FOOD QUALITY
BEHAVIOUR, PERCEPTIONS AND KNOWLEDGE OF SOUTH AFRICAN CONSUMERS – A FOCUS ON MIDDLE AND UPPER SOCIO-ECONOMIC GROUPS

Task report

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Executive summary

- This document reports on the main findings of a study that focused on the purchase behaviour and quality perceptions of South African consumers (LSM 7 to 10), regarding a number of fresh food categories. The survey was conducted in Gauteng from October to December 2009 among 420 recruited consumers, based on an extensive personal interview questionnaire.
- Among the fresh food products covered in the survey milk, yoghurt, chicken, mince meat, fruit and vegetables are very widely purchased while steak is a bit less purchased with differences across LSM and ethnic groups.

Purchase locations:

- Supermarkets are the main source of food for the large majority of sampled consumers. The main purchase locations for the various product categories were: dairy - Pick 'n Pay and Shoprite/Checkers; meat – Pick 'n Pay and local butchers; fresh produce – Pick 'n Pay and Fruit & Veg City. Across product categories the most important criteria for selecting a purchase outlet were good quality, convenient location and affordable prices. The relative importance of these 3 factors varied somewhat between product categories.

Product selection criteria:

- When considering consumers' main product selection criteria, very similar factors were observed for red meat, chicken and fresh produce since price, expiry date, appearance and some indication of quality (e.g. quality guarantee, freshness, firmness) are among the dominant factors for all product categories. These criteria are still largely focused on basic quality attributes. Credence attributes received lowest scores for all product categories.

Organic and free range food:

- Representing the most well-established credence food categories in the South African food market, about a third of middle and upper income consumers purchase organic and free range products, mostly at irregular intervals. Interestingly, consumers exhibited similar behaviours and perceptions towards these categories of products.
- A relatively high share of consumers purchasing organic and free range food has an understanding of the terms, in particular wealthier more educated consumers. The main reasons for buying organic and free-range food focus on 'personal gain factors' such as health and taste while environmental

awareness are still very low across categories (even though consumers widely acknowledge the environmental and social benefits of these products). It is striking that safety and traceability are also not seen as important.

- Even though only a small share of consumers consider themselves as being sensitive to environmental issues a significant positive association was found in general with organic and free-range purchases.
- Consumers revealed consistent economic behaviours with regard to price increases with about half of purchasers still willing to buy these products at 10% premium and a quarter at a 20% premium.
- A lack of understanding is still the most critical reason for not purchasing these products, with price not being seen as a major barrier. Additional price discounts of 10% and 20% were associated with only small increases in willingness to buy organic and free range products.
- Only about half of purchasers trust organic or free-range labels. A public body (SABS) is significantly preferred to retailers for guaranteeing labels even though a significantly large share of the total sample perceives the food from major retailers as safe.

Understanding of food-related terms and food information sources:

- Consumers' have relatively low understanding of food-related terms and logo's; with somewhat higher understanding among wealthier more educated consumers.
- The most preferred food information sources are focused on mass media such as advertisements, magazines and TV.

Understanding of food-related terms and food information sources:

- Half of consumers indicated a willingness to buy food produced by small-scale farmers mainly due to perceptions of freshness, safety, healthiness, good quality (linked to smaller, more caring production) and a willingness to help SSF.
- SSF's perceived limited farming resources and knowledge of agricultural production practices were perceived as the dominant factors preventing consumers from buying SSF products.

Environmental awareness:

- Only a small share of households perceives themselves as being sensitive to environmental issues, significantly dominated LSM 9 & 10 consumers. Even though very few consumers expressed food purchase behaviour as a manifestation of their environmental awareness, a significantly large share of the environmentally aware consumers purchase organic and free range food.

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Main insights:

- The fresh food products covered within the consumer research (milk, yoghurt, beef mince, beef steak, fresh fruits and vegetables) are very widely purchased with some differences across LSM and ethnic groups.
- The more developed alternative quality products in South Africa, organic and free range food, are being consumed (mostly at irregular intervals) by about a third of these consumers (LSM 7 to 10) despite lack of knowledge about it and lack of trust.
- Retailers are seen as efficient with regard to safety and traceability (even if these factors are not perceived as strong determinants for purchase). However, they are not widely trusted for guaranteeing alternative quality claims.
- Consumers' have relatively low understanding of food-related terms and logo's
- The most preferred food information sources are focused on mass media such as advertisements, magazines and television.
- Half of consumers indicated a willingness to buy food produced by SSF, suggesting a potential market for these produce.
- When selecting food purchase outlets and fresh food products, consumers largely apply basic quality and convenience considerations (e.g. appearance, taste), while credence attributes (e.g. animal welfare, environmental practices, safety) are being poorly considered across products except for some health attributes. These observations are to a large degree in line with results from international literature, with however some major differences relating to developed country consumers' generally stronger focus on more advanced quality attributes. Markets for alternative quality products are much more established in Europe or Northern America.

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1. Introduction

The consumer research results presented in this report constitutes a component of the project "*Exploring the impact of local alternative food quality dynamics on small scale farmers' access to markets*", conduced by the Department of Agricultural Economics, Extension and Rural Development at the University of Pretoria, with funding provided by the National Agricultural Marketing Council (NAMC). The objective of the consumer survey was to develop a comprehensive understanding of South African upper middle- and high socio-economic status consumers' present food quality evaluation, perceptions and knowledge of food quality issues related to a wide range of fresh food products. This survey constituted a significant part of the activities for Year 1 of the larger project.

2. Methodology

Since survey research is particularly suitable for such descriptive research, the method was selected for this component, to be executed with a survey questionnaire that was developed (based on the research objectives, as well as inputs from the in-store product observations and focus group results) and pre-tested among role-players and consumers.

The consumer survey involved interviews with 420 upper middle- and high income consumers, based on an extensive questionnaire containing a wide range of research questions (open questions and several types of closed questions – e.g. dichotomous (yes / no), multiple choice, Likert scale agreement level, importance scale and rating scale questions) (Refer to Appendix A for the Survey questionnaire). Data gathering was done from October to December 2009. A typical consumer interview lasted between 90 minutes and two hours.

The sample size was selected based on three main considerations – the minimum sample size allowing statistical significance within the larger population, the cost of respondents' recruitment and the significant length of the consumer survey questionnaire (19 pages). The study focused specifically on upper middle- and high income consumers (LSM 7 to 10), given their ability to afford more expensive food. Since alternative food quality attributes (e.g. organic and free range) as well as their expected more diversified and more alternative quality oriented food shopping behaviour are usually associated with price premiums.

Respondents were recruited in Gauteng based on quota sampling, since the province has similar demographical features compared to the country as a whole. The quota sampling plan for the survey is shown in Table 1, based on the actual cultural and age characteristics of consumers within LSM 7 to 10. The study focused on the two main cultural subgroups in Gauteng (black consumers and white consumers) divided into three age groups ranging from young adults (25-34) to consumers in the age (35-49) as well as older consumers (50+). All respondents had to be prominent shoppers in their household, engaged in extensive grocery shopping at least twice per month. No formal female / male split was included in the sampling. However, it was expected that the sample would be dominated by female consumers given their traditional dominance in the food purchasing activity for households.

