 18-65 years and were selected according to various sociodemographic criteria. These discussions were held to develop an understanding of the general attitudes involved and to explore the winter aspects of vegetable usage.

The second (6) group participants were made up of females and the selection was based on stage of life criteria. These discussions involved younger participants because they had been identified as particularly important to determining the future strategy and were conducted two months later during warmer weather.

Scope

The report is divided into two sections the first part being an executive summary; the second part discusses the detailed findings of the studies and finishes with an Appendix.

The Executive Summary features a detailed Summary of Findings which includes the following:

- Overall Situation
- Determinants of Meal Preparation
- Attitudes to Vegetables
- Fresh Ideas Campaign

The next part of the report discusses Conclusions and Recommendations and includes the following:

Vegetables as a Category

1. Development of a High Vegetable Meal Habit
2. Preparation for Raising a Family
3. The Myth of "Vegetable Banking"

Marketing Individual Vegetables

Consumer Recommendations in Relation to the Catering Industry

Consumer Promotion in relation to Retailing

Consumer Promotion - the Grower Perspective

The detailed findings of the research studies is divided into 4 sections featuring the following headings and sub headings. These are:

Introduction

- Background
- Research Objectives

Methodology

Detailed Findings

1. Current Lifestyles and Vegetables
 - Young Women and Men without Children
 - Women with Young Children
 - Women with Older Children
 - Men with Children
 - Empty Nesters
2. An Overview of the Evening Meal
 - The Types of Meals Prepared
 - The Baked Dinner
 - Meat and Separate Vegetables
 - Pasta Dishes
 - Stir-Fry
 - Easy Meals
 - Eat Out and Takeaway
 - Other Meals

The Main Meal Preparer

Factors that influence the Evening Meal Choice

- Time
- Fatigue
- Variety
- Nutrition
- Family Tastes
- Food Available in the Home

Special Occasion Cooking

- Entertaining
- Family Celebrations
- Adding Variety to the Meals usually prepared

The Use of Recipes

- Recipes in Day to Day Cooking
- The Use of Recipes
- Recipe Cards

3. The Role of Vegetables in the Evening Meal
 - Why Vegetables are Prepared
 - Nutrition and Vegetables
 - Vegetables as Traditional and Functional

Vegetable Preparation
Salads
Cooked Vegetables

4. The Consumer and Vegetables
 - The "Ideal" Vegetable
 - Perceptions of Vegetables as a Group
 - Colour
 - Usage
 - Comparing Salads and Cooked Vegetables
 - Vegetables on an Individual Level
5. Shopping for Vegetables
 - Which Vegetables are Chosen
 - Basics
 - Additional Vegetables
 - Disliked Vegetables
 - Unknown Vegetables
6. Fresh Vegetable Alternatives
 - Pre-prepared Vegetables
 - Frozen Vegetables
 - Vegetables as their own Alternative

Appendix

Discussion Agenda - Purchasers/Providers

1. Introduction to Discussion Procedures and other Participants
2. Main Meal Preparation
3. Attitudes to Vegetables
4. In-Store Purchase Attitudes and Behaviour

Discussion Agenda - Consumers

1. Introduction to Discussion Procedures and Other Participants
2. Evening Meal Choice Alternatives
3. Attitudes to Vegetables
4. In-Store Purchase Attitudes and Behaviour

Discussion Agenda - Purchasers/Providers - Second Series

1. Introduction to Discussion Procedures and Other Participants
 2. Main Meal Preparation
 3. Recipe Usage
 4. Attitudes to Vegetables
 5. In-Store Purchase Attitudes and Behaviour
-
1. Development of a High Vegetable Meal Habit
 2. Preparation for Raising a Family
 3. "Vegetable Banking"

Copies of Reports

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Reviewers Comments

This report was prepared in 1995 and so is recent enough to be relevant to consumers today. Note that it was conducted with consumers in only Sydney and Brisbane, however for qualitative research purposes we do not feel this is a problem.

It is a well conducted, comprehensive qualitative study of consumer habits and attitudes in relation to vegetables and also covers (to a limited extent) marketing strategy options. Much of the information is set out in consumer statement and research back-up response format, which is easy to follow.

Its only shortcoming is that it does not include any assessment of the future implications of the findings nor any specific strategic recommendations for the industry to consider.

We consider it to be a worthy and valuable resource for the industry.

Report 6

Vegetables - Menu and Market Study Emphasis on Heavy Produce QUANTITATIVE Research Report

Report Details

Date:	01-Mar-95
Commissioned by:	Old Fruit and Vegetable Growers for the Heavy Produce Committee
Researcher:	Margaret Olsen Durham Kelly & Olsen Market and Advertising Research
Attachments:	Summary of Findings

Research Description

The Heavy Produce Committee conducted a series of research projects into the attitudes of those involved in the marketing of four vegetables - potatoes, pumpkin, onions and sweet potato.

The findings were taken from both Sydney and Brisbane and were designed on the basis of a random sample of consumer households in each city. Therefore the results could be extended to the market as a whole. Although attention is concentrated on four vegetables, it must be stressed that the consumer does not separate these from any other they may use. The research includes a summary of all general information on vegetables which is relevant to understanding the consumer perspective in regard to the four study vegetables.

The overall objective of this project was to provide a benchmark measure of family consumption of vegetables, in particular potatoes, onions, pumpkin, sweet potato and competitive food products in the context of both mealtime usage and purchase decision making.

Specifically, the study was designed to cover the following objectives:

1. Provide a detailed measure of Australian eating habits across a full week, allowing for weekday and weekend patterns.
2. Provide specific usage data from which the following can be assessed:
 - strengths and weaknesses of individual vegetables
 - natural vegetable groupings based on usage patterns
 - competitive situation between vegetable groups
 - main food service competitors for vegetable usage situations
 - competition from prepared/processed/imported food products
3. Provide full purchase details for each vegetable
4. Determine shopping habits in regard to vegetables
5. Explore the value for money continuum of price versus quality
6. Determine family attitudes to individual vegetables
7. Explore interest in recipes, cooking, meal planning and entertaining

8. Measure the effectiveness of Fresh Ideas cards

9. Provide a detailed analysis of the above information, by demographics, lifestyle factors and relevant attitudinal measures

Methodology

A sample of 400 randomly selected households in Brisbane and Sydney formed the base of this research. Starting addresses were selected at random from an up to date listing of all homes in the telephone directory in each city. A cluster size of five interviews was used from each starting address.

In this work half the interviewees were under 40 years of age and the other half over this age. This enabled suburbs with younger and older biases to be evened out.

All interviewees were the main food shopper and meal preparer within their household.

Results were processed by computer to allow for a detailed analysis of as many relevant sub-categories as possible.

Field work took place in March-April, 1995. Care was taken to avoid the Easter holiday period biasing results.

Scope

The report is divided into two sections the first part being a Summary of Findings; the second part discusses the detailed findings of the research and finishes with an Appendix.

