

# **Pork consumption and perceptions in Gauteng and the Western Cape**

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Pork perceptions and consumption behavior of low-, middle- and high income South African consumer in Gauteng and the Western Cape

Industry Sector: Pork

Research Focus Area: Pork consumption and perceptions in Gauteng and the Western Cape

Year of completion: 2020

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## **EXECUTIVE SUMMARY**

### **Introduction**

In 2012/2013 and 2016/2017 the South African red meat industry (via RMRD SA) commissioned three comprehensive consumer studies among red meat consumers across the socio-economic spectrum, in Gauteng and the Western Cape, respectively. The overall project objective of these two studies was to investigate South African consumer behaviour towards and perceptions regarding red meat. This project focused on the pork-related aspects covered within these surveys. Thus, no new primary consumer data was gathered for this survey as the focus was to present the local pork industry with the available market intelligence gathered in the 2012/2013 and 2016/2017 surveys.

### **Objective Statements**

The general objective of this project was to extract the pork-related aspects from the above-mentioned surveys, by considering the following components:

- The popularity of pork among other animal protein food options;
- Pork purchasing;
- Pork preparation;
- Pork consumption (typical quantities, changes over time and consumption frequencies of specific pork cuts);
- Pork perceptions;
- Pork in food-away-from-home consumption;
- Preferred meat information sources.

### **Project Aims**

To analyse the pork consumption behaviour and perceptions of low-, middle- and high-income consumers in Gauteng and the Western Cape, based on data already obtained within the 'Red Meat LSM consumer studies' (during 2012 and 2013 for Gauteng and 2016/2017 for the Western Cape).

To compare the results against older studies.

## Results

This project involved an extraction of pork-specific findings obtained in comprehensive consumer research studies conducted in Gauteng (2012/2013, n=585) and the Western Cape (2016/2017, n=750) focusing on consumer behaviour and perceptions regarding meat across the socio-economic spectrum (funded by RMRD SA).

Even though 73.9% of the total sample indicated that they generally ate pork, only approximately a third of respondents listed pork among the top three animal protein foods consumed in the largest quantities. At a provincial level pork was more popular in the Western Cape than in Gauteng (purchased by 82.3% and 63.1% of sampled households respectively). From a socio-economic perspective pork was more popular among middle-income and affluent consumers, with the share of households purchasing pork being 64.2% (low-income), 76.7% (middle-income) and 79.5% (affluent). The typical monthly pork expenditure of affluent households was approximated 2.7 times higher than that of low-income households and 1.7 times higher than that of middle-income households among the Western Cape sample. The typical weekly raw pork equivalent intake per household increased significantly with rising socio-economic level being higher for affluent households (1.2 times higher than middle-income households and 2.5 times higher than low-income households).

Considering changes in pork intake, reduced pork intake applied to  $\pm 12\%$  of the sample, increased pork intake to  $\pm 22\%$  of the total sample. The largest share of affluent and low-income households consumed the same quantity of pork (compared to two years before the surveys), while the largest share of middle-income households consumed more pork. Reduced pork intake was most prominent among middle-income and affluent households.

Respondents were generally most negative about pork in terms of the perceived high fat content (linked to heart health concerns and cholesterol), high prices, quality concerns, smell, dryness of meat, perishability ('goes off quickly'), food safety ('must be cooked well'), hair on the skin of meat cuts and health concerns. As the surveys were conducted before the Listeriosis outbreak in South African in 2018, the pork safety perceptions of consumers did not take into account the impact of the outbreak.

Consumers were generally most positive about pork in terms of affordability, speed / ease of cooking, knowing how to prepare pork, versatility, taste, being a good meat choice for 'braai' and nutritional value.