Table 1: The sample quotas

	Ideal Sample*	**Share (%) – ideal sample**
LSM 7, Black 25-34	31	7.7
LSM 7, Black, 35-49	35	8.7
LSM 7, Black, 50+	31	7.7
LSM 7, White, 25-34	9	2.2
LSM 7, White, 35-49	10	2.5
LSM 7, White, 50+	9	2.2
LSM 8, Black, 25-34	14	3.5
LSM 8, Black, 35-49	18	4.5
LSM 8, Black, 50+	17	4.3
LSM 8, White, 25-34	11	2.8
LSM 8, White, 35-49	14	3.5
LSM 8, White, 50+	13	3.4
LSM 9, Black, 25-34	9	2.3
LSM 9, Black, 35-49	14	3.5
LSM 9, Black, 50+	13	3.3
LSM 9, White, 25-34	18	4.5
LSM 9, White, 35-49	27	6.9
LSM 9, White, 50+	26	6.5
LSM 10, Black, 25-34	2	0.5
LSM 10, Black, 35-49	5	1.1
LSM 10, Black, 50+	3	0.8
LSM 10, White, 25-34	15	3.8
LSM 10, White, 35-49	33	8.3
LSM 10, White, 50+	22	5.6
TOTAL	400*	N/A

** A 5% over-sampling was applied, resulting in an actual sample size of 420 consumers*

The overall LSM groups and specific age categories were divided according to the official proportions found among the LSM groups in South Africa. The inclusion of LSM 7, 8, 9 and 10 in the sample was chosen to enable the comparison between consumers in the 'lower' wealthy categories (LSM 7 & 8) versus the 'higher' wealthy categories (LSM 9 & 10).

Panel recruitment was done through a professional consumer panel recruitment agency ('Consumers in Focus'), to ensure the validity of the sampling process. Sampling of consumers was done randomly around Johannesburg and surrounding areas. Door to door recruiting was done where consumers were first screened for shopping roll and demographics profile and once qualified invited to participate (via one on one interviews at convenient times at the consumers' homes). Recruiters/interviewers (a team of about 25 trained individuals) were given specific demographical areas and consumer profiles to concentrate on. A random sample (23% of all questionnaires) was back-checked by 'Consumers In Focus' personnel after questionnaires were returned to gauge recruiting accuracy and monitor interview protocol adherence. The survey areas included Soweto, Tembisa, Vosloorus, Aucklandpark, Newlands, Roodepoort, Krugersdorp, Randburg, Sandton, Alberton, Benoni, Brakpan, Springs, Boksburg, Kemptonpark, Edenvale, Midrand and Centurion.

Data capturing and cleaning was done in Microsoft Excel, after which a wide range of descriptive, comparative analysis (ANOVA and Chi-square) and multivariate techniques were applied to analyze the data with SPSS 17.0. Comparative results were evaluated at two significance levels: Significant differences, $p \leq 0.01$ (indicated as ***) and significant differences, $0.01 < p \leq 0.05$ (indicated as **).

3. Results and discussion

3.1 Sample demographics

A comparison of the ideal sample composition and the actual sample composition is presented in Table 2. The actual sample is a good representation of the demographical shares represented in the actual population of consumers within LSM 7 to 10, broken down in terms of ethnicity and age groups.

Table 2: A comparison of the ideal and actual sample composition

	Actual sample	Ideal Sample*	Share (%) – actual sample	Share (%) – ideal sample
LSM 7, Black 25-34	33	31	7.9	7.7
LSM 7, Black, 35-49	32	35	7.6	8.7
LSM 7, Black, 50+	32	31	7.6	7.7
LSM 7, White, 25-34	10	9	2.4	2.2
LSM 7, White, 35-49	12	10	2.9	2.5
LSM 7, White, 50+	10	9	2.4	2.2
LSM 8, Black, 25-34	16	14	3.8	3.5
LSM 8, Black, 35-49	18	18	4.3	4.5
LSM 8, Black, 50+	18	17	4.3	4.3
LSM 8, White, 25-34	10	11	2.4	2.8
LSM 8, White, 35-49	14	14	3.3	3.5
LSM 8, White, 50+	15	13	3.6	3.4
LSM 9, Black, 25-34	10	9	2.4	2.3
LSM 9, Black, 35-49	15	14	3.6	3.5
LSM 9, Black, 50+	15	13	3.6	3.3
LSM 9, White, 25-34	18	18	4.3	4.5
LSM 9, White, 35-49	23	27	5.5	6.9
LSM 9, White, 50+	28	26	6.7	6.5
LSM 10, Black, 25-34	4	2	1.0	0.5

LSM 10, Black, 35-49	7	5	1.7	1.1
LSM 10, Black, 50+	4	3	1.0	0.8
LSM 10, White, 25-34	18	15	4.3	3.8
LSM 10, White, 35-49	37	33	8.8	8.3
LSM 10, White, 50+	21	22	5.0	5.6
TOTAL	420	400	N/A	N/A

** As specified in the quota sampling plan*

In terms of gender, the sample consists of 15.5% male and 84.5% female respondents. The dominance of female respondents was according to expectations, given their traditional role as food shoppers for households as already mentioned. The composition of the sample in terms of education level is shown in Table 2. The majority of the respondents were educated up to Grade 10 to Grade 12.

Table 2: Education level characteristics of the sample

Education level:	**Share of sample: (n=420)**
Grade 7 or lower	2.1%
Grade 8 or 9	7.4%
Grade 10 or 11	27.4%
Grade 12	41.1%
Technicon degree / diploma	13.1%
University degree	4.5%
Other post-matric qualification	4.3%

3.2 Shopping role in household

While respondents were required to be the main shopper of the household or a regular supplementary shopper, the vast majority of respondents (91.9%) were the main shoppers in their households, with only 8.1% of the respondent being regular supplementary shoppers. In terms of the identity of the main shopper, the wife / mother / female partner in the household dominated (83.6%) followed by the husband / father / male partner (13.6%) or older children (2.9%). The dominant shopping frequencies of the respondents were weekly (34.1%), monthly shopping (33.2%) and twice monthly shopping (20.2%). Only 10.5% of the respondents shop for food more than once per week.

3.3 Dairy purchasing behaviour

3.3.1 Milk purchasing behaviour

Detailed group comparisons of LSM and ethnic groups are shown in Appendices B & C.

All consumers in the sample purchase milk.

Milk types purchased:

- Fresh milk is purchased most often (60% of sample), followed by long life milk (38%).
- LSM comparisons: No significant differences

- Ethnic comparisons***: Black consumers purchase more long life milk while white consumers purchase more fresh milk

Milk purchase frequency:

- A significant share of the sample (76%) purchase milk once per week or more often.
- LSM comparisons**: LSM 7 & 8 less often, LSM 9 & 10 more often
- Ethnic comparisons***: Black consumers purchase milk less often than white consumers (could be linked to their preference for long life milk)

Main milk purchase locations:

- The two dominant purchase locations for milk (i.e. outlets where milk is purchased most often) were Pick 'n Pay (46% of sample) and Shoprite/Checkers (25%).
- Pick 'n Pay is mainly chosen due to the following attributes: Convenient location, Good quality & Affordable prices
- Shoprite/Checkers is mainly chosen due to the following attributes: Affordable prices & Convenient location
- LSM comparisons***: LSM 7 & 8 have a strong preference for both Pick 'n Pay (43% within LSM 7 & 8 group) and Shoprite/Checkers (33% within group), while LSM 9 & 10 strongly prefers Pick 'n Pay (50% within group) when purchasing milk.
- Ethnic comparisons***: Black consumers have a strong preference for both Pick 'n Pay (53% within group) and Shoprite/Checkers (33% within group), while white consumers strongly prefer Pick 'n Pay (40% within group) and Spar (22% within group) when purchasing milk.
- Other milk purchase outlets included:
    - Spar (preferred by 28% of sample) – mainly associated with Convenient location
    - Woolworths (preferred by 18% of sample) – mainly associated with Good quality & Hygiene
    - Spaza shops (preferred by 6% of sample) – mainly associated with Convenient location
    - Other large retailers (preferred by 6% of sample) – mainly associated with Affordable prices
    - Dairy shops (preferred by 4% of sample) – mainly associated with Affordable prices
- Overall the dominant criteria for selection of milk purchase outlets were (in order of importance): Convenient location, Good quality & Affordable prices

3.3.2 Yoghurt purchasing behaviour

Detailed group comparisons of LSM and ethnic groups are shown in Appendices D & E.