The Summary of Findings discusses:

Household Eating Patterns
Type of Meal Eaten at Evening Meals
Home Prepared Evening Meals
Evening Meals Prepared Away from Home

Included in this section are three bar graphs depicting:

Usage of Total Vegetables
Average Home Prepared Veg Eaten per Evening Meal by Family Structure
Total Venue Usage of Family Evening Meals Prepared away from Home

The Findings continue with:

Comparative Vegetable Purchase
Potato Profile
Pumpkin Profile
Onion Profile
Sweet Potato Profile
Pasta and Rice

Included in this section are graphs depicting:

Potato Usage during the Week of Survey by Age of Respondent
Frequency of Buying Pumpkin
Frequency of Buying Onions
Sweet potato Usage during the Week of Survey by Age of Respondent

The Final part of the Summary discusses:

Shopping for Vegetables
Attitudes to Cooking

Included in this section is a graph depicting:

Total Venue Usage

Next is the body of the report which covers the following:

Introduction

- Background
- Research Objectives

Methodology

Overview of Research Findings

Detailed Findings

1. Vegetable Purchase

Heavy, Medium and Light Vegetable Purchase

- Table 1 Weekly Vegetable Purchase
- Table 2 Weekly Vegetable Purchase
- Table 3 Weekly Vegetable Purchase
- Table 4 Study Vegetable Usage compared to General Vegetable Purchase

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Copies of Reports

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Reviewers Comments

This report was prepared in 1995 and so is probably still (but only just) relevant to consumers today. It is however a good benchmark against which future studies can be measured and changes tracked.

It is a very comprehensive, quantitative look at vegetable purchasing and usage - with particular emphasis on the 'heavy' vegetables of Pumpkin, Potatoes, Sweet Potatoes and Onions. Another very similar study (dealing with all vegetables) was commissioned by QFVG at the same time, and it is worthwhile looking at both studies in combination.

Note however that it covers households in Brisbane and Sydney only and while these may be representative of other capital cities, they are

not likely to be representative of regional households.

Note also that the household reported consumption deals with one particular week in the research period (March-April) and so therefore takes no account of seasonal consumption differences.

A valuable study with much useful information. However it does not extend to drawing implications from the findings or providing detailed strategic recommendations.

Report 7

Vegetables - Wholesaler & Retailer Attitudinal Research QUALITATIVE Research Report

Report Details

Date:	01-Jul-95
Commissioned by:	Qld Fruit and Vegetable Growers for the Vegetable Sectional Group Committee
Researcher:	Margaret Olsen Durham Kelly & Olsen Market & Advertising Research
Attachments:	Executive Summary

Research Description

The Vegetable Sectional Group Committee commissioned this report to seek a better understanding of the attitudes and actions of all those involved in the vegetable marketing chain. This particular report presents the findings of a study of the attitudes of wholesalers and retailers to vegetable marketing. The findings cover only individuals and organisations operating in Brisbane.

The overall objective of this project is to provide information which can be used by growers to strengthen their position relative to the other main groups in the marketing chain.

The specific objectives were:

1. Define the attitudes underlying the actions of each of these subgroups.
2. Gain some indications of the strengths and weaknesses of each group in terms of how they see their business profitability.
3. Attempt to obtain some measure of the buying and selling patterns within the subgroups and what is directing these.
4. Determine how each group consider vegetables - do they actually see them as separate products?
5. Define what it is that each group feels their customers want in the way of vegetables and what they feel inhibits consumer sales.
6. Determine how each group regards the consumer - are they interested in consumer information or do they "know it all" already?
7. Examine each industry for any changes they foresee in consumer behaviour or any market opportunities they have noticed.

Methodology

A total of 21 personal interviews and 4 telephone interviews were conducted with wholesalers and retailers at their place of business. Personal interviews were arranged by appointment and lasted between 30 and 90 minutes depending upon the time available.

Interviews were conducted with all vegetable wholesalers in the Brisbane markets willing to be part of the study.

A sample of owners/managers of larger fruit and vegetable outlets in the Brisbane metropolitan area were also interviewed and their shops reviewed.

Interviews were also conducted with representatives of three major chains, Coles, Woolworths and Bi-Lo and with representatives of QIW and Pick and Pay.

Interviews were conducted in July, 1995.

Scope

This report is divided into two sections; being the Executive Summary and the main body of the report.

The body of the report discusses the following:

Introduction

- Background
- Research Objectives

Methodology

Detailed Findings

1. Merchants/Agents

- Central Markets
- Attitudes Underlying Actions and Decisions
- Determinants of Operations
- Market Relationships
- Strengths and Weaknesses
- Consideration of Individual Vegetables
- Export
- Consumer Information
- Future of Merchants and Market System

2. Independent Retailers

- Attitudes Underlying Actions and Decisions
- Determinants of Operation
- Market Relationships
- Consideration of Individual Vegetables
- Export
- Consumer Information
- Future of Merchants and Market System

2. Independent Retailers

- Attitudes Underlying Actions and Decisions
- Determinants of Operations
- Strengths and Weaknesses
- Consideration of Individual Vegetables
- Transport and Storage Conditions
- Promotion

3. Buyers for Chains

- Attitudes Underlying Actions and Decisions
- Determinants of Operation
- Strengths and Weaknesses
- Vegetable Requirements
- Imported Vegetables

-
- Consumer Information
 - Consumer Promotion
 - Future of Industry

Conclusions

- Retail Outlets
- Retailer Vegetable Suppliers
- Other Vegetable Purchasing
- Price Setting
- Growers

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- Wholesaler Interview Guidelines
- Independent Retailer Interview Guidelines
- Supermarket Buyer Interview Guidelines

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Reviewers Comments

This report was prepared in 1995 and describes qualitative research examining wholesaler and retailer attitudes to vegetables, the vegetable market and their business.

Note that it was conducted in Brisbane only and so the findings may not be entirely relevant to other States. In addition, wholesaler interviews were conducted only with those willing to participate so the results may not indicate a good cross-section of all wholesalers views.

It is not a consumer study as such, however some aspects of it covered the wholesalers and retailers observations of consumer trends and attitudes.

The study contains a number of observations about the future of vegetable wholesaling and retailing as well as recommendations on how growers could respond and maintain or enhance their commercial position.

Report 8

Vegetables - Food Service Industry Study QUALITATIVE Research Report

Report Details

Date:	01-Jul-95
Commissioned by:	Qld Fruit and Vegetable Growers
Researcher:	Margaret Olsen Durham Kelly & Olsen Market & Advertising Research
Attachments:	Executive Summary

Research Description

The Vegetable Sectional Group committee commissioned this report to seek a better understanding of the attitudes and actions of all those involved in the vegetable marketing chain.

This report presents the findings of a detailed study of attitudes in the Brisbane food service industry. The research covers representatives of those groups involved in supplying meals in any form. It also covers a representative sample of organisations supplying pre-prepared vegetables and meals to other food service organisations.

The specific objectives of this section of the research are to:

1. Define the attitudes underlying the actions of each of these subgroups.
2. Gain some indications of the strengths and weaknesses of each group in terms of how they see their business profitability.
3. Attempt to obtain some measure of the buying and selling patterns within the subgroups and what is directing these.
4. Determine how each group consider vegetables - do they actually see them as separate products?
5. Define what it is that each group feels their customers want in the way of vegetables and what they feel inhibits consumer sales.
6. Determine how each group regards the consumer - are they interested in consumer information or do they "know it all" already?
7. Examine each industry for any changes they foresee in consumer behaviour or any market opportunities they have noticed.

Methodology

A total of 75 interviews were conducted with businesses involved in the Brisbane food industry.

All interviews were conducted (in July 1995) by telephone and lasted an average of over 60 minutes. Most of these interviews were resident in Brisbane but in the case of national fast food outlets, the person involved in purchase decision was tracked to head

office for an interview.

