

7:6 Manufacturer Control of Distribution Channels for Meat Products

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Introduction

The purpose of this paper is to highlight developing problems for meat product manufacturers, and to propose solutions for them.

Product liability legislation based on the EEC Draft Directive has led to manufacturers becoming liable for mishandling by wholesalers, retailers and consumers. A meat product properly formulated and labelled as to handling, if mishandled can become dangerous to its consumers. Yet the new legislation means that negligence or ignorance of others can lead to the manufacturer being liable to prosecution despite his/her own propriety, care and attention.

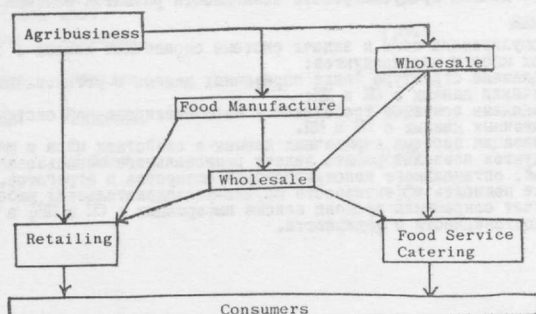
Having initially reviewed the legal environment, the paper will move on to look at social trends that tend to exacerbate the legal problem. Other relevant developments including those in domestic kitchen technology, business trends, food technology, distribution and markets will be briefly reviewed.

Risks emerging from these considerations will be explored and the paper will look at ways of managing these risks.

Communications with distributors and users, and the formulation of intrinsically safer products will be considered, as will methods for workers to monitor domestic and retail practices, and to consider problems encountered by processors of meat.

The relevance of the work of scientists and technologists involved in meat research and development will be given an additional dimension through this paper.

A diagram of the system (based on Lyons 1980) is shown below.



The complexity of this system provides the measure of the problem that we are addressing. In particular the amount of the system 'downstream' from food manufacture where products can be abused, is worth noting.

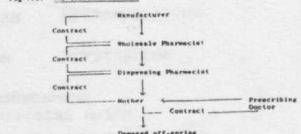
Legal Environment

Three dimensions define the legal environment under consideration, namely 'product liability', 'hygienic practices' and product labelling. Contractual relationships are comparatively clear-cut.

Turning first to product liability; it is discussed below (Lyons and Drew 1984)

The following text is a reproduction of the text from the Lyons and Drew (1984) paper, which is available in the full text of the paper. It is reproduced here for the purpose of providing a context for the diagram.

The first problem we face is that the contract law is not a simple matter of a contract between a manufacturer and a consumer. It is a complex web of relationships between many parties. The diagram shows the flow of products from the manufacturer to the consumer, but it also shows the flow of information and responsibility. The manufacturer is responsible for the product, but the wholesaler, retailer, and consumer are also responsible for their own actions. The diagram shows the flow of products from the manufacturer to the consumer, but it also shows the flow of information and responsibility. The manufacturer is responsible for the product, but the wholesaler, retailer, and consumer are also responsible for their own actions.



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The sorts of problems that we are concerned with here are:

- (Inevitably) Food poisoning brought about by mishandling by distributors and consumers themselves.
- Packaging (eg jagged edges of cans) causing wounds.
- Inadequate labelling, eg many prepared poultry products such as Tandoori chicken are sold cooked and uncooked; they are distributed in similar packaging and have a similar appearance resulting from the sauce.

OR

Oven-ready packages that fail to tell the user to remove the product from its plastic tray before cooking.

There is a trend to harmonise legislation applying to goods traded within the EEC. EEC standard hygiene practices are already applicable in exporting slaughter houses and poultry processing.

In theory, harmonisation should make situation easier to manage. However change is confusing in itself and obscure points await clarification by test cases eg for trading standards - the Cassis de Dijon case, Case 120/78 (Hill, 1982).

Even when the legal situation is clearer than at present, there will inevitably be differences between countries in detailed interpretation of the law and the efficiency and effectiveness of its enforcement.

Social Patterns

It is not our purpose to undertake a complete social and economic analysis of Europe; rather we would like to indicate some well-established trends and to think about their implications for food manufacturers.

