



DUTCH
SAFETY BOARD

Summary

Risks in the meat supply chain



Summary

Risks in the meat supply chain

The Hague, March 2014

*The reports issued by the Dutch Safety Board are open to the public.
All reports are also available on the Safety Board's website www.safetyboard.nl*

Source photo cover: Ivan Nakonechnyy/Shutterstock.com

Dutch Safety Board

The aim in the Netherlands is to limit the risk of accidents and incidents as much as possible. If accidents or near accidents nevertheless occur, a thorough investigation into the causes, irrespective of who are to blame, may help to prevent similar problems from occurring in the future. It is important to ensure that the investigation is carried out independently from the parties involved. This is why the Dutch Safety Board itself selects the issues it wishes to investigate, mindful of citizens' position of independence with respect to authorities and businesses. In some cases the Dutch Safety Board is required by law to conduct an investigation.

	Dutch Safety Board		
Chairman:	T. H. J. Joustra		
	E. R. Muller		
	P. L. Meurs		
	L. O. Fresco		
	(extraordinary board member)		
General Secretary:	M. Visser		
Visiting address:	Anna van Saksenlaan 50	Postal address:	PO Box 95404
	2593 HT The Hague		2509 CK The Hague
	The Netherlands		The Netherlands
Telephone:	+31 (0)70 333 7000	Fax:	+31 (0)70 333 7077
Website:	www.safetyboard.nl		

NB: The full report is published in Dutch. The English summary is the translation of the summary, the consideration and the recommendations of the report. In the event of any discrepancy between these versions, the Dutch text shall prevail.

CONTENT

Consideration and recommendations 4

Summary 9

CONSIDERATION AND RECOMMENDATIONS

Consideration

Meat is an important source of food for the human population. Yet the consumption of meat is surrounded with risks. Without the right level of hygiene during production and preparation, people can become ill or even die. Furthermore, meat can contain harmful substances or parasites. It is for this reason that the government is intensively involved in the safety of meat. The government has been responsible for meat inspections for more than 100 years, and it also controls food businesses that work with meat.

Since the end of the last century, the responsibility for food safety has increasingly been allocated to the industry itself. However, this increase in responsibility for individual food business operators (fbo's) has not been fully accepted. During the investigation into risks in the meat supply chain, the Dutch Safety Board ('the Board') observed numerous deficiencies in hygiene. This is worrying, because hygiene has long been a crucial part of the system that aims to safeguard the safety of meat. Nowadays hygiene control measures should no longer be the subject of discussion.

Next to hygiene, the investigation also revealed that fraud in the meat industry poses an underestimated risk with potentially harmful consequences for the public health. Risks arising during the import of meat are also insufficiently controlled.

The Safety Board found that larger food business operators in the Netherlands do not necessarily perform better than smaller companies. How the meat industry in the Netherlands performs in comparison with the meat industry in other European countries is difficult to determine. This due to the lack of comparative studies. Based on this investigation, the Board suspects that the differences between companies in the Netherlands are comparable with those in other EU member states.

Many - smaller - food business operators in the meat supply chain exhibit neither the willingness nor the knowledge to guarantee optimum food safety. These companies do not take their responsibility for safeguarding safe meat. They assume there are no deficiencies as long as the competent supervisory authority does not intervene.

Larger companies in the meat supply chain often have quality assurance systems that aim to ensure not just food quality ('a nice piece of meat'), but also food safety. These systems may go beyond what is required by law. However, these supply chain quality systems have led to a 'system reality' which results in focusing on complying to the system norms. Apart from this system reality, there is the work floor reality where employees often have to work with a natural product under difficult conditions, and mistakes are made. When food business operators put all their trust in the paper reality, food safety becomes a sham.

The government used the increase in supply chain quality systems as an argument to reduce supervision. It was assumed that private regulation would ensure that food safety would be at least as good, and that supervision at the system level would suffice. This has not happened, and the reduction in public supervision has therefore been premature.

The Safety Board doubts whether the meat industry currently has the ability for far reaching private regulation and system supervision. Parties show little willingness to confront each other with risky behaviour, and the willingness between parties to organise themselves is low. Food business operators can sometimes break the rules for years, even though it may be known within the industry. It is considered inappropriate within the industry to correct companies that take irresponsible risks, for instance, by informing the supervisory authorities about risks observed. As a result, the responsibility for tackling risky business, such as fraud, lies solely with the public supervisory body.

Government supervision has not only been reduced in recent years, but the working methods also have become mainly planning and routine based. This leads to a form of 'stopwatch supervision', where the pace of work is considered more important than the accuracy with which the work is done. This situation is further tightened by the way the Netherlands Food and Consumer Product Safety Authority ('NVWA') invoice the retribution of costs for the meat inspection and supervision (in intervals of 15 minutes). Furthermore, the NVWA is not yet achieving its objective of working in a risk-oriented way, in part because of a lack of expertise and information about the risks in the meat industry.