Scope

This report is divided into two sections; being the Executive Summary and the main body of the report.

The body of the report discusses the following:

Introduction

- Background
- Research Objectives

Methodology

Detailed Findings

1. Consumer Demands Dominate
2. Underlying Attitudes of the Food Preparation Industry
3. Pre-Preparation Segment
 - Overall Attitudes
 - The Types of Players in the Market
4. Institutions
 - Hospitals
 - Boarding Schools and Colleges
 - The Defence Forces
5. Caterers
 - Smaller Caterers
6. Food Chains
7. Clubs and Hotels
8. Other Establishments
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 - Carrots
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 - Pumpkin
 - Tomatoes
 - Lettuce
 - Capsicum
 - Broccoli
 - Sweet Potato
 - Zucchini
 - Corn
 - Cauliflower
 - Snow Peas
 - Button Squash
 - Celery
 - Cucumber
 - Cabbage
 - Silverbeet
 - Eggplant

-
- Chinese Vegetables
 - Brussels Sprouts
 - Asparagus
 - Parsnips
 - Beetroot
 - Mushrooms
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10. Future Trends

- Factors Influencing Vegetables Sales and/or Consumption

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Representatives Interviewed

- Processors of Pre-Prepared Vegetables
- Clubs and Hotels
- Cafes
- Restaurants
- National Food Chains
- Snack Bars and Take-away Food Shops
- Institutions
- Caterers

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Reviewers Comments

This study was conducted in 1995 and is, we consider, still relevant. It deals with the food service industry in Brisbane only, however it is very likely that the findings in other capitals would be similar.

It is an excellent, in-depth look at this important and growing segment of overall food consumption. Trends are identified and some implications for the vegetable industry are drawn.

A valuable, detailed and informative report.

Report 9

Vegetables - Menu and Market Study QUANTITATIVE Research Report

Report Details

Date:	01-Mar-95
Commissioned by:	The Qld Fruit and Vegetable Growers for the Vegetable Sectional Group Committee
Researcher:	Margaret Olsen Durham Kelly & Olsen Market and Advertising Research
Attachments:	Summary of Findings

Research Description

The Vegetable Sectional Group Committee commissioned this report to seek a better understanding of the attitudes and actions of all those involved in the vegetable marketing chain.

This report presents the findings of a detailed consumer study into the attitudes and habits of those responsible for household meal preparation. It covers full details of family evening meals during the past week, lunch time habits and weekend variations. As well, shopping details and attitudes to shopping and cooking are explored for all of the vegetables grown in Queensland.

The overall objective of this project is to provide a benchmark measure of family consumption of vegetables and competitive food products in the context of both mealtime usage and purchase decision making.

Specifically, the study is designed to cover the following objectives:

1. Provide a comprehensive and detailed measure of Australian eating habits across a full week allowing for a consideration of both weekday and weekend patterns.
2. Provide specific usage data from which the following can be assessed:
 - strengths and weaknesses of individual vegetables
 - natural vegetable groupings based on usage patterns
 - competitive situation between vegetable groups
 - main food service competitors for vegetable usage situations
 - competition from prepared/processed/imported food products.
3. Provide full purchase details for each vegetable.
4. Determine shopping habits in regard to vegetables.
5. Explore the value for money continuum of price versus quality.
6. Determine family attitudes to individual vegetables
7. Explore interest in recipes, cooking, meal planning and entertaining.
8. Measure the effectiveness of Fresh Ideas Cards

9. Provide a detailed analysis of the above information, by demographics, lifestyle factors and relevant attitudinal measures.

Methodology

A sample of 400 randomly selected households in Brisbane and Sydney formed the base of this research. Starting addresses were selected at random from an up to date listing of all homes in the telephone directory in each city. A cluster size of five interviews was used from each starting address.

A simple quota of having each interviewer obtain half their total interviews under 40 years of age and half over this age was applied.

All respondents interviewed were the main food shopper and meal prepare within their household.

Results were processed by computer to allow for a detailed analysis of as many relevant sub-categories as possible.

Fieldwork took place in March-April, 1995.

Scope

This report is divided into two sections; being the Summary of Findings and the main body of the report:

The Summary of Findings covers the following topics:

Vegetable Shopping

This section is accompanied with a table depicting Total Venue Usage to purchase vegetables

Household Eating Patterns

Type of Meal Eaten at Evening Meals

Home Prepared Evening Meals

This section is accompanied by two tables depicting the following:

Usage of Total Vegetables

Average Home Prepared Veg Eaten per Evening Meal by Family Structure

The next topic is:

Evening Meals Prepared Away from Home

This is accompanied by a table depicting:

Total Venue Usage of Family Evening Meals Prepared away from Home

The Summary of findings concludes with:

Attitudes to Cooking

Comparative Vegetable Purchase

The main body of the report follows and consists of the following sections and sub headings:

Introduction
- Background

- Research Objectives

Methodology

- Presentation of Report Findings

Detailed Findings

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2. Attitudes to Cooking

Interest in Cooking

- Table 13 Interest in Cooking

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3. Attitudes to Vegetables Generally

Vegetable to Meat Comparison

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- Table 40 Weekend Lunchtime Meal Pattern

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- Table 47 Salads Served at Sunday Lunch

- Table 48 Mixed Salad Vegetables Eaten at Sunday Lunch

6. Recipe Usage and Fresh Ideas Card

Recipe Usage

- Table 49 Usage of any Recipe including Cakes and Dessert

Vegetable Recipes

- Table 50 Use of Recipes for Dishes Featuring Vegetables

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- Table 51 Recall of Fresh Ideas Cards

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Conclusions

Appendix

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Reviewers Comments

This report was prepared in 1995 and so is probably still (but only just) relevant to consumers today. It is however an excellent benchmark against which future studies can be measured and trends/changes tracked.

It is a very comprehensive, quantitative look at vegetable purchasing and usage. Another very similar study was commissioned by QFVG at the same time, with emphasis on 'heavy' vegetables (potatoes, pumpkin onions and sweet potato), and it is worthwhile looking at both studies in combination.

Note however that both studies cover households in Brisbane and Sydney only and while these may be representative of other capital cities, they are not likely to be representative of regional households.

Note also that the household reported consumption deals with one particular week in the research period (March-April) and so therefore takes no account of seasonal consumption differences.

A valuable study with much useful information. However it does not extend to drawing implications from the findings or providing any strategic recommendations.

Report 10

Consumer Consumption Patterns, Purchasing Habits and Attitudes to Fruit and Vegetables

Report Details

Date:	01-Oct-94
Commissioned by:	WA Department of Agriculture and Woolworths Perth (Riverton Forum Shopping Centre)
Researcher:	CMC Yuen, N Caffin, K Hunter, W Newton, and Y Haynes
Attachments:	Research Paper

Research Description

This research paper reports on a consumer survey (which was part of a major apple maturity testing program) conducted in a Woolworths supermarket in Perth, Western Australia based on 900 interviews.

The findings reported in the paper suggest that consumption of fresh fruit and vegetables had increased. While the majority of consumers thought fresh fruit and vegetables were safe and good for you, there was a component who were unhappy with the quality.

The main reasons for selection were freshness and taste. However, many considered point-of-sale information on variety, nutrition and origin beneficial.

Most consumers purchased fresh fruit and vegetables on a weekly basis.

