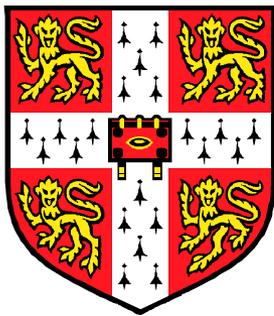


The welfare of ducks during foie gras production



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Council of Europe: 1987-2000 Advisor to the Council of Europe Standing Committee on the Welfare of Animals Kept for Farming Purposes. During this time we produced recommendations, including those on laying hens, domestic ducks, Muscovy ducks and hybrids, domestic geese, turkeys.

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Foie gras production: what factors affect it?

Tradition - the tradition was to use geese, however now almost all (97% in France) are ducks. **Hence the tradition is not followed.**

Convenience in management - farmers have always known that the ducks avoid the person who force-feeds so small cages were used.

The gavage procedure occurs for 2-3 weeks.

Some producers now use group cages but they are still small.

The ducks have to be crowded into a very small space for gavage because they avoid the person feeding them.

The consequence of such housing is poor welfare.



Foie gras production:

The food is pushed into the oesophagus of the duck with a machine.

The quantity increases from 180-450 g of dry maize, soaked in water so that it weighs up to 1000g.

This is very much more than a duck would ever eat.



Birds in foie gras production are the only farmed animals not allowed to use their basic biological mechanisms to regulate their own food intake.

Foie gras production:

The liver of the force-fed duck grows to 550-700 g. or more. This is 7-10 times as large as the liver of a normal duck.

It is sometimes said that this is natural in a migratory bird.

However, the mulard and its parent the Muscovy duck are not migratory. Also, the liver never enlarges this much in a migratory bird.

The large liver makes walking more difficult and foot problems more frequent.

In addition to animal welfare problems with foie gras production, there may be a public health risk associated with foie gras consumption because the product contains amyloid protein.

Foie gras production:

Foie-gras production necessitates:

confined rearing conditions,

aversive force-feeding often with injuries to the oesophagus, face and neck,

failure of the detoxifying function of the liver – toxins can cause pain,

malaise and early death.

During the rearing and feeding, the beneficiary is human and the cost is borne by the animal.

For most of the public now, force-feeding,
close confinement of animals, and
a pathological liver condition are unacceptable.

What is the evidence for poor welfare during foie gras production?

The welfare of an animal is its state as regards its attempts to cope with its environment.

Welfare includes positive and negative feelings and other mechanisms for coping.

It can be assessed scientifically, for example by measuring behaviour, physiology, injuries, systems for coping with disease etc.

Pain and fear are important aspects of suffering and poor welfare and measurement of these in farm animals has been the subject of the recent E.U. funded Animal Welfare Indicators project.

Health is an important part of welfare.



What is the evidence for poor welfare during foie gras production?

The gavage procedure results in the bird moving its head or body away from the force-feeder if it can.

Force-fed birds have to overcome the gag reflex and show agitation and head-shaking, an indicator of aversion and poor welfare. They reduce activity and pant because of thermal stress engendered by high food intake.

A study by Faure et al (2001) concluded that force-feeding was not aversive. This study was not well designed.

1. It compared the responses of force-fed ducks to the force-feeder with their response to an unfamiliar person. The force feeder was familiar but the other person was not. It would be better to compare two persons of equal familiarity.
2. The measure of the birds' response was flight distance. This cannot be a reliable measure in a very small cage.

What is the evidence for poor welfare during foie gras production?

Guémené et al (2001, 2006a) and Flament et al (2012) used measures of adrenal response (corticosterone) to indicate welfare after force-feeding.

However, corticosterone does not reliably indicate the welfare of an animal when the subject is eating.

Also, the low corticosterone levels reported by Guémené et al and Flament et al before and after force-feeding are not in agreement with the higher levels found by Mirabito et al (2002c) and Mohammed et al (2014).

The conclusion that lack of increase in corticosterone means that the ducks had no problem with gavage is unfounded.

What is the evidence for poor welfare during foie gras production?

The mortality rate during the gavage period is at least 5-10 times higher than if there is no gavage. This is a result of injuries, disease, and failure of liver function.

If gavage continues for longer than the normal time, mortality increases sharply because of liver failure.

The physical condition of the ducks declines during the gavage period. The faeces become very watery. Solid flooring and bedding are not used. Cleanliness of plumage, dermatitis, foot ulceration, respiratory infections, *Candida* infection, bone fractures and capability to remove toxins from the body all get worse during the force-feeding period.

Most of these problems are a direct consequence of the steatosis resulting from the very large food intake.

Steatosis means that normal functional cells in the liver are replaced by cells with fat globules in them. This is a pathological condition. Recovery is possible but it remains pathological, greatly reducing comfort in the birds and increasing the risk of early death.

What is the evidence for poor welfare during foie gras production?

Individual cages used for gavage prevent much essential behaviour and lead to very poor welfare.

In group cages, the degree of restriction increases as the birds grow fatter during the force-feeding period. The flooring and feeding result in widespread, painful foot ulceration.

The crowd gate used in most group cages, described as “peigne de contention”, appears to be frightening to birds and can cause injury.

The Council of Europe Recommendations for duck rearing are not properly met by housing systems used for foie gras production. Many conventional duck meat production systems also fail to meet these requirements.

In particular, ducks need access to water for bathing. Without this, plumage condition, health, and welfare in general are impaired.

A rest area and bedding or litter are also needed for all ducks.

**Conclusions: 1. Welfare can never be good if birds are force fed.
2. The increase in liver size is pathological and causes poor welfare.
3. Individual- and group-housing systems used now do not meet the needs of ducks. 4. Foie gras should be produced without poor welfare.**

Alternative production:

- Feed without gavage.
- Specify maximum level of pododermatitis and walking problems.
- Change required liver size for foie gras from at least 300g (ducks) and 400g (geese) to a maximum – perhaps 400g but based on welfare evidence.

References are listed in the report.

A summary of the evidence is also available in: Broom, D.M. and Fraser, A.F. 2015. *Domestic Animal Behaviour and Welfare 5th edn*, Wallingford: CABI.

