

# Optimising animal health on organic cattle farms

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### Introduction

Organic livestock production is a food production system that is governed by EU Legislation with production protocols delivering a high status of animal welfare, care for the environment, restricted use of medicines and the production of a healthy product without residues.

The organic certification system as it is currently implemented under the EU Council Regulations is based on assuring standards which mainly describe resources, such as stocking densities, provision of quality forage and restricted use of conventional products. The organic system is designed to and aspires to guarantee various outcomes such as:

- More effective immunity,
- Improved animal welfare,
- Minimisation of residues in milk and meat and
- Reduced damage to flora and fauna

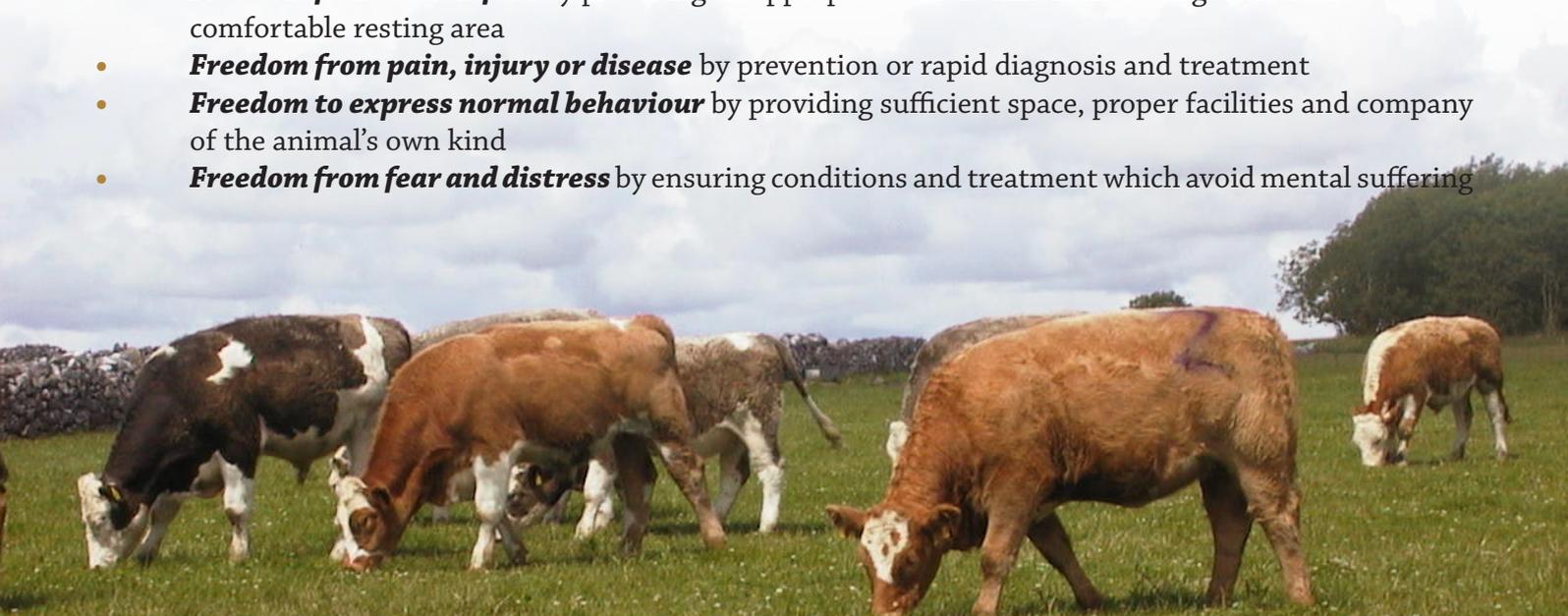
The certification system does not take any legal responsibility over these outcomes. However these outcomes are an integral part of organic farming objectives and a major reason for continued consumer interest in organic products.

The standards for organic livestock production emphasise preventative strategies based on the principles that an animal is allowed to exhibit natural behaviour, is not subject to stress and is fed high quality feed to meet its nutritional requirements so that the animal has optimal natural resistance to combat disease.

