

# The Welfare Benefits of LED Lighting

Every poultry farmer understands the importance of achieving a high standard of welfare, not only on ethical grounds but also from a profitability standpoint. The happier and healthier the birds, the better the potential profits!

To this end a great deal of attention is paid to providing the birds with the best nutrition, good water quality, good air quality, good biosecurity, a carefully tailored vaccination programme and good management.

However, in many instances, the quality of the lighting environment is one aspect of welfare that is overlooked, and this is understandable given the limited technology that conventional lighting offered to poultry farmers.

The rapid development of LED technology in recent years has led to the emergence of lighting systems that are specifically tailored to the needs of the birds.

Initially it was the energy saving advantages that attracted producers to LED systems, but the benefits go way beyond this.



Flicker-free systems are crucial to the welfare of poultry given a bird's ability to see flickering up to 205 Hz (humans see only constant light above 25 Hz). Removing flicker significantly reduces stress levels and encourages more natural behaviour, improves feed intake, reduces undesirable behaviour such as pecking and increases resistance to disease, all of which can significantly reduce mortality rates and improve flock performance.

Lumen depreciation is another important consideration. This is how well LED lights retain luminescence or light output, over time. The performance of high-quality LED lights will not diminish at the same rate as conventional systems (or indeed poorer quality LEDs) meaning that even 5 years after installation luminescence can still be up to 80% of when the lights were new.

Poultry specific systems should also be durable, IP67 to prevent water ingress and IK10 to withstand impact, enabling thorough cleaning between flocks and helping to minimise the risk of disease.

Needless to say, at Gallina LED all of our products fulfil the above criteria. The quality and durability of our purpose-built systems ensure years of trouble-free performance.

Get in touch if you would like to learn more about how you can use LED lighting to improve the welfare of your birds.

LED: Improve Performance, Improve Welfare, Save Energy!