Almost the entire sample of consumers purchases yoghurt (95% of sample), of whom the majority prefer a specific brand of yoghurt (94% of yoghurt purchasers), with no significant differences between sub-groups, thus confirming the importance of branding in such a segment.

Yoghurt purchase frequency:

- About half of the sample (49%) purchase yoghurt once per week or more often, while 23% of the sample purchase yoghurt 'Twice per month' and 23% 'Once per month'.
- Yoghurt is purchased less frequently than milk.
- LSM comparisons: No significant differences
- Ethnic comparisons**: A larger share of black consumers purchase yoghurt less regularly (e.g. once or twice per month) compared to white consumers.

Main yoghurt purchase locations:

- The two dominant purchase locations for yoghurt (i.e. outlets where yoghurt is purchased most often) were Pick 'n Pay (51% of sample) and Shoprite/Checkers (27%) (similar shares as for milk).
- Pick 'n Pay is mainly chosen due to the following attributes: Convenient location, Good quality & Affordable prices (similar to milk).
- Shoprite/Checkers is mainly chosen due to the following attributes: Affordable prices & Convenient location (similar to milk).
- LSM comparisons: No significant differences.
- Ethnic comparisons***: Black consumers have strong preferences for Pick 'n Pay (57% within group) followed by Shoprite/Checkers (33% within group), while white consumers prefer Pick 'n Pay (45% within group), Shoprite/Checkers (21% within group) and Spar (16% within group) when purchasing yoghurt.
- Other yoghurt purchase outlets included:
    - Spar (preferred by 9% of sample) – mainly associated with Convenient location
    - Woolworths (preferred by 8% of sample) – mainly associated with Good quality & Hygiene
    - Other large retailers (6% of sample) – mainly associated with Affordable prices
    - Spaza shops (1% of sample) – mainly associated with Convenient location
    - Dairy shops (1% of sample) – mainly associated with Affordable prices

- Overall the dominant criteria for selection of yoghurt purchase outlets were (in order of importance): Convenient location, Affordable prices & Good quality. Interestingly Affordable prices is the second most important factor when choosing a yoghurt purchase outlet, and third most important for milk. This could be linked to the fact that milk is more part of the basic diet of South African consumers compared to yoghurt (being a more luxurious food grocery item) and thus has a lower price elasticity.

3.4 Meat purchasing behaviour

3.4.1 Chicken purchasing behaviour

Detailed group comparisons of LSM and ethnic groups are shown in Appendices F & G.

Almost all consumers in the sample purchase chicken (99% of total sample).

Chicken types purchased:

- Frozen portions are the most popular chicken purchase format (usually purchased by 64% of the sample, followed by fresh portions (21%), fresh skinned and/or deboned (11%) and fresh whole chicken (9%).
- LSM comparisons***: The purchase of frozen portions dominates among LSM 7 & 8 (78% within group) followed by fresh portions (only 15%), while the preferences of LSM 9 & 10 are more dispersed with frozen portions (48%), fresh portions (27%), fresh skinned and/or deboned (18%) and fresh whole chicken (12%).
- Ethnic comparisons***: The purchase of frozen portions dominates among black consumers (87% within group) followed by fresh portions (only 12%), while the preferences of white consumers are more dispersed with frozen portions (42%), fresh portions (29%), fresh skinned and/or deboned (20%) and fresh whole chicken (15%).

Chicken purchase frequency:

- An equal share of consumers purchase chicken meat once per week or more often (38% of purchasers) and once per month (also 38% of purchasers).
- LSM comparisons: No significant differences
- Ethnic comparisons***: Black consumers purchase chicken more regularly than white consumers

Main chicken purchase locations:

- The three dominant purchase locations for chicken (i.e. outlets where chicken is purchased most often) were Pick ‘n Pay (41% of purchasers), Woolworths (21% of purchasers) and local butchers (12% of purchasers).
- Pick ‘n Pay is mainly chosen due to the following attributes: Good quality & Affordable prices

- Woolworths is mainly chosen due to the following attributes: Good quality & Hygiene
- Local butchers is mainly chosen due to the following attributes: Convenient location, Affordable prices and Good quality
- LSM comparisons***: LSM 7 & 8 have a strong preference for Pick 'n Pay (46% within group) followed by Woolworths (27%), while LSM 9 & 10 have more diverse preferences preferring Pick 'n Pay (37% within group) followed by Woolworths (15%), local butchers (15%) and Spar (15%) when purchasing chicken.
- Ethnic comparisons***: Black consumers have a strong preference for Pick 'n Pay (54% within group) followed by Woolworths (33% within group), while white consumers prefer Pick 'n Pay (29% within group) and local butchers (22% within group) when purchasing chicken.
- Other chicken purchase outlets included:
    - Spar (preferred by 9% of sample) – mainly associated with Convenient location and Good quality
    - Woolworths (preferred by 21% of sample) – mainly associated with Good quality & Hygiene
    - Other large retailers (preferred by <5% of sample) – mainly associated with Affordable prices
    - Wholesalers (preferred by <5% of sample) – mainly associated with Affordable prices
- Overall the dominant criteria for selection of chicken purchase outlets were (in order of importance): Affordable prices, Good quality and Convenient location, Good quality.

Perceived importance of chicken purchase considerations

- The 5 most important considerations were:
    - Freshness (most important factor for 18% of total sample; Overall average rating score of 9.44 on a scale from 0 to 10);
    - Price (most important factor for 16% of total sample; Overall average rating score of 8.87);
    - Expiry date (most important factor for 16% of total sample; Overall average rating score of 9.28);
    - Clean meat (most important factor for 10% of total sample; Overall average rating score of 9.45);
    - Appearance (most important factor for 9% of total sample; Overall average rating score of 9.28).
- LSM comparisons: No significant differences

- Ethnic comparisons***: Black consumers most important chicken purchasing factors (in order of importance) are freshness, expiry date, price and appearance, while the factors for white consumers are price, expiry date, clean meat and freshness.
- Age comparisons:
  - The only significant differences were in terms of price and fat content.
  - Price**: Older consumers (especially those in the age category 35 – 49 years) perceive price as more important than young consumers.
  - Fat content**: The perceived importance of fat content increases towards older consumers.
- Education level comparisons:
  - The only significant differences were in terms of free range, price, packaging size and quality guarantee.
  - Free range**: Consumers with an education level of Grade 7 or lower perceived this attribute as very unimportant (average score 1.67), compared to the other education levels with average scores ranging from 4.18 to 4.89 on a scale from 0 to 10. Furthermore consumers with a post-Grade 12 qualification gave this attribute the highest score with regard to the other education level categories. These observations could be linked to consumers' understanding / knowledge levels in terms of what means free range food.
  - Price***: The relative importance of price increases as education level decreases. This observation could be linked to consumers' general decreased socio-economic status associated with lower education levels.
  - Packaging size**: Consumers in the education level brackets Grade 8 to 12 valued packaging size the most, pointing towards the importance of the convenience dimension.
  - Quality guarantee***: The perceived importance of a quality guarantee increases as education level decreases. This observation might be linked to the type of chicken purchased with possibly increased exposure to safety risks with education and income decreasing or limited knowledge levels regarding food quality and safety. Furthermore it could be argued that consumers with lower education levels could lack the ability to interpret other labeling dimensions that could serve to inform them about and guaranteeing quality (e.g. free range).
- Overall among the 27 chicken purchase considerations evaluated by consumers the least important considerations were free range, animal friendly production, environmentally friendly production, skinned / deboned chicken meat, intended use, origin of meat, chickens fed GM free grain, traceability and indigenous chicken species. Even though 'store where purchased' and 'past purchase

experience' did not receive high ratings, consumers did reveal specific preferences in terms of their preferred retail outlets for chicken, as discussed above.