### Animal welfare

The principles of organic animal welfare are largely based on Professor Roger Brambell's 5 principles of animal welfare which are under human control:

- **Freedom from hunger or thirst** by ready access to fresh water and a diet to maintain full health and vigour
- **Freedom from discomfort** by providing an appropriate environment including shelter and a comfortable resting area
- **Freedom from pain, injury or disease** by prevention or rapid diagnosis and treatment
- **Freedom to express normal behaviour** by providing sufficient space, proper facilities and company of the animal's own kind
- **Freedom from fear and distress** by ensuring conditions and treatment which avoid mental suffering



*Maintenance of a very high standard of animal health and welfare is key in organic farming*

## **Prevention of disease**

Disease prevention on organic farms is based on:

- High levels of biosecurity on the holding.
- Selection of appropriate breeds and strains of animals.
- Use of animal husbandry practises appropriate to the requirements of each species, encouraging strong resistance to disease and the prevention of infections.
- Provision of high quality feed together with regular access to grazing areas encouraging the natural immunological defence of the animal.
- Appropriate stocking densities both during the housed period and at grass reducing stress on animals.

In organic systems, animal health is seen not simply as the absence of disease; it is seen as a positive characteristic which is to be achieved through the application of biological and animal husbandry principles rather than the routine use of conventional veterinary medicines. Where medicines are required, the use of complementary methods both for the prevention and treatment of disease is encouraged.

The development and management of organic livestock production systems requires special care in nurturing positive health and vitality, ensuring the proper control of the disease and the encouragement of positive animal welfare i.e. the satisfaction of the animal's needs, including behavioural needs and not merely the avoidance of cruelty.

In essence the aspirations of organic farmers should be:

1. To have healthy and productive livestock
2. To develop organic systems which deliver positive health and welfare.
3. To continually improve the health and welfare of livestock.
4. To progressively reduce dependence on medicines

***Adjustments to organic housing standards may require the provision of extra space and dry bedding***



## Herd health plan

When a farmer undergoes conversion to organic status an Animal Health Plan is recommended to be drawn up by the vet, which specifies the current animal health issues on the farm and how the farmer will tackle these issues into the future while conforming to the requirements of organic certification standards.

The Herd Health Plan ultimately needs to address issues such as:

1. What diseases are currently issues on the farm.
2. How can these be controlled or prevented.
3. What modifications can be made at farm level to reduce the risk of disease.

Faeces testing for your present livestock can help to identify the level and type of internal parasites which you have to plan to reduce. Keeping the herd health plan up to date is an on-going process. Whenever an animal needs treating you must treat it, but do think about what could be done to avoid having to treat again in the future.



***The taking of faecal dung sample helps to identify the type and level of internal parasites in the herd***

### Steps to developing an animal herd health plan:

1. It is recommended that the animal herd health plan is drawn up by the vet.
2. Identify the disease organism or health problem
3. Learn about the organism's life cycle and/or health problem.
4. Identify the current veterinary or other treatments used.
5. Think about management/husbandry practices that could be used to break the organism's lifecycle or improve the animal's health whilst reducing reliance on veterinary treatments.
6. Identify management husbandry practices or alternative therapies that could be used to minimise or reduce the problem.
7. Identify in advance the alternative veterinary medicines that can be used should the management practices not be successful
8. Identify the specified withdrawal periods for the treatments and calculate the longer withdrawal periods required for organic management.

### Complying with organic certification requirements

In all cases, permission must be sought from your relevant Organic Certification Body (OCB) in advanced of carrying out animal mutilation procedures. ***In all cases, adequate anaesthesia and/or analgesia must be used.*** Procedures for which permission (derogation) must be sought include dehorning, disbudding, castration and tail docking/use of rubber rings for lambs.

Under organic livestock management, preventative husbandry and management practices must be introduced to avoid and minimise pest and disease problems and reliance on chemical treatments. However, the standards do permit the use of synthetic chemical medicines in order to avoid suffering and distress, and where homeopathic and herbal preparations would not be effective.

Detection of problems needs to be early, and timely veterinary advice is invaluable - when an animal is ill the organic farmer reacts in the same manner as their conventional neighbour and veterinary assistance is sought immediately. Failure to treat sick animals may result in the withdrawal of organic status for the entire farm (ie. treatment must be administered even if the result would mean an animal losing it's organic status).

In the case of the clean grazing system, if it breaks down and individual animals become infected (showing clinical symptoms) then it is permitted to use certain wormers to treat individual animals. Permission may be granted base on veterinary advice to use avermectin products if evidence of need is demonstrated - for

example resistance to other wormers. Consult with your vet to select the right wormer for the job.

If a significant number of animals require treatment, the use of wormers on a whole-herd basis may be allowed. You will be required to get veterinary advice and/or evidence to support the treatment, such as faecal egg counts.

### **Withdrawal periods**

The withdrawal periods for allopathic medicines are longer for organic animals than for conventional animals. Use products with shorter withdrawal periods where possible, paying special attention as to when the animal will enter the organic market. Treated animals which are sold to other organic farms and which have existing withdrawal periods yet to elapse must complete the withdrawal period on the buyers farm.