The paper points out that information on consumption and purchasing patterns and preferences towards fresh fruit and vegetables in Australia is scarce. It describes the limited data provided from 4 previous studies carried out in between 1974 and 1988. In so doing it reinforces the importance of this kind of consumer information to agricultural scientists, farmers and marketers in "developing long term growing practices, postharvest handling procedures, quality standards and marketing strategies to best serve Australian consumers as well as the fruit and vegetable industry.

Methodology

900 customers were randomly selected at the produce section of Woolworths supermarket in Riverton Forum shopping centre, Perth. This venue was selected because it attracts shoppers from a wide range of socio-economic backgrounds.

A standard questionnaire was used and the interviewers were asked to guide, prompt and encourage respondents to give frank answers and further information in support of their answers. The survey also included background questions, e.g. age, sex and country and origin of respondents.

Scope

The report commences with a brief synopsis of the survey findings.

This is followed by two sections describing:

1. Materials and Methods

2. Results and Discussion

The results and discussion section comprises of two sub headings and four tables which are:

General Fruit and Vegetables

Apple Survey

Table 1. Summary of Questions asked of consumers in supermarket

Table 2. Consumption and purchasing pattern of WA consumers (900) for fruit and vegetables

Table 3. Attitudes of WA consumers (900) to fruit and vegetable quality

Table 4. WA consumer (900) attitudes, knowledge, preferences, shopping patterns and usage of apples

The paper concludes with:

Acknowledgments

References

Copies of Reports

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Reviewers Comments

This journal article was published in October 1994 and summarises findings of 900 random interviews with shoppers in one supermarket in Perth WA. The limited sample scope suggests care should be taken in interpreting the results.

Findings are presented primarily in percentages which are numerous and do become difficult to follow.

While there is some general data about peoples' fruit & vegetable consumption patterns, the information is fairly academic and of more use in areas of community nutrition and diet.

Of limited use from a vegetable marketing viewpoint.

Report 11

"Opportunities and Analysis for Australian Vegetables in Specific Markets" - still being edited not yet published

Report Details

Date: 01-Jun-98
Commissioned by: NSW State Department of Agriculture
Researcher: Andrew McKillop
Attachments: Report not published as yet

Research Description

This information was obtained during a telephone discussion about the report which is still in 'edit' mode and not yet published.

The author says the paper addresses opportunities for farmers in both a domestic and export sense. He has identified a small range of vegetables with untapped potential some of which are: onions, lettuce, broccoli and sweetcorn.

McKillop said one of the main problems for growers is the high cost involved in post farmgate activity i.e. packaging and transporting their produce. He also suggested interstate co-operative marketing as an opportunity for growers. Another opportunity, he says, is to amalgamate growers under one packing shed.

Methodology

Exact methodology is not known. However it is understood a lot of the information was obtained through face to face interviews with growers.

Scope

Not known at this stage

Copies of Reports

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Reviewers Comments

As a report of the study has not yet been published it is not possible to

provide any comment on the value of the study or its recommendations.

Report 12

Apparent Consumption of Foodstuffs Australia 1994-95 and 1995-96

ABS No. 4306.0

Report Details

Date:	01-Apr-98
Commissioned by:	Australian Bureau of Statistics
Researcher:	Joanne Gibbons
Attachments:	Summary of findings and relevant parts of the report.

Research Description

This publication contains detailed statistics of the apparent consumption of foodstuffs in Australia for 1994-95 and 1995-96, as well as comparative data for earlier years.

The Summary of Findings discusses consumption levels of all the major food groups in detail. Information relating to Vegetables covers the following:

Per capita consumption of vegetables in 1995-96 rose to a record high of 162.8 kg after falling in 1994-95. Vegetable consumption in 1995-96 was approximately 39% greater than consumption in the late 1950's which was about 117.0 kg per capita.

It describes consumption of root and bulb vegetables (excluding potatoes) as increasing by 12.9% to 24.3 kg per capita. The per capital consumption of leafy and green vegetables rose 5.5% in 1995-96 to 21.5 kg but had remained steady in 1994-95. Other vegetables also showed an increase in 1995-96 with consumption up 16.2% to 26.3 kg per capita.

The document then consists of 4 sets of statistical tables.

These statistics compare the following figures of per capita consumption of various food types, one of which is vegetables:

Tables 1 and 2 look at Apparent per Capita Consumption and Total Apparent Per Capita Consumption every 10 years from 1938-39 until 1988-89 and then 1995-96 and each year from 1990-91 to 1995-96 respectively. Vegetables are divided into potatoes, other root and bulb vegetables, tomatoes, leafy and green vegetables, other vegetables and the total consumption of vegetables per capita.

The third and fourth sets of tables show the Estimated Supply and Utilisation of Foodstuffs for the years ended 30th June 1995 and 30th June 1996 respectively. Statistics are given for 19 different types of vegetables.

The document also provides an appendix comprising explanatory and technical notes.

Methodology

ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations.

Scope

This document is divided into three sections. They are:

Notes

Summary of Findings

Tables

1. Apparent per capita consumption - average 3 years ended 1938 -39 to 1988-89 and 1995-96.

2. Total apparent consumption - years ended 30 June 1991 -96

3. Estimated supply and utilisation of foodstuffs - year ended 30 June 1995

4. Estimated supply and utilisation of foodstuffs - year ended 30 June 1996

Additional Information

Explanatory Notes

Appendix - per capita statistics

Technical notes

Copies of Reports

Australian Bureau of Statistics
Lvl 5 St Andrews House
Sydney Square
Sydney 2000

Ph: (02) 9268 4611

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Reviewers Comments

The information presented is statistical and not descriptive in nature.

It provides a reasonable overview of total vegetable consumption trends and some limited breakdown by vegetable groups.

The data is of general interest only and not particularly useful in terms of strategic planning.

Report 13

National Nutrition Survey and Selected Highlights Australia

ABS No. 1995 4802.0

Report Details

Date:	22-Dec-97
Commissioned by:	Australian Bureau of Statistics and Commonwealth Department of Health and Family Services
Researcher:	W McLennan and A Podger
Attachments:	Selected Highlights

Research Description

This publication presents selected data from the 1995 National Nutrition Survey (NNS) which collected information on food and nutrition from the Australian Population. Information is provided on food and beverage consumption, nutrient intake, eating habits and dietary attitudes.

The overall objective of this survey is the provision of food and nutrient data to assist with the implementation of Australia's "Food and Nutrition Policy", future revisions of the Recommended Daily Intakes and future revisions of National Health Goals and Targets..

More specific objectives are to provide data on food intake for comparison with dietary guidelines and nutrient intake for comparison with RDIs. The NNS also provides benchmark data against which future surveys can be compared to assess changes over time in the dietary status of Australians.

The publication includes 24 highly detailed tables and vegetable intake comes under the heading Vegetables and Legumes and is referred to specifically as vegetable products and dishes.

The publication discusses food intake, energy intake and eating patterns for the following groups:
Children aged 2-11 years; Adolescents aged 12-18 years; Adults aged 19 years and over

The second half of the publications is a series of 24 detailed tables depicting various aspects of the NNS.

Methodology

The National Nutrition Survey was conducted during the period from February 1995 to March 1996. Approximately 13,800 people aged two years or over from urban and rural areas in all States and Territories participated in the survey. The NNS was conducted on a sub-sample of respondents in the 1995 National Health Survey (NHS). The NNS was conducted under the Census and Statistics Act 1995, on a voluntary basis.

