Tomatoes - Marketing

The West of Scotland Agricultural College

THE MARKET FOR SCOTCH TOMATOES

The report of a pilot study
carried out during 1973

by

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AYR

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FOREWORD

This report covers part of a comprehensive research programme devised in outline by C.J. Manners of the Economics Division in close association with the Advisory and Development Service of the College. The overall objective has been to examine in detail the problems and prospects of the tomato grower in the West of Scotland with a view to suggesting guidelines for the future.

Earlier reports have considered aspects of both production and retailing of Scotch tomatoes.

This report outlines the findings of two investigations which examined consumer aspects, covering both housewives' attitudes to tomatoes and purchasing patterns of a sample over an eleven week period.

The two investigations were formulated in association with members of the Marketing Department at the University of Strathclyde under the direction of Professor M.J. Baker.

The major contributions to the investigations were made by C.J. Manners and A.J. Grieve with Yvonne Doolan (student at the University of Strathclyde) responsible for the fieldwork on the housewives Diary panel.

C.J. Manners left the College in March 1974 to take up a post with Fargrow of Worthing, whilst A.J. Grieve left the College in September 1974 to join the Tourist Board at Worcester.

The Draft report was written by A.J. Grieve and has been edited by R.W.T. Hunt.

J. Clark
Head of Division

ACKNOWLEDGEMENTS

The basic research for this report owes much to the pioneering enthusiasm of John Manners who jointly with the author and members of the Marketing Department of the University of Strathclyde devised the research method used. The work of Strathclyde personnel:- N.V. Palmer (planning stage) A.J. Brown (group interviews) and Yvonne Doolan (field work for housewives Diary panel) is gratefully acknowledged.

Thanks are also due to J. Potter of DAFS in Glasgow for supplying regular information on tomato supplies and prices.

The analysis of the Diary panel data was carried out by clerical staff at The West of Scotland Agricultural College.

Editorial Note

The report was drafted by A.J. Grieve and although some of the views expressed may have been omitted in an attempt to reduce the length of the report, they remain substantially as set out by the author.

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CHAPTER 1

SUMMARY

1. THE SCOTTISH TOMATO INDUSTRY

Tomato Production is concentrated in the South West of Scotland particularly in the counties of Lanarkshire and Ayrshire. In recent years, the industry has faced a situation of declining consumption, declining real prices and a declining local premium while at the same time both costs and competition have increased. The climatic conditions in Scotland relative to competitors necessitates greater use of heating, the higher cost of which must be recouped from the market, in the form of a premium price, if Scottish growers are to obtain adequate returns. The recent rise in oil prices has intensified the need for a premium price and although the government oil subsidy has provided a temporary palliative, the long term prospects of many growers is bleak.

2. THE MARKET

Scotch tomatoes have traditionally been sold through commission agents in the wholesale markets to retailers. However, the growth of the supermarket chains in recent years has seen them capture a 30% share of fruit and vegetable retailing in Scotland and it is expected that this share will increase further in the future. While the independent retailers could be adequately served by the tradition of personal visits to the market to select and purchase individual consignments from commission agents, the supermarket buyer requires large and regular deliveries of an accurately graded product. Due to the small size of individual nurseries, Scottish produce comes into the market in small individual lots of variably graded quality. The supermarket buyers have been unwilling to individually inspect each consignment of Scotch tomatoes and so turned increasingly to imported tomatoes which were available in large homogenous quantities. Thus, the Scottish grower found himself in the position of selling his produce to a declining sector of the retail trade, but unable to meet the requirements of the growing supermarket sector.

3. THE CONSUMER

(A) Attitudes

Group interviews with housewives showed that tomatoes were identified as a seasonal, health-giving and convenient food, requiring little preparation and providing excellent decoration. They were particularly associated in the mind of the housewives with salads, sunshine and the coming of summer. Tomatoes were regarded as having no close substitute and processed tomatoes, sauces and purees were not closely associated with the fresh product.

Housewives attitudes towards Scotch tomatoes were basically very favourable. Almost all the housewives expressed a marked preference for Scotch tomatoes, which were believed to be fresher and have a special flavour. It was believed that Scotch tomatoes could be identified by their "minty" smell, the presence of the stalk and by their orange-red colour.

Many housewives claimed that they were prepared to pay a premium to obtain Scotch tomatoes. However, qualifications were often made about the consistency of the quality of Scotch tomatoes and buying Scotch tomatoes was often considered a risk. In general, the housewives were quite willing to pay a premium if they could be certain that they would obtain the extra quality they were looking for.

For the majority of housewives, the ideal tomato was orange to red in colour, small and firm, with a strong "minty" smell and having a stalk attached which indicated freshness. Dutch tomatoes, which were believed to be generally inferior, were often purchased because their standard quality and lower prices gave excellent value. When purchasing tomatoes, colour and firmness were used as the main indications of eating quality.

The housewives claimed that some retailers sold poor or mislabelled produce. Only by self-selection could they be sure of obtaining the quality they demanded, and most felt that retailers did not help them to obtain quality tomatoes. This uncertainty of the quality of Scotch tomatoes is detrimental to sales and could be overcome by more accurate grading, allied to branding and promotional campaigns.

(B) Shopping Patterns

Scotch tomatoes must be widely available to the housewife within her normal shopping pattern, before she can purchase them. Investigations carried out in 1973 suggest that more than one quarter of Scotch tomatoes in Kilmarnock were bought from supermarkets and department stores, an improvement on the 1971 position. However, Scottish tomato growers are still heavily dependent on the independent shops, as retail outlets for their produce. As fruit and vegetable sales through multiples are expected to increase from the present 30%, Scotch tomatoes must be available in these outlets in the future.

An initial panel of 200 housewives keeping diaries over an eleven week period revealed that in any one week, 80% of the panel purchased tomatoes. The housewives generally made one or two purchases per week, these being concentrated at weekends. Prepacked tomatoes were unpopular as they made careful selection difficult and these tomatoes were thought of as being less fresh than loose tomatoes. Fewer Scotch than other types of tomatoes were bought prepacked, probably because freshnes was particularly associated with Scotch tomatoes. A quarter of all tomatoes purchased were of unknown origin; this is probably the result of a lack of adequate labelling in shops, particularly the cooperative stores and supermarkets. Brand awareness was lowest among the younger housewives, particularly those in the higher ABC 1 social groups(1), implying that knowledge of the country of origin of the tomatoes is less important in the purchasing decision of younger housewives. If growers of Scotch tomatoes wish to establish a premium price for their produce, they first must establish a brand awareness, particularly among the younger housewives, before they can begin to suggest that Scotch tomatoes are a premium product.

(C) Consumption

Tomato consumption per head in Scotland has steadily declined over the last 10 years by 15.5% and in 1972 stood at 2.68 oz/person/week. Tomatoes are a seasonal commodity and consumption reached a peak in the summer months of June, July and August when purchases each week in the Kilmarnock sample were 18 oz. per household. Despite the fact that

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(1) For definition see Appendix B, page 65

Scotch tomatoes were the most expensive type, commanding an average retail premium of 4p per lb over Dutch tomatoes, they were the most popular tomatoes, holding a 55% market share over the diary panel period. Sales of Scotch tomatoes were strongest in the lower C_2DE socio-economic groups, particularly to the over 35 year old housewives, and noticeably lower to younger (16-35 year old) housewives who tend to purchase Dutch and other types of tomatoes. Although the young group is the smallest in the population as a whole, it is this age group which is bringing up families, and it is important for the future of the industry that the children of this group become aware of Scotch tomatoes, as childhood influences often affect adult purchasing habits. Only 6% of the tomatoes bought by the panel members were cooked, and the higher price paid for Scotch tomatoes is reflected in the fact that only 4% of them were cooked, thus confirming the suggestion that Scotch tomatoes are regarded as "special", as cooking is believed to be a misuse of quality tomatoes.

(D) Prices

After a period of steadily falling average annual retail prices, the price of Scotch tomatoes began to rise in 1971 in both real and absolute terms. The wholesale premium for Scotch tomatoes has been re-established at 2½p per lb in 1973 compared with 0.5p per lb in 1971. Seasonally, tomato prices were at their highest in the spring months of April and May, falling rapidly after July as autumn approached.

Some of the recent rises in retail tomato prices is attributed to the retailers' pricing policies. A study in 1971 suggested a retail mark up on the wholesale price of 2½p per lb, while the present study indicated an average mark up on Scotch tomatoes of 9½p per lb or almost 90%. The lower retail margin (6p per lb) taken on Dutch tomatoes will help to maintain the probably harmful image that Scotch tomatoes are expensive, and it would be probably beneficial to growers if the retailers were to take a lower margin on a higher level of sales of Scotch tomatoes. The retail price premium for Scotch tomatoes averaged 4p per lb over the panel period.

Prices paid by housewives in the Kilmarnock panel varied widely between retail outlets with supermarkets, multiples and greengrocers being the cheapest while butchers and cooperatives were the most expensive. However, housewives in the ABC_1 group paid less for their tomatoes, of whatever type, than those in the C_2DE group. Although this is partly a reflection of the shopping habits, it also suggests that housewives in the ABC_1 group are more price conscious and may be willing to devote more time to shopping around for the best "value".

4. RECOMMENDATIONS

Scottish growers need a price premium for their tomatoes, which could be obtained, as this report shows there is an existing consumer preference for Scotch tomatoes which could be built on with appropriate marketing action.

The marketing arrangements for Scotch tomatoes must meet the requirements of the various types of retail buyer. Cooperative marketing is considered to be essential to adequately serve the growing demands of supermarket chains.

Grading must be standardised and accurate so that retailers are able to order and re-purchase with confidence.

Scotch tomatoes must be established as an identifiable product by branding, allied to sales promotion.

Sales promotion should be initially concentrated at a store level which will aid brand awareness and establish certain retailers as outlets of quality Scotch tomatoes.

Image development of Scotch tomatoes should probably be based on such concepts as "Freshness", "Scotchness", "Locally Grown", "Summer, Sunshine fruit".

Further research is required to identify the demographic and attitude characteristics of discerning Scotch tomato buyers, which would indicate the size of market segments and the most beneficial promotional themes.

CHAPTER II

INTRODUCTION

1. THE TOMATO INDUSTRY IN SCOTLAND

(A) The Importance of the Tomato Industry to Scottish Horticulture

Tomato production in Scotland represents 15% of the value of the Scottish horticultural industry, with an estimated annual output of 8.6 thousand tons worth £2.24 million in 1972-73. Commercial tomato production in Scotland is exclusively under glass, occupying 200 acres or 70% of the Scottish glasshouse acreage. Nearly three quarters of this glasshouse acreage is located in the South-west of Scotland, with tomato production being particularly concentrated in the counties of Lanarkshire and Ayrshire.

The concentration of the glasshouse industry in these areas gives the prosperity of the tomato industry an influence on the local economy. Although alternative crops such as flowers, lettuce and peppers can be grown, any large scale production changes by the industry would cause havoc with the price and marketing of these alternative crops. Thus, for most tomato growers, there is no real alternative employment for their labour and invested capital. The localised importance of the tomato industry and the lack of profitable alternative glasshouse crops makes it essential that Scottish growers obtain profitable returns from tomatoes.

(B) Problems Facing the Scottish Tomato Industry

(i) Low productivity

Unfortunately, growers have been finding satisfactory profits increasingly difficult to achieve. The industry faces a situation of falling consumption and poor yields due to a low investment, while costs and competition increase.

The small size of the individual business coupled with low tomato yields (35 tons/acre)[1], due to the predominance of old glass, makes financing a modernisation or expansion programme particularly difficult, and many growers find themselves in a vicious circle of low yields (due to old glass), low profits, low investment in new glass leading to low yields and low profits.

However, investment was encouraged by the low interest rates between 1970 and 1972 and by the Horticultural Improvement Scheme which was replaced in 1974 by the less generous EEC Scheme for replacement of glass only.

