

# Feeding Laying Hens

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With spring just around the corner, the longer daylight hours mean hens will soon be back to laying at their best. Therefore, it is more important than ever to ensure you are feeding your hens correctly to receive everything they need for their health and produce delicious, nutritious eggs!

When an Avian Influenza housing order isn't in place, many owners are lucky enough to keep their laying hens free-ranging or in a large enclosure. One significant advantage of this is that they have plenty of vegetation to eat and room to scratch about looking for other food, including insects, worms and seeds. Whilst these tasty extras will all contribute towards a healthy diet, they will not supply all the essential nutrients laying hens require for a long, healthy life. A complete, balanced layers feed should always be fed as the main part of their diet.

## Choosing a Feed

That age old saying “you get out what you put in” could not be more true when it comes to hens and the eggs they lay. If you are eating the eggs yourself or giving them to friends and family, it is important to know exactly what is in the feed you provide your hens. Not all feeds are the same. There can be a huge variation in their nutritional content and the quality of ingredients used; some may even contain hidden extras, like genetically modified ingredients, artificial additives or animal by-products that you would rather avoid! The feed bag label will tell you all you need to know about the feed's nutritional content and the ingredients it contains.



All laying hens should be fed a balanced layers feed that provides all the nutrients in one feed, including protein and vitamins and minerals hens need, both for themselves and egg production. Smallholder Range Natural Free Range Layers Pellets or Crumble are GM-free, Vegetarian Society approved and free from all artificial additives. Layers pellets or crumble should be fed from point of lay onwards (around 16 weeks) and provided on a free access basis (ad lib) all year round. It is important not to dilute this balanced diet by feeding other less nutritious feeds.

It is a common misbelief that there is no need to feed a layers feed to hens that are not laying because they are broody, going through a moult, or to pullets before they have come into lay. These periods are times when a hen particularly needs a complete balanced diet. If a good quality feed is not provided, then the hen's laying performance could be affected in the future. Not only do hens need quality nutrition for egg production, but also for maintaining good health, as well as to produce a complete set of new feathers at least once a year!

Eggs are a particularly rich source of protein, and laying hens need to be fed a diet with at least 16% protein to fuel this egg production. Historically, soya has been heavily used in poultry feed as an important source of protein, but many consumers are increasingly concerned about allergies relating to it, as well as its impact on the environment from large scale production and the food miles incurred from transportation. Smallholder Range has replaced the non-GM soya in their Natural Free Range Layers feeds with field beans to produce, what is believed to be, the UK's only soya free, Non-GM layers feeds. Poultry have a specific requirement for the correct balance of essential amino acids (the building blocks of protein) for growth, health and egg production. The inclusion of dehulled, cooked field beans blended with other ingredients; including wheat, maize and linseed, provides a good natural balance of all the essential amino acids needed by laying hens without synthetic sources.



### Eggshell Quality

Problems with the shells of eggs being very thin, misshapen or completely missing can be a natural occurrence that is more common in young hens when they first come into lay and also in older hens at the end of their laying life. However, eggshell quality is also closely linked to nutrition - the main component is calcium and vitamin D is required for the efficient absorption of this calcium into the hen's body.

Without sufficient calcium and vitamin D in the diet, eggshell quality could be significantly affected, particularly in hens that lay prolifically. When shells are soft or thin, there is an increased risk of these breaking inside the hen during the laying process, this can lead to serious health problems, such as egg peritonitis which can be fatal. Therefore, everything possible must be done to facilitate strong shells' production. Providing free access to a good quality layers feed will ensure the hens' demand for these essential nutrients is met and reduces the risk of deficiencies. Take care not to dilute the hens' nutrition by feeding too many treats as this will unbalance their diet and reduce their intake of calcium and other essential vitamins and minerals. Only provide small amounts of treat feeds such as mixed corn late in the afternoon, so hens have had all day to eat as much of their nutritious Layers pellets as possible.



It is important to note that shell defects can also occur due to several diseases, and when events such as a thunderstorm or low flying aircraft cause shock to hens and disrupt the shell formation process. The occasional blip in eggshell quality is usually nothing to worry about. If the problem persists, always check you are feeding a high-quality, balanced feed and seek veterinary advice to rule out disease.

### Yolk Colour

One of the most sought after attributes of a home-produced egg is a rich, golden yolk. Some breeds lay paler yolks than others, and there can be some variation within breeds, but hens' diets can heavily influence yolk colour. More specifically, it is the carotenoid content of the hens' feed that determines the colour of the yolk they produce. Grass, maize, alfalfa and marigold are high in carotenoids and are commonly used in Smallholder Range layers feeds to give a natural golden yolk colour. However, some manufactured feeds contain artificial colouring agents, so it is always worth checking the ingredients list on your bag of layers feed to ensure that you know exactly what you are feeding your hens.