Two approaches were used in the NNS to collect data on food and beverage intake:

The daily food consumption (24 hour recall) method was used as the main indicator of food intake.

A Food Frequency Questionnaire (FFQ) was used to assess usual frequency of intake for those aged 12 years or more.

Additionally, the personal interviews collected information on:

Physical measurements

Eating habits and patterns

Scope

This publication is divided into two sections.

The first section discusses the editorial and additional information regarding the 1995 National Nutrition Survey.

It contains the following topics and graphs:

Editorial

Preface

Introduction

Selected Highlights

- Average intake of food and beverages
- Average energy intake
- Contribution of macronutrients of energy intake of adults
- Average intake from selected food groups, children 8-11 years
- Average intake from selected food groups, adolescents 16-18 years
- Average intake from selected food groups, adults
- Contribution of selected food groups to energy intake, adults
- Overweight and obese adults

List of Tables

FOOD INTAKE

1. Persons: Proportion who consumed from major food groups by age by sex
2. Mean daily food intake (g): Amount consumed from major food groups by age by sex
3. Mean daily food intake for persons aged 19 years and over (g): major food groups by State by sex
4. Mean daily food intake for persons aged 19 years and over (g): Major food groups by part of State by sex

NUTRIENT INTAKE

5. Total energy intake (kJ): Proportion obtained from major food groups by age by sex
6. Mean daily energy and nutrient intake: Age by sex
7. Mean daily energy and nutrient intake:

Persons aged 19 years and over by State by sex

8. Mean daily energy and nutrient intake:
Persons aged 19 years and over by part of State by sex
9. Mean per cent contribution to energy intake:
Protein, fat, carbohydrate and alcohol by age by sex
10. Persons aged 19 years and over: Vitamin and mineral supplements taken the day before interview by age by sex

EATING PATTERNS

11. Persons: Self-reported type of diet by age by sex
12. Persons: where food and beverages consumed by age by sex
13. Total Energy intake (kJ) : Proportion of energy by eating location by age by sex
14. Contribution of fat to energy intake: Eating location by age by sex
15. Persons: Eating occasion by broad food groups by age by sex
16. Persons: Number of times food is usually consumed per day by age by sex
17. Persons: Number of times per week usually has breakfast
18. Persons aged 16 years and over: Desired change in amount of selected foods consumed by age by sex
19. Persons aged 16 years and over: Whether ran out of food and had no money to buy more by age by sex

PHYSICAL MEASUREMENT

20. Persons: Measured height by age by sex
21. Persons: Measured weight by age by sex
22. Persons aged 19 years and over: Body mass index by age by sex
23. Persons aged 19 years and over: Body mass index by self-reported type of diet by sex
24. Mean daily energy and nutrient intake:
Persons aged 19 years and over by body mass index by sex

Additional Information

EXPLANATORY NOTES

Introduction
Scope
Methodology
Data Processing
Survey Response
Estimation Procedures
Reliability of Estimates
Data Quality
Comparison with other studies
Related Publications
Symbols and other usage's

APPENDIX 1

Population Estimates used to Calculate Means and Percentages

APPENDIX 2

Food Group Categories

APPENDIX 3

Recommended Dietary Intakes

TECHNICAL NOTES

GLOSSARY

LIST OF REFERENCES

Copies of Reports

Australian Bureau of Statistics
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Sydney 2000

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Fax:(02) 9268 4620

Reviewers Comments

The information presented is statistical and not descriptive in nature. Note also that, being collected in 1995, it may be somewhat obsolete. However, in terms of a purely statistical analysis of vegetable consumption, it is the best available.

It provides very broad information about vegetable and vegetable product consumption and compares males/females; different age groups etc.

No information on consumption of specific vegetables or vegetable groups is contained in this report, however such detailed data is available in the ABS publication 'National Nutrition Survey: Foods Eaten In Australia, 1995 (Cat #4804.0)

No comparison with previous studies is included so overall trends

cannot be identified.

Interesting general information but probably of limited strategic use to the vegetable industry.

Report 14

Consumer Study of the Fruit and Vegetable Market 1990

HRDC Project No. HG808

Report Details

Date:	30-Jun-90
Commissioned by:	Horticultural Research & Development Corporation, the Australian Horticultural Corporation, The Sydney Market Authority and the Committee of Direction of Fruit Marketing
Researcher:	Frank Small & Associates (Aust) Pty Ltd
Attachments:	Executive Summary

Research Description

This study was prepared following a request from the horticultural industry. The primary goal of this marketing research project is to provide the industry with guidelines for developing consumer marketing strategies in Australia which:

- are based on an understanding of current perceptions and behaviour that consumers have towards fruit and vegetables. This includes trial of new products;
- allows the industry to meet consumer concern about environmental issues (such as consumer perceptions about chemical/pesticide residues); and helps the industry identify opportunities for specific marketing strategies.

Although specific research had been conducted on some horticultural products in previous years (i.e. prior to 1990, no large scale comprehensive study on fruit and vegetables had been conducted in Australia.

This report addresses a large number of issues for the horticultural industry generally, as well as findings specific to individual fruit and vegetable categories.

The first half addresses the general findings and the latter half addresses findings relevant to individual fruit or vegetable categories.

Methodology

The survey involved 1,954 face-to-face interviews with householders who purchase fresh fruit and vegetables.

Interviews were conducted in May/June 1990 with the main fruit/vegetable or decision maker (aged 18 years and over) in households.

Interviews were conducted in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart.

The sample was based on multistage area probability random sampling.

Scope

The report commences with 4 introductory chapters which are:

1. INTRODUCTION

2. STUDY OBJECTIVES

3. RESEARCH DESIGN

4. EXECUTIVE SUMMARY

Table 1. Vegetables Purchased

Table 2. Fruits Purchased

Table 3. Segmentation of Fruit and Vegetable Purchasers

MAIN FINDINGS

Then the following 16 chapters focus on the main findings of the research.

5. OPPORTUNITIES - THE CHANGING ROLE OF FRUIT AND VEGETABLES

5.1 Fruit, Vegetables and Meat in Meals

5.2 Fashionability of Fresh Fruit and Vegetables

5.3 Opportunities for Specific Fruit and Vegetables

6. PURCHASING DIFFERENCES BETWEEN CITIES

7. THE INCREASING POPULARITY OF FRUIT AND VEGETABLES

7.1 Fruit

7.2 Vegetables

8. THREATS AND WEAKNESSES WHICH NEED ADDRESSING

8.1 Perceptions of Fresh Food Safety

8.2 Apples and Environmental Issues

8.3 Concern about Quality

8.4 Tomato Quality

8.5 Avocado Quality

9. CONSUMER LOYALTY

10. ATTITUDES TO FRUIT AND VEGETABLES

11. BEHAVIOURAL AND ATTITUDINAL SEGMENTATION

12. PURCHASE BEHAVIOUR

13. USAGE AND CONSUMPTION BEHAVIOUR

14. IMPORTANT FACTORS WHEN PURCHASING AT FRUIT AND VEGETABLE OUTLETS

15. ATTITUDES TOWARD STICKERS

16. MICROWAVE USAGE

17. EFFECTIVENESS OF ADVERTISING

17.1 Overview

17.2 Level of Registration of Fruit Campaigns

17.3 Non Awareness Levels of Fruit Campaigns

17.4 Registration of Vegetable Advertising Campaigns

18. EFFECTIVENESS OF PROMOTIONS

19. CONSUMER DEMANDS FOR SPECIFIC FRUITS

19.1 Apples

19.2 Apricots

-
- 19.3 Bananas
 - 19.4 Blueberries
 - 19.5 Cherries
 - 19.6 Custard Apples
 - 19.7 Grapes
 - 19.8 Honey Melons/Honeydew Melons
 - 19.9 Kiwi Fruit
 - 19.10 Mandarins
 - 19.11 Mangoes
 - 19.12 Nashi Fruit
 - 19.13 Nectarines
 - 19.14 Oranges
 - 19.15 Pawpaws
 - 19.16 Peaches
 - 19.17 Pears
 - 19.18 Pineapples
 - 19.19 Plums
 - 19.20 Rockmelons
 - 19.21 Strawberries
 - 19.22 Watermelons