(ii) Increased costs

The recent sharp rise in oil prices has brought problems to the glasshouse industry and called into question the economic viability of many tomato producers. Although the government oil subsidy has provided a temporary respite, the long term prospects for many growers is bleak. The most vulnerable are the main crop growers with low yields using old glass. The recent rises in interest rates to record levels has also penalised the more ambitious and progressive growers, as it is this group which has borrowed heavily to finance modernisation in the belief that this would enable them to break out of the low investment vicious circle and obtain satisfactory profits.

(iii) Increased competition

Production of tomatoes within the UK is not sufficient to meet total demand, so the deficiency is made up by imports. The main source of imports are the Canary Islands, Spain, Holland, the Channel Islands and recently the Republic of Ireland, due to the introduction of EEC exports, rebates. Only imports from the last three named countries compete directly with home grown produce. It has been estimated that Scottish producers supply 34% of the Scottish tomato market, with a 47% share during the summer months[1].

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[1] Tomato Production in Scotland - C.J. Manners, WSAC 1972.

Table 2.1 Supplies of Tomatoes to Glasgow Market - Summer 1974
27th May 1974 - 30th August 1974

Country of Origin	'000 Tons	%
Scotland	336.3	43.7
Guernsey	159.8	20.8
England	60.5	7.8
Holland	174.3	22.6
Republic of Ireland	22.8	3.0
Jersey	15.2	2.0
Total	768.9	100%

Source: DAFS Private Communication

A recent NEDO report[1], in its examination of the prospects for the glasshouse industry in an enlarged EEC, stated that in the longer term, supplies from climatically favoured countries such as France, Italy, Spain, Canary Islands and Morocco are likely to increase. The development of plastic structures had enabled high quality produce to be grown at lower cost in these countries and competition is likely to be most intense during the early UK season. Although these countries will probably export their additional output to West Germany, the effect of these exports will be to depress the West German market, so forcing the Dutch to concentrate their tomato marketing expertise on more Northerly markets where they have a transport advantage.

2. RESEARCH FOR THE TOMATO INDUSTRY AT THE WEST OF SCOTLAND AGRICULTURAL COLLEGE

(A) Introduction

The importance of tomato production to the prosperity of the region's horticultural industry, led the Economics Division of the College to undertake a research programme designed to

[1] Glasshouse Crops and Mushrooms - NEDO, Agriculture EDC 1973.

examine, in detail, the problems and prospects facing the tomato industry. The programme was designed to achieve two objectives by the completion of a series of inter-related studies.

(i) To assess the long term viability of tomato production in Scotland by investigating the competitive position of the industry compared to other production centres in the United Kingdom and in Europe.

(ii) To communicate to growers the particular areas of strength and weakness of the industry and to recommend steps which could be taken to capitalise on the strengths and eliminate the weaknesses.

(B) Earlier studies in the series

Three reports[2] have already been published, covering the Economic Division's research into the production, supply and retailing of Scotch tomatoes.

The reports indicated that the tomato grower in Scotland will face competition from growers in the rest of the UK and in Europe and to compete successfully, he must offset the climatic disadvantages of Scottish tomato production by the utilisation of both production and marketing skills.

While some Scottish growers possess a high degree of production skills, the superior marketing ability of overseas tomato growers, particularly the Dutch, has weakened the position of the Scottish tomato industry. Good production and cultural methods must be linked to marketing abilities if Scotland's tomato industry is to prosper. These two vital elements are the essential components of profitable enterprise, and without either one of them success is unlikely. While the cultural and production problem have received most attention in the past, marketing opportunities have been virtually ignored by research workers.

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(2) See Bibliography page 64

3. THE OBJECTIVES OF THIS STUDY

The aim of this pilot study was to provide Scottish tomato growers with information on the market for their produce. Within this broad aim a number of more specific objectives were identified:-

(i) To determine the size and characteristics of the tomato market in Scotland.

(ii) To identify the purchasers of tomatoes and their purchasing patterns.

(iii) To identify the retail outlets for tomatoes.

(iv) To determine consumer attitudes towards tomatoes.

(v) To identify the marketing strengths and weaknesses of Scotch tomatoes over tomatoes from alternative sources, in terms of consumer purchasing patterns and attitudes.

(vi) To indicate possible marketing strategies which merit further detailed consideration.

4. METHOD

This report is based on information obtained, from both published material and a pilot research project. The desk research made extensive use of previous College publications, the DAFS, personal contacts and publications from other centres. However, most of this report is based on the information yielded by the pilot research project during 1973.

Group interviews were taken as a starting point in the primary data collection. This technique, where consumer views on a product are elicited by holding a number of informal discussions with small groups of housewives revealed many attitudes and opinions held by the housewives towards tomatoes. However, this technique yields qualitative not quantitative data, so to obtain quantitative data on the purchasing of tomatoes another research method was used. As tomato consumption is seasonal, it was decided that the most efficient method of collecting purchasing data would be to set up a diary panel. This panel consisted of an initial sample of 200 housewives in Kilmarnock who recorded their purchases of tomatoes and other food products, in a diary on a weekly basis for a period of 11 weeks.

The methodology is discussed in greater detail in Appendix A on page 60.

CHAPTER III

THE RETAIL MARKET

1. RETAIL OUTLETS FOR FRESH FRUIT AND VEGETABLES IN UK AND SCOTLAND

Although housewives are generally willing to 'shop around' comparing price and quality between shops within a locality, it is unlikely that many will be willing to make a specific effort to search out Scotch tomatoes. It is thus vital that Scotch tomatoes be as widely distributed as possible so as to give the housewife the greatest possible number of purchasing opportunities.

Table 3.1 shows the type of shops where UK housewives bought most of their greengroceries in 1970.

Table 3.1 Source of Housewives Main purchases of Greengrocories 1970 - UK.

Type of Outlet	% of Shoppers
Greengrocer	48
Market Stall	14
Grocer	13
Supermarket	12
General Store	6
Other	3
Cooperative	1
TOTAL	97%

Source: P.I.B. Report No. 165 - Prices, Profits and Costs in Food Distribution.

In the UK as a whole, the greengrocers are by far the most frequently used source of fresh fruit and vegetables, while the supermarkets are used by only 12% of housewives. Table 3.2 shows a comparison between shopping patterns in the UK and Scotland in 1969.

Table 3.2 Percentage of Households using different types of shops for their food purchases 1969.

	Fresh Fruit	
	Scotland	UK
Cooperatives	11	6
Multiples	31	20
Independents	54	68
Unspecified	4	6
TOTAL	100	100

Source: Household Food Consumption and Expenditure 1969.

Table 3.2 shows the clear differences in fresh fruit shopping patterns in Scotland and the UK in 1969. The cooperatives and multiples in Scotland held a strong position in fresh fruit retailing, whereas two-thirds of the households in the UK as a whole, used independents as their source of fresh fruit. This marked difference is probably linked to the low consumption of fresh fruit in Scotland (see page 22). The low levels of consumption in Scotland may not have encouraged the development of specialist greengrocers (c.f. England). This could limit the range and quality of fruit on display to the customer, leading in turn to low levels of consumption. Fruit and vegetable retailing in Scotland remained undeveloped until the entry of multiple chains into the trade, bringing with them capital and expertise in produce merchandising which has hitherto been lacking. The success of the multiples in fruit and vegetable retailing in Scotland might indicate that it was the traditional forms of retailing that were inadequate, rather than a basic lack of demand for an attractively presented range of fresh produce.

2. RETAIL OUTLETS FOR TOMATOES IN KILMARNOCK

Many housewives, especially those practising one-stop shopping will purchase the tomatoes offered by the supermarket they patronise. Studies into the future of retailing(1) suggest that one-stop shopping will become increasingly popular, which makes it vital that Scotch tomatoes

(1) The Future Pattern of Shopping - Distributive Trades EDC.

are available from the widest range of food outlets possible. One of the main findings of a pilot study in 1971 of tomato retailing in Kilmarnock, was the limited distribution of sales of Scotch tomatoes through department stores and supermarkets.

Table 3.3 Retail sales of tomatoes in Kilmarnock by type of shop and source of tomatoes May - September 1971.

Type of Shop	Source of Tomatoes Sold		Average All Sources
	Scotch	Imported	
	per cent	per cent	per cent
Department Stores	-	27	27
Self Service grocers	11	28	39
Counter Service grocers	10	1	11
Greengrocers	15	8	23
TOTALS	36	64	100

Source: Retailing Tomatoes in Kilmarnock - C.J. Manners, WSAC 1972.

The restricted level of sales of Scotch tomatoes through the supermarkets and department stores was due to the inability of Scottish growers to meet the requirements of this retail market. The multiple retailers demand a continuous supply of accurately graded produce with bulk buying facilities. While these requirements were not met by Scottish growers, the multiples, with their centralised buying policy, turned to imported tomatoes which met their purchasing requirements.

The unhappy situation revealed in the 1971 retailing study, was much improved by 1973. A weekly audit of the multiple chains represented in Kilmarnock revealed that only two stores never stocked Scotch tomatoes during the audit period. The effect of this improved distribution is shown in table 3.4 and resulted in an average 55% market share for Scotch tomatoes over the period of the diary panel.

Table 3.4 Retail outlets according to origin of tomatoes - Kilmarnock 1973.

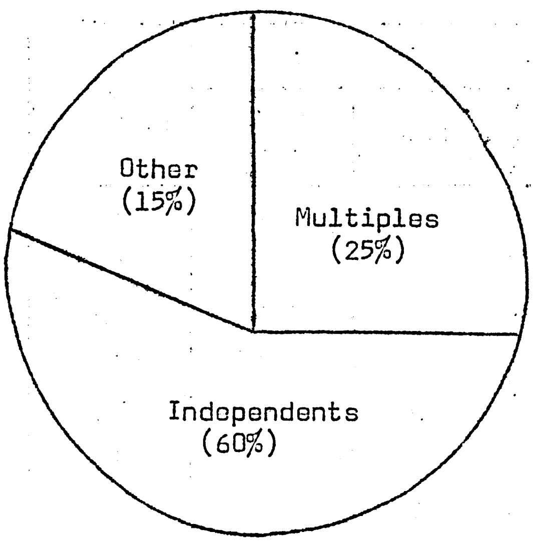
Shop Type	Country of Origin of Tomatoes				All Tomatoes
	Scotch	Dutch	Other	Don't Know	
Department Store	11%	15%	33%	11%	13%
Supermarket	15%	37%	32%	26%	22%
Cooperative	2%	1%	2%	5%	3%
Greengrocer	25%	16%	5%	24%	22%
Fish/Butcher	15%	1%	2%	6%	10%
Ordinary Grocer	18%	18%	8%	12%	16%
Other	10%	-	5%	10%	8%
Don't Know	4%	12%	13%	6%	6%
% of All tomatoes	55%	11%	8%	26%	100%

Source: WSAC Diary Panel

Table 3.4 shows that the supermarkets, and greengrocers are the two main retail outlets for tomatoes.

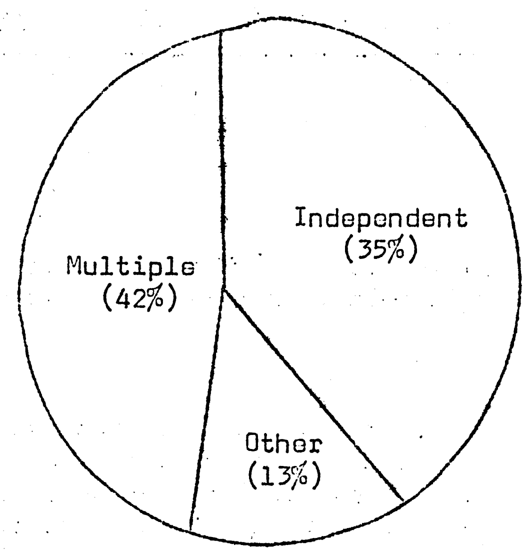
The comparison between the outlets of Scotch and Dutch tomatoes illustrates the importance of the independent (greengrocer, fishmonger/butcher and ordinary grocer) as a retail source of Scotch tomatoes. Whereas over 50% of Dutch tomatoes were sold through multiple retailers (supermarkets and department stores) only a quarter of Scotch tomatoes were sold through these shops. Multiples were also an important outlet for the category of "other" tomatoes which were mainly from England and Guernsey and often low priced. The results implied that many multiples attempted to stock the lowest priced tomatoes, which would help to explain their stocking pattern throughout the diary period. The audit revealed that the multiples frequently changed the type of tomato stocked, and in one case, a multiple stocked three different types of tomatoes over a period of eleven weeks.