When asked about potential motivations to eat more pork, only about one third of affluent consumers (in both provinces) and about half of middle-income consumers in the WC were potentially willing to eat more pork. Potential drivers of increased pork consumption were improved affordability, improved healthiness, food safety, improved quality, less fat, improved convenience, improved sensory appeal and improved preparation knowledge. The majority of surveyed households in the Western Cape purchase pork at formal chain retailers (e.g. Shoprite, Checkers, SPAR, Pick 'n Pay, Woolworths) (listed as dominant pork purchase location by 54.9% of the sample), followed by butchers (local/independent- and chain butchers) (14.8%). In general, the tendency to buy pork at formal chain retailers increased with socio-economic status, while the tendency to buy pork at butchers (independent or chains) decreased with socio-economic status. Important factors considered when selecting a pork purchase outlet included price / affordability, convenience (e.g. close to home, long

shopping hours, can buy different items in one store), quality, freshness and hygiene (e.g. clean meat, clean store).

When purchasing pork certain factors were important to consumers across the socio-economic spectrum: price/affordability, freshness/food safety, visual appeal, fat content and quality in general. Low-income purchasers were relatively more focused on affordability, visual cues (e.g. fat colour and 'no blood' in packaging) and bone-to-meat-ratio (linked to value-for-money). Middle-income consumers paid relatively more attention to the store where they buy, while affluent consumers focused relatively more on neat / 'nice' cuts than the other groups.

Considering specific pork cuts, the cuts consumed in the largest quantities by WC low-income households were dominated by stew and offal (followed by chops and mince). The more affluent groups had a primary focus on chops followed by stew and roast.

Considering food-away-from-home, pork was somewhat more popular in the context of restaurant meals than in take-away meals, but was not a major meat choice in this regard.

In general, the most significant source of data variability within the considered data was based on the socioeconomic status of responding households. Some variability was also observed based on ethnicity. Respondent gender, age and education level were not meaningful bases to explain data variability.

## **Conclusion**

In conclusion the research results presented in this report contain numerous aspects which could enhance the consumer appeal of South African pork, e.g.:

- Product improvement and marketing actions should focus mainly on middle-income and affluent consumers (the dominant pork consuming segments).
- Inter-provincial differences in pork consumption behaviour and perceptions should be noted and used for market differentiation and growth.
- Increased pork intake seems most likely among the middle-income segment. An improved understanding of this group is critical for the industry.
- Corrective industry actions and consumer education (based on scientifically sound information) should be applied to address consumers' negative pork perceptions, enhance positive perceptions and educate consumers on safe product handling.
- Continued recipe development and distribution could educate consumers in aspects such as innovative cooking, entertaining, safe preparation, the interesting utilization of less expensive cuts and the healthy preparation.
- Recipe development should also focus on the most preferred cuts for the various socio-economic groups.
- To ensure consumer satisfaction, pork supply chain role-players should pay attention to the factors viewed by consumers as important when selecting a pork purchase outlet, e.g. affordability, food safety, freshness, quality, product appearance, fat content and sensory acceptability. Follow-up research is needed to unpack consumers' preferences in this regard.
- The pork industry should engage in actions to grow the appeal of pork in the context of take-away and restaurant meals.

- Data on the most highly used and trusted information sources to obtain meat information, could be utilized by the industry to target consumers through the most appropriate marketing channels.
- Market segmentation based on socio-economic standing was found to be the most viable segmentation approach for the pork industry based on the current survey data.