- Consumers' chicken selection criteria are still largely focused on basic quality attribute, while credence attributes received the lowest scores.
- This is similar to other meat types, as presented in the following sections.

3.4.2 Beef mince purchasing behaviour

Detailed group comparisons of LSM and ethnic groups are shown in Appendices H & I.

Almost all consumers in the sample purchase beef mince (98% of total sample).

Beef mince purchase frequency:

- Monthly shopping for beef mince is applied by 41% of purchasers, followed by 36% shopping for beef mince once per week or more.
- LSM comparisons**: LSM 9 & 10 tend to shop for beef mince less often than LSM 7 & 8.
- Ethnic comparisons***: Black consumers purchase beef mince more regularly than white consumers

Main beef mince purchase locations:

- The three dominant purchase locations for beef mince (i.e. outlets where beef mince is purchased most often) were Pick 'n Pay (33% of purchasers), local butchers (26% of purchasers) and Woolworths (14% of purchasers).
- Pick 'n Pay and local butchers are mainly chosen due to the following attributes: Good quality, Convenient location & Affordable prices
- Woolworths is mainly chosen due to the following attributes: Good quality and Good hygiene.
- LSM comparisons**: LSM 7 & 8 prefer Pick 'n Pay, local butchers and Woolworths, while LSM 9 & 10 prefer mainly Pick 'n Pay and local butchers.
- Ethnic comparisons***: Black consumers prefer Pick 'n Pay and Woolworths, while white consumers prefer mainly local butchers and Pick 'n Pay.
- Other beef mince purchase outlets included:
  - Spar (preferred by 11% of sample) – mainly associated with Convenient location and Good quality
  - Other large retailers (preferred by less than 5% of sample) – mainly associated with Affordable prices
  - Wholesalers (preferred by less than 5% of sample) – mainly associated with Affordable prices

- Overall the dominant criteria for selection of beef mince purchase outlets were (in order of importance): Good quality, Affordable prices and Convenient location.

3.4.3 Beef steak purchasing behaviour

Detailed group comparisons of LSM and ethnic groups are shown in Appendices J & K.

A large share of consumers in the sample purchases beef steak (76% of total sample), with purchasing significantly dominated by LSM 9 & 10 consumers (85% within group).

Beef steak purchase frequency:

- Monthly beef steak purchasing is applied by 47% of purchasers, followed by 29% purchasing beef steak once per week or more.
- LSM comparisons: No significant differences
- Ethnic comparisons***: Black consumers purchase beef steak more regularly (i.e. less bulk) than white consumers

Main beef steak purchase locations:

- The two dominant purchase locations for beef steak (i.e. outlets where beef steak is purchased most often) were local butchers (33% of purchasers) and Pick 'n Pay (30% of purchasers).
- These purchase outlets were mainly chosen due to the following attributes: Good quality, Convenient location & Affordable prices
- Woolworths is preferred by 12% of purchasers, mainly due to the following attributes: Good quality & Hygiene
- LSM comparisons: No significant differences.
- Ethnic comparisons***: Black consumers have a strong preference for Pick 'n Pay (45% within group) followed by Woolworths (20% within group), while white consumers prefer local butchers (46% within group) and Pick 'n Pay (19% within group) when purchasing beef steak.
- Other beef steak purchase outlets included:
    - Spar (preferred by 9% of sample) – mainly associated with Convenient location and Good quality
    - Shoprite/Checkers – mainly associated with Affordable prices & Convenient location
    - Other large retailers – mainly associated with Affordable prices
    - Wholesalers – mainly associated with Affordable prices
- Overall the dominant criteria for selection of beef steak purchase outlets were (in order of importance) the same as for chicken: Good quality, Affordable prices and Convenient location.

Perceived importance of beef steak purchase considerations

- The 5 most important considerations were:
  - Price (most important factor for 26% of total sample);
  - Expiry date (most important factor for 21% of total sample);
  - Appearance (most important factor for 18% of total sample);
  - Quality guarantee (most important factor for 15% of total sample);
  - Fat content (most important factor for 7% of total sample).
- LSM comparisons***: LSM 7 & 8: focus mainly on price, expiry date and appearance, while LSM 9 & 10 focus mainly on the presence of a quality guarantee followed by price and expiry date.
- Ethnic comparisons***: Black consumers' most important beef steak purchasing factors (in order of importance) are appearance, price and expiry date. White consumers are focused on price, expiry date and a quality guarantee.
- Overall the least important considerations were hormone free meat, free range, animal friendly production, past purchase experience, breed of animal and traceability.
- Consumers' beef steak selection criteria are still largely focused on basic quality attributes, while credence attributes received the lowest scores.
- This is similar to other meat types, as already mentioned.

3.5 Fresh produce purchasing behaviour

3.5.1 Fresh Fruit

Detailed group comparisons of LSM and ethnic groups are shown in Appendices L & M.

Almost all consumers in the sample purchase fruit (99% of total sample).

Fruit purchase frequency:

- More perishable fruit are mostly purchased once per week or more (73% of purchasers), while 53% of fruit purchasers buy less perishable fruit once per week or more and 25% twice per month.
- LSM: No significant differences
- Ethnic comparisons***: Black consumers purchase fruit more regularly How regular? than white consumers

Main fruit purchase locations:

- The dominant purchase locations for fruit (i.e. outlets where fruit is purchased most often) were:

- Pick ‘n Pay (30% of purchasers), mainly chosen for good quality, convenient location and affordable prices;
    - Fruit & Veg City (30% of purchasers), mainly chosen for affordable prices, good quality and a wide selection;
    - Shoprite/Checkers (12% of purchasers), mainly chosen for affordable prices, convenient location and good quality;
    - Local greengrocers (11% of purchasers), mainly chosen for convenient location and affordable prices.
- LSM comparisons**: All groups prefer Pick ‘n Pay and Fruit & Veg City, but LSM 7 & 8 also prefer Shoprite/Checkers, while LSM 9 & 10 also or only?? prefer Woolworths.
- Ethnic comparisons***: Black consumers prefer Pick ‘n Pay followed by Fruit & Veg City, while white consumers prefer mainly Fruit & Veg City followed by Pick ‘n Pay.
- Other fruit purchase outlets included:
    - Woolworths (preferred by 7% of sample) – mainly associated with good quality and hygiene;
    - Spar – mainly associated with Convenient location and Good quality
    - Informal traders – mainly associated with convenient location
- Overall the dominant criteria for selection of fruit purchase outlets were (in order of importance): Good quality, Affordable prices and Convenient location (similar to vegetables as shown below).

