Consumption of processed meat in South Africa

[1]Schönfeldt, H.C. [2]Vermeulen, H., [1]Pretorius, B. & [1]Muller, C.
[1]University of Pretoria, Institute of Food, Nutrition and Well-being.
[2]Bureau of Food and Agricultural Policy

Processed meat is consumed by all the different incomes groups in South Africa with different consumption and preparation methods observed over the three different income groups. The high income groups consist of 16.5% of the population, upper middle and middle income 72.8% and low incomes 10.7%. The South African meat land scape is unique as pork is not widely consumed in South Africa, with chicken being the number one highest consumed animal protein food (BFAP, 2016).

In South Africa most processed meat product contain chicken as the main source of animal source protein, probably a very important to note as this differs substantially from typical European processed meat product which is produced with pork.

Some of the processed meat consumed in South Africa are traditional to the countries culture and are described below.

Processed meat is defined as meat that has undergone any action that substantially altered its original state (including), but not limited to, heating, smoking, curing, fermenting, maturing, drying, marinating (surface application), extraction or extrusion or any combination of all these processed meat (SABS, 2011).

International definitions for processed meat and processed red meat are stated below:

Processed - Food products manufactured by industry in which salt, sugar, or other culinary ingredients have been added to unprocessed or minimally processed foods to preserve them or make them more palatable. Processed food products are derived directly from natural foods and are recognized as a version of the original foods. Most of them have two or three ingredients. The processes used in the manufacture of these food products may include different methods of cooking, and, in the case of cheeses and breads, nonalcoholic fermentation. Additives may be used to preserve the properties of these products or to avoid the proliferation of microorganisms.

Processed red meat - Refers to meat that has been transformed through salting, curing, fermentation, smoking, or other processes to enhance flavour or improve preservation. Most processed meats contain pork or beef, but processed meats may also contain other red meats, poultry, offal, or meat by-products such as blood (FAO - IARC, 2015).

Boerewors, a type of beef sausage, is manufactured from meat of an animal of the bovine, ovine, porcine or caprine species or from a mixture of two or more thereof. This meat is cased in an edible casing, and shall contain a minimum of 90% total meat content and not more than 30% fat content (Department of Health, 2014).

Russians, viennas and polonies should adhere to the following criteria:

- Minimum 60% total meat protein equivalent
- Minimum 25% actual meat content
- Minimum 15% actual lean meat
- Maximum 30% fat
- Maximum 15% rinds added
- Na gelatin may be added
- Maximum 40% added defeathered chicken skin

Dried beef sausage (droëwors)

- Minimum 80% actual meat content
- Minimum 55% actual lean meat
- Maximum 50% fat
- No rinds, gelatin or defeathered chicken skin may be added

Salami

- Minimum 90% total meat protein equivalent
- Minimum 80% actual total meat content
- Minimum 30% actual lean met
- Maximum 40% fat
- Maximum 10% rinds added
- Na gelatin may be added
- Maximum 10% added defeathered chicken skin

Cold meats

- Minimum 60% total meat protein equivalent
- Minimum 33% actual total meat content
- Maximum 20% actual lean meat
- Maximum 20% fat
- Maximum 10% rinds added
- No gelatin may be added
- Maximum 10% added defeathered chicken skin

Processed meat is widely consumed by low income consumers with 20% to 26% of this group consuming polony and viennas on a daily basis (Table 1). Of the top 20 animal foods consumed by this group five are processed meats; polony, viennas, Russians, canned meat and dried meat.

Table 1: Consumption frequency of different meat types and cuts in order of importance for the overall sample (share of low LSM sample consuming protein food at particular frequency) (Vermeulen, et al., 2015)

	Share of sample consuming meat type with particular frequency:			
	Daily	Weekly	Monthly	Occasionally
Polony	10.4	16.0	9.5	11.0
Vienna	5.3	14.2	9.5	14.2
Russians	5.0	13.1	9.2	15.7
Salami	0.6	1.5	0.9	3.6
DryBeefsausage	0.0	1.2	1.5	5.3

The middle income group consumes less processed meats that the low income group. This groups also consumes more fresh meat than processed meats with only 57% of the sample indicating that they consume cold meats occasionally or never (Table 2).