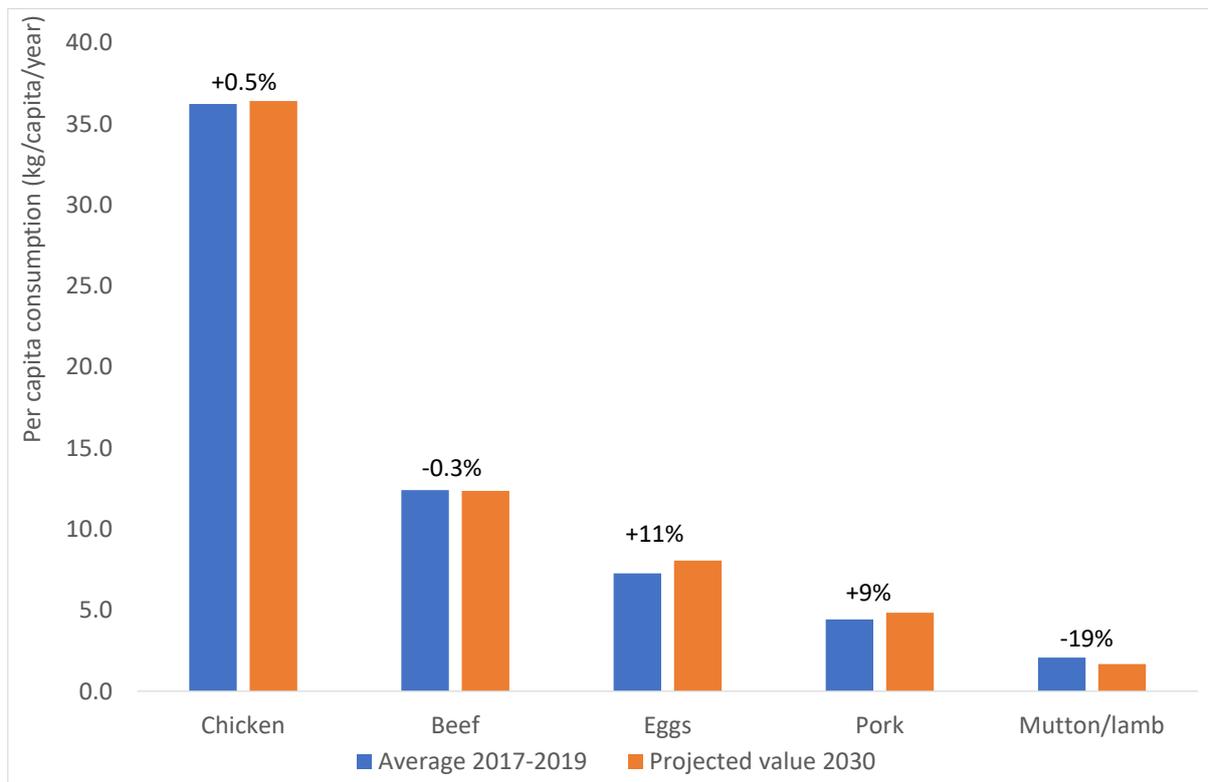
## Popular Article

### Title for Popular Article

## The Western Cape – A star in the pork consumption landscape in South Africa

### Pork consumption in South Africa – The bigger picture

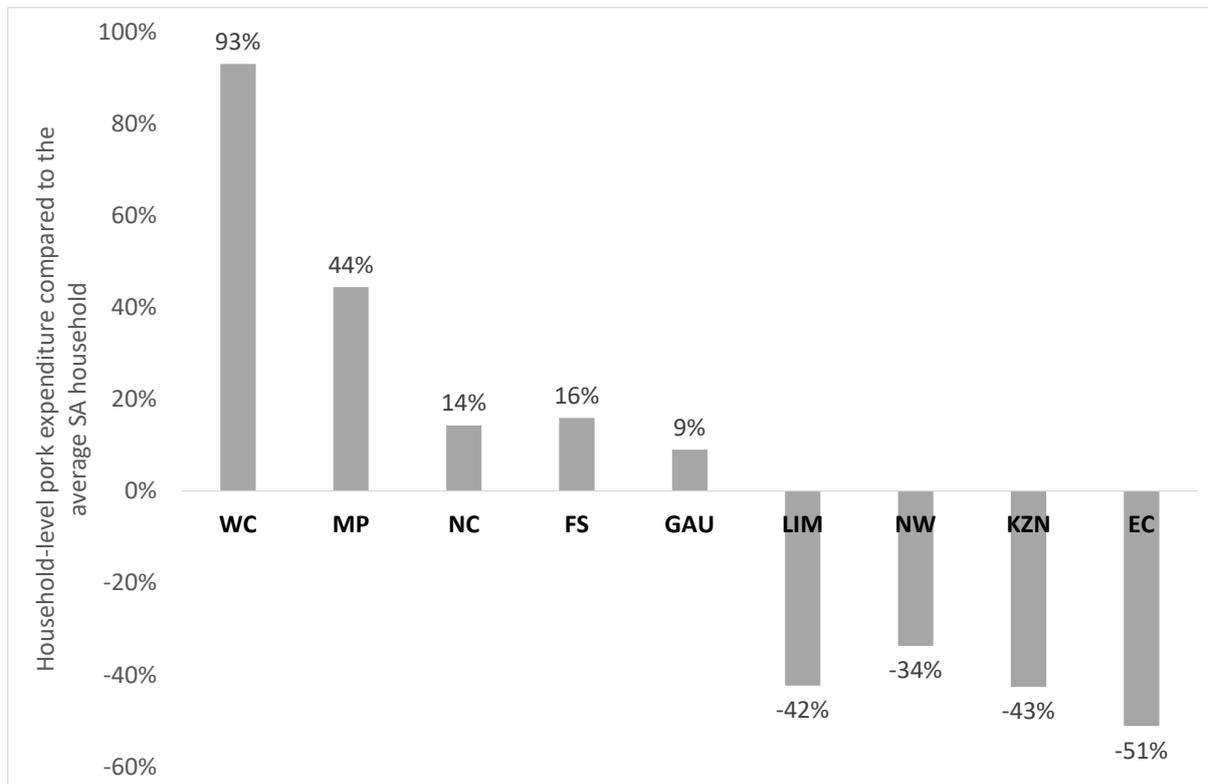
Pork is the fourth most important animal protein food in South Africa with an average per capita intake value of 4.4kg/capita in 2017 to 2019 (compared to a significantly higher intake level of 36.2kg/capita for chicken) (see Figure 1). According to projections by the Bureau for Food and Agricultural Policy (BFAP) (BFAP, 2020) the per capita intake of pork is expected to increase by ±9% over the next decade, with little or no growth projected for the other meat options presented in Figure 1. The projected growth in pork intake is based on expected consumer income growth, as well as the relative affordability of pork compared to beef (with beef prices expected to increase more than pork prices over the projection period).



**Figure 1: Historical per capita intake of chicken, beef, eggs, pork and mutton/lamb for 2017 to 2019, with projected values for 2030 (Source: BFAP, 2020)**

From a provincial perspective an average household in the Western Cape typically spends approximately 93% more than the average South African household on pork meat, followed by Mpumalanga (44% more), the Northern Cape (14% more), Free State (16% more) and

