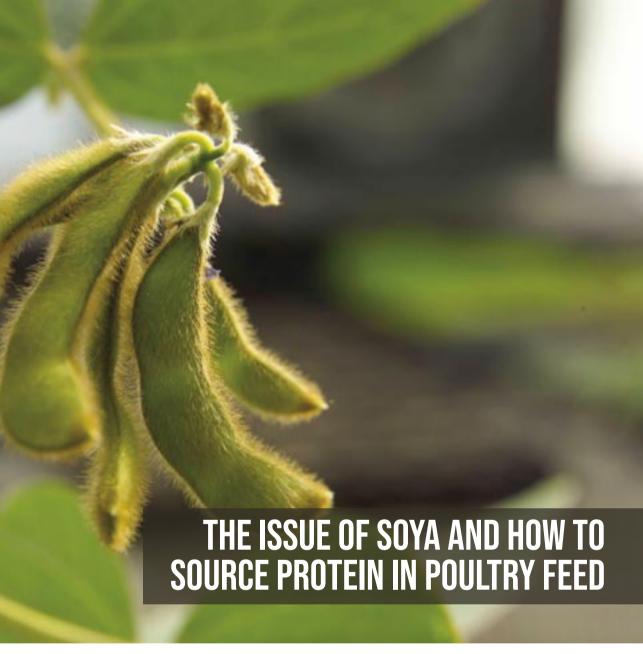
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A carefully balanced diet plays a vital role in keeping your laying flock healthy and productive.

The birds need protein to grow and energy to keep them warm and active, as well as a number of other key nutrients met from a range of ingredients optimised for the birds' performance and welfare. But how can we ensure that this diet is both healthy, and ethically sourced?

The role of soya in animal feed Feeds have for some time relied on soya as the



principal source of amino acids, which are the essential building blocks for proteins all animals need to support their normal body functions. Sova provides an ideal mix of amino acids which can be effectively balanced for optimum nutrition of laying birds.

### Sources of soya

Soya cannot be grown cost-effectively in the

European climate, so the sourcing of conventional soya is mainly from North and South America. In recent years some feed producers have bought supplies from sustainable sources in countries such as the USA and Argentina. However, negative public perception means that feed suppliers such as Humphrey Feeds & Pullets are looking afresh at how and where they source soya, and whether there is any suitable alternative.

Brazil has experienced negative headlines for concerns about the destruction of rainforest. and unethical work practices. These issues have led to a public perception that all products from the region are tainted, even though exports such as sova may have no business or geographical relationship to the deforestation or ethical issues.

"As a responsible business we are exploring how best to deliver high quality protein from sustainable sources in our poultry diets," says Kayleigh Johnson, Procurement & Formulations Manager at Humphrev Feeds & Pullets. "We care about fair and ethical practices and want to provide high quality feeds using the best ingredients from sustainable sources for our customers."

## Sustainable sova production

One solution is to buy soya production credits to balance any actual or perceived adverse impact of the soya used in feed products. Humphrey Feeds is a signatory to the Round Table on Responsible Soy Association (RTRS), a non-profit organisation promoting the production, trade and use of responsible soya. Customers can ask the company to purchase credits giving soya farmers the incentive to grow soya to a sustainable standard, without the complication and cost of segregating soy through the supply chain.

UK-wide initiatives including RTRS and the UK Sustainable Soya Initiative also encourage sustainable soya production through systems ensuring ethical standards (without deforestation, and under fair working conditions, for example). However, until the public sees the success of such projects it is not clear that they are sufficient to sway public opinion on the use of soya in feeds.

It is worth noting that Humphrey Feeds, like many UK feed manufacturers, buys soya from the USA, Argentina and Paraguay, none of

which have participated in deforestation. UK feed compounders also purchase some Brazilian soya, but in accordance with EU policies to promote sustainable forest management, soya is not sourced from areas of the rainforest cultivated since 2008.

# Alternative sources of protein for laying flocks

If soya cannot be sourced sustainably, UK feed producers could look to alternative sources of protein. These include:

### 1. Rape meal

This is a cost-effective partial substitute for soya, and as rapeseed is grown in the UK it carries lower environmental costs in terms of food-miles. However, following a ban on the use of neonicotinoids in 2018 the crop has become more difficult to grow.

#### 2. Wheat distillers

(a by-product of ethanol production) As two UK ethanol plants come back into production, it is possible that this source of protein will be both cost-effective and of sufficiently high quality to be used in poultry feeds at relatively low levels. "We will be evaluating the product and consistency of production as wheat distillers becomes available," says Kayleigh. "If standards are sufficiently high, wheat distillers may be an ideal, local (UK) source of protein."

#### 3. Sunflower meal

Sunflower meal is produced in Argentina, Ukraine and Russia and the highest grades are a good source of protein. Sunflower provides increased fibre to the diets which can prove beneficial in keeping birds calmer, but fibre levels must be closely monitored in poultry diets to avoid issues such as wet litter.

Reducing the protein requirement of diets



Rather than replacing soya in poultry feed, feed producers could reduce the protein requirement of the diet. None of the alternatives are as rich in the amino acids as soya, so feeds using any of these substitutes will deliver less protein to your flock - but this may be a good thing provided the amino acids are nutritionally balanced using synthetic amino acids.

Poultry can thrive on a carefully-formulated lower protein diet, though they are less likely to sustain production of the large size eggs currently popular in the UK. Provided that consumers accept the normal range of egg sizes naturally produced by laying flocks, producers can offer lower-protein whilst maintaining a healthy diet that supports bird longevity and welfare.

Lower levels of protein in poultry feed may also help reduce emissions, since excess amino acids are broken down in the gut through de-amination and contribute to methane output.

Supplying healthy, high quality poultry feed with sustainable ingredients Clearly there are complex reasons why elements of poultry diets may vary, as producers consistently strive to ensure the feeds deliver the best combination of protein and energy for your flock.

As Kayleigh admits: "We do not yet have all the answers - but we are addressing the challenges of sustainable soya production as part of our on-going commitment to supporting the environment."