Table 2: Consumption of processed meats by middle income consumers (Vermeulen, et al., 2015)

	>4x a week	**3-4x a week**	**1-2x a week**	**3x a month**	**2x a month**	**1x a month**	**<1x per month**	**Occasionally**	**Never**
Cold meats	5.8%	8.8%	10.5%	6.4%	2.3%	7.0%	2.3%	28.1%	28.7%
Beef sausage	2.3%	1.8%	15.8%	9.9%	9.9%	5.8%	3.5%	28.1%	22.8%
Mutton/Sausage	0.6%	1.2%	5.8%	5.3%	3.5%	5.3%	1.8%	17.0%	59.6%
Pork sausage	0.0%	1.8%	8.8%	1.2%	5.8%	4.1%	2.3%	22.2%	53.8%

Cold meats are the third most important animal source product consumed by the high income group with beef sausage ranking eight. These are the only two processed foods in the top ten animal protein foods (Table 3).

Table 3: Consumption of processed meats by high income consumers (Vermeulen, et al., 2015)

Meat type	**Consumption frequency**	**LSM 9 (n=131)**	**LSM 10 (n=118)**	**Total sample (n=249)**
Mutton sausage	5-7 times per week	0.8%	-	0.4%
	3-4 times per week	0.8%	2.6%	1.6%

	1-2 times per week	5.4%	9.4%	7.3%
	3 times per month	7.0%	2.6%	4.9%
	2 times per month	5.4%	3.4%	4.5%
	1 time per month	7.0%	11.1%	8.9%
	2 to 6 times per year	0.8%	2.6%	1.6%
	occasionally	22.5%	22.2%	22.4%
	never	50.4%	46.2%	48.4%
Beef sausage	5-7 times per week		0.9%	0.4%
	3-4 times per week	6.2%	7.7%	6.9%
	1-2 times per week	37.2%	30.8%	34.1%
	3 times per month	9.3%	6.8%	8.1%
	2 times per month	13.2%	7.7%	10.6%
	1 time per month	7.0%	14.5%	10.6%
	2 to 6 times per year	3.9%	0.9%	2.4%
	occasionally	16.3%	20.5%	18.3%
	never	7.0%	10.3%	8.5%
Cold meats	5-7 times per week	7.8%	12.0%	9.8%
	3-4 times per week	20.9%	9.4%	15.4%
	1-2 times per week	28.7%	23.1%	26.0%
	3 times per month	2.3%	10.3%	6.1%
	2 times per month	3.9%	6.0%	4.9%
	1 time per month	7.0%	8.5%	7.7%
	2 to 6 times per year	1.6%	0.9%	1.2%
	occasionally	16.3%	20.5%	18.3%
	never	11.6%	9.4%	10.6%

Over the past decade, meat consumption in South Africa expanded rapidly as a result of growing income levels, continued urbanisation, rising living standards and ever increasing dietary diversity. As the most affordable source of animal protein, poultry consumption in particular increased by almost 50%, compared to a 19% and 33% increase in beef and pork consumption respectively. Particularly in the short term, the outlook for income growth is much more reserved, resulting in significantly slower meat consumption growth in the coming decade relative to the past. This slowdown is already evident in the post-recession period and since 2010, consumption growth for chicken and beef has slowed considerably, with pork being the only meat type where consumption growth accelerated in the past five years relative to the 2005 to 2010 period.

Affordability being an important consideration in a slower income growth environment, chicken and pork consumption is also expected to outpace that of beef and sheep meat over the next ten years. Whilst slowing from the past decade, chicken consumption is projected to expand by 29% in the outlook period, equating to more than 500 thousand tons of additional chicken meat and almost 70% of additional meat consumed by 2025 relative to a 2013-2015 base period. Albeit from a small base, pork consumption growth in the coming decade accelerates from the past, expanding 37% by 2025 relative to the base period. By contrast, growth in beef consumption slows to 6% in the coming decade, from almost 19% over the past ten years. Much of this slowdown is attributed to the rapid decline in beef consumption over the next three years. Given the cautious outlook for income growth, consumer spending is expected to be under pressure, while at the same time supply limitations arising from herd liquidation through the current drought has pushed prices to record levels. Following this initial decline and as income growth recovers, beef consumption is projected to rise once more over the second half of the outlook period, to reach 13.5 kg per capita by 2025. This makes it the second most consumed animal protein following chicken (42kg per capita), with pork and sheep meat significantly lower at 5.2kg and 2.6kg per capita respectively. Eggs represent an important, affordable alternative protein source and domestic egg consumption is projected to expand by 17% over the coming decade, to exceed 8.5kg per capita by 2025 (BFAP, 2016).

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