Gauteng (9% more) (see Figure 2) (Statistics South Africa Living Conditions Survey (Stats SA LCS), 2014/2015). From a total market perspective (i.e. considering typical household-level expenditure and population figures combined) the Western Cape and Gauteng provinces dominate pork expenditure in South Africa, with provincial expenditure shares of  $\pm 20\%$  and  $\pm 30\%$  respectively (estimated from Stats SA LCS population statistics and 2014/2015 household-level expenditure data inflated to February 2020 levels).



**Figure 2: Comparing provincial household-level pork expenditure to the average South African household (Source: Calculations based on household-level food expenditure data obtained from Stats SA LCS 2014/2015, with expenditure values inflated to February 2020 levels)**

The high levels of household expenditure observed in the Western Cape serves as the motivation for this article. In the sections to follow the pork perceptions of consumers in the Western Cape will be explored.

### Methodology overview

In 2016/2017 the South African red meat industry funded a comprehensive consumer study to investigate the meat behaviour and perceptions of the South African low-, middle- and high-income consumers in the Western Cape (n=750, with 250 surveys within each socio-economic sub-group). The study sample was designed to reflect the population in the Western Cape Province, according to income-level (low, middle- and high-income (affluent) households); ethnicity: black, coloured and white (based on ethnicity of main food purchaser in the household) and the age of the main food purchaser in the household (age brackets 19 to 24 years, 25 to 34 years, 35 to 49 years and 50 years and older). In this article we focus on selected survey results pertaining to pork consumption behaviour and perceptions.