20. CONSUMER DEMANDS FOR SPECIFIC VEGETABLES

- 20.1 Asparagus
- 20.2 Avocados
- 20.3 Green Beans
- 20.4 Broccoli
- 20.5 Button Squash
- 20.6 Cabbage
- 20.7 Capsicum
- 20.8 Carrots
- 20.9 Cauliflower
- 20.10 Celery
- 20.11 Cucumber
- 20.12 Eggplant
- 20.13 Fresh Herbs
- 20.14 Green Chinese Vegetables
- 20.15 Lettuce
- 20.16 Mushrooms
- 20.17 Onions
- 20.18 Peas
- 20.19 Potatoes
- 20.20 Pumpkin
- 20.21 Sweet Corn
- 20.22 Tomatoes
- 20.23 Zucchini

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7 Merriwa Street
Gordon 2072

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Reviewers Comments

This study was carried out in 1990 and while very comprehensive, it would bear little relationship to consumer markets today. It is however a

good example of a very comprehensive and market-focussed study.

Its only real purpose now might be to serve as a benchmark and thus enable tracking of changes in purchasing and usage habits & attitudes. And that is only if it was considered tracking changes over the past 10 years is important.

The report includes detailed graphs and samples of the survey.

Although this is a lengthy document, information is clearly expressed and the findings thorough.

Report 15

The Attitudes of Independent Fruit and Vegetable Retailers towards Skilling and Promotion.

HRDC Project No. VG205

Report Details

Date:	30-Sep-93
Commissioned by:	Horticultural Research and Development Corporation and Australia United Fresh Fruit & Vegetable Association Ltd
Researcher:	Agriculture Victoria - Mr K Clayton-Greene
Attachments:	Report

Research Description

This project involved research with 65 Victorian fruit & vegetable retailers. It sought to provide information that would assist in developing training and other programs to improve the handling of fruit and vegetables by retailers.

The first aim of this study was to develop an understanding of both the working environment and the attitudes of fruit and vegetable retailers toward skilling and promotion.

The second aim was to find out if there was demand for training in fruit and vegetable handling and to provide that information to course providers on how such courses could be designed and structured.

Methodology

One hundred retailers were randomly selected from a list of 1800 known fruit & vegetable retailers. Letters were sent inviting them to participate in the study and eventually 65 were interviewed personally. A structured questionnaire with mostly closed questions was used.

Questions covered:

- (i) their working environment
- (ii) attitudes toward skilling and promotion
- (iii) training in fruit and vegetable handling
- (iv) general comments on the fruit and vegetable industry.

Scope

The final report comprises:

INTRODUCTION

METHODOLOGY

STRUCTURE OF SAMPLE

RESULTS

Handling of produce
Experience and expertise
Attitudes on skilling
Attitudes on promotion
Pesticide use

CROSS TABULATIONS

GENERAL COMMENTS

CONCLUSIONS

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Reviewers Comments

This is a study of retailers so has limited relevance to the consumer focus of this project. There are however, some comments from the retailers on their perception of the need for much more consumer education on selection and storage of fruit & vegetables.

An overall comment on sample selection for this study is appropriate. The selection of retailers to be interviewed is open to bias at a number of levels and so we would urge caution in considering the findings.

And on methodology, virtually all questions were 'closed', allowing little room to explore motivations or the reasons behind particular answers.

While the study draws a small number of conclusions, no strategic recommendations are provided.

Report 16

Review of Consumer Market Research in the Fruit & Vegetable Industries

HRDC Project No. HG323

Report Details

Date: 30-Nov-94

Commissioned by: Horticultural Research and Development Corporation and Australia United Fresh Fruit & Vegetable Association Ltd

Researcher: Australia United Fresh Fruit & Vegetable Assoc Ltd - Mr E Kime

Attachments: Executive Summary

Research Description

The aim of this project was to assist in promoting the case for, and then planning a national generic promotional campaign of fruit and vegetables, with a view to increasing consumption and sales.

This report:

- Reviews recent past fruit & vegetable campaigns in the USA, UK and various Australian States.
- Provides a summary of the limited recent Australian consumer research into fruit & vegetable consumption.

Methodology

All desk research involving the sourcing and reviewing a considerable number of studies and papers.

Scope

The report comprises:

AN EXECUTIVE SUMMARY

REVIEW OF FRUIT & VEGETABLE PROMOTIONS

United States of America

Canada

United Kingdom

New Zealand

Western Australia

Victoria

New South Wales

South Australia

Queensland, Tasmania & Northern Territory

Conclusions

AUSTRALIAN HEALTH ISSUES AND FRUIT & VEGETABLES

State/Territory issues for a national fruit & vegetable promotion.
What are Australian Eating?
How much fruit & vegetables should Australians eat?
Why should Australians eat more fruit & vegetables?
Food and Nutrition Policy for Australia.

CONSUMER RESEARCH

Profile of Australian eating habits
Social influences
Fruit & Vegetable consumption
Consumer Barriers
Consumer Attitudes
Consumer knowledge
Consumer behaviour
Areas of opportunity

CONCLUSIONS

Food and Nutrition policy for Australia.

CONSUMER RESEARCH

Profile of Australian Eating habits

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Reviewers Comments

This is a thorough and logical review of past consumer promotional activities and the available (at the time) consumer research.

It contains quite a deal of broad information and comment that may be relevant to current markets - though much of the analyses or studies reviewed date to the very early 90's - so may be not so relevant to today's consumers.

It puts a convincing argument for ongoing, major-funded promotional activity for fruit & vegetables and would be an important resource for anyone considering developing a case for such a program.

Report 17

Complete Reference to the Rural Industry and Australian Agriculture

1997-98 6th Edition

Report Details

Date:	01-Jan-97
Commissioned by:	National Farmers' Federation Australia
Researcher:	Brian Newman, Australian Vegetable and Potato Growers Federation (Inc) - Ausveg.
Attachments:	Article Australian Horticulture

Research Description

This is one of the chapters in the "Complete Reference to the Rural Industry and Australian Agriculture" called The Vegetable Industry.

It discusses the importance of the vegetable industry in the Australian farming sector as a whole.

