

Can your food kill?

A view on acceptable risk

Increased consumer awareness for food quality and safety

For the last decade or so we have all become much more aware of food safety issues and as a consequence many of us ask more questions about where our food comes from, how was it produced, how was it processed and what has been added to it. But with the search for more knowledge sometimes all we get is more confusion. The simple truth remains however that we all want our food to be safe and not cause us any harm, in either the short or longer term.

The hazards in food which have the potential to harm

us are numerous. In some cases, such as alcohol, it



may be that the potential hazard is an integral part of the food itself, but in others, such as salt, it may be added during processing. The safety of red meat and poultry meat may also be compromised during processing by the transfer of contamination from the skin, feathers or gut con-

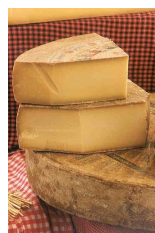
tents to the surface of the meat. Various fats are essential to the body's metabolism but the same fats may be a factor in coronary heart disease if taken in excess. Other hazards, such as with heavy metals or radionucleotides, may occur as a result of environmental contamination of pasture or crops while others such as herbicides, pesticides and antimicrobials result from farm practices during production.

Is our food safe to eat? How safe is safe?

- Increased consumer awareness for food quality
- Hazards in food?
- Individual safety
- Acceptable level of risk
- Zero risk ?
- Food as individual responsibility

Susceptibility to different hazards

The concept of our individual safety is further complicated by the fact that all of us may have different susceptibility to each hazard. The young, the old, the sick, the immunocompromised



and the pregnant all have varying degrees of susceptibility. This leads to the warnings,

such as those issued to pregnant women, to avoid soft cheeses through the risk of infection with *Listeria* food poisoning.

Acceptable level of risk

In some cases scientists need to make an expert informed decision as to what an acceptable level of risk may be. It is a fact that some foods may contain residues of pesticides, herbicides or heavy metals such as lead transmitted to the animal over its lifetime from its food or the environment.

Current laboratory methods are so sensitive that they can detect residues down to a fraction of one in a billion making the concept of 'absence' of these compounds almost impossible. This demands that scientists set a safe or acceptable level below which the food can be considered safe. Different

safety levels may be set for different groups of consumers, for example there may be a different safe level for baby foods than for 'normal' food.

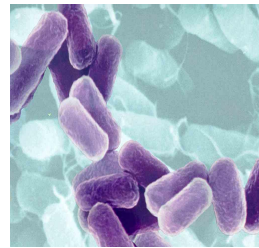


Zero risk ?

From the above, it is obvious that the concept of 'zero risk' has no real meaning when it comes to food safety. Food, like many worthwhile things, comes with a risk. The question we have all to contend with is how do we determine from the information available what is an acceptable risk.

The key to individual decision making on this topic is reliable easy to understand information, presented to the shopper at the point of sale. This may be through labelling, leaflets or advertising all of which must be strictly regulated and controlled to avoid misleading or false claims. This is an area where regulation rather than deregulation is appro-

appropriate and where the control authorities must ensure that



Electron microscopic picture of bacteria

appropriate checks are carried out and enforcement action taken when necessary.

The individual must then make the personal decision on their own, or family's susceptibility based on the available information. They may wish to eliminate a health risk completely by

avoiding a particular food as part of their diet or more likely reduce the risk by reducing the intake of one particular food to achieve a balanced diet. Again labelling is key, allowing the consumer to make this educated choice but also ensuring that he or she is aware of their individual responsibility to store food properly, to avoid cross contamination within the kitchen and to prepare foods as recommended.

A balanced diet is the key to good health. Avoiding or minimising the risk to ourselves and our families is an individual responsibility.

“A balanced diet is the key to good health”