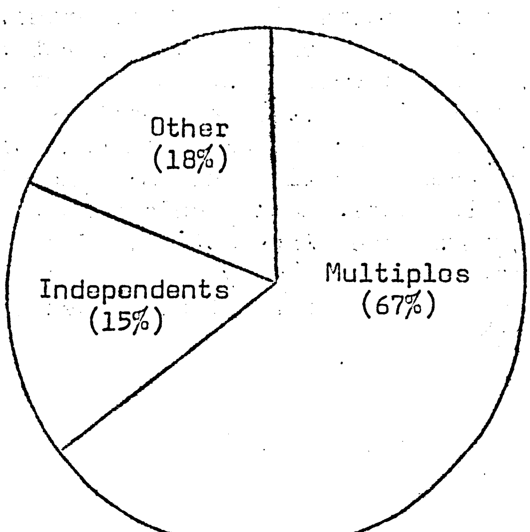
Figure 3.1 Proportion of tomatoes sold through different outlets Kilmarnock 1973



SCOTCH

DUTCH





OTHER (Mainly English, Guernsey)

Source: WSAC Diary Panel

3. RETAIL MARGINS

An earlier study of retailing in Kilmarnock[1] suggested that retailers used fixed rather than percentage markups throughout the season. The estimates of the average markups throughout the season were put at between 2p/lb and 2½p/lb.

Using the data available from the diary panel which yielded retail prices and the weekly market reports of the DAFS for average wholesale prices, it is possible to estimate the retail margins secured by retailers on tomato sales in 1973. Although the 1971 study suggested a markup of 2½p/lb, the present study indicates that the margin during the summer of 1973 was around 9½p/lb or approximately 90%. This is a surprisingly high markup and the fact that the margin on Dutch tomatoes is only 6p or 60% would indicate that retailers attempt to obtain maximum returns on Scotch tomatoes. This apparent pricing policy of retailers will maintain the probably harmful image of expensive Scotch tomatoes in the consumer's mind, when it would probably be more beneficial to Scottish tomato growers if the retailer accepted a lower margin on a higher level of sales. It would be invidious to compare margins obtained by different types of shops as no measure of quality was used in this study.

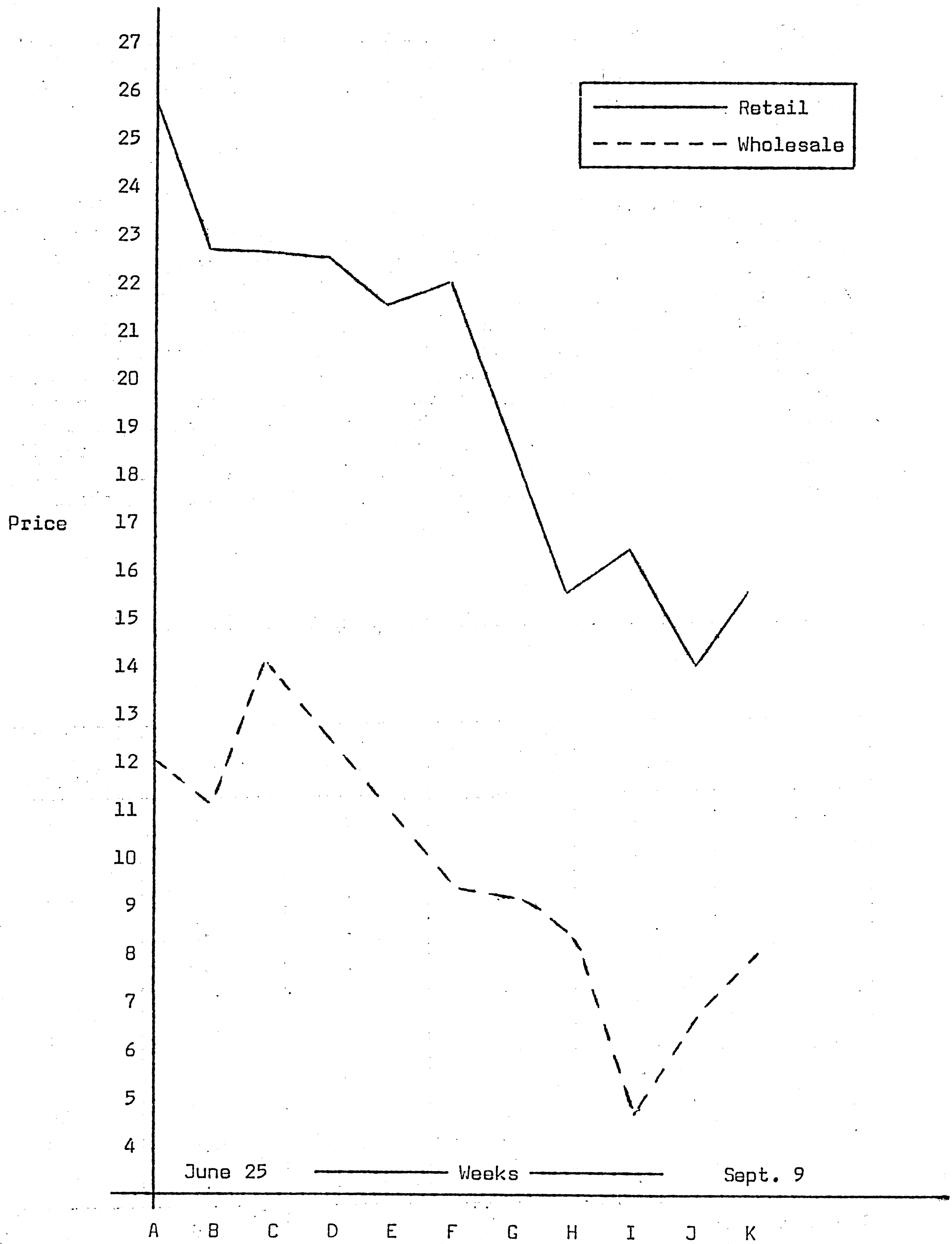
Table 3.5 Wholesale and retail prices of Scotch tomatoes - 1973

Week	Wholesale	Week	Retail	Mark-up	% Difference
A - June 25	15.8	A	26.4	10.6	67
B	12.0	B	22.8	10.8	90
C	11.3	C	22.8	11.5	102
D	13.7	D	22.8	9.1	66
E	12.1	E	21.4	9.3	77
F	9.1	F	21.5	12.4	136
G	9.6	G	18.5	8.9	93
H	9.0	H	15.3	6.3	70
I	7.9	I	16.2	8.3	105
J	4.8	J	13.2	9.4	185
K - Sept. 9	6.8	K	15.1	8.3	122
Average	10.2		19.6	9.5	93%

Source: WSAC Diary Panel and DAFS Horticultural Market Reports.

(1) C.J. Manners - Tomato Retailing in Kilmarnock, WSAC 1972.

Figure 3.2 Average Prices of Scotch tomatoes at Retail and Wholesale 1973



Source: WSAC Diary Panel, DAFS Market Reports.

Retail Margins are generally difficult to catalogue, as retailers take a high margin on some lines and merchandise others on the basis of breaking even, or even at times using some as loss leaders. Official sources suggest that an overall retail margin of 30% appears normal. The Economist Intelligence Unit suggest that this estimate appears to be low, and that a figure of 40% would be more appropriate for the fruit and vegetable trade. Indeed, there appear to be a number of products with markup of up to 300% but these are mainly products which are sold in small quantities, or have a low price. The National Board of Prices and Incomes Report(2) of 1967 showed that the gross margin of fruit and vegetable retailers was just over 21% for the smallest firms, rising to 29% when the number of shops in the firm exceed ten. The latter figure is partly explained by the activities of the larger companies who normally carry out some wholesale activities. The report concluded that there was a high degree of competition in the retail trade which has contributed to preventing the prices of fruit and vegetables from rising as fast as they might have otherwise done.

4. DEVELOPMENTS IN THE RETAIL MARKET

(A) Changing Retail Structure

The structure of Scottish fruit and vegetable retailing has been poorly developed, which has left the traditional outlets in a weak position to face the competition of the new supermarkets. The supermarkets have captured a 30% share of the total fruit and vegetable trade in Scotland, a significantly greater total than they enjoy in England and Wales. The success of supermarket retailing in Scotland and the shortage of suitable sites in the Midlands and South of England has led to the North of England and Scotland accounting for a disproportionate share of new supermarket stores in recent years.

The supermarket groups intend to expand further in Scotland, and this form of retailing is going to become even more important in the future. However, not only are supermarkets likely to grow but there is also likely to be a reduction in the number of supermarket buyers. There has been a process of amalgamation of supermarkets going on for some time and many of these mergers are beginning to rationalise their operations. These developments imply that the size of individual orders from multiple retailers for tomatoes will grow considerably over the next few years.

(2) National Board of Prices and Incomes 1967.

These multiple retailers require large and regular deliveries of a well graded product which, due to the small size of individual nurseries, the Scottish growers have been unable to supply. The large supermarket groups turned increasingly to imported tomatoes for their supplies, as the exporting countries have a well-developed marketing structure, which enables them to cater for changing demands. Thus the Scottish grower finds himself in a situation of selling his produce to a declining sector of the retail trade, but unable to meet the requirements of the growing sectors. It is believed that the changes in the retail structure, and the inability of Scotch producers acting individually, to adapt to the change, led to the fall in the price premium between 1961 and 1971.

(B) Changing Marketing Systems

The traditional system of marketing, involving the use of wholesale markets, has developed over a long period. The bulk of fresh fruit and vegetables (including tomatoes) was sold to the consumer through a large number of small retailers, each retail outlet selling small quantities of a wide variety of fruit, vegetables and other products. These retailers bought the majority of their produce requirements from wholesale markets, who in turn were supplied with home-grown produce by a large number of local growers and with foreign produce through importers. This resulted in a wide variety of produce being available in many different quality grades. Produce prices are fixed between the buyer and the commission agent on the basis of supplies available within the market and the demand for produce from the buyers. Thus, the wholesale market performed the vital function of price determination.

However, developments in retailing have led to changes in marketing structures. The concentration of retailer purchasing power in the hands of a few multiple chains has resulted in changing demands for fresh produce. The supermarkets and department stores are essentially mass merchandisers, requiring produce in large standardised quantities, continuously throughout the season. These requirements are not easily met by the traditional wholesale markets, so the multiple chains have increasingly turned to specialist supply organisations. These organisations can supply, and transport, large standardised lots of a wide range of produce, often at predetermined prices, and so the traditional wholesale markets are being increasingly by-passed by the retailers.

The growth of the supermarket trading in fruit and vegetables makes it vital that Scotch tomatoes be sold through these outlets. To achieve this, Scottish growers must either trade through the specialist supply organisations or organise their marketing so as to be able to deal directly with the supermarkets. Both alternatives require co-ordinated action by tomato growers, either to exert countervailing power against the competing supply organisations, or to provide marketing services (such as quality control, forward buying, and fixed price contracts) required by supermarkets.

The first marketing priority of Scottish growers must be to maintain and widen the retail outlets for their produce, which will necessitate sales through supermarkets and department stores. Sales through this increasingly important retail sector can only be achieved by meeting their purchasing requirements. These requirements can be met through cooperative marketing action by growers, which will enable them to compete effectively with tomato growers overseas.