The chapter addresses several crucial areas which the vegetable industry must look at if it wants to survive into the 21st century which include:

- the need for individual farming units to Co-ordinate their efforts in terms of production and marketing
- the need for strategic partnerships to be developed between the production sector, retailers, processors and exporters;
- the need for research and development priorities to be established that concentrate on issues and outcomes for Australian vegetables beyond the farm gate;
- the need to address the issue of international competitiveness and especially the areas of import replacement and product development and differentiation;
- the need for infrastructure improvements to make the linkages between the grower and the consumer shorter and more efficient;
- the need to address the issue of declining returns to growers, which is inhibiting an investment in new technology to gain improvements in quality and the expansion of farming operations. New technology can lead to economies of scale and an ability to offer the market longer lines of quality assured produce; and
- the need to encourage the rapid adoption of internationally acceptable quality assurance systems that will enhance Australia's position as professional producers of clean wholesome vegetables".

The article goes on to discuss the major opportunities for the vegetable industry on the domestic market; opportunities on export markets; opportunities in processing; and strategic alliances

Methodology

N/A. Not a research study.

Scope

This is a 5 page chapter appearing in the 1997-98 6th Edition of the "Complete Reference to the Rural Industry and Australian Agriculture" pp 285 -289 inclusive.

It contains 2 graphs depicting

Figure 1. Australian production of selected vegetables 1993-94

Figure 2. Australian vegetable exports and imports

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KINGSTON ACT 2604
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Reviewers Comments

An interesting overview of the Vegetable industry in Australia for 1997/98 and an insight into future opportunities for the industry.

This is not a consumer research report as such, but does contain some observations on market and marketing opportunities.

Report 18

Emerging Trends in the International Vegetable Industry

ExpHORT 2000 Publication No 14

Report Details

Date: 01-Aug-97

Commissioned by: ExpHORT 2000 - 7 Veg and Agribusiness, The Institute for Horticultural Development and Agriculture Victoria

Researcher: Paul Daly, Megan Hill and Ralph Cadman

Attachments: Summary

Research Description

This report has been produced to provide market information and "live" trend information for the ExpHORT 2000 - 7 VEG program team.

This report attempts to provide an overview of the latest international trends as they have appeared in international industry periodicals and fresh produce journals over the past 2 years. The trends which are examined are in the commercial, consumer, government and R&D areas.

The report provides an overview of the possible directions that future research and industry development could take.

The overriding aim of the program is "to achieve a 40% increase in production for export and a 5 fold increase in package-branded (value added) vegetables for the domestic and export markets by the year 2001"

Methodology

- Review the last 2 years of major domestic and international business, marketing and technical periodicals and journals;
- Identify emerging themes and issues that begin to appear in the media and track them as they evolve into major issues; and
- Identify issues as emerging and high profile developments, in order to prioritise them for further analysis and discussion with industry.

The main industry journals cited were: Snack World (USA); Produce Business (USA); the Packer (USA); Packer Fresh Trends (USA); Fresh Produce Journal (UK); and Good Fruit and Vegetables (Australia)

Scope

The content of the Report is as follows:

Summary
Introduction

Aims
Methodology

1. GENERAL TRENDS IN THE INTERNATIONAL VEGETABLE INDUSTRY
Production, distribution and marketing

Seed companies
Production
Food safety in Australia
Post harvest and transportation
Wholesale
Retail and marketing
Promotions
Trade

PRODUCT TRENDS

Organic produce
Tomatoes
Lettuce
Carrots
Sweet corn
Asian Vegetables
Changes in Varieties

NEW TECHNOLOGIES

Cool chain and atmosphere storage management
Processing
Packaging
Genetic transformation
New products
Value adding
Fresh cuts

2. OVERVIEW OF CONSUMER & RETAIL TRENDS IN THE USA & UK PRODUCE INDUSTRIES

Food Safety
Fresh-cuts
Home-meal replacement & meal solutions
Health & nutrition
New challenges for the fresh produce retail sector
Internet
Home shopping
Electronic information management
Specialty produce
Industry structure
Private labels

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Reviewers Comments

The study is recent having been published in August 1997.

Methodology involves review of recent marketing and technical articles involved in the vegetable industry - mainly from the USA.

Information is presented clearly and concisely, however most of the reference sources and trend information is American.

Where consumer and market trends are discussed, the report does not go on to highlight any implications for the Australian vegetable industries or provide any specific recommendations.

Report 19

Australian Asian Vegetables - Assessment of Market Demand in Australia

Report Details

Date: 01-Jan-96

Commissioned by: Rural Industries Research & Development Corporation,
Connectica International

Researcher: Barry Lee

Attachments: Executive Summary

Research Description

Documents the results of 183 interviews with Asian restaurant managers, grocery stores and supermarkets in Sydney and Melbourne. Shows that the markets for Asian vegetables in Sydney and Melbourne alone are growing at a rate of more than 20 percent annually. While Asian restaurants currently account for 50% of the trade, supermarkets expect the largest increase in annual demand.

Methodology

The research involved an extensive program of industry consultation and field surveys, and was conducted in five stages:

STAGE 1

Definition of market analysis and survey plans.

STAGE 2

Preparation of survey methodology and testing of questionnaires.

STAGE 3

Field surveys and questionnaires of Asian restaurants, Asian foodstores and supermarket chains in Sydney and Melbourne.

STAGE 4

Definition and analysis of survey results.

STAGE 5

Interim reporting to industry (at the Australian Asian Vegetables Industry Conference), and publication.

The primary sources of data for this study were field surveys in Sydney and Melbourne.

The selection of survey sites and numbers was based upon a stratified random sampling technique, and biometric experience from other food surveys conducted by University of NSW.

There was a total of 183 outlets surveyed during the study.

Scope

This publication comprises 12 sections not including the Foreword and Appendix.