3.5.2 Fresh Vegetables

Detailed group comparisons of LSM and ethnic groups are shown in Appendices N & P.

Almost all the consumers in the sample purchase vegetables (99.5% of total sample).

Vegetables purchase frequency:

- More perishable vegetables are mostly purchased once per week or more (79% of purchasers), while 53% of vegetable purchasers buy less perishable vegetables once per week or more and 22% twice per month as would be expected.
- LSM comparisons: No significant differences
- Ethnic comparisons***: Black consumers purchase vegetables more regularly (i.e. less bulk) than white consumers

Main purchase locations for vegetables:

- The dominant purchase locations for vegetables (i.e. outlets where vegetables are purchased most often) were:
    - Pick ‘n Pay (29% of purchasers), mainly chosen for good quality, convenient location and affordable prices;
    - Fruit & Veg City (28% of purchasers), mainly chosen for affordable prices, good quality and a wide selection;
    - Shoprite/Checkers (14% of purchasers), mainly chosen for affordable prices, convenient location and good quality;
    - Local greengrocers (12% of purchasers), mainly chosen for convenient location and affordable prices.
- LSM comparisons**: All LSM groups prefer Pick ‘n Pay and Fruit & Veg City, but LSM 7 & 8 also have a preference for Shoprite/Checkers.
- Ethnic comparisons***: Black consumers prefer Pick ‘n Pay followed by Fruit & Veg City, while white consumers prefer mainly Fruit & Veg City followed by Pick ‘n Pay.
- Other vegetable purchase outlets included:
    - Woolworths – mainly associated with good quality and hygiene;
    - Spar – mainly associated with Convenient location and Good quality;
    - Informal traders – mainly associated with Convenient location.
- Overall the dominant criteria for selection of vegetables purchase outlets were (in order of importance): Good quality, Affordable prices and Convenient location (similar to fruit).

Perceived importance of purchase considerations for tomatoes

- The most popular tomato types were medium tomatoes (regularly purchased by 70% of purchasers) and large tomatoes (26% of purchasers).
- The 5 most important considerations were:
    - Freshness (most important factor for 30% of total sample);
    - Price (most important factor for 14% of total sample);
    - Expiry date (most important factor for 10% of total sample);
    - Firmness (most important factor for 8% of total sample);
    - Quality guarantee (most important factor for 8% of total sample).
- LSM comparisons: No significant differences.

- Ethnic comparisons***: Black consumers' most important vegetables purchasing factors (in order of importance) are freshness, quality guarantee and firmness. White consumers are focused on freshness, price and expiry date.
- Overall the least important considerations were past purchase experience, tomato variety, shape, brand, environmentally friendly production, intended use, packaging material, packaging size, natural, origin, traceability and organically produced tomatoes.
- .Consumers' vegetables selection criteria are still largely focused on basic quality attribute, while credence attributes received the lowest scores.
- This is similar to other products, as presented in this report.

3.6 Prominent sustainability dimensions in SA: Organic and free range food

3.6.1 Organic food:

Detailed group comparisons of LSM and ethnic groups are shown in Appendices Q & R.

Results for consumers purchasing organic food:

- Given the general perception of organic food market as being of a niche nature, a surprising large share of the total sample (36%) purchase organic food even though not necessarily on a regular basis. A significantly larger share of consumers in LSM 9 & 10 purchase organic food, but no significant differences were observed between ethnic groups.
- A wide range of purchase frequencies were observed for organic food: Once / week or more (36% of organic purchasers); Once or twice / month (27% or organic purchasers) and Less than once / month (36% or organic purchasers).
- The evaluation of consumers' understanding of the term 'organic' revealed that 85% of organic purchasers have a good understanding of the term, with a significantly larger share among LSM 9 & 10. Consumers associate 'organic' with concepts such as: no chemicals / pesticides / poison used; Natural; as well as healthy / nutritious food. As expected, the share of consumers understanding the term organic increased significantly (***) towards higher education levels.
- The most prominent organic food type purchased by consumers is vegetables, followed by fruit, eggs, dairy and meat (in order of importance).
- Consumers evaluated their agreement with statements that organic food is healthier, tastier, more environmentally friendly and safer on a 5 point scale. The majority of consumers purchasing organic food perceived organic food as healthier, tastier and safer. Consumers were also presented with a pre-tested list of potential motivations for purchasing organic food and were asked to indicate the most

relevant option. These results indicated that organic purchasers' main motivations for purchasing organic food related to health, nutrition and (perceived) superior product taste. Interestingly, sustainability dimensions such as environmentally friendly production and traceability are not perceived as important motivations for consuming organic food, despite the observation that about 90% of organic purchasers agreed that organic food is more environmentally friendly.

- Willingness to buy organic food at different price levels:
  - If a product's organic price equals the price of the conventional product, 92% of organic purchasers indicated a willingness to buy MORE of the organic product.
  - If a product's organic price is 10% higher than the price of the conventional product, only 52% of organic purchasers indicated a willingness to still buy organic product.
  - If a product's organic price is 20% higher than the price of the conventional product, only 26% of organic purchasers indicated a willingness to still buy organic product.
  - These results suggest that organic food consumers are price sensitive, especially taking into account that price premiums of 10% to 20% were not uncommon for organic goods at the time when the survey was conducted, which is also reflected in the fact that most organic purchasers state that they would buy more would the price for organic produce be the same as the conventional product. This confirms that while a significant number of consumers purchase organic, only a share of these purchasers are regular buyers that are less price sensitive.
- Only 43% of consumers purchasing organic food believe that the organic products that they are purchasing are really organic. Thus, trust is an issue of significant importance.
- Consumers' preferred guaranteeing body for organic food is the SABS (42% of organic purchasers), followed by farmers (20%) and retailers (16%).
  - LSM comparisons***: Among consumers in LSM 7 & 8 purchasing organic a dominant 55% perceived the SABS as the preferred guaranteeing body for organic food, followed by retailers (20%) and farmers (12%). Preferences among consumers in LSM 9 & 10 purchasing organic were more dispersed since 30% perceived the SABS as the preferred guaranteeing body for organic food, followed closely by farmers (28%) and then retailers (13%)..
  - Ethnic comparisons***: Even though all ethnic groups revealed the largest preference for the SABS, black consumers have a dominant preference for SABS, while white consumers also trust farmers and retailers.

Results for consumers not purchasing organic food:

- Among the sample of consumers not purchasing organic food, the main reasons for not purchasing were a lack of understanding (58% of non-purchasers), a lack of interest (20% of non-purchasers) and a lack of trust (3% of non-purchasers).

- Willingness to buy organic food at different price discount levels:
  - If a product's organic price equals the price of the conventional product, 42% of organic non-purchasers indicated a willingness to buy the organic product.
  - If a product's organic price is 10% lower than the price of the conventional product, a slightly higher share (44% of non-purchasers) indicated a willingness to buy the organic product.
  - If a product's organic price is 20% lower than the price of the conventional product, again a slightly higher share (46% of non-purchasers) indicated a willingness to buy the organic product.
  - These results suggest that a reduction in the price of organic food to similar price levels as convention goods could result in a significant increase in organic sales. However, a further reduction in the price of organic food to below the price of conventional goods will not result in any further significant increase in organic food sales. This could be interpreted as a mistrust in low priced organic products as organic products are usually associated in the mind of consumers with higher prices

3.6.2 Free range food:

Detailed group comparisons of LSM and ethnic groups are shown in Appendices S & T.