How serious the consequences of these failings, identified in the Dutch meat industry, are for public health is difficult to say. Little is known about the number of people that fall ill from meat consumption. However, what *is* known is that only a fraction of the true numbers of people falling ill are actually represented in the statistics. Even less is known about the number of victims in the longer term.

This lack of information about the numbers of people falling ill from meat consumption may erode any urgency to improve food safety. It also contributes to the image the meat industry has of itself that hygiene is very well established, except for a few incidents.

The Safety Board also considers it plausible that the number of victims could be much higher in case consumers would not heat their food so intense. Although consumers are responsible for food safety as well, they should be able to have trust in the product they are buying.

Although the Board has not been able to form a complete picture of the risks throughout the entire meat supply chain, it is considered as most likely that the deficiencies observed occur on a larger scale. This does not mean that the observed irregularities occur at all Dutch food business operators. Nevertheless, the risks observed are too serious and too numerous to ignore. The incidents that have been reported in recent years acknowledge this. While the Dutch Safety Board realises that this is a tough message, it is important that the parties concerned are convinced of the urgency of the issue and take action.

To improve the safety of meat, it is high priority that the private and public parties in the meat supply chain each perform better to exercise their responsibilities. They need to feel more responsible for the shared objective: safe meat for consumers. It will not do for each to limit themselves to their own business, without being mindful of the overall outcome. Both public and private parties could share more information, learn from each other, address problems and correct each other. It is crucial that expertise is increased, both in the industry itself and in the public regime of supervision.

Meat safety must not be a derivative of quality, but must be the primary concern of all involved parties. An argument that the Board heard often during the investigation was that parties feel as though they are forced to take risks because large parties like retailers put pressure on prices. Anyone buying meat at bargain prices - whether in the Netherlands or abroad - needs to be aware that this may come at a risk. The Board considers that small margins may never be an excuse to make concessions in respect of safety.

It is important that the production of meat is made more transparent. Meat is largely a anonymous product that finds its way to the consumer via sometimes long - international - routes. When incidents occur, consumers have no idea which of these parties is responsible. This means that incidents affect the entire industry. The industry therefore also has an interest in greater transparency. If it becomes clearer where unsafe meat has originated from and if poorly performing businesses are named, this would act as an incentive to improve safety. Finally, greater transparency would allow consumers to make a more balanced choice.



Figure 1: Pig carcasses at a slaughterhouse. (Photo credit: Shutterstock)

Recommendations

The Board believes that both public and private parties must take measures to improve the food safety structurally. Furthermore, the Board demands for changes from private parties in particular. Improvements must be made across the industry as a whole. However, the Board considers that private parties currently lack the needed self-regulating capacity and the desire to organise themselves. Therefore, no recommendations can be made to specific private parties. For this reason, the Board makes these recommendations to the State Secretary for Economic Affairs and the Minister for Health, Welfare and Sport.

Increased cooperation to ensure food safety is needed within the industry before the meat industry can obtain more responsibility. While operators focus primarily on quality ('a nice piece of meat') and price, food safety needs to take a more prominent place. Every food business operator and each employee must be aware that the products ultimately end up on consumers' plates, and that they therefore carry responsibility for the safety of these products. This responsibility cannot be passed to the next link in the supply chain.

Private supply chain quality assurance systems may help raise the awareness of safety and help improve the safety of meat. But apart from hygiene, they must also focus on fraud. Operators in the meat supply chain should verify whether the certificates actually offer a guarantee of the safety of meat. There is a need for additional incentives for businesses to encourage cooperation on food safety and for the industry to correct business that take irresponsible risks.

The Board makes the following recommendations:

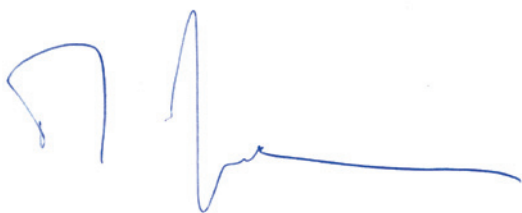
To the State Secretary for Economic Affairs and the Minister for Health, Welfare and Sport:

1. Initiate a process together with the supervisory authority to make binding agreements with private parties in order to structurally improve food safety standards. In this process, ensure that:
 - a. food business operators in the supply chain address each other for risky conduct, such as unhygienic slaughter or illegal practices. They should inform each other and the competent supervisory authority (NVWA) about risky conduct by other operators.
 - b. the traceability of products will be improved and consumers gain a greater understanding of the food safety performance of individual suppliers.
 - c. private certification will be combined with effective private enforcement. Business partners should make unannounced visits to their suppliers to verify whether they work in accordance with the agreed standards. This specifically addresses the struggle against fraud.