Paler yolks are more common in winter when the quality and quantity of grass is greatly diminished. During long, dry summers when pastures become scorched, and there is very little grass available you may notice yolks become paler too. Feeding a good quality layers feed all year round will help to ensure a consistent yolk colour. Still, leafy greens such as kale and spinach, along with carrots and ripe tomatoes (not green ones or the plant stem or leaves as these are poisonous) are all good additional sources of carotenoids. Offering your hens small amounts of these may encourage a golden yolk colour, but these must be fed as a late afternoon treat and not in place of their nutritionally balanced layers feed.

### Health

A hen will not lay to her full potential if she is ill or carrying a parasite infestation. Routine treatments to eradicate intestinal worms and external parasites such as red mite and lice are essential. Knowing your hens and how they usually look and behave can help you quickly detect when they are unwell. Any change in behaviour or a decrease in appetite could indicate a decline in the flock's health status that should be investigated urgently.



## Treats

Many people like to feed their hens 'treats' such as mixed corn or vegetables to add variety to the diet. Whilst there is nothing wrong with feeding a small amount of treats, make sure your hens eat their balanced layers feed in the morning to ensure they receive all the nutrition they need. A hen's feed intake is limited by the size of her crop (part of the digestive system); so if they are offered corn and pellets together, they may fill up on the corn and miss out on getting the right balance of nutrients, particularly protein and calcium.

Approximately 20g (an egg cup full) per bird is a suitable amount of mixed corn to feed as a treat to a laying hen, fed as late as possible in the afternoon. When scattered around the coop, a treat of mixed corn helps to encourage natural foraging behaviour and is also useful to bribe reluctant hens back into their house at night! Smallholder Range Super Mixed corn is a perfect treat for your hens as it contains the added ingredients of grit to aid digestion and calcium granules as a additional source of calcium.



It is vital to be aware that the feeding of any meat products or kitchen/catering waste to any livestock, including poultry, is prohibited by DEFRA to prevent outbreak of deadly diseases such as Foot & Mouth. It is also important to avoid the temptation to indulge your birds in foods manufactured for humans as the levels of salt and sugar in some of these extremely high and potentially harmful to hens. Hens will also very quickly become overweight when fed unsuitable, high calorie food, which can greatly affect their health and welfare with problems such as becoming egg bound. Always remember that any food intended for human consumption or has come from your kitchen would be classed as catering waste and therefore illegal to feed.

## Grit and Water

As poultry do not have teeth, grit plays an important role in their diet as a digestive aid. After the food has been stored in the crop, it then passes further down the digestive tract into the gizzard (part of the stomach). Here, the pieces of grit ingested by the birds aid the breakdown of the feed into tiny particles, making nutrient absorption more efficient. It is essential that an insoluble poultry grit is provided at all times. Poultry grit is available to purchase from feed suppliers and should be offered near to the feeder in a small container that is regularly refilled to ensure hens can take what they need.

All hens need a constant supply of clean, fresh drinking water – preferably supplied in a container that they can't step in, contaminate with droppings or knock over. It is a good idea to provide more than one water container to ensure your birds always have access to clean water. Water should be provided in a shaded area, out of direct sunlight to prevent an overgrowth of harmful bacteria that could be detrimental to hen health. A hen's feed intake is closely associated with water intake: if she drinks less water she will in turn eat less feed, which will have a knock on effect on the quality and quantity of the eggs she produces.



## Top Tips for Feeding Hens

- Feed layers pellets (or layers crumble) on a free access basis (ad lib) all year round regardless of whether they are laying eggs, going through a moult or simply taking a break from laying through the winter months.
- Provide clean, fresh water and grit at all times.
- Use purpose made poultry feeders to prevent wastage and to avoid feed getting spoiled.
- Provide sufficient feeding space for the number of hens, so that they all have room to feed.
- Clear away spilt and waste feed daily to discourage vermin.
- Keep treats to a minimum and only feed something 'poultry friendly' like Smallholder Range Super Mixed Corn late in the afternoon.
- Do not feed meat products or kitchen waste in line with DEFRA regulations.



### Our layers feeds are suitable for:

Adult poultry, including cockerels kept with hens, pullets that have not yet come into lay and hens that are not laying because they are going through a moult. These feeds can also be safely fed to adult ducks and geese if kept with hens.

#### Pellet size

Our small 2.5mm pellet diameter



A grain of wheat diameter



Traditional 3mm pellet diameter



### Why choose the Smallholder Range

- We only source **Non-Genetically Modified (Non-GM) Ingredients**
- All of our feeds are approved by the **Vegetarian Society**
- All of our feeds are made in our own **Drug Free Mill**
- We only use **Premium Grade Vegetable Oils**
- Our **oils are pressed**, not harshly extracted using the solvent hexane
- **Soya Free** - fewer food miles



Find out more about feeding your hens by calling the friendly Smallholder Range Nutrition Team.

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