Results for consumers purchasing free range food:

- Given the perception of free range food market as being of a niche nature, a surprising large share of the total sample (38%) purchases free range food (similar share to free range food).
- A significantly larger share (***) of consumers in LSM 9 & 10 buys free range food corresponding to the luxury nature of the product.
- The evaluation of consumers' understanding of the term 'free-range' revealed that 66% of free range purchasers have a good understanding of the term (lower share than for organic food but still quite significant).
- Consumers associate 'free-range' with concepts such as: free roaming animals, not force fed, animal welfare and no hormones given to animals.

- A wide range of purchase frequencies were observed for free range food: Once / week or more (28% of free range purchasers); Once or twice / month (32% of free range purchasers) and Less than once / month (40% of free range purchasers).
- The most prominent free range food type purchased by consumers is eggs, followed by chicken, beef and mutton/lamb (in order of importance).
- The majority of consumers purchasing free range food perceived free range food as healthier, tastier and safer and indicated that their top 3 motivations for purchasing free range food related to health, taste and nutrition, which is a similar pattern to organic product perception and consumption. However, interestingly, animal friendly production was also perceived as important.
- As for organic production, environmentally friendly production and traceability are not perceived as important motivations for consuming free range food, despite the observation that about 81% of free range purchasers agreed that free range food is more environmentally friendly.
- Willingness to buy free range food at different price levels:
  - If a product's free range price equals the price of the conventional product, 89% of free range purchasers indicated a willingness to buy MORE of the free range product.
  - If a product's free range price is 10% higher than the price of the conventional product, only 52% of free range purchasers indicated a willingness to still buy of the free range product.
  - If a product's free range price is 20% higher than the price of the conventional product, only 29% of free range purchasers indicated a willingness to still buy of the free range product.
  - Interestingly, these results follow very similar patterns to those obtained for organic food.
  - These results suggest that a share of free range food consumers are also price sensitive and also confirm that while a significant number of consumers purchase free range products, only a share of these purchasers are regular buyers that are less price sensitive.
- Only 48% of consumers purchasing free range food believe that the free range products that they are purchasing are really free range (slightly higher share than for organic food). Thus, trust is also an issue of significant importance.
- Consumers' preferred certification body for free range food are again the SABS (30% of free-range purchasers which is less than for organic production but still comes first), closely followed by farmers (29%) and with retailers in third place (15%). Interestingly, organic consumers revealed a lower trust in farmers than free-range consumers. Again a low trust is placed in retailers for guaranteeing this type of alternative quality claims, especially among the wealthier consumers as shown just below which was unexpected given the sophistication in the retail sector and its

dominance on the South African agro-food market. The problem is however that SABS is not involved and thus illustrate the consumers limited understanding of the role of various certification bodies

- LSM comparisons***: Among consumers in LSM 7 & 8 purchasing free range 31% perceived the SABS as the preferred guaranteeing body for organic food, followed by retailers (20%) and farmers (19%). Consumers in LSM 9 & 10 purchasing free range food focused primarily on farmers (37%), followed closely by the SABS (29%) and retailers at only 11%.
- LSM comparisons***: LSM 7&8 trust the SABS, retailers and farmers, while LSM 9&10 trust farmers and the SABS
- Ethnic comparisons: No significant differences.

Results for consumers not purchasing free range food:

- Among the sample of consumers not purchasing free range food, the main reasons for not purchasing were a lack of understanding (43% of non-purchasers), a lack of interest (22% of non-purchasers) as for organic product but it also includes expensive prices (8% of non-purchasers).

- Willingness to buy free range food at different price discount levels:
  - If a product's free range price equals the price of the conventional product, 36% of free range non-purchasers indicated a willingness to buy the free range product.
  - If a product's free range price is 10% lower than the price of the conventional product, a slightly higher share (39% of non-purchasers) indicated a willingness to buy the free range product.
  - If a product's free range price is 20% lower than the price of the conventional product, again a slightly higher share (41% of non-purchasers) indicated a willingness to buy the free range product.
  - Interestingly, these results are very similar to those obtained for organic food.
  - These results suggest that a reduction in the price of free range food to similar price levels as convention goods could result in a significant increase in free range sales. However, a further reduction in the price of free range food to below the price of conventional goods will not result in any further significant increase in free range food sales. As for organic product, this could be interpreted as mistrust in low priced free range products as free range products are usually associated in the mind of consumers with higher prices.

3.7 General shopping behaviour, perceptions and knowledge

Detailed group comparisons of LSM and ethnic groups are shown in Appendices U & V.

3.7.1 Changes in shopping behaviour – past five years

- Did shopping behaviour change in the past 5 years in terms of what the consumers buy?
  - Only 54% of the sample experience such changes, mainly caused by financial pressure (e.g. expensive food, the economic recession) forcing them to buy cheaper food and / or essential food items only. New quality offerings were not indicated as a major reason for changes in purchasing habits except for a stronger health orientation as indicated below.
  - LSM*** and ethnic*** comparisons: As could be expected, consumers in LSM 7&8 are more affected in this regard, as well as black consumers.
- Did shopping behaviour change in the past 5 years in terms of where the consumers buy?
  - Only 30% of the sample experience such changes, mainly caused by financial pressure (e.g. expensive food, the economic recession) forcing them to buy at cheaper stores and/or shop around for specials.
  - LSM*** comparisons: As could be expected consumers in LSM 7&8 are more affected in this regard.

In addition to changes driven by financial pressure, other interesting observations include the following:

- About 6% of the sample indicated that their shopping behaviour changes toward buying more healthy food and fruit in the past 5 years. This is related to the 'health mega trend' with a strong prevalence globally and in South Africa.
- Shopping behaviour changes related to more advanced quality issues were extremely limited, but included the following:
  Buy better quality food (0.7% of sample);
  Buy more environmentally friendly products / lower carbon footprint (0.7% of sample);
  Buy other foods due to changes in taste preference changes (0.5% of sample);
  Buy more luxurious food items (0.2% of sample).

3.7.2 Food safety perceptions

Consumers' perceptions regarding the safety of food sold by major retailers, small independent retailers and food-away-from-home outlets were tested:

- A significant share of the sample (82%) perceives the food in major retailers as safe to eat.
- Food safety trust in the food sold by small independent retails is significantly less, with only 44% of the sample that perceived this food source as safe. This observation could possibly help to explain the

limited purchasing at these outlets of perishable food products, for example only 5.2% of the sample buy milk at small independent retailers and only 0.8% of them yoghurt.

- Interestingly, only 53% of the sample perceives the food in restaurants and take-away outlets as safe to eat.

Since formal food retail is the main source of food for most LSM 7 to 10 consumers in South Africa, consumers' trust in food retailers could possible help to explain the relative low importance attached to food safety when evaluating specific products such as steak, tomatoes and chicken (as discussed earlier in the report). It may also be linked to the fact that there has been no major food threats related to the main retailer chains in the recent past in South Africa.