- d. food business operators in the meat supply chain work together and take the initiative to develop, share and invest in expertise, training and awareness of food safety.
 - e. no concessions are made to food safety regardless of the price point.
2. When setting priorities for the competent supervisory authority (NVWA) pay more attention to tackling fraud in the meat supply chain. In particular, strengthen the capacity and effectiveness of the NVWA's Intelligence and Investigation Service. Encourage cooperation with the criminal investigation services of other ministries.
 3. Introduce a clear segregation between meat/livestock inspection and supervision to avoid confusion about the role of the public supervision body.
 4. Change the system of cost-effective charges for meat/livestock inspection and supervision so that the primary focus is on ensuring food safety.
 5. Create increased scope in legislation and regulations - and in the implementation thereof - for innovations that can help to improve food safety.

To the Inspector-General of the Netherlands Food and Consumer Product Safety Authority:

6. Map out the risks of vulnerable links in the supply chain and set priorities. Make a clear distinction between meat/livestock inspection and supervision, monitor companies closely to ensure they fulfil their responsibilities. Cooperate in investigations with other investigation services.



T.H.J. Joustra
Chairman, Dutch Safety Board



M. Visser
General Secretary

In February 2013, the Food Safety Authority of Ireland (FSAI) conducted a major study into fraud with horse meat. It followed a report by the FSAI that horse DNA had been found in beefburgers in the United Kingdom and in Ireland. The case also led to the Netherlands. The horse meat fraud was widely reported, in part because a very large amount of meat (50 million kilos) was recalled because its origin was uncertain. Because it was unclear whether the meat had been approved or contained harmful substances, the NVWA believed that it therefore presented a public health risk.

Following this and other incidents in the meat supply chain, the Dutch Safety Board conducted an investigation into the risks in the meat supply chain on request of the State Secretary for Economic Affairs. The investigation was aimed at identifying safety risks in the meat supply chain and the extent to which public and private parties are successful in controlling the risks in accordance with best practice. The emphasis of the investigation lay firmly on deficiencies that have an effect on food safety.

Fraud in the meat supply chain is a underexposed risk. Fraud in the meat chain is lucrative because the volumes and the margins are large and the chances of getting caught are small. The approach to safety by both the government and businesses is primarily aimed at good hygiene and the control of diseases that can be passed to humans.

Parties within the meat industry associate fraud in the first place with integrity of the product (is it what it claims to be?) and not with food safety. Yet it is safety that is at stake. Fraud leads to an unknown product or to a product of unknown origin, which makes it unclear whether it presents a hazard to human health.

Horse meat fraud is possible because the identification and registration system - the horse passport - can be counterfeited. And because it then becomes unclear what medication a horse has been given, it is possible that horse meat is sold that contains harmful substances. More stringent checks of horse passports can help reduce the problem, but does not solve it. As long as there is no fraud-proof identification and registration system, the safety of horse meat cannot be guaranteed.

The NVWA has insufficient expertise and information to tackle fraud effectively. For a long time, fraud was seen as a matter for criminal investigation services, and not for supervisory bodies. The fact that both functions have now been brought under one roof offers opportunities to increase supervision expertise and to pass on suspicions of fraud found during inspections more easily to the criminal investigation service (NVWA-IOD). However, it also gives rise to the risk that the tackling of fraud will have to compete with other duties, resulting in lower prioritisation while extra attention is exactly what is called for. Expertise on the risks from fraud, for instance, is still lacking. The NVWA still has an incomplete picture of vulnerable links in the supply chain (such

as refrigeration and freezer facilities and meat brokers) and production streams (e.g. animal by-products). The organisation currently has too little expertise to investigate administrative systems in depth.

For many years, hygiene has formed a crucial part of the safety assurance system in the meat supply chain. Business processes should be established to control the hygiene risks. This makes it all the more remarkable that almost all visits conducted by the Board to meat producing or meat processing companies revealed serious deficiencies in hygiene. Reports by the NVWA and the European Food and Veterinary Office (FVO) also show that by no means all slaughterhouses and cutting plants have sufficient control of their hygiene. This problem is not limited to the Netherlands. It is a worrying picture given that controlling hygiene risks during slaughter is of crucial importance to food safety.

Barriers that could help provide an assurance of food safety, such as import controls between member states, have been removed to promote trade. Within the EU, food safety should be assured at the same level across all member states, yet this is not the case. Some member states (recent entrants, for instance) still have to catch up with the rest.