Trends

- (a) Cultural convergence, viz the internationalisation of aspects of lifestyle, eg fast foods.
- (b) Long-term structural unemployment in the manufacturing base and the most promising employment areas proving to be service industries.
- (c) The growth of multinational firms, and the holes that they leave in their markets for small enterprises.
- (d) Increase in "snacking" as a style of eating.

Outcomes from the above are known to include:

- Independent butchers buying up "out of sell by date" sausages and meat products to sell unpackaged.
- Independent fast food operators, often with mobile premises, selling "out of date" products - or even making up burgers etc from out of date comminuted meat.
- Small wine bar owners losing or ignoring the "sell by" date for patés, and having them on sale for too long.
- Independent processors adding meat products to their prepared salads (cole slaw style perhaps, with added continental style sausages).

The opportunities for independents to enter the food retailing industries, and some areas of the processing industry is great as it requires little capital, is difficult to 'police', and everyone seems to think that they know about food - after all, they have always eaten it.

Snacking involves a person consuming small meals independent of other members of the family. Thus necessary food preparation is ideally quick and simple and "fool proof" (some snackers will be unskilled/very young etc).

Domestic Technology

In recent years there has been a proliferation in the kitchen gadgets and equipment available to the consumer. They include

- microwave ovens
- food processors
- freezers
- pouch sealers
- slicers
- contact grills
- fan assisted ovens which may be used without heat for thawing.

Items which are well established in some markets may represent innovation in others eg German cookers traditionally do not include a grill. Grills are a new chic addition to domestic technology in that country.

Standard equipment may find differing uses eg refrigerators, formerly used for storing small food items at chill temperatures may be used to chill bulks of food produced using food processors.

Thus the technological side of domestic food handling is far from predictable.

Consumer abuse of domestic technology has been discussed in Drew and Lyons (1983).

Business Organisation

The catalogue of developments in this area is broad. Again we will outline major trends and then draw from them some implications.

- 1 The growth of multinational enterprises is continuing; however at present there are two trends that are NOT appearing, namely there is little vertical integration including retail and manufacture; retailers are not yet as multinational as manufacturers (notwithstanding firms such as Safeways, A&F and Sears).
- 2 Retailer power is leading to the growth of own label and generic product ranges and we are seeing many fields where products are perceived as commodities.
- 3 Along with own-brand we are seeing retailers entering into product development and specification.
- 4 Technological trends are making retail management more complex and risky.

The major implication of these developments is that whilst the legal trend is tending to place more responsibility with manufacturers, retailers are actually balancing the equation by choosing to "own-brand" and specify formulations. Courts are likely to deem that where this has been done, the retailer is actually responsible.

Technologies

There are changes occurring in technical capabilities and practice at all stages of meat production and distribution.

Bailey (1983), Finne (1982), Lawrie (1983), Lyons and Drew (1984).

Actual and possible changes include:

1. **Changes in the way meat is handled and processed**
eg killing without pre-slaughtering, which means handling of carcasses using less of the slaughterhouse but handling, vacuum packing, transportation by road, etc.
2. **Changes in meat processing/packaging**
eg this packing of frozen cuts of meat, once in the pack, will be handled, for example, by multiple preservation techniques (chilling, preservation, irradiation, protective packaging, controlled atmosphere).
3. **Improved Temperature Control and Monitoring**
Advances in electronic engineering and closer understanding of the relationship between storage temperature and the rate of spoilage have led to improvements in food temperature control and monitoring equipment. Such equipment will, however, be used by everyone starting or transporting meat.
4. **Changes in Product Range/Formulation**
Products well established in one market (eg pastries, Italian sausage) are diffusing into others. Some companies are attempting to 're-engineer' and are adopting their own (eg pizza, pepperoni-based sausage incorporating meat) to 'local' tastes.
New ingredients include plasma protein, soy protein, more attractive, flavoured and reformed meat and meat recovered mechanically from bones.
Computers can be used for adjustments to meat cut formulae based on the latest ingredients' prices.
5. **Change in the Possibility/Probability of Further Processing**
Meat products may be subjected to further processing by the retailer. This could include for example:
 - mincing
 - (incorporating into a dish) - freezing - use in cook freeze system
 - (incorporating into a dish) - chilling - use in cook chill system
 - vacuum packing

Further processing in the home - see Domestic Technology

Distribution Patterns

Two distinct issues merit particular consideration. Firstly, we are seeing specialist networks of distribution linking large manufacturers and retailers. Small manufacturers supplying large retailers are able to link in.