The following withdrawal periods must be adhered to for the production of organic beef production.

- No withdrawal period indicated - withdrawal period of seven days.
- For legal withdrawal period of between 1 to 18 days - 3 times the legal withdrawal period eg. a legal withdrawal period of 6 days would then result in an organic withdrawal period of 18 days.
- For legal withdrawal periods of between 19 - 28 days - organic withdrawal period of 56 days.
- For legal withdrawal periods of 29+ days - twice the legal withdrawal period applies.

***Products with the active ingredients listed below must not be used in the production of organic beef if supplying beef to Good Herdsmen Ltd: Updated 2016***

<b>Product Name</b>	<b>Active Ingredient</b>
Tetracycline	Tetracycline (This may have to be used - if used inform the processor)
Benastermycin	Bebethamin-Penicillin
Fatroximin	Rifaximin
Buscopan	Buthylscopolamin
Cydectin	Moxidectin
Trodax	Nitroxtmil
Alamycin	Oxytetracyclin-Hydrochloride
Engemycin	Oxytetracyclin
Oxipra	Oxytetracyclin
Receptal	Buserelin

***Source: Good Herdsmen Ltd., March 2016.***

**Note:** Organic beef producers must keep up to date with their relevant Organic Certified Body or organic beef processor regarding any changes to prohibited veterinary products.

### **Number of antibiotic treatments permitted**

The use of antibiotics in clinical cases only is a restricted practice where no other remedy would be effective or after a major trauma as a result of surgery or accident. In other words they should be used only where necessary. The organic standards set out the number of antibiotic treatments permitted per animal:

- Animals for meat consumption: One course of antibiotics is allowed within a 12 month period.
- Animals for breeding: Two courses of antibiotics are allowed within a 12 month period.
- Dairy Mastitis: Two courses of antibiotics are allowed within a 12 month period.

A course of treatment means all necessary measures taken to restore the animal to health following a particular disease episode. If the number of treatments permitted are exceeded, the animal should then be sold conventionally or undergo a further fifteen month conversion period.

## Use of vaccines

Vaccination is permitted only in cases where there is a known disease risk (confirmed in writing by the vet) on a farm or neighbouring land which cannot be controlled by any other means.

Single vaccines (monovalent) are preferred, unless a multiple problem exists. A vaccination programme should be developed as part of the animal health plan, following advice from your vet.

## Use of alternative therapies

Organic management encourages the use of alternative therapies, such as homeopathy that improve the animal's ability to resist disease rather than treating the disease specifically. It is important to remember that there is a danger of misuse of alternative therapies as much as with conventional (allopathic) medicines.

## Mineral supplementation

The inclusion of forage legumes in the diet of cattle improves the nutritive value of the diet and improves individual performance. Animals which are fed a high quality forage are less likely to succumb to disease pressures.

Features of organic farming such as improved soil biological activity, more balanced crop rotations, less production pressure on livestock enterprises, more diverse swards and a prohibition of artificial fertilizers are expected to reduce problems of micro-nutrient deficiency relative to conventional systems.

There is a need to be aware of nutritional deficiencies when solely home-grown feed is used, particularly in areas where inherent soil deficiencies are known to be prevalent. The need for supplementation is based on a veterinary recommendation following interpretation of a blood or herbage sample. Treatment may be in the form of organic seaweed based minerals or conventional licks, bolus or injection.

## Animal housing

- Adjustments to meet organic standards may be necessary – depends on farm situation.
- Housing is not compulsory.
- Livestock housing must have a smooth but non-slippery floor and must be provided with a comfortable, clean and dry lying area. At least 50% of the total floor areas must be solid, that is, not of slatted or grid construction.
- Straw, rushes or untreated wood shavings are acceptable bedding materials and these need not be organic.
- All animal housing is subject to inspection and approval by the Organic Certification Body (OCB).

## Minimum housing area per head and by weight

Animal	Minimum Indoor Areas ( <i>net area available to each animal</i> )	
	Live-weight Minimum (kg)	m <sup>2</sup> /head
Calves Beef Cattle	Up to 100kg	1.5
	Up to 200kg	2.5
	Up to 350kg	4.0
	Up to 500kg	5.0
	Over 500kg	Min. 1m <sup>2</sup> /100kg
Dairy Cows Suckler Cows	Up to 600kg	6.0 min.
	Over 600kg	1m <sup>2</sup> /100kg
Breeding Bulls		10m <sup>2</sup>

Source: *Organic Standards*