CHAPTER IV

THE CONSUMER MARKET

1. SALES OF TOMATOES

(A) Total Sales

Total domestic consumption of tomatoes in Scotland was estimated at 20,000 tons in 1972, of which slightly more than one third was grown in Scotland. During the Scottish tomato production season, Scottish growers supply approximately half the total demand, most of the deficit being made up from elsewhere in the British Isles (including Eire) and Holland. Household consumption of tomatoes per head in Scotland has declined over the ten years 1962-1972, from 3.17oz/person/week to 2.68oz/person/week in 1972.

Table 4.1 Consumption of Tomatoes (oz/person/week)

	Scotland	G.B.
1962	3.17	4.20
1963	2.77	3.96
1964	3.16	4.22
1965	2.73	3.92
1966	2.96	3.98
1967	2.82	4.06
1968	2.91	3.98
1969	3.28	4.10
1970	2.82	4.00
1971	2.57	3.99
1972	2.68	3.66
% Change 1962-1972	-15.5%	-13%

Source: National Food Survey 1962-1972

Table 4.1 shows that the consumption of tomatoes per head in Scotland is considerably lower than in G.B. as a whole, and in this respect is similar to many other fruit and vegetable crops. Over the whole range of horticultural crops, with the exception of rhubarb, consumption per head in Scotland is lower than the national average. This feature could be related to the poorly developed fruit and vegetable retailing structure, which was discussed in detail on page 13.

(B) Sales of Tomatoes in Kilmarnock

Purchases of tomatoes in Kilmarnock recorded by the diary panel, were higher than the national annual average because of the seasonal influences, as the panel was operated during the months of July - September, a period of high consumption.

Table 4.2 Average Tomato Purchases by Country of Origin, Age and Social group of purchaser - Kilmarnock 1973 (ozs/household/week)

		All Tomatoes		Scotch		Dutch		Other		Not Known	
Under 35's	ABC_1	15.6	(100%)	4.4	(28%)	4.0	(26%)	2.7	(17%)	4.5	(29%)
	C_2DE	17.5	(100%)	9.3	(53%)	1.9	(11%)	1.4	(8%)	4.9	(29%)
35 - 54	ABC_1	20.4	(100%)	10.4	(51%)	1.9	(9%)	3.0	(15%)	5.1	(25%)
	C_2DE	18.5	(100%)	10.7	(58%)	0.9	(5%)	1.5	(8%)	5.4	(29%)
54 and Over	ABC_1	13.5	(100%)	8.0	(59%)	0.4	(3%)	0.9	(7%)	4.2	(31%)
	C_2DE	18.8	(100%)	11.1	(59%)	3.0	(16%)	1.0	(5%)	3.7	(20%)
All Ages	ABC_1	16.7	(100%)	8.8	(48%)	1.9	(11%)	1.1	(13%)	4.6	(28%)
	C_2DE	18.4	(100%)	10.5	(57%)	1.9	(10%)	1.4	(8%)	4.6	(25%)
All Social Groups											
Under 35		17.2	(100%)	8.2	(47%)	2.5	(14%)	1.8	(10%)	4.8	(28%)
35 - 54		18.3	(100%)	10.7	(58%)	1.2	(7%)	1.9	(10%)	4.5	(24%)
54 and Over		17.2	(100%)	10.2	(59%)	2.2	(13%)	0.9	(5%)	3.9	(23%)
All Groups		18.3	(100%)	9.8	(54%)	2.2	(12%)	1.6	(9%)	4.6	(25%)

Source: WSAC Panel

Table 4.2 indicates that there were differences in levels of tomato consumption by various groups of consumers in the diary panel. Over one half of the tomatoes purchased were Scotch and in broad terms, the C_2DE socio-economic groups and 35-54 age group were the most enthusiastic tomato eaters. Scotch tomatoes appeared to be particularly attractive to the C_2DE groups and within each age group the proportion of Scotch tomatoes purchased was higher in the older age groups. Average consumption per household per week was 18.3oz, during the panel period which is similar to the equivalent seasonal figure for G.B. as a whole in 1972, quoted by the National Food Survey.

(C) Seasonality of Sales

During the group interviews, the housewives made frequent associations between tomatoes, sunshine, summer and salads. Thus it was to be expected that consumption of tomatoes would be at the maximum during the summer months. The diary panel was run during the peak consumption period and by yielding continuous data over an 11 week period, it revealed trends in tomato consumption. Consumption per household fell steadily during July, recovered at the beginning of August and then fell steadily away with the end of the summer.

Table 4.3 shows the seasonal trends at a G.B. level.

Table 4.3 Indices of Seasonal Prices, Purchases and supply of Fresh Tomatoes 1971 - G.B. (Annual Average = 100 in each case)

Tomatoes (Fresh)	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Prices	95	105	109	136	135	119	101	84	75	81	90	90
Purchases	62	56	68	86	126	158	176	174	138	110	80	67
Demand	61	57	70	97	140	168	177	163	124	102	77	64
Supply	66	52	69	77	112	156	173	148	107	77	85	76

Source: Household Food Consumption and Expenditure 1971 MAFF Statistics

The demand for tomatoes rises to a peak in the period June to August as do supplies of tomatoes. The spring months of April and May see a sharp increase in demand while supplies lag, which leads to a period of high prices. As supplies increase so prices fall until they reach their lowest point in the late summer and autumn.

Fresh tomato prices are at their maximum in April and May, when demand is increasing sharply as the warmer spring weather arrives, but domestic production, particularly in Scotland, is only commencing slowly. During this early period in the domestic tomato production season, imports are also discouraged by import duties.

The high prices which can be obtained for tomatoes in April and May, have not gone unnoticed by domestic and overseas growers. Growers have attempted to exploit this early season opportunity, by employing improved cultural and production methods. However, this increased supply of tomatoes in April and May has reduced the early season premium, which is needed by Scottish growers to recoup the extra costs of the adverse climate. The present high prices for fuel may also reduce the attractions of the early market. In addition, output from cold glass is concentrated in the months of August and September when demand is declining, which depresses prices further.

Table 4.4 Seasonal Consumption of Tomatoes (G.B.) - Fresh and Preserved - 1972

	Consumption 1972 - oz/person/week G.B.				
	Jan - March	April - June	July - Sept	Oct - Dec	Yearly Average
Fresh Tomatoes	1.95	3.84	5.45	3.42	3.66
Canned or Bottled Tomatoes	1.12	1.13	0.74	0.91	0.98

Source: Household Food Consumption and Expenditure 1972 - MAFF

Table 4.4 substantiates the impression revealed in the group interviews, that tinned tomatoes are not commonly regarded as an adequate substitute for fresh tomatoes. Table 4.4 shows that while fresh tomato consumption varies seasonally, consumption of tinned and bottled tomatoes remains almost steady throughout the year, an average of 0.98 oz/person/week.

Processed tomatoes are almost exclusively imported for the production of sauces, puree and preserved tomatoes. While consumption levels of fresh tomatoes have stagnated or even fallen, sales of processed tomatoes and tomato products have increased, both in terms of volume and value.

(D) Brand Awareness

A measure of brand awareness, or lack of it, was available from the panel in the number of purchases of tomatoes of unknown origins.

Table 4.5 Brand Awareness by Shop Type

Shop Type	Proportion of Tomatoes of Unknown Origin
Department Store	22.5%
Supermarket	30.4%
Cooperative	51.8%
Green Grocer	25.4%
Fish/Butcher	14.3%
Ordinary Grocer	19.3%
Other	30.2%
Don't know	26.4%
All Shops	25%

Source: WSAC Diary Panel

A quarter of the tomatoes purchased by panel members were of unknown origin. This high figure is probably a result of poor or non-existent labelling in shops, but it does indicate that a large section of the tomato purchasing public is willing to purchase tomatoes regardless of origins. It would imply that many buyers believe they can judge the quality of tomatoes in terms of physical attributes, and that knowledge of the country of origin is not essential in the purchase decision. The differences in levels of brand awareness between different outlets were probably a result of differences in labelling and consumer knowledge. In general, the independent retailers foster a higher level of brand awareness than do the multiples. This helps to maintain the consumers' awareness of Scotch tomatoes, which are mainly sold through this class of outlet. Consumer knowledge of tomato types was lowest in the supermarkets, cooperative and 'other' shops. Brand awareness was lowest with the younger housewife, particularly those in the ABC_1 group, implying that knowledge of the origin of the tomatoes is less important in the purchase decisions of younger housewives.

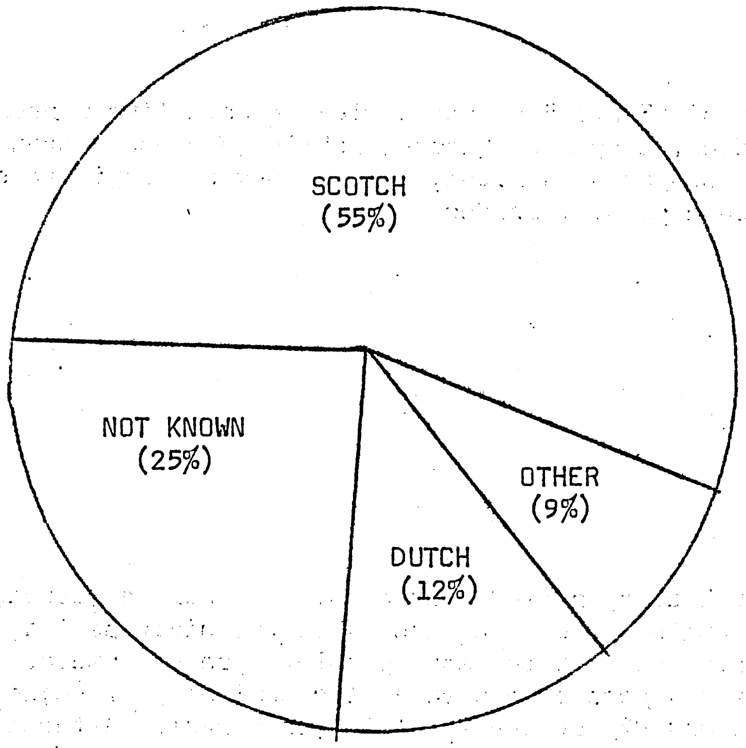
If the growers of "Scotch" tomatoes wish to establish a premium price for their produce, they must first establish a brand awareness, particularly among younger housewives, before they can begin to suggest that Scotch are a premium product.

(E) Market Shares

Over the 11 week diary period Scotch tomatoes held an average 55% share of the tomato market and throughout the diary period, each week Scotch tomatoes were the most popular type of tomato. Purchases of Scotch tomatoes were at a peak at the beginning of August of 13oz/household/week and 82% of the total tomato market. After this peak period, "Other" tomatoes particularly those from England and the Channel Islands captured an increasing market share. During July, Holland was an important supplier of tomatoes but their share of the market declined as domestic production in Scotland increased.

Figure 4.1 Market Share Different Types of Tomatoes

11 Weeks - Kilmarnock 1973.



Source: WSAC Diary Panel

While Table 4.2 indicates the consumption patterns associated with the demographic characteristics these figures have to be considered in relation to the numbers of consumers within the respective groups. The marketer is more interested in the consumption by market segments than in individual household consumption. Table 4.5 shows the proportion of each type of tomato bought by each demographic group. It becomes immediately obvious, that the social group C_2DE is much the largest market segment, purchasing almost three-quarters of the total tomatoes sold. Table 4.2 indicated that this most numerous sector also purchased most per household while the younger age group (under 35 years old) comprised the smallest market segment and also tended to have a low consumption per household.