Supplying small retailers is however a different problem. Whilst the growth of the 'cash and carry' wholesale sector (along with its own-brands) is fairly reliable, handling of foods by small retailers is notoriously unreliable.

Although empirical studies of food handling by independent retailers are largely missing, it is common to observe chilled and frozen foods stored for unacceptable periods of time in private vehicles - often on hot days.

Responsibility in this context still rests with manufacturers, although their handling instructions may be ignored.

Similarly incorrect handling and storage of foods in say independent wine bars and delicatessens occurs - providing manufacturers with a major problem of control.

Markets

As animal protein prices rise the trend is towards formulating meat products with low materials costs and a high level of added value.

Product differentiation amongst comminuted or otherwise processed meat products is also noticeable.

At the same time advances in technology are changing product formulations - eg delicatessen sausages are now appearing with lower salt content as they are refrigerated and not preserved by their salt.

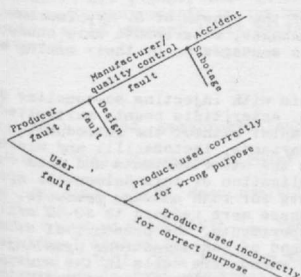
Managing a distribution channel where end markets as well as intermediate markets and products are in such a state of flux is inevitably raising risk.

Management of Implied Risks

Identification of the Risks

Management of food product liability risks in general due to consumer abuse of products has been discussed elsewhere (Lyons and Drew, 1981, Drew and Lyons, 1983). It is suggested that possible risks be listed and prioritised and suitable steps taken to guard against damaging litigation, bad publicity and the need for product recall.

Product faults may arise in the following ways (Lyons and Drew, 1981; Lyons and Pinches 1982).



From the previous discussions it will be clear that a product may run the risk of being mishandled at any stage of distribution. It may encounter entirely new combinations of circumstance. Identification of possible/likely risks is not easy!

Risk Management

We suggest that risks associated with well designed and well manufactured meat products may be managed by strategies including

- clear communication with agents at all stages of distribution
- clear communication with the ultimate user of the product
- formulating low risk products
- monitoring retail practices
- monitoring domestic practices
- monitoring problems encountered by other food/meat processors

Communication with Agents at all Stages of Distribution

Essential information must be designed to 'get to' the relevant person eg reach her/him and be read. It must be clear and unambiguous to that person. The target person may well be very busy and of unknown intelligence and experience. Identifying the correct target person is important. Media include demonstrations, films, videos, written information.

Communication with the Ultimate User of the Products

Similar problems exist. Media include

- words/pictures on the product/its pack
- accompanying literature at point of sale
- advertisements
- demonstrations/in-store video
- teaching packs for use in schools and clubs

Where short cuts are likely, relevant advice can be supplied eg "if no refrigerator is available, the food may be stored in a cool place (max 15°C) for up to 24 hours".

Formulating Low Risk Products

Tactics for lowering risks associated with a meat product include

- 1 Using resilient, tamper-proof packs.
- 2 Using portion-sized packs.
- 3 Formulating so that detectable spoilage changes precede the growth of food poisoning organisms in the storage conditions which could possibly be encountered.

- 4 Formulating to low water activities.

- 5 Designing product in ready-to-eat form, ie with no/minimal handling/processing required by others.

- 6 Producing shelf-stable products which do not require specialized storage facilities.

- 7 Using labels which provide clear, appropriate information and which stay on the food pack until immediately before the food is consumed.

Monitoring Retail Practices

At present retail audits are limited to research agencies measuring retail sales, and sales practices such as shelf space. There is a clear case for commissioning studies to include hygienic food handling practices. There may also be a case for manufacturers helping retailers with training, and more....

Monitoring Domestic Practices

Again present consumer research attends to quantities of food consumed, and consumption patterns. There is again an opportunity for this to be extended to food handling and hygienic practices in the home.

Monitoring Problems Encountered by other Food/Meat Processors

This may be done via international press (general, trade, legal, product liability), domestic trade press, raw materials/equipment/packaging suppliers especially those with international interests, noticing any competing products which are withdrawn although apparently successful export trade bureaux

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