

SUMMARY

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This thesis comprises a general introduction which gives interesting information on the importance of studying meat flavour in producing meat products.

Flavour chemistry has become an important area of specialization in the last years. However the literature is mostly devoid of references on work done on aroma of adulterated beef meat with HSP and camel meat.

The review of literature systematize the investigation of meat flavour components. Several studies had been done **concerning** the volatile constituents of meat from different species of animals. Meat flavours are produced by cooking raw meat and they vary not only with respect to types of meat (e.g. beef, pork, chicken) but also with respect to method of cooking (e.g., stewing, simmering, frying and roasting). Various compounds in raw meat are converted into volatiles as a result of chemical changes by heating. Many investigations showed that the flavour desirability of beef products containing other inexpensive but still nutritional proteins, (soybean protein, mechanically

deboned meat and others) decreased by increasing the added protein. Attempts of many authors in studying Maillard reaction and some model systems to simulate the aroma of cooked meat had been reviewed.

The experimental part includes information about the materials utilized in the studies. The different experimental procedures and techniques adopted are also explained, these include the preparation of aroma concentrates from the following samples.

1. Roasted beef meat.
2. Roasted camel meat.
3. Roasted beef meat containing 10-90% camel meat.
4. Roasted hydrolyzed soybean protein.
5. Roasted beef meat containing 10-30% HSP.
6. Roasted beef meat containing different ratios of camel meat and HSP.
7. Roasted three commercial samples of beef containing HSP available from the local market.
8. Three different model systems.

The aroma concentrates developed from roasted beef meat and camel meat were fractionated into their neutral acidic and basic fractions. The aroma concentrates mentioned above were subjected to GLC analysis. The obtained data are illustrated by 12 figures and 14 tables. The