Table 4.5 Market Shares by Types of Purchaser Kilmarnock 1973

		All Tomatoes	Scotch	Dutch	Other	Not Known
All Ages	ABC_1	26	23	28	36	28
	C_2DE	74	77	72	64	72
All Social Groups						
	Under 35	23	20	32	28	26
	35 - 54	41	43	26	50	41
	55 and over	36	37	42	22	33
TOTAL		100%	100%	100%	100%	100%

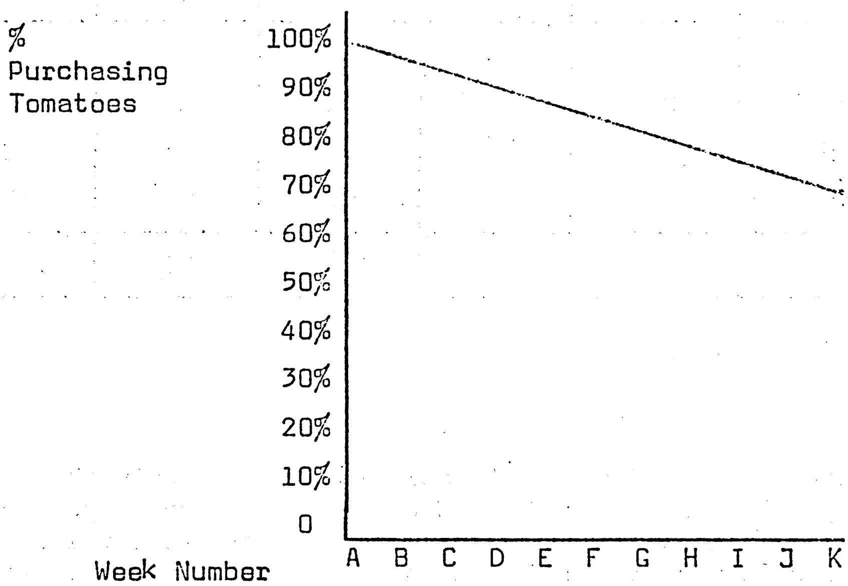
Source: WSAC Diary Panel

The market profile of Scotch tomatoes mirrors closely that for all tomatoes, with the exception of the ABC_1 and under 35 year old groups. Although these groups are the smallest, and may appear less important, the under 35's are the future purchasers of tomatoes. It is the under 35 age group that are bringing up families, and it is important that these children become aware of Scotch tomatoes, as childhood influences can often affect adult purchasing habits. The importance of childhood influences was one of the findings which emerged from the group discussions, thus any weakening of the Scotch brand image in this group may affect future Scotch tomato sales. Dutch and "Other" tomatoes appear to be particularly strong in the ABC_1 and younger groups which may be a reflection of the shopping patterns of these groups. Table 3.4 illustrated the retail sales pattern, and indicated that Dutch and "Other" tomatoes were most frequently purchased from supermarkets and department stores, and research has established that it is the younger housewives particularly in the ABC_1 groups who prefer self-service shopping. One quarter of all tomatoes bought were of unknown origin. The proportion of "unknown" tomatoes purchased decreased with age of customer, implying that the older housewives were more aware of origin of tomatoes than younger ones were.

(F) Market Penetration

All the panel members purchased some tomatoes over the diary period. An average of 78% of the panel purchased tomatoes in any one week, the actual weekly percentages being shown in Figure 4.2.

Figure 4.2 % of Panel Purchasing Tomatoes Weekly



June 25th to September 9th

Source: WSAC Diary Panel

Figure 4.2 shows a steady decline in panel members purchasing tomatoes over the diary period. This is a result of declining consumer demand for tomatoes in late summer months. The Self-Service and Supermarket Directory indicates an average figure of only 63% of households purchasing tomatoes in the previous week. The disparity could be due to WSAC diary panel being run in a period of high tomato consumption.

2. CONSUMER ATTITUDES

(A) Introduction

The basic demand for a product is based on consumer needs and preferences. The actual quantities purchased depend on the prices of the product and its substitutes, and the income of the purchasers. Economic theory tends to assume that needs and preferences are constant, a valid assumption as preferences change only very slowly, so attention is normally concentrated on variable components - prices, quantities and incomes. However, the needs and preferences of the consumer are the basis of the demand for a product, and it is vital in any marketing study, to have some knowledge of the components and elements of this basic demand. It is the demand-satisfying qualities of a commodity which need to be studied.

(B) Research Method

Six informal discussion groups were held in private houses in Glasgow, Johnstone and Kilmarnock. Each group consisted of 7-10 housewives selected to provide a cross section of social groups and ages. This cross section promoted discussion whilst remaining small enough to allow the members of the research team to guide the discussion. Each discussion was taped and adequate notes were taken to enable each speaker to be identified, hence opinions could be related to the age and social group of the speaker. In this way it was possible to distinguish some differences between age and social groupings but because of the small sample size, they cannot be taken as representative of the population of Scotland.[1]

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[1] For further details of the methodology see Appendix A page 60 .

(C) The Results of the Group Interviews

(i) Opinions and Associations Relating to Tomatoes

The groups yielded a wide variety of opinions about tomatoes. To many they were a luxury, because of the expense, and so are often regarded as a "Treat". The housewives' preoccupation with prices during the discussion groups could have been influenced by the seasonally high prices at the time of the interviews. They are a convenient vegetable requiring little preparation and provide excellent decoration. Tomatoes were thought of as being a seasonal product closely associated with summer. Outstandingly, they were associated with salad days, with sunshine, the coming of summer. Another general attitude which was widely held is that tomatoes are good for health. They are believed to contain valuable vitamins, and form part of many diets.

(ii) The Ideal Tomato

There was a general feeling in all the groups that the housewives had an image of the "ideal" tomato, although this depended on the use to which the tomato would be put. The characteristics the housewives looked for were as follows:-

(a) Colour

This was apparently the most important indicator of eating satisfaction. Preference for colour varied from "sunshine-yellow" through orange to ripe red, with red being the most popular. Some housewives considered yellow tomatoes under-ripe while others considered rich red tomatoes would be too ripe. Under-ripe tomatoes would be bought in preference to over-ripe ones, as they can be ripened by storing. Colour is particularly important in decoration and here red and orange were believed to give the best impression.

(b) Size

The majority of housewives preferred small tomatoes for one of two reasons - either because they believed them to be 'sweeter' or because they were more economical to use when whole tomatoes were being served. Smaller tomatoes also appeared to be preferable for certain uses e.g. eating raw. Large tomatoes were often considered unattractive. Some panel members thought a mixture of size in any one purchase of tomatoes was most practical - then the tomatoes could be put to a variety of uses.

(c) Firmness

There was a very narrow range between what was regarded as too hard and too soft. The firmness of the tomato was thought to be a good indicator of quality and in the absence of tactile contact, firmness is indicated by colour. Firm tomatoes were preferred for their cutting and storage qualities while soft tomatoes were regarded as only suitable for cooking.

(d) Skin

Preference tended towards an unblemished, smooth, shiny skin. Thick skins were associated with tough, under-ripe tomatoes. Housewives held strong views as to the "goodness" contained in the skin. The majority felt that much of the health giving qualities were in the skin while a small minority felt that skins were harmful, causing digestive troubles, and so peeled their tomatoes before eating.

(e) Smell

Some group members suggested that they could differentiate between Scotch and other tomatoes on the basis of smell. Scotch tomatoes were detected by a strong minty smell.

(f) Stalk

The presence of the stalk on a tomato, suggests to housewives that the tomato is Scotch and fresh. This repeated association between freshness and Scotch by the housewives is a valuable asset to Scottish growers.

(g) Taste

The taste of the tomato was linked to its size and colour. Smaller tomatoes are thought of as sweet and larger ones as tasteless. An unripe tomato was believed to have a bitter taste. Most of the group members claimed they could taste the difference between Scotch and other tomatoes.

(h) Interior

The colour and firmness seemed to be the two factors most indicative of the condition of the tomato's interior. The ideal condition existed when the interior was firm enough for easy slicing but not hard. There was a general dislike of separation of the tomato's interior on being cut. Too much flesh inside the skin was disliked - this flesh was suspected of being tough when the tomato was green or greeny/yellow. A watery interior was also disliked. The core and seeds also provoked strong feelings of either approval or dislike.

(iii) Type of Tomato

(a) Scotch

Almost all the housewives expressed a marked preference for Scotch tomatoes. It was believed that they could be distinguished by their minty smell and having the stalk attached. They were often recognised in the shops by their yellow-orange colour, and particularly by the mixed colours in a box. Many housewives claimed that Scotch tomatoes had a special flavour and were often bought as a "treat" on special occasions, although they were expensive.

(b) Dutch

After Scotch these were the most popular tomatoes, but thought of as often too sweet, with tough skins and over-ripe.

(c) Guernsey

Often watery and tasteless.

(d) Others

Other tomatoes mentioned were Spanish and Rumanian which were thought of as poor quality but cheap. English tomatoes were never mentioned, which is probably a result of the sporadic supplies in Scotland and the lack of promotion in comparison with Dutch and Guernsey tomatoes.

(iv) Prices

Price was obviously a factor in determining or limiting purhcases of tomatoes. The willingness to buy tomatoes and pay a premium for Scotch tomatoes is dependent on sufficient disposable income. However, expenditure on the most expensive Scotch tomatoes appeared not to increase with socio-economic class. In fact the group interviews revealed that the ABC_1 socio-economic[1] groups

(1) See Appendix A for definition

were more unwilling to pay higher prices and would rather shop around for the lowest prices consistent with reasonable quality. All the housewives were very price conscious and well aware of the seasonal change in tomato prices. In general, housewives were willing to pay a premium for Scotch tomatoes if they could be certain that they would obtain the extra quality they were looking for.

(v) Uses

(a) Eaten Raw

Many of the housewives ate tomatoes raw as a fruit. It was felt that eating tomatoes in this way revealed a sharper taste and they obtained satisfaction from biting the succulent, juicy tomatoes. The tomatoes, preferably small ones, were eaten with sugar, or salt or alone.

(b) Salads and Sandwiches

These two uses were described as being the main method of consuming tomatoes. The best tomatoes were used in salads and sandwiches and it was often claimed that salads were not complete without tomatoes. Sandwiches were a frequent use of tomatoes, particularly by the C_2DE socio-economic groups.

(c) Decoration

Slices and portions of tomatoes were very often used as decoration on many dishes. It was generally thought that the tomato colouring was ideal for decorative purposes. In general the younger housewives tended to be more adventurous in their use of tomatoes.

(d) Stewing and Frying

This was not thought to be the best way of using tomatoes and housewives would only use soft cheap tomatoes for cooking. Many claimed that it was a waste to use good tomatoes, particularly Scotch, for cooking.

(vi) Purchasing Patterns

The housewives all claimed that prices determined their purchasing decisions and that quality and appearance were secondary features. This is probably a rationalisation as discussion later suggested that few housewives planned their purchases of tomatoes and tended to buy them when noticing tomatoes in the shop. The purchasing patterns reflected the idea of tomatoes being a luxury, as purchases were concentrated at weekends, and many housewives did not buy the more expensive Scotch tomatoes during the week. The quantities bought on each purchase occasion depended on the size of family and frequency of shopping trips. In general, quantities of 1 lb were bought, although many housewives were in fact buying a number of tomatoes and chose the sizes to give the requisite number of tomatoes in a pound. Generally housewives who ate tomatoes raw tended to purchase them more frequently and often on impulse.

(vii) Retail Outlets

The discussion groups indicated that some housewives can be attracted to buy tomatoes on impulse when presented with a pleasing display. However, it was often claimed that the tomatoes on the display were of higher quality than those actually sold. In general, there appeared to be little trust between retailers and their customers. It was claimed that some retailers falsely sold tomatoes as Scotch, when they were in fact imported, but this study has not been able to provide any evidence to substantiate this allegation. The group members were completely unaware that tomatoes are graded for conformation and size, although in some shops the grades are deliberately mixed to provide a selection of sizes.