3.7.3 Understanding of food-related terms and logo's

- In general consumers revealed low levels of understanding of many food-related terms and logo's, such as sustainable (understood by only 5% of sample), Badger Friendly Honey (only 5%), rBST (only 3%), Fair Trade (only 3%), Ecocert (only 0.2%) and the SASSI logo (6%).
- Traceability was understood by 38% of consumers, despite earlier observations revealing the low importance of traceability among other food selection criteria.
- Interestingly, a number of terms related to free range meat were more widely understood, such as Karoo Lamb (42% of sample), Animal Welfare (38%), Certified Natural Lamb (25%) and the Woolworths Free Range logo (28%).
- The most widely understood terms and logo were 'SABS' (100% of sample), 'Traditional' (67%) and the Heart Mark logo (66%)
- The term 'traditional' was associated with dimensions such as culture, customs, doing things always the same, South African, food preparation methods, natural, original and religion.
- A significantly higher share*** of consumers in LSM 9 & 10 revealed understanding of many of the food-related terms and logo's, which was to be expected given their higher education levels (in particular Grade 12 and higher) and higher purchasing power to afford more sophisticated products.
- As expected, the share of consumers understanding food-related terms / logo's such as rBST, Karoo lamb, badger friendly honey, animal friendly, traceability, sustainability, heart mark logo, free range logo and SASSI logo increased significantly (***) towards higher education levels.

3.7.4 Food information sources

- Consumers were asked to indicate their food-related information sources. The most important food information sources were advertisements (34% of sample), Magazines (14%), TV programs (14%), Food labels (10%) and word-of-mouth from relatives/friends (9%). Thus, consumers' most preferred food information sources are strongly focused on the mass media, such as advertisements, magazines and TV programs. Significant differences were found between the LSM groups. Whereas the most prominent food information sources are advertisements (most important source) and magazines (third most important source) for all LSM groups, for LSM 7 & 8 the second most important source is television, while the second most important source for LSM 9 & 10 is food labels.
- Interestingly, a significantly higher share (***) of the consumers who obtain information from food labels understood terms such as organic, free range, rBST, Fair trade, Karoo lamb, badger friendly honey, animal welfare, traceability and sustainability (compared to the share of consumers who understand these term, but who do not obtain food information from food labels). However, since only 10% of the sample considers food labels as their most important source of food-related information and only 27% of the sample obtains food information from food labels, the results suggest the importance of consumer education on the importance and meaning of food labels' content and terminology, in order to assist them to make informed food choices.
- Few or no significant differences were found in terms of the share of consumers' understanding various food-related terms and their usage of food information sources such as TV, word-of-mouth and advertisements.
- No significant differences were observed when comparing the food information sources of various education groups in the sample, which can probably be related to the fact that consumers mostly rely on mass media for sourcing information and these are widely accessible, thus not implying significant different skills and ability in sourcing information.

3.8 Food produced by small-scale farmers (SSF)

Detailed group comparisons of LSM and ethnic groups are shown in Appendices W & X.???

Consumers were asked to indicate and motivate whether they would be willing to buy products that carry a sign indicating that it has been produced by SSF or land reform beneficiaries, with answering options 'yes', 'no' and 'not sure'. The following results were obtained:

- About half of the sample (52%) indicated a willingness to purchase these products, while 23% of the total sample is not willing to buy SSF products and 25% is not sure.

- Among the positive consumers 39% of the sample indicated that they perceive the quality of SSF produce to be better than that of commercial farmers. Positive attitudes were mainly based on perceptions that produce are fresh / safe / healthy, good or better quality, willingness to help and support SSF to grow and more caring and natural production due to smaller size. It is interesting to note that this significantly differs from what retailers state regarding consumers' willingness to buy products from SSF. Indeed, according to recent interviews with retailers the latter generally believe that most consumers would be reluctant to buy products advertised as produced by SSF. However, it is also important to point out that it may well be that consumers not willing to purchase from SSF have a strong opinion about it and retailers are more driven by the perception of the risks associated with loosing these consumers than with the potential associated with advertising procurement from SSF on a national basis. And it is also well established that consumers' stated and actual behaviours might differ substantially, thus explaining the discrepancy between the survey results and the retailers' perception.
- About 11% of consumers indicated that they would be willing to buy SSF products if it was affordable or cheaper than other goods or if it was the same as products produced by commercial farmers (thus suggesting a more important focus on and sensitivity to price than to social issues).
- LSM comparisons: No significant differences.
- Ethnic comparisons***: Even though about 50% of both white and black consumers were willing to purchase SSF products, a significantly higher share of black consumers (31% vs 19% of white consumers) were indecisive (i.e. larger share of black consumers indicating 'not sure'). It could be argued that this indecisive group of black consumers might become positive towards SSF produce if targeted with the right information and exposure to quality SSF produce.
- No significant differences were found when comparing the age and education level profiles of consumers' willingness to purchase SSF produce.
- Interestingly, a positive correlation was found between purchasing of organic and free range products on the one hand and consumers' perceptions regarding SSF produce on the other hand:
    - 79% of consumers purchasing free-range food perceive SSF produce as 'better', while only 53% of consumers who do not purchase free-range food perceived SSF produce as 'better' (significant differences at $p<0.001$);
    - Similarly, 80% of consumers purchasing organic food perceive it as 'better', while only 56% of consumers who do not purchase organic food perceived SSF produce as 'better' (significant differences at $p<0.001$);

- Thus, existing organic and free-range consumers could potentially be a target group for the produce of small-scale farmers. This might be associated with the fact that these consumers are more sensitive to sustainability concerns that include the social dimension. It may also reflect their preference for less industrialized farming systems.

- Consumers indicated a number of reasons why they would not purchase SSF produce, with the main reasons being: Food quality and safety concerns (±15%), SSF are inexperienced / still learning with limited resources (±14% of sample) and other reasons such as concerns related to the perceived absence of inspection and quality guarantees as well as a lack of interest and perceived expensive prices of these produce.
-

3.9 Food sources of household

Detailed group comparisons of LSM and ethnic groups are shown in Appendices Y & Z.

- Supermarkets are the main source of food for the large majority of sampled consumers (96% of sample).
- Only 10% of the sampled households obtain food from farmers, mainly vegetables, meat and fruit (in order of importance)
- Food purchased from farmers' markets:
  - Only 7% of respondents purchase food from farmers' markets, dominated by consumers in LSM 9 & 10, thus pointing out the upmarket feature of farmers' market in South Africa. However, 68% of the sample indicated a willingness to support farmers' markets if the markets occur regularly at convenient locations.
  - Interestingly, a significantly high share of consumers (***) who purchase food at farmers' markets also purchase organic food (58.6%) and free range food (72.4%).
  - The main food types purchased (in order of importance) are vegetables, fruit, meat, eggs and dairy foods.
  - Most of these consumers only purchase from these markets once per month or less.
  - The main reasons for not buying at farmers' markets were a lack of availability of such markets and a lack of interest.
  - Applicable to about a third of the sample (35%), significantly dominated ($p<0.01$) by black consumers and consumers in LSM 7 & 8.
  - Consumers mainly purchase vegetables such as potatoes, onions and tomatoes, as well as fruit like apples from street traders.

- Food purchasing from street traders:
- Food production in garden:
  - Only 12% of the sample produces some of their food (mainly vegetables and herbs) in their home garden, which could be associated to the fact that only middle and higher income consumers were interviewed.

3.10 Environmental awareness

Detailed group comparisons of LSM and ethnic groups are shown in Appendices Y & Z.