FOREWORD
ACKNOWLEDGMENTS
ABBREVIATIONS
EXECUTIVE SUMMARY

1. BACKGROUND TO THE PROJECT

2. OBJECTIVES OF THE PROJECT

3. ASIAN VEGETABLES IN AUSTRALIA

3.1 Asian Vegetables for Today's Consumer

3.2 The Range of Asian Vegetables

4. RESEARCH METHODOLOGY

4.1 General

4.2 Industry Surveys

5. MAJOR OUTLETS FOR ASIAN
VEGETABLES

5.1 Retail Supermarkets

5.2 Asian Grocery Stores

5.3 Food Service/Asian Restaurants

6. THE SURVEY RESULTS FOR SYDNEY
AND MELBOURNE

6.1 Overview

6.2 Awareness of Asian Vegetables

6.3 Asian Vegetables in Business

6.4 The Value of Asian Vegetable Purchases

6.5 The Future Growth in Demand for Asian
Vegetables

6.6 The Top Asian Vegetables

6.7 Wanted - Asian Vegetables

6.8 Asian Vegetables - the Benefits for
Business

6.9 Price, Availability, and Quality of Asian
Vegetables

6.10 Issues Affecting the Growth of the Asian
Vegetables Industry

6.11 Issues that Constrain the Growth of the
Asian Vegetables Industry

6.12 Who are the Major Suppliers of Asian
Vegetables

6.13 Where are the Asian Vegetables Grown

7. THE SURVEY RESULTS FOR SYDNEY

7.1 Overview

7.2 Awareness of Asian Vegetables

7.3 Asian Vegetables in Business

7.4 The Value of Asian Vegetable Purchases

7.5 The Future Growth in Demand for Asian
Vegetables

7.6 The Top Asian Vegetables

7.7 Wanted-Asian Vegetables

7.8 Asian Vegetables-the Benefits for Business

7.9 Price, Availability and Quality of Asian
Vegetables

7.10 Issues Affecting the Growth of the Asian
Vegetables Industry

7.11 Issues that Contrain the Growth of the

Asian Vegetables Industry

7.12 Who are the Major Suppliers of Asian Vegetables

7.13 Where are the Asian Vegetables Grown?

8. THE SURVEY RESULTS FOR MELBOURNE

8.1 Overview

8.2 Awareness of Asian Vegetables

8.3 Asian Vegetables in Business

8.4 The Value of Asian Vegetable Purchases

8.5 The Future Growth in Demand for Asian Vegetables

8.6 The Top Asian Vegetables

8.7 Wanted-Asian Vegetables

8.8 Asian Vegetables-the Benefits for Business

8.9 Price, Availability and Quality of Asian Vegetables

8.10 Issues affecting the Growth of the Asian Vegetables Industry

8.11 Issues that Constrain the Growth of the Asian Vegetables Industry

8.12 Who are the Major Suppliers of Asian Vegetables

8.13 Where are the Supplied Asian Vegetables Grown

9. AUSTRALIAN MARKET ISSUES

9.1 Market Demand for Asian Vegetables in Sydney and Melbourne

9.2 Assessment of Australian Demand

9.3 Key Issues

10. RESEARCH ISSUES

10.1 Market Development

10.2 Industry Development

11. CONCLUSIONS

12. REFERENCES

APPENDIX

Asian Vegetables Survey Form

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Ph: (02) 6272 4539
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E-mail: rirdc@netinfo.com.au

Reviewers Comments

This study is two years old and so is still very relevant. It aims to assess the demand and growth issues for the Australian Asian vegetables

market.

An excellent study - easy to follow and contains much useful information. All findings are supported by many diagrams and graphs.

While the study provides an excellent overview of the Asian Vegetables market, with indications of market growth and opportunities, it contains no specific strategic recommendations.

Report 20

Audit of the Australian Asian Vegetables Industry

Report Details

Date:	01-Jan-95
Commissioned by:	Rural Industries Research & Development Corporation, Connectica International
Researcher:	Barry Lee
Attachments:	Executive Summary

Research Description

This study seeks to identify those production factors which link the industry to the market and the practical issues which can sustain the competitive advantages for the Asian vegetables industry to Australia.

It determines baseline production and research data and defines industry capability statements for each state/territory of Australia.

It covers existing industry production, capabilities and experience, opportunities developed through applied research, and industry strategic strengths and weaknesses.

Methodology

The research involved an extensive program of industry consultation and was conducted in four stages:

STAGE 1
Identification of relevant industry and research organisations

STAGE 2
Preparation and distribution of surveys.

STAGE 3
Field interviews with both industry and relevant research organisations.

STAGE 4
Definition and analysis of industry production and related research programs.

For much of this study, estimates of grower and local vegetable production information relied heavily upon field surveys and interviews with State Departments' of Agriculture and industry in NSW, Victoria, Tasmania, Queensland, Northern Territory and Western Australia.

More than 115 interviews were conducted with growers, wholesalers and retailers of Asian vegetables.

Scope

ACKNOWLEDGMENTS

ABBREVIATIONS

EXECUTIVE SUMMARY

1. Background to the Project
2. Objectives of the Project
3. Introduction
4. Research Methodology
 - 4.1 Data Sources for the Industry Survey
 - 4.2 Data Quality
5. Industry Overview
 - 5.1 Industry Background
 - 5.2 Types of Asian Vegetables
 - 5.3 Industry Population
 - 5.4 Industry Size and Capacity
 - 5.5 Asian Vegetable Audit
 - 5.6 Climate
 - 5.7 Cultivated Area and Production methods
 - 5.8 Yields
 - 5.9 Summary

6. AUSTRALIAN ASIAN VEGETABLES INDUSTRY BY STATE

- 6.1 New South Wales
- 6.2 Victoria
- 6.3 South Australia
- 6.4 Western Australia
- 6.5 Queensland
- 6.6 Northern Territory
- 6.7 Tasmania
- 6.8 Summary

7. STRATEGIC REVIEW OF THE AUSTRALIAN ASIAN VEGETABLES INDUSTRY

- 7.1 Strengths of the Australian Asian
Vegetables Industry
- 7.2 Weaknesses of the Australian Asian
Vegetables Industry
- 7.3 Opportunities for the Australian Asian
Vegetables Industry
- 7.4 Threats to the Australian Asian Vegetables
Industry
- 7.5 Key Issues Raised by Industry
- 7.6 Innovation and Research & Development
- 7.7 Summary of SWOT Analysis
- 7.8 Summary

8. INDUSTRY CAPABILITY STATEMENT

- 8.1 Sustainable Competitive Advantages for the
Industry
- 8.2 Australian Industry Capability Statement

9. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

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ASIAN VEGETABLES

APPENDIX B
PRODUCTION ESTIMATES
AUSTRALIAN ASIAN VEGETABLES

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YIELD ESTTIMATES FOR ASIAN VEGETABLES

APPENDIX D
RESEARCH PROJECTS

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REFERENCES

Copies of Reports

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Reviewers Comments

This study is three years old, having been carried out in 1995.

The methodology aims to provide a practical capability statement for further development of the Asian vegetables industry; rather than simply an extensive listing of Asian vegetables grown in Australia.

The study is comprehensive and thorough, though it is very much a production and industry development project rather than dealing with particular consumer or market issues. These are covered, to some extent, in the 'Assessment of Market Demand in Australia' study (Report 19 - separately reviewed in this document).

Report 21

Meal Solutions in Australia 1998-2000

Report Details

Date:	01-May-98
Commissioned by:	N/A. This was a syndicated study.
Researcher:	BIS Shrapnel
Attachments:	Document

Research Description

A comprehensive study of the 'meal solution' market in Australia.

For the purposes of this study, a meal solution is defined as "Fresh, chilled pre-cooked full meals and major meal components which require only heating; as well as fresh, chilled pre-prepared raw major meal components, some of which require cooking"

So, in relation to Vegetables, it covers:

- Washed and stir-fry vegetables in a bag or container
 - Washed and sliced cabbage and coleslaw packs
 - Fresh chilled stuffed raw vegetables
 - Washed lettuce salad mix in a bag
- Complete salad mix in a sealed container.

Details on current and future purchase interest are provided according to a number of demographic groups.

Looks at the dynamic nature and rapid growth of the market as well as providing an estimate of market size and growth expected over the next 2 years.

Methodology

A combination of methodologies, including:

- 254 face-to-face consumer interviews
- 14 consumer focus groups
- 400 telephone interviews with supermarket shoppers
- extended interviews with major players in the market.

Scope

A very comprehensive report on the total Meal Solutions market, incorporating the following sections:

EXECUTIVE SUMMARY

INTRODUCTION

SUMMARY OF KEY FINDINGS

OVERSEAS & LOCAL TRENDS

THE AUSTRALIAN HOME MEAL REPLACEMENT MARKET

SHARE OF STOMACH

MARKET ATTRIBUTES

Copies of Reports

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Reviewers Comments

A very comprehensive look at this important and growing trend in food preparation/consumption. The study looks at the total market and vegetables are covered in that context.

This is a syndicated survey which is generally available for purchase at \$17,000 for the full study. However particular results for a range of vegetable products, across a number of consumer demographic groups, is available for \$1,000.