TECHNICAL DEVELOPMENTS IN WHOLESALING AND RETAILING TO
MEET CONSUMER DEMANDS

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Compared with other sectors of the food industry the meat packer has relatively poor contact with the final consumer. Feedback of information from the retail market is often inadequate and the meat packer is not always fully aware of consumer requirements. Modern marketing systems have not been taken up on a large scale by the industry and disposal is still largely confined to commodity selling. Consumer oriented marketing depends on a close liaison between meat packer and retail shopper and some radical changes are needed if the industry is to progress in this direction.

The meat packing industry in Europe is still largely dominated by live cattle procurement and selling carcases or quarters of beef to wholesale markets. The industry has been slow to change from traditional methods and relatively reluctant to adopt new techniques or introduce technological innovation to processing operations. Part of the reason for this is undoubtedly the large capital investment required to install new equipment and to change operating systems to deal with the increased throughput which would result from more elaborate processing, but slow progress has also been due to a failure to understand technical principles involved. This paper is concerned with technical considerations of a more modern marketing philosophy.

Because of its highly perishable nature meat must be very carefully and hygienically handled and stored under refrigeration at all stages of distribution. Carcases are normally chilled immediately after slaughter in order to prevent the development of deep-seated bacteriological growth which
leads to bone taint. Given favourable conditions the small number of microorganisms which may be present in deep muscle tissue can multiply very rapidly under suitable conditions resulting in putrefactive spoilage and the objectionable odour associated with this phenomenon.

In practice microbial contamination, which takes place during slaughtering, carcase dressing and cutting operations, is the only real problem in chilled carcase meat and this is very largely confined to the meat surface. Because a carcase has a relatively small surface area compared to volume, spoilage problems are generally not troublesome. Even when contamination is heavy, the combined effects of small surface area, surface dehydration and the protective action of intact tissue membranes help to keep the bulk of the meat in sound condition. A certain amount of trimming may be necessary to remove discoloured or otherwise spoiled surface meat, but this can usually be done without seriously harming the commercial value of the carcase.

Even though handling conditions may be relatively poor, carcase beef has reasonably good keeping quality, provided it is adequately chilled, and when cut subsequently in a butcher's shop, produces bright red cuts of meat at the point of sale. Particularly if it has been produced under hygienic conditions and thoroughly chilled post-mortem, there is not a great deal that can go wrong with meat in carcase form. The level of technology required to handle it is not high and although this is an advantage in simplifying marketing, it may also lead to a general lack of appreciation of the importance of technical innovation and the necessity for more stringent standards of hygiene in the preparation of other forms of meat.

The need for a more elaborate technology increases inversely with the size of the piece of meat. Whilst some latitude may be given in handling carcase meat, this does not apply to cuts which must be carefully handled at all stages of cutting and distribution and stored continuously under