- Only 17% of household perceive themselves as being sensitive to environmental issues, significantly dominated ($p<0.01$) by white consumers from LSM 9 & 10.
- Consumers perceived the following as manifestations of their environmental awareness: recycling, keeping the environment clean, not littering, caring about green issues, caring about saving the environment, buying green friendly products, saving water and electricity, as well as making own compost for garden. Some consumers also linked their environmental awareness to health concerns.
- Only 0.7% of respondents belong to environmental organizations.
- It is interesting to note that 62% of the consumers who perceive themselves as environmentally aware, buy organic food (differing significantly*** from the non-environmental aware group). Similarly 68% of the consumers who perceive themselves and environmentally aware, buy free range food (differing significantly*** from the non-environmental aware group). Thus, even though consumers did not list purchasing of organic and free range food as a prominent manifestation of their environmental awareness, some positive link seems to exist in this regard. However, in general these results show that the South African food market environmental orientation is still in its early infancy.

4. Conclusion

- The research reported in this document focused on the purchase behaviour and quality perceptions of South African consumers (LSM 7 to 10), regarding a number of fresh food categories. Among these foods milk, yoghurt, chicken, mince, fruit and vegetables are very widely purchased while steak is a bit less purchased (76%) with differences across LSM and ethnic groups.

Purchase locations:

- Supermarkets are the main source of food for the large majority of sampled consumers. The main purchase locations for the various product categories were: dairy - Pick ‘n Pay and

Shoprite/Checkers; meat – Pick 'n Pay and local butchers; fresh produce – Pick 'n Pay and Fruit & Veg City.

- Interestingly LSM 9 & 10 consumers revealed a dominant preference for Pick 'n Pay, while LSM 7 & 8 consumers revealed preferences for Pick 'n Pay and Shoprite/Checkers. These observations are in accordance with these retail chains' positioning and targeted consumer segments. Shoprite targets LSM 4 to 7, while Checkers stores target LSM 7 to 10 (Shoprite Holdings). Pick 'n Pay targets mainly LSM 8 to 10, with an increasing focus on LSM 4 to 7 (Pick 'n Pay, 2007).
- Across product categories the most important criteria for selecting a purchase outlet were good quality, convenient location and affordable prices. The relative importance of these 3 factors varied somewhat between product categories.

Product selection criteria:

- When considering consumers' main product selection criteria, very similar factors were observed for red meat, chicken and fresh produce since price, expiry date, appearance and some indication of quality (e.g. quality guarantee, freshness, firmness) are among the dominant factors for all product categories. These criteria are still largely focused on basic quality attributes. Credence attributes received lowest scores for all product categories.
- South African consumers' focus on attributes such as price, expiry date, appearance and quality indications revealed in this survey confirm and supplement other studies in South Africa. In particular, Botha (2008) showed the importance of factors such as convenience, packaging, brand, nutritional information and price. Furthermore, the general movement to more advanced quality considerations associated with higher socio-economic groups is also reflected by Botha (2008).
- In terms of consumers' evaluation of fresh produce, international scientific literature on consumers' evaluation of fresh produce (e.g. apples, pears, citrus) also illustrates the importance of 'basic' quality attributes such as appearance (e.g. colour, shape), freshness (e.g. mainly sensory properties such as taste, crispness, aroma, juiciness) above credence attributes such as organic (Gamlea et al, 2006; Péneau et al, 2006; Péneau et al, 2007).
- For chicken, literature also confirms the importance of attributes such as texture and appearance (e.g. chicken meat skin colour, meat colour) when consumers' purchase chicken meat (Fletcher, 2002; Vukasovič, 2009). Furthermore, the importance of factors such as a quality guarantee and expiry date are also illustrated (Vukasovič, 2009; Magdelaine et al, 2009). However, internationally a number of other chicken criteria is also important (in contrast to South Africa) such as brand, origin, and packaging (Vukasovič, 2009; Magdelaine et al, 2009; Pouta et al, 2008)

- South African consumers' evaluation of red meat focuses mainly on price, expiry date, quality guarantee and fat content. Even though this result has significant similarities with international literature, it does appear somewhat more limited than those of consumers internationally (especially in Europe) where factors such as purchase location, health concerns, origin, environmental concerns and animal welfare are also important (Grunert, 1997; Alfnes and Rickertsen, 2003; Acebron and Dopico, 2000; Bernue et al, 2003; Verbeke and Ward, 2006).
- The sampled consumers revealed low interest in product traceability even though more than a third of the consumers understand what traceability is. This result is in line with research results from Europe and the USA, confirming that traceability is not a stand-alone determinant of food purchases (Loureiro and Umberger, 2007; Verbeke and Ward, 2006; Angulo et al, 2005). However, several of these studies do point out that traceability could be considered as important when viewed in relation to other dimensions (e.g. food safety, guaranteeing the authenticity of other attributes). This seems to differ from the current South African consumers' awareness and perception as food safety, origin and authenticity are also not considered as important factors. However, South African consumers' awareness and perceptions regarding the potential benefits associated with proper traceability systems were not investigated in detail within the scope of the project, thus making it difficult to comment further on their specific views in this regard.

Organic and free range food:

- Representing the most well-established credence food categories in the South African food market, about a third of consumers purchases organic and free range products, mostly at irregular intervals. Interestingly, consumers exhibited very similar behaviours and perception towards these two categories of products.
- A relatively high share of consumers purchasing organic and free range food understands the terms, in particular wealthier more educated consumers. The main reasons for buying organic and free-range food focus on 'personal gain factors' such as health and taste while environmental awareness is still very low across categories (even though consumers widely acknowledge the environmental and social benefits of these products).
- Even though a small share of consumers considers itself as being sensitive to environmental issues, a significant positive association was found with organic and free-range purchases.
- Consumers revealed consistent economic behaviours with regard to price increases, with about half of purchasers still willing to buy these products at 10% premium and a quarter at a 20% premium.

- Only about half of purchasers trust organic or free-range labels. A public body (SABS) is significantly preferred to retailers for guaranteeing labels even though a significantly large share of the total sample perceives the food from major retailers as safe.
- Despite the evidence provided in the survey that a majority of the sampled consumers have an understanding of what organic and free range mean, the lack of understanding is still seen as the most critical reason for not purchasing these products, with price not seen as a major barrier. Additional price discounts of 10% and 20% were associated with only small increases in willingness to buy organic and free range products, which can be interpreted as mistrust in low priced organic and free range products as these products are usually associated in the mind of consumers with higher prices.
- International scientific literature illustrates that products such as organic and free range are more well-established in European countries. Even though these consumers are generally more aware of environmental and social issues, prominent driving forces behind consumption are also focused on aspects such as freshness, taste and health benefits. Many studies emphasize the need to improve consumers' information and understanding of products such as organic food (Nielsen Company, 2007; Gracia and De Magistris, 2008; Pirog and Larson, 2007; Wier et al, 2008;).

Understanding of food-related terms and food information sources:

- Consumers have relatively low understanding of food-related terms and logo's; with however somewhat higher understanding among wealthier more educated consumers confirming the choice of conducting the survey among the middle and upper income population.
- The most preferred food information sources are focused on mass media such as advertisements, magazines and TV.

Products produced by small-scale farmers:

- Half of consumers indicated a willingness to buy food produced by small-scale farmers mainly due to perceptions of freshness, safety, healthiness, good quality (linked to smaller, more caring production) and a willingness to help SSF. A positive correlation was found between purchasing of organic and free range products and consumers' (positive) perceptions regarding SSF produce:
- SSF's perceived limited farming resources and knowledge of agricultural production practices were the dominant factors preventing consumers from buying SSF products.

Environmental awareness:

- Only a small share of household perceives itself as being sensitive to environmental issues, significantly dominated by LSM 9 & 10 consumers. Even though very few consumers expressed food purchase behaviour as a manifestation of their environmental awareness, a significantly large share of the environmentally aware consumers purchase organic and free range food.

5. References

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