Faced with the current economic realities, farmers worldwide are searching for new options of surviving, as well as expanding their business. One of the many opportunities to grow markets, turnover and profits is by adding value to farm produce through further processing.

Most of the value-added food products available to consumers have been processed in some way or other, even if the processing is as simple as cleaning produce before it is packed in plastic or net bags. Two types of processing methods may be performed on raw materials: primary processing and secondary processing.

Without the aid of food processing, we would not have the convenience of the large variety of food products available in supermarkets and other food outlets. Processing of raw products has a number of advantages:

- It allows for the year-round availability of foods that have a limited growing season, or is not grown in certain areas due to soil and climate factors, e.g. frozen and canned fruit, vegetables as well as meat products.

- Processing extends the shelf-life of products, such as canned fish and UHT milk.
- Food processing improves the safety of our food supply through processes intended to destroy harmful bacteria, and packaging helps in the prevention of food tampering.

This article looks at the different red meat products (including products containing mixes of red meat and other meat such as pork), and gives a brief description of the difference between processed meat products based on the size of the meat particle used in its production:

- **Whole meat products:** Muscle tissue is still clearly recognisable and defined in the end product (e.g. pressed beef).
- **Minced meat products:** Meat structure has undergone a degree of breaking up, for example in a mincer, and the meat is no longer in a fibre form, but in particle form (e.g. fresh sausage, frikkadels and hamburger patties).
- **Emulsified meat products:** The muscle tissue has been so finely minced that it is not recognisable anymore and is in a fibrous or particle form (e.g. polonies and meatloaves).
Emulsified meat products:
- **Frankfurters** are cooked, smoked sausages prepared from an emulsified mixture of lean and fatty meat (40% pork and 60% beef). Frankfurters are also cured, seasoned and skinned. It can be sold as a convenience product or a canned product.
- **French polony** is a typical emulsified sausage product that is stuffed in plastic casings for slicing purposes. It is the most basic type of luncheon meat. The basic polony mixture (40% pork and 60% beef, with or without added colouring) and processing method can be used as the basis for the manufacture of most other types of luncheon meats and loaves. These include olive loaves, egg loaves, pepper loaves, etc.

Minced meat products:
- **Fresh sausage** is prepared from minced meat that is uncured, seasoned with salt and spices, and stuffed into casings without smoking or cooking. Examples include boerewors, beef sausage and mutton sausage.
- **Frozen hamburger patties** are shaped minced meat products containing added ingredients and seasoning that may be crumbled and flash-fried prior to freezing.
- **Hamburger patties** are minced meat products containing added ingredients and seasoning, which is pressed into a round, flat shape. Variations include lamb burgers made from pre-cured lamb, cheese patties and microwave patties.
- **Salami** is a fermented chopped meat product, usually made from a mixture of lean pork and beef. Fermentation reduces the pH to below 5.3. The product is also dried to remove at least 20% moisture.
- **Uncooked smoked sausages** can be cured or uncured, seasoned, stuffed into casings and smoked but not cooked prior to sale.

Edible meat by-products:
- **Canned tongue** is tongue that has been pickled and then heat processed in cans.
- **Cooked tongue** is tongue that has been pickled, cooked, sliced (optional) and vacuum-packaged for retail outlets. All types of tongue can be pickled, including beef, lamb, sheep and pig.
- **Pickled tongue** is a neatly trimmed beef, lamb or pork tongue, which is free of bone, epiglottis, external fat, glands and skin, that has been cured.
- **Liver spread** is an emulsified product stuffed in a plastic or natural casing and has a texture similar to pâté.

Whole muscle meat products:
- **Canned corned meat products** are cured beef or mutton cuts that are cooked and canned, and may contain seasonings and added starchy ingredients.
- **Corned meat products** include beef and mutton cuts that have been adequately cured, and prepared as a cooked vacuum-packed product.