## Pork purchasing and consumption behaviour

In the Western Cape the **share of households purchasing pork** increased significantly with rising socio-economic levels, from 76% of low-income households to 88% of middle-income households and 83% of affluent households [Chi-square=10.821, df=2, p=0.004]. The share of households buying and eating pork did not differ significantly in terms of sub-groups based on age, gender and education level. From an ethnic perspective pork purchasing and consumption were more prominent in cases where the respondent was white (94%) and black (90%) compared to lower values observed from coloured (72%) and Indian (56%) respondents [Chi-square=51.924, df=3, p=0.000].

The **dominant factors considered by consumers when purchasing pork**<sup>2</sup> were:

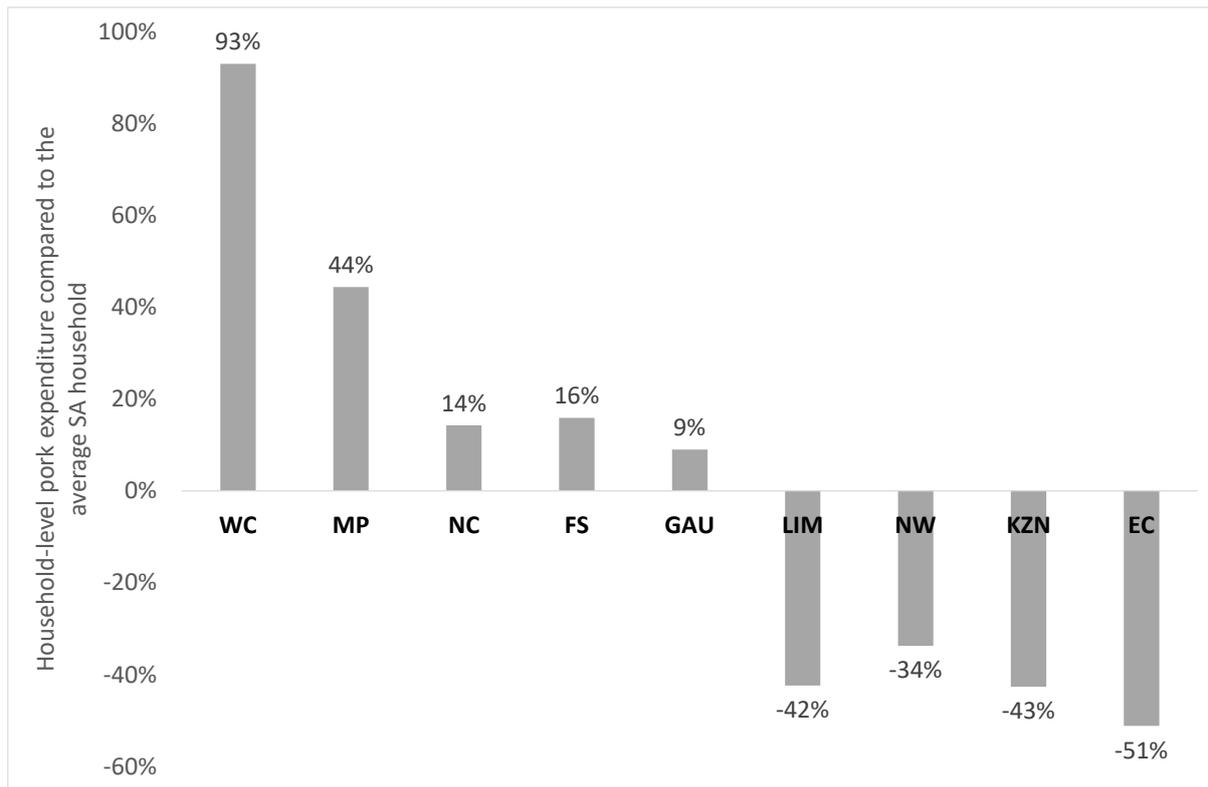
- Low-income households: Affordability/price (mentioned by 62.0% of sample), colour of meat (34%), lean meat (32%), date information (sell by, use by or expiry date) (24%) and colour of fat (17%);
- Middle-income households: Affordability/price (51%), general quality (34%), lean meat (32%), freshness (21%), and appearance/visual appeal (17%);
- Affluent households: Lean meat (42%), affordability/price (32%), freshness (28%), neat cuts (18%) and general quality (18%).