The most popular type of display, was that which allowed self selection of tomatoes. Here shoppers could exercise their own choice and they did not appear to object to other people handling the fruit. Where this form of self-selection was not available, an acceptable alternative was to buy from a fruiterer where the assistants are guided in their selection by the purchaser. Where trust is built up between a shop and purchaser it can be very strong, but in general the retailers image in the eyes of their customers is very low. Small shops came in for much criticism of high prices, poor quality and poor selection. Many of the housewives, particularly the younger ones, were very reticent about returning poor produce and preferred merely not to patronise that particular outlet again. Supermarkets attracted mixed comment, some felt that they were impersonal and that the quality was poor, but the majority felt that they offered good quality at reasonable prices, and because of the high turnover, the stock would be fresher.

(viii) Pre-packing

Pre-packed tomatoes were associated mainly with the supermarkets and in general were unpopular. The group members claimed that it was difficult to assess the quality of fruit in the package, believing that the blemishes were often deliberately hidden from view. Other views expressed, were that packaging spoilt the flavour as they attract moisture and many resented paying for what they regarded as superfluous packaging. Pre-packing also forced customers to buy a certain number of tomatoes of a standard size, so reducing flexibility in purchasing. The egg-box and sachet style of pre-packs received favourable mention, but this was probably a reflection of the shops in which they were sold. Generally, pre-packs were associated with soft tomatoes, poor quality, higher price and poor housekeeping.

(ix) Branding

The branding of tomatoes by country of origin at retail level was considered by the housewives as unreliable - many were of the opinion that tomatoes were often falsely labelled as Scotch by the retailer. A number of housewives would prefer the tomatoes to be presented in the wholesale 12 lb boxes, showing the name of the nursery, which would indicate that they were authentic Scotch produce. The interviewees were unable to name any grower of existing brand of tomatoes, thus it appears that any existing differentiation of produce must be at wholesale level. With the housewives distrust of retailers and her lack of knowledge of tomato quality, there would appear to be profitable opportunities in consumer branding of standardised Scotch tomatoes, allied to a promotion campaign, which could take the form of in-store merchandising aids.

(x) Tomato Substitutes

All the discussion groups claimed that there were no real substitutes for tomatoes. Tinned tomatoes were adequate in soups and stews but there was nothing to substitute for tomatoes in salads. Beetroot was suggested as an alternative for colourful decoration, albeit a poor second best. Tomato ketchup, soup and juice were not associated with fresh tomatoes. These were all regarded as products in their own right and were not seen as substitutes for fresh tomatoes.

(xi) Storage and Waste

There was a sharp difference of opinion as to whether tomatoes should be stored in refrigerators. However, tomatoes were not kept long, rarely for more than one week. By purchasing tomatoes in varying states of ripeness and allowing them to ripen at home, housewives were able to store them until required. Very few tomatoes were wasted, and often only the blemished portions would be cut out. However, many housewives considered that to allow a ripe tomato to degenerate to being soft and over-ripe, fit only for cooking, was wasteful and indicated poor housekeeping.

Figure 4.7 Summary of Consumer Attitude Towards Physical Characteristics of Tomatoes

Characteristic	Desirable Qualities	Characteristic	Undesirable Qualities
Colour Orange/Red	A firm tomato which could be kept for a few days before use, resulting in low wastage.	Green	A hard tomato with a bitter taste.
Bright Red	A firm tomato which could be used immediately.	Blood Red	An over-ripe tomato which would be soft and watery.
Stalk	The presence of the stalk still attached to the tomato was thought to be an indication of freshness and was associated by some consumers with Scotch tomatoes.		
Firmness	A firm tomato was preferred because it was easier to cut and serve and because it would keep for a few days. (Colour was thought to be the best indication of firmness although a number of housewives thought it was only possible to gauge the firmness by picking up the tomato.)	Firmness	A soft squashy tomato was thought to be over-ripe. These tomatoes are difficult to cut and are only suitable for cooking. Tomatoes bought during the winter tended to be soft.
Size	A small/medium tomato was preferred because these were more economical for serving to large families and they were also thought to be sweeter. (Buying a variety of sizes at one time was thought to be a good idea by a number of housewives because these could then be put to a variety of uses.)	Size	Large tomatoes were thought to be unattractive and to have a hard centre.

Figure 4.7 Summary of Consumer Attitude Towards Physical Characteristics of Tomatoes (Continued)

Characteristic	Desirable Qualities	Characteristic	Undesirable Qualities
Thin Skin	A smooth glossy skin free from markings and blemishes was preferred. (A wide range of opinions were expressed about the skin, some thought that all the "goodness" and vitamins were in the skin whilst others removed the skin because it caused indigestion and it was thought to be detrimental to health.)	Thick Skin	These were thought to be indigestible and indicated an unripe tomato with a tough flesh. A shrivelled skin indicated an old tomato.
Taste	Tomatoes were thought to have a clean fresh taste with smaller tomatoes being sweeter. (There was a widespread feeling of a taste difference between Scotch and other tomatoes.)	Lack of Flavour	Large tomatoes were thought to be tasteless whilst unripe tomatoes have a bitter taste. Imported tomatoes picked green were considered to lack flavour. (Certain housewives felt that tomatoes did not taste as good now as they did when they were young and thought that this was due to the crop being forced.)
Minty Smell	A "minty" smell near the stalk was thought to be an indication of freshness and was associated by some with Scotch tomatoes.)		
Interior	A firm centre to the tomato with no separation of the pulp from the flesh. This makes slicing easier.	Interior	Unripe tomatoes had a tough flesh under the skin with green seeds. With over-ripe tomatoes the seeds were black.

3. SHOPPING PATTERNS

(A) Shopping Days

The purchasing pattern within the week showed considerable variation. Shopping is generally concentrated at weekends when housewives buy the bulk of their shopping. The data obtained from the Kilmarnock diary panel showed that purchases of tomatoes remained at a steady 12-13% at the beginning of the week, rising to a peak on Fridays and Saturdays when 22% of weekly tomato purchases were made.

Table 4.7 Household Purchases of Fresh Tomatoes Each Day - Kilmarnock

Tomato Type	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Scotch	8.0%	6.2%	7.7%	6.9%	12.4%	13.0%	0.9%
Other	3.9%	4.3%	3.8%	7.3%	6.9%	7.9%	0.3%
Dutch	1.4%	1.8%	0.8%	1.6%	3.0%	1.9%	-
Total	13.3%	12.3%	12.3%	15.8%	22.3%	22.8%	1.2%

Source: WSAC Diary Panel

The Table 4.7 shows that almost half the purchases of tomatoes were concentrated in the two weekend shopping days of Friday and Saturday, which tends to substantiate the statements made in the discussion groups, that tomatoes are a weekend "treat".

The shopping pattern for tomatoes showed by the Kilmarnock housewives followed closely the shopping habits of UK housewives.

Table 4.8 shows that in 1971 two-thirds of housewives in the UK carried out their main shopping occasions on either Friday or Saturday.

Table 4.8 UK Shopping Patterns 1971

Day	% Going Shopping	% Main Shopping Occasion
Monday	44	3
Tuesday	54	6
Wednesday	47	6
Thursday	52	16
Friday	70	44
Saturday	58	23
Sunday	4	2

Source: Self-Service and Supermarket Directory

Although shopping is concentrated at the weekend, about half the housewives go shopping on each weekday. Housewives generally complete the bulk of their shopping in one day, usually Friday or Saturday, but they buy fresh produce regularly throughout the week.

Weekend shopping is likely to become increasingly popular as more housewives take up full-time gainful employment and shop at one large shop using the family motor car. A not unimportant factor is that, for weekly wage earners, pay-day usually falls on a Thursday or Friday.

(B) Frequency of Purchase

Over the 11 week period, the panel members made a total of 880 purchases of tomatoes.

Table 4.9 Frequency of Shopping for Tomatoes (Kilmarnock 1973) and Greengroceries (UK 1970)

Frequency	Tomatoes[1] (Kilmarnock)	Greengroceries[2] (UK)
Less than once a week	22%	3%
Once a week	41%	34%
2-3 times a week	33%	49%
4-5 times a week	4%	8%
6-7 times a week	-	6%

Sources: (1) WSAC Diary Panel

(2) National Board for Prices and Incomes Report No. 165 1970

Table 4.9 shows that in an average week 22% of the panel members bought no tomatoes while 41% purchased once a week. The diaries indicated that most of the purchases were made at the weekend while some housewives purchased a further quantity during the week.

Closer examination of table indicates that tomatoes are purchased less frequently than greengroceries as a whole i.e. tomatoes are not bought on every purchase occasion, tomato purchases being concentrated at the weekend.

Table 4.10 shows the influence of the housewives age and socio-economic group on tomato purchasing frequency.

Table 4.10 Frequency of Tomato Purchase by Age and Socio-Economic Group

	Socio-Economic Group							
	ABC_1				C_2DE			
Frequency/week \ Age	-35	35-54	54+	All Ages	-35	35-54	54+	All Ages
None	41%	19%	27%	26%	25%	14%	21%	19%
Once	36%	50%	44%	45%	44%	43%	36%	41%
Twice	20%	24%	24%	24%	18%	32%	32%	28%
Three times	3%	6%	4%	4%	10%	7%	6%	7%
Four times	-	1%	-	1%	3%	3%	4%	3%
More than 4 times	-	-	1%	-	1%	-	1%	1%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

Source: WSAC Panel

Overall, the purchasing frequency of the two socio-economic groups appear to be similar. The under 35 year old groups show the greatest percentage of non-purchasers, a feature particularly noticeable in the ABC_1 grouping, while the most frequent purchasers of tomatoes were the 35-54 year old groups with only 16% not buying tomatoes in any one week. The difference in purchasing frequency would appear to be more dependant on the age of the housewife rather than her socio-economic grouping.

(C) Purchase Quantities

The quantity of tomatoes purchased on each purchase occasion ranged from 2 ozs to 48 ozs, with the most common purchase quantity being one pound.

Table 4.11 Purchase Quantities

Purchase Weight	% of Total Purchases
8 ozs or less	33%
1 pound	63%
$1\frac{1}{2}$ pounds	2%
2 pounds	2%
$2\frac{1}{2}$ pounds	...
% Base	1126

Source: WSAC Diary Panel

Table 4.11 shows that almost two thirds of the tomato purchases were made in one pound lots, with a further third being in $\frac{1}{2}$ pounds. Few purchases were made in quantities of greater than one pound.

4. USE OF TOMATOES

The group interviews suggested that housewives thought that cooking tomatoes was a poor method of utilisation. The diary panel members provided information on the uses of their tomato purchases during the panel period. 86% of the tomato purchases were mainly eaten uncooked in the form of salads, sandwiches or as fruit, while only 6% were fried, grilled or stewed. Thus the diary panel results would tend to validate the impressions gained during the diary period, that very few fresh tomatoes are used for cooking during the summer months. The results of the group interviews implied that as Scotch tomatoes were a special tomato, very few would be cooked. In fact, some housewives claimed that to cook Scotch tomatoes was not only wasteful but also indicated poor housekeeping.

Table 4.12 Proportion of Tomatoes Used for Cooking

	% of Tomatoes Cooked
SCOTCH	4.1%
DUTCH	6%
OTHER	8.1%
All Tomatoes	6%

Source: WSAC Diary Panel

Table 4.12 shows not only that few tomatoes were cooked but also that fewer Scotch than any other types of tomato were cooked.

Although the differences in Table 4.12 are small, it does tend to confirm the belief that housewives regard Scotch tomatoes as "special" and were thus reluctant to use them in the cooked form, but preferred to eat them raw so that their special flavour could be fully appreciated.