Just as for EU member states, measures put in place by non-member states are primarily intended to guarantee food safety. Yet the EU compels its member states to check meat from those countries at the border. The random sampling used for the additional checks, however, are too light to guarantee the safety of meat admitted to the EU. Furthermore, import checks allow importers and their buyers the opportunity to hide behind the NVWA, which carries out the checks.

European legislation and regulations make it easy for companies to discard their own responsibility and hide behind supervision. For instance, legislation states that private businesses have primary responsibility for food safety, yet at the same time the rules describe in detail how the public supervision body must assure the safety of meat. Because the legislation makes NVWA responsible for the certification of livestock and meat, the supervisor becomes part of the meat supply chain. Employees of the NVWA then have to perform two roles within one organisation: they perform meat/livestock inspections in the production process of a slaughterhouse, and they may also have to take supervision action against the same company. These separate roles do not sit well together. Because the NVWA has to retribute its certification and supervision costs from the food business operators, the role of the supervisory authority role is more one of a service provider, instead of an independent authority.

In the past ten years, the NVWA has undergone a series of reorganisations, mergers and spending cuts. Improving supervision was not the primary objective of these exercises, but satisfying a desire to reduce the burden on government and businesses. The many changes have eroded the supervision function, as much expertise and capacity has been lost.

Within the limited scope that has remained, the NVWA itself has passed over opportunities to carry out its activities effectively. Certification and supervision are carried out in a routine fashion, allowing important opportunities to be missed. Within the NVWA, there are differences in the enforcement culture. This leads to tension among NVWA supervisors, and causes a lack of clarity and irritation among the business operators subject to supervision.

The Safety Board regards the improvement plan announced by the government in December 2013 as a starting point for improving supervision. However, the true test will be whether the organisation can find the resources, time and scope needed to achieve the improvements and succeed in gathering the authority and trust of ministries, the public and the meat industry. The NVWA will have to earn that trust through its own efforts, but the ministries must give it sufficient scope to develop as an authority. It should be noted that the Ministry of Economic Affairs now takes control during incidents, as it has insufficient faith in the NVWA to manage them independently. However, to be able to act with authority as a supervisory body and to retain the trust of the public, it is important to end this stalemate so that the NVWA can position itself to fulfil this role.

This will also require a reassessment of the assumptions that lie at the foundation of reorganisations and spending cuts. One of these assumptions is that supervision must be based on the premise that businesses can be trusted to take responsibility for food safety. In anticipation of this, capacity at NVWA has been drastically reduced. Because the meat industry has fallen short in exercising its responsibility, there has been a supervision vacuum, resulting in insufficient assurances of food safety.

The Board finds that the retreat of supervision was premature because the meat industry is not yet ready for the intended private regulation. There are many different parties and unity is lacking. Many are not willing to guarantee food safety without some external incentive, and the capacity of the industry to organise itself and cleanse itself is low. This is in part due to the fact that many businesses in the industry can operate anonymously as far as the outside world is concerned. For them, market discipline (reputational damage and loss of custom) scarcely provides any incentive to better control risks. For these businesses, it is often more beneficial to stay out of self-regulation systems and to rely on inspections by the NVWA.

Although supply chain quality assurance systems with food safety aspects have been introduced in parts of the meat industry in recent years, they have so far merely created paper-based safety. Most partners in the chain blindly rely on certification and do not perform checks of the actual situation. Certification bodies are financially reliant on the businesses they certify. Private enforcement within the supply chain systems is weak.

Businesses have the intention to strengthen private enforcement and unity across the meat industry through the Food Confidence Task Force set up by government and the industry in 2013. The Board observes that measures are primarily focused on food integrity and not on other aspects of food safety, such as hygienic operations.

Throughout the investigation, the Board encountered on several occasions the view of food business operators and by supervisors that meat produced in or imported to the Netherlands is safe. They then refer to the relatively low numbers of people that are admitted to hospital or die as a result of eating meat. The figures give an incomplete picture of the actual number of people falling ill from consumption of meat. Yet even if the number of victims is low, it is unclear whether this is due to the safety measures taken or, for example, due to consumers heating their meat properly.

As long as we have no reliable statistics on the number of illnesses, there is no reliable way to check how safe the meat is that makes its way to consumers' plates. This means that we are missing an important source of feedback to improve the safety of meat. Without any understanding of the consequences of their actions, businesses will be less likely to change that behaviour voluntarily.

**Visiting Address**

Anna van Saksenlaan 50
2593 HT The Hague
T +31(0)70 333 70 00
F +31(0)70 333 70 77

Postal Address

PO Box 95404
2509 CK The Hague

www.safetyboard.nl