In general, the factors considered when purchasing pork were focused on cost (e.g. price, affordability and value-for-money), overall quality, food safety (e.g. freshness, clean meat, expiry date, use-by date and sell-by date), fat content (with a particular focus on lean meat), appearance (e.g. general product appearance, visual appeal, meat colour and fat colour) and sensory acceptability (e.g. taste, flavour, aroma, tenderness). As could be expected the relative importance of affordability decreased with rising socio-economic status.

Among all socio-economic sub-segments in the Western Cape the **primary pork purchase location** was chain food retailers (see Figure 3). However, the share of pork consuming households purchasing pork from chain food retailers increased with rising socio-economic status, from 66% for low-income households, to 77% of middle-income households to 80% of affluent households.

The dominant factors considered when selection a purchase location for pork were the following:

- Low-income households: Price / affordability (mentioned by 100% of the pork consuming low-income sample), convenience / close to home / long shop hours (96%), food safety (clean shop (51%), clean meat / clean offal (21%), staff friendly / good service (16%), freshness (14%)), credit (6%) and general quality (6%);
- Middle-income households: convenience / close to home (mentioned by 55% of pork consuming middle-income households in the sample), price / affordability (49%), quality (36%) and freshness (28%).
- Affluent households: quality (mentioned by 52% of pork consuming affluent households in the sample), price / affordability (39%), convenience / close to home (37%) and freshness (32%).



**Figure 3: Primary pork purchase location of consumers in the Western Cape sample (Source: Survey results)**

Rising socio-economic status was generally associated with increased pork expenditure, increased pork intake quantities and more frequent pork consumption (see Table 1).

**Table 1: A comparison of low-income, middle-income and affluent households in the Western Cape sample in terms of pork expenditure, intake quantities, intake frequency and most preferred pork cuts (Source: Survey results)**

Variable	Low-income pork eating households (n=161)	Middle-income pork eating households (n=192)	Affluent pork eating households (n=199)
Average monthly pork expenditure (R/household)*	R160	R208	R357
Average monthly pork quantity eaten (kg/household)	±2kg retail weight	±2.6g retail weight	±4kg retail weight
Typical pork intake frequency	Weekly 91% Monthly 9%	Weekly 36% Monthly 55%	Weekly 39% Monthly 53%
Most popular pork cuts / options	Pork stew with bone Pork offal Pork chops Pork mince	Pork chops Pork stew with bone Pork roast Pork mince	Pork chops Pork roast Pork stew with bone Pork bacon