5. PACKAGING OF TOMATOES

With the growth of self-service trading, it becomes increasingly attractive to retailers to offer pre-packed produce. In an earlier study[1], retailers stated that they preferred pre-packed produce as it was easy to handle and labour saving. However, some of the retailers in the sample, particularly the smaller shops, claimed that pre-packed tomatoes had a high wastage rate. This feature was probably a result of the low stock turnover of smaller shops where the length of time produce is displayed before sale can be considerable. The consumers antagonism towards pre-packed tomatoes has not been reduced by familiarity. Retailers are aware of this resistance and tomatoes are still generally sold loose, even in supermarkets, which are essentially operated on a self-service basis. In the two years between 1971 and 1973 there has been very little change in the method of retailing of tomatoes in Kilmarnock and the sale of pre-packed tomatoes in 1973 was still on a very restricted basis. Data from the diary panel yielded detailed information on the purchases of pre-packed tomatoes by panel members.

(1) C.J. Manners - Retailing of Tomatoes in Kilmarnock WSAC 1972

Table 4.13 Sales of Pre-packed and Loose Tomatoes - Kilmarnock 1973

Type of Tomato	Loose	Pre-packed
Scotch	91%	9%
All Tomatoes	84%	16%

Source: WSAC Diary Panel

Only 9% of Scotch tomatoes purchased were in pre-packed form, whereas 16% of all tomatoes purchased were prepacked. The lower levels of sales of pre-packed Scotch tomatoes is a result of consumer resistance to pre-packing, the buyers of Scotch tomatoes being particularly attracted by the freshness of the tomatoes, which they believe not to be present in pre-packed tomatoes. Purchases of tomatoes in a pre-packed form are at a lower level than fruit and vegetables as a whole.

The Economist Intelligence Unit[1] suggests that 25-30% of fresh green vegetables in the UK are pre-packed; 30% of root vegetable (other than potatoes); 35-40% of lettuce; 10% of tomatoes and 15-25% of other produce. Consumer resistence to pre-packing of carrots and potatoes appears to have been largely overcome by skillful grading and washing of produce before packing. However, the group interviews indicated that housewives regard these products as requiring less purchasing skill than tomatoes probably because they have a greater shelf life, thus reducing the risk of a purchase of poor quality vegetables.

Table 4.14 Influence of Purchaser's Age and Socio-Economic Group on Purchase of Pre-packed Tomatoes

Method of Sale	Age			Socio-Economic Group	
	-35	35-54	54+	ABC_1	C_2DE
	per cent of total			per cent of total	
Loose	81	82	87	78	85
Pre-packed	19	18	13	22	15
All	100	100	100	100	100

Source: WSAC Diary Panel

(1) Retail Business No. 184 1973

Table 4.14 shows that the age and socio-economic group of the housewife did influence purchases of pre-packed products. Generally, the younger and ABC_1 housewives were more willing to purchase pre-packed tomatoes than the older C_2DE housewives. This difference is probably associated with the shopping habits of these groups, as supermarket shopping is favoured by younger housewives. With the possible exception of potatoes, pre-packed produce is closely identified with sales in supermarkets. However, many supermarket chains appreciate the housewives preference for unpacked fruit and vegetables, and many now operate a personal service produce counter within a self-service shop.

6. RETAIL TOMATO PRICES

(A) Annual Trends in Tomato Prices

Tomato prices declined in both real and absolute terms between 1968 and 1970. However, since 1970, prices have kept pace with inflation, as indicated by the Retail Price Index, and since 1972, there have been increases in the real price of tomatoes. This real price increase has led to a fall in the level of purchases of tomatoes.

Table 4.15 Average Retail Prices Paid for All Tomatoes 1968-1973 (July-Sept) - GB

Year	1968	1969	1970	1971	1972	1973(3)
Price (pence/lb)	11.8	11.6	11.2	13.2	15.8	18.7
Index(2) of Tomato Prices	100.0	98.3	95.0	112.0	134.0	158.7
Retail Price Index(1)	100.0	105.4	112.1	122.7	131.4	143.5
Tomato Prices(4)	101.0	99.0	96.0	101.0	104.0	110.0
Purchases	102.0	102.0	98.0	102.0	92.0	

Source: Household Food Consumption and Expenditure, MAFF, Annual Abstract of Statistics, WSAC Diary Panel

(1) All Items

(2) 1968 = 100

(3) Kilmarnock

(4) Deflated by General Index of Retail Prices

(B) Seasonal Trends in Tomato Prices UK

Table 4.16 Index of Monthly Tomato Prices 1971

(Annual Average = 100)

Month	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Price Index	95	105	109	136	135	119	101	84	75	81	90	90

Source: Household Food Consumption and Expenditure 1971
MAFF Statistics

The spring months of April and May see a sharp increase in the level of demand for tomatoes while supplies lag, which leads to a period of high prices. As supplies increase, so prices fall to their lowest point in the late summer/early autumn months.

The high prices which can be obtained for tomatoes in April and May, has not gone unnoticed by domestic and overseas growers. Growers have attempted to exploit this early season opportunity, by employing improved cultural and production methods. However, this increased supply of tomatoes in April and May has reduced the early season premium, which is needed by Scottish growers to cover the extra heating costs associated with the production of early tomatoes. The present high prices for fuel may reduce the attractions of the early market, unless the early season premium increases. However, output from cold glass is concentrated in the months of August and September when demand is declining, which depresses prices further.

Retail prices of tomatoes in Kilmarnock showed a progressive decline throughout the diary period although there appeared to be two periods of relative price stability. Throughout July the average price for all tomatoes remained firm at around 22p/lb, but the beginning of August brought a sharp decline in price of 8p over two weeks, reducing tomato prices by more than one third. This sharp fall was a result of the bulk of the GB crop coming on to the market, and not being met by an equivalent increase in demand. After the fall at the beginning of August, prices tended to level out at about 14p/lb for all tomatoes.

Table 4.17 Retail Prices of Tomatoes in Kilmarnock 1973 (pence/lb)

Week Ending		All Tomatoes	Scotch	Dutch	Premium Over "Dutch"
		pence per lb			
July 1st	A	25.2	26.4	21.3	5.1
	B	21.6	22.8	19.1	3.7
	C	22.3	22.8	18.4	4.4
	D	21.7	22.7	16.9	5.8
	E	21.1	21.4	17.7	3.7
	F	21.5	21.5	17.1	4.4
	G	17.6	18.5	16.0	2.5
	H	13.5	15.3	12.0	3.3
	I	14.4	16.2	11.7	4.5
	J	12.3	13.7	10.1	3.6
Sept 9th	K	13.9	15.1	10.6	4.5
	Av.	18.7	19.9	15.6	4.3

Source: WSAC Diary Panel

The price of Dutch tomatoes remained at all times lower than that for Scotch tomatoes, and also showed a more steady decline in price. The differential between the price of Scotch and Dutch tomatoes fluctuated weekly, but was generally in the order of 4p/lb. As the price premium was roughly constant, it would imply that retailers priced Scotch on an absolute rather than percentage over Dutch tomatoes.

(C) Country of Origin of Tomatoes

Table 4.18 Retail Prices of Tomatoes in Kilmarnock 1973

Source	Scotch	Dutch	Other	All Tomatoes
Average Price	19.9	15.6	15.7	18.7

Source: WSAC Diary Panel

Table 4.18 shows that Scotch tomatoes were the most expensive, having an average price on almost 20p/lb over the diary period. The average price for all tomatoes was 18.7p/lb, which was a considerable increase on the price in previous years (See Table 4.15). The premium for Scotch tomatoes, which averaged a little more than 4p/lb, is a measure of the preference of the Scottish Housewife for the locally produced fruit.

This premium allowed the Scottish producer to compete successfully with producers in more favourable climates and with lower costs. However, this premium for Scotch over Dutch tomatoes, has been steadily eroded from an average of 2.8p/lb (range 11.6-0p) at wholesale level in 1961 to 1.5p/lb (range 4p-0.25p) in 1971, but has since increased to 2.6p/lb in 1973. Although the absolute wholesale premium has been restored, in real terms it is still considerably lower than in 1961. While inflation has steadily increased production costs, the premium has not increased to the same extent to cover these increased costs.

The group interviews revealed that Scotch tomatoes were believed to be always the most expensive. This belief, may mitigate against the sale of Scotch tomatoes, particularly when sold in shops which do not mark prices. While premium prices are welcomed by Scottish growers, the emphasis placed on price by the consumer may deter sales. This emphasis on price could be reduced by stressing the quality and freshness of the locally grown produce.

(D) Age and Socio-economic Group of Purchaser

Table 4.19 Tomato Prices paid by Age and Social Group of Purchaser

	Age			Socio-Economic Group		All Housewives
Type of Tomato	-35	35-54	54+	ABC_1	C_2DE	
Scotch	19.6	20.0	20.0	19.8	20.0	19.9
Dutch	15.7	14.3	16.9	14.4	16.0	15.6
Other	13.5	16.3	15.9	13.2	16.6	15.7
All Tomatoes	18.2	18.7	18.7	17.9	18.8	18.7

Source: WSAC Diary Panel

An interesting feature shown up in Table 4.19 is that the ABC_1 group pay less for their tomatoes, whatever type, than the C_2DE group. This is partly a reflection of the shopping pattern habits of the two groups, as the ABC_1 housewife tends to shop from self-service supermarkets and department stores where prices are generally lower (See Table 4.20). It also suggests that housewives in the ABC_1 group are more price conscious and are willing to devote time to shop around for the best value.

(E) Prices Charged by Different Shops

The prices paid by the panel for their tomatoes and the variation between shops are shown in Table 4.20.

Table 4.20 Price of Tomatoes by Shop Type and Source of Tomatoes

	Tomato Type				All Tomatoes
	Scotch	Dutch	Other	Don't Know	
Dept. Store	19.7	16.6	13.2	17.2	17.2
Supermarket	17.3	13.7	17.6	16.5	16.5
Green Grocer	19.3	14.6	13.0	20.3	17.3
Cooperative	19.3	22.6	11.5	17.9	20.2
Fish/Butcher	20.5	16.0	21.5	19.2	20.1
O. Grocer	20.0	18.0	18.4	21.3	19.8
Other	19.5	-	13.0	19.7	18.4
Don't Know	21.2	15.0	10.8	19.0	18.5
All Shops	19.8	15.5	15.0	18.9	18.8
Coeff. of Variation	5.7	17.8	25.6	8.5	

Source: WSAC Diary Panel

Supermarkets were the cheapest source of tomatoes, followed by greengrocers and department stores, while the Cooperatives, fishmongers and butchers were the most expensive. With the exception of the cooperative, all categories of retailer secured a premium for Scotch tomatoes over Dutch tomatoes. The low coefficient of variation for the price of Scotch tomatoes between different outlets would suggest that retailers follow similar policies when pricing Scotch tomatoes, while the high coefficient associated with the price of Dutch and 'other' tomatoes may indicate that certain outlets are more prepared to cut prices than others. The figures will, of course, be influenced by seasonality and quality of supplies.

CHAPTER V

DISCUSSION

1. Scottish Growers must obtain a Price Premium

Scotland's climatic conditions place local growers at a disadvantage, in terms of sunshine hours and spring temperature, relative to the conditions prevailing in the South of England, Holland and other countries with warmer climates. These climatic disadvantages can be partly overcome by the use of extra heating although at considerable extra cost. To compete successfully, the grower must offset the climatic disadvantages of tomato production in Scotland by effective marketing to obtain a premium price for his produce. While, in the past, Scottish growers have been successful in obtaining a premium for their tomatoes, in recent years the premium at wholesale level has eroded and in 1971 stood at only 0.5p/lb. Although the premium has recovered since 1971, in real terms it has still fallen considerably since 1961. Premiums vary according to seasonal supplies and can be influenced by switching of supplies to other markets. For example the low prices in 1971 encouraged Dutch produce to find other markets, mainly W.Germany, creating a shortage of Dutch in the UK Market and eroding the premium for Scotch.

Table 5.1 Average Wholesale Prices for Scotch and Dutch Tomatoes 1961-1973

Source of Tomatoes	1961	1971	1972	1973
	Pence per lb.			
Scotch	11.0	11.9	15.6	14.0
Dutch	8.2	11.4	13.4	11.4
Premium	2.8	0.5	2.2	2.6

Source: DAFS

2. The Premium Market for Scotch Tomatoes

The price premium for Scotch tomatoes is a reflection of consumer preference interacting with available supplies. Many housewives participating in the group interviews believed that for a variety of reasons tomatoes from Scotland are better than those from anywhere else. Although this preference was rationalised into a preferred flavour, it was probably based on a number of factors, the most important being the freshness associated with the locally grown produce. Scottish housewives also have pride in Scottish produce which may lead them to ascribe to Scotch tomatoes a better flavour or quality. The pattern of price fluctuations during the season suggests that there is a small, but very strong market for Scotch tomatoes. This market feels that it must have Scotch tomatoes and is willing to pay a premium price. At the start of the season supplies are adequate only to meet the demands of the keen Scotch tomato buyer so the premium is high. Later in the season, as supplies increase, this small premium market gets flooded and the majority of the buyers will not discriminate between tomatoes from different countries, so Scotch tomatoes are sold in direct price competition with other tomatoes at a reduced premium. The keen Scotch buyers will be able to obtain their preferred Scotch tomatoes for a small premium although they were willing to pay considerably more earlier in the season.

3. Marketing Action

Having established that there is premium to be obtained for Scotch tomatoes, the growers must market their produce so as to capitalise on these established preferences. Although preferences for Scotch tomatoes originate with the final consumer i.e. the housewife and her family, growers initially sell their produce to retailers, who introduce their own interpretations of their customers' requirements. Thus, Scotch tomatoes must be marketed in such a way as to meet the requirements of both the retailers (the intermediate buyers) and the housewife, the final purchaser.

This research project, although only a pilot study, has indicated a number of marketing opportunities meriting further attention by Scottish growers and are outlined in the following pages. The opportunities could be confirmed by further research, particularly designed to identify the demographic and attitude characteristics of the housewives likely to be prepared to pay a premium.

(A) The Retail Demands

The Marketing of Scotch Tomatoes must Adapt to Changing Retailing Conditions

One factor in the decline in the price premium for Scotch tomatoes up to 1971 was the change in retailing methods. Multiple chains of supermarkets and department stores were capturing a larger share of the Scottish Retail fruit and vegetable trade. These retailers require large, accurately graded, quantities of tomatoes which individual Scottish growers were unable to supply, but these requirements were met by imported tomatoes. Thus, multiples, which have captured over 30% of the fruit and vegetable trade, tended to sell exclusively imported tomatoes, as Scotch tomatoes were not available in the required form. To make Scotch tomatoes widely available to housewives, the produce must be available in all types of fruit shop, including the supermarkets and department stores. Scottish growers must be able to meet the specialised requirements of the supermarkets which can be achieved through cooperative marketing. Growers must accept that only through cooperative marketing action will they be able to trade with supermarkets and department stores or their suppliers, so maintaining the separate identity for Scotch tomatoes.

(B) The Final Consumer Requirements

At the final consumer level, action should be aimed at expanding the size of the premium market, through both physical and psychological product differentiation. This can be achieved by a combination of three techniques; grading, retail segmentation and finally image development and promotion.

(i) Grading

The accuracy of grading Scotch tomatoes must be improved. It is essential that Scottish growers supply a reliable product so that buyers can re-purchase with confidence. As Dutch tomatoes are well graded, Scotch tomatoes will be at a competitive disadvantage unless their grading is of similar accuracy.

(ii) Retail Segmentation

Knowledge of the purchasing patterns of different groups of housewives and the stocking and pricing policies of retailers could provide the basis of retail segmentation of the market. The study revealed that specialist greengrocers, butchers and fishmongers were popular sources of

Scotch tomatoes, particularly to the C_2DE and over 35 years old housewives, who were willing to pay higher prices for their Scotch tomatoes. The panel also revealed that these outlets were able to retail tomatoes at high prices and so would provide the most appropriate outlet for the premium product.

Supermarket sales must be expanded, as this retail category will probably be the most important outlet for fruit and vegetables in the future. However, supermarkets are essentially concerned with mass merchandising and are generally unwilling to charge premium prices for premium quality produce.

This is an area for further investigation and for a concerted marketing effort by growers.

(iii) Image Development and Promotion

Image development can be achieved through sales promotion at both a retail and consumer level, and should be aimed at expanding the sales of Scotch tomatoes through extending the existing knowledge and awareness of the product among consumers, so establishing Scotch tomatoes as an identifiable commodity.

If Scottish growers wish to establish a price premium for their produce they must first establish an identifiable product, through branding and sales promotion. Brand awareness has been shown to be poor in this study, with a quarter of tomato sales being tomatoes of unknown origin. This situation could be much improved by the use of in-store labelling and merchandising material which would indicate the county of origin and the benefits of Scotch tomatoes. The group interviews clearly indicated a lack of trust between the retailer and housewife in the purchasing of Scotch tomatoes. This could be overcome by the use of in-store promotional material which would allay consumers' fears by guaranteeing the produce as quality Scotch through the combination of branding and promotion.

(iv) Further Research

Although the initial promotion objective will be to establish Scotch tomatoes as an identifiable product through branding, thought must be given to the image and characteristics that should be highlighted by the promotion. Although the group interviews yielded information on attitudes and opinions, it would be desirable to carry out an attitude survey to quantify some of the impressions gained in the discussions, to provide the basis of a promotional campaign. The pilot study indicated that the promotion should probably be based on such concepts as "Freshness", "Scotchness", "Locally Grown", "Summer, Sunshine Fruit".

APPENDIX A

METHODOLOGY

1. DISCUSSION GROUPS

Group interviews provide an ideal introduction into primary data collection. They provide a wealth of information on attitudes and opinions, rapidly and economically, and are often used in the exploratory phases of research to generate hypotheses which are later tested using conventional survey techniques. The aim of this technique is to obtain free flowing discussion of the product area between a group of relevant participants. This discussion is guided by a moderator, whose task it is to keep the conversation relevant, but is not himself involved in discussion. The discussions are taped and notes taken to identify each speaker so that attitudes can later be related to the characteristics of the speaker when the tapes are interpreted. Although this technique will reveal many attitudes and opinions, it cannot be classed as motivation research as it does not probe the subconscious and will not yield underlying information which the informants do not wish to reveal.

In order to discover consumer attitudes towards tomatoes, six discussion groups were held in private houses in Kilmarnock, Johnstone and Glasgow. The number of housewives present at each discussion varied from 7 to 10. Groups of this size were large enough to provide a cross-section of opinion, which promoted discussion and small enough to allow the moderator to adequately guide the discussion.

Discussion generally opened with spontaneous remarks concerning the display of tomatoes, and then ranged over a wide variety of tomato characteristics. The interviews were generally closed after 1-1½ hours, when most relevant topics appeared to have been covered.

Table A.1 Demographic Characteristics of Group Participants

Social-Economic Group	
Group	No. of Housewives
AB	6
C1	10
C2	19
DE	17
Total	52

Age of Housewife	
Group	No. of Housewives
17-25	9
25-45	25
45-55	18
Total	52

Age of Family	
Group	No. of Family
21+	108
16-21	13
5-16	41
less than 5	19
Total	181

Table A.2 Location of Discussion Groups

Location	No. of Discussions	Date
Johnstone	2	29/5/73
Glasgow	3	31/5/73
Kilmarnock	1	14/6/73

2. DIARY PANEL

The seasonal nature of tomato production and consumption suggested that a survey at a single point in time would not be applicable to the research problem. It was decided that a diary panel would be the most appropriate technique to obtain data on consumer tomato purchasing habits over a period of time.

The panel was set up in Kilmarnock, an industrial town with a population of 50,000, the demographic characteristics of which, are approximately representative of Scotland as a whole. The sample of 200 was recruited on a quota basis, with a representative personally contacting the volunteer panel members. The quotas were based on demographic characteristics of the population of Scotland as a whole.

Table A.3 Demographic Characteristics of Original Sample

Socio-Economic Group	Age 16-34	Age 35-54	Age 55+	All Ages
ABC	13	22	20	55
C_2DE	33	59	53	145
Total	46	81	73	200

Quotas based on STV and National Readerships Survey figures.

The diaries were distributed to the panel ~~members~~ each week and collected by hand. This helped to reduce the drop out rate of the volunteer panel. The diaries, with a page for each day, covered a variety of food commodities including fruit, vegetables, dairy produce and meat. Although this research project was primarily interested in the tomato purchases, the other commodities were included to draw attention away from tomatoes, which could have led to exaggerated results. It was also felt that the information obtained on the other commodities could be useful in later studies.

The main problems faced by researchers using panels are sample mortality and conditioning. It was felt that the 11 week period was too short for any serious conditioning to be introduced, but sample mortality was a more serious problem. The desired sample size was 100, as it was believed that this was an adequate sample size of the population of Kilmarnock for a pilot panel, and the using of personal contact while reducing sample mortality, also placed limitations on the sample size.

Table A.4 Drop out rate and Usable Diaries over the Diary Panel Period

Week	Number Dropping Out	Sample Remaining	Sample as % of Original	Usable Diaries as % of Original Sample
A	73	127	63.5	40.0
B	3	124	62.0	51.0
C	6	118	59.0	52.0
D	6	112	56.0	43.0
E	5	107	53.5	38.0
F	6	101	50.5	28.0
G	2	99	49.5	30.0
H	-	99	49.5	44.0
I	-	99	49.5	48.0
J	-	99	49.5	48.0
K	6	93	46.5	46.0

The cooperation of the 200 households selected by quota was not difficult to achieve. However, when the first weeks' diaries were returned, 73 housewives failed to cooperate any further, and usable diaries were returned by only 40% of the sample. The following two weeks saw an increase in usable diaries,probably as a result of the volunteers' familiarisation with the diary. The number of diaries returned, declined sharply as volunteers took their holidays during July and early August, although the number of effective non-cooperators was small, as most of the panel members resumed returning diaries after their holidays. No attempt was made to replace the non-respondents as it was felt that replacements would not be necessarily representative of the non-respondents. Instead, each week's data was weighted to maintain the desired demographic characteristics of the panel when analysing the data. The sample mortality experienced by the WSAC diary panel is similar to that of the remunerated Attwood Consumer Panel quoted by Moser and Kalton[1], where only 48% of the original sample remained after six weeks. Although volunteer panels are often unsuccessful by maintaining personal contact through weekly collection and distribution of diaries it was possible to maintain the panel at a reasonable size for a period of 11 weeks, and at tht end of the diary period 46% of the original sample remained.

[1] Survey Methods in Social Investigation - C.A. Moser and G. Kalton, Heinemann 1971.

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APPENDIX B

DEFINITION OF SOCIO-ECONOMIC GROUPS

The housewives were allocated into socio-economic groups according to the occupation of the head of the household, or former occupation in the case of retired persons.

Group	Description	Typical Occupations
A	Upper Middle	Doctor, Dentist, Stockbroker, Professor, Barrister, Solicitor, Accountant, Senior Executive, Senior Civil Servant, Farmer of large farm, People living in comfort from private incomes.
B	Middle	Headmaster, University Lecturer, Librarian, Bank Manager, Civil Servant in Executive Grade, Farmer of medium sized farm.
C 1	Lower Middle	Teachers, Nurse, Junior Lecturer, Junior Civil Servant, Lower Managerial, Manager of Small Retail Shop, Bank Clerk, Pharmacist.
C 2	Skilled Working	Foreman, Chargehand, Craftsman, Tradesman.
D	Unskilled Working	Agricultural Labourer, Bus Conductor, Porter, Labourer, Shop Assistant.
E	Lowest Level of Subsistence	Unemployed, Pensioners, Casual Workers.

Source: Opinion Research Centre, London.