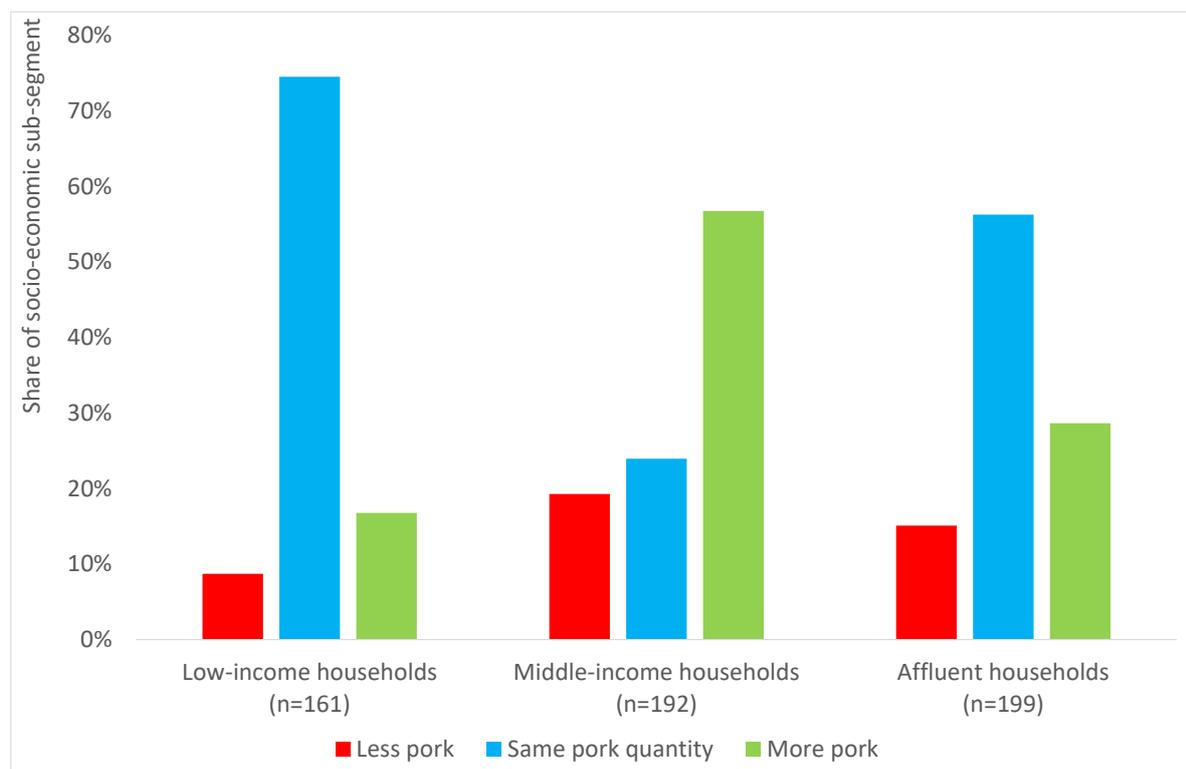
\* Statistically significant differences at 1% level of significance [F=140.7, df=2, p<0.000]. 2016/2017 values inflation adjusted to June 2020 values.

## Perceived changes in pork intake over time

To get an idea of changes in pork consumption over time, respondents were asked whether they currently consumed more, the same quantity or less pork compared to two years before the survey.

- Unchanged pork intake was most prominent among low-income households (75% of pork eating households within the low-income bracket) followed by affluent households (56%).
- Reduced pork intake was the least prominent movement observed, reported by up to 19% of pork eating households, being most prominent among the middle-income and affluent groups. The perceived reasons for reduced pork intake related mainly to product acceptability, health aspects, pressure on household income and expensive meat prices – even though pork is generally the most affordable red meat option available to consumers.
- Increased pork intake was the second most prominent movement observed, reported by 57% of middle-income households and 29% of affluent households. Increased pork intake was mainly attributed to the decreased intake of mutton/lamb and beef, particularly among middle-income and affluent households. The reasons for increased pork intake related mainly to healthiness, nutritional value, sensory product acceptance, affordability and versatility.

No significant differences were observed between sub-groups based on gender, age and education level in terms of the changes in pork consumption over time. From the perspective of ethnic groups, a larger share of black consumers was eating pork more often (35%) versus white consumers (21%) and coloured consumers (20%), while a larger share of white consumers was eating less pork (15%) compared to black consumers (9%) and coloured consumers (10%) [Chi-square=70.456, df=9, p=0.000].



**Figure 4: Perceived changed in pork intake quantities in the two years preceding the survey**

(Source: Survey results)

### Dominant positive pork perceptions

Consumers were generally most positive about pork in terms of affordability, healthiness, speed / ease of cooking, versatility, taste, being a good meat choice for 'braai' and nutritional value (Table 2).

**Table 2: Dominant positive pork perceptions among the Western Cape sample**

(Source: Survey results)

Low-income pork eating households (n=161)	Middle-income pork eating households (n=192)	Affluent pork eating households (n=199)
<i>(Share of sample mentioning aspects among top three reasons for eating pork)</i>		
Fast and easy to cook (48%) Healthy (35%) Tasty (34%) Affordable (29%) Family like it (27%) Versatile cooking options (14%) Low in fat (5%)	Price, affordability (63%) Healthy (61%) Tasty, like it (54%) Easy to cook (40%) Good protein source (9%) Add meat variety (9%) Tender (6%) Versatile (5%) Less fatty (5%)	Tasty, like it (59%) Healthy (47%) Price, affordability (42%) Easy to cook (38%) Add meat variety (20%) Versatile (14%) Good for braai (10%) Like bacon (8%) Nutritious (6%) Convenient (5%) Good protein source (5%)

### Dominant negative pork perceptions

Consumers were generally most negative about pork in terms of the perceived high fat content, high prices, quality concerns, smell, dryness of meat, perishability ('goes off quickly'), food safety ('must be cooked well'), hair on the skin of meat cuts and health concerns. Generally middle-income and affluent consumers responded with a lot more concerns than low-income consumers.

**Table 3: Dominant negative pork perceptions among the Western Cape sample**

(Source: Survey results)

Low-income pork eating households (n=161)	Middle-income pork eating households (n=192)	Affluent pork eating households (n=199)
<i>(Share of sample mentioning aspects among top three reasons for disliking pork)</i>		
Fatty (13%) Expensive (2%) Muslim / religious concerns (2%) Goes off quickly (0.8%) Hair on skin (0.8%) Dry, too salty (e.g. bacon), bad smell (0.4% each)	Fatty (21%) Price, expensive (8%) Goes off quickly (8%) Freshness concerns (4%) Hair on fat / skin (4%) Quality concerns, taste dislike, dry meat, must be cooked properly (3% each) Swine flu, tape worm, long cooking time, bad smell (2% each)	Fatty (25%) Dislike taste (4%) Expensive (4%) Unhealthy, dry, must be cooked well, can make you ill, do not like it, quality concerns, unhealthy, worms (2% each) Allergies, availability, goes off quickly, not liked by children, bad smell (1% each)

	Allergies / causes rash, health concerns, skin tough when cooked, thick and tough skin (1% each)	
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### Key marketing recommendations

Even though a dominant share of consumers in all socio-economic sub-segments indicated that they eat pork (ranging from 76% of low-income households to 83% of affluent households), most low-income households and more than half of these middle-income and affluent households only consume pork three times per month or less often. Marketing actions aimed at increasing the pork intake frequency of these groups could make a significant contribution to per capita market growth.

Marketing actions, consumer education and future research could deal with the following elements:

- Continued development and communication of pork-based recipes (kitchen cooking and 'braai'), targeted at particular socio-economic segments, aimed at keeping the product interesting, tasty and versatile.
- The development and communication of 'budget stretching' pork recipes could also be advantageous in the current tough economic conditions.
- Continued scientific research, marketing and consumer education on the health benefits of consuming lean pork meat.
- Fat content:
  - o Raising industry awareness of the critical importance of avoiding a pork market offering with excessive fat content throughout the socio-economic consumer spectrum.
  - o Further consumer research needs to be done to establish consumers' preferences regarding the ideal fat content of different pork cuts for different cooking methods – which could form the basis for product adjustments at both the carcass and retail levels in the supply chain.
- Quality:
  - o Further consumer research on defining ideal pork quality for different cuts, eating occasions and socio-economic sub-groups.
  - o Raising industry awareness of consumers' desired quality preferences.
  - o Consumer education on pork quality attributes.
- The product offering presented to the consumer at the retail level should adhere to several non-negotiable attributes, such as food safety requirements, acceptable shelf life, no hair on skin, good quality product, good quality cuts (e.g. not too big or too small) and proper packaging material.

Strategically designed and well-executed marketing campaign could contribute to stimulate pork demand in the South African context, with the potential to deliver even higher per capita growth over the next decade than indicated in current projections. This will however require a coordinated effort from all role-players in the supply chain up to retail level, and it would also have to include the scientific community.

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(References available on request)

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