



TOOL
BOX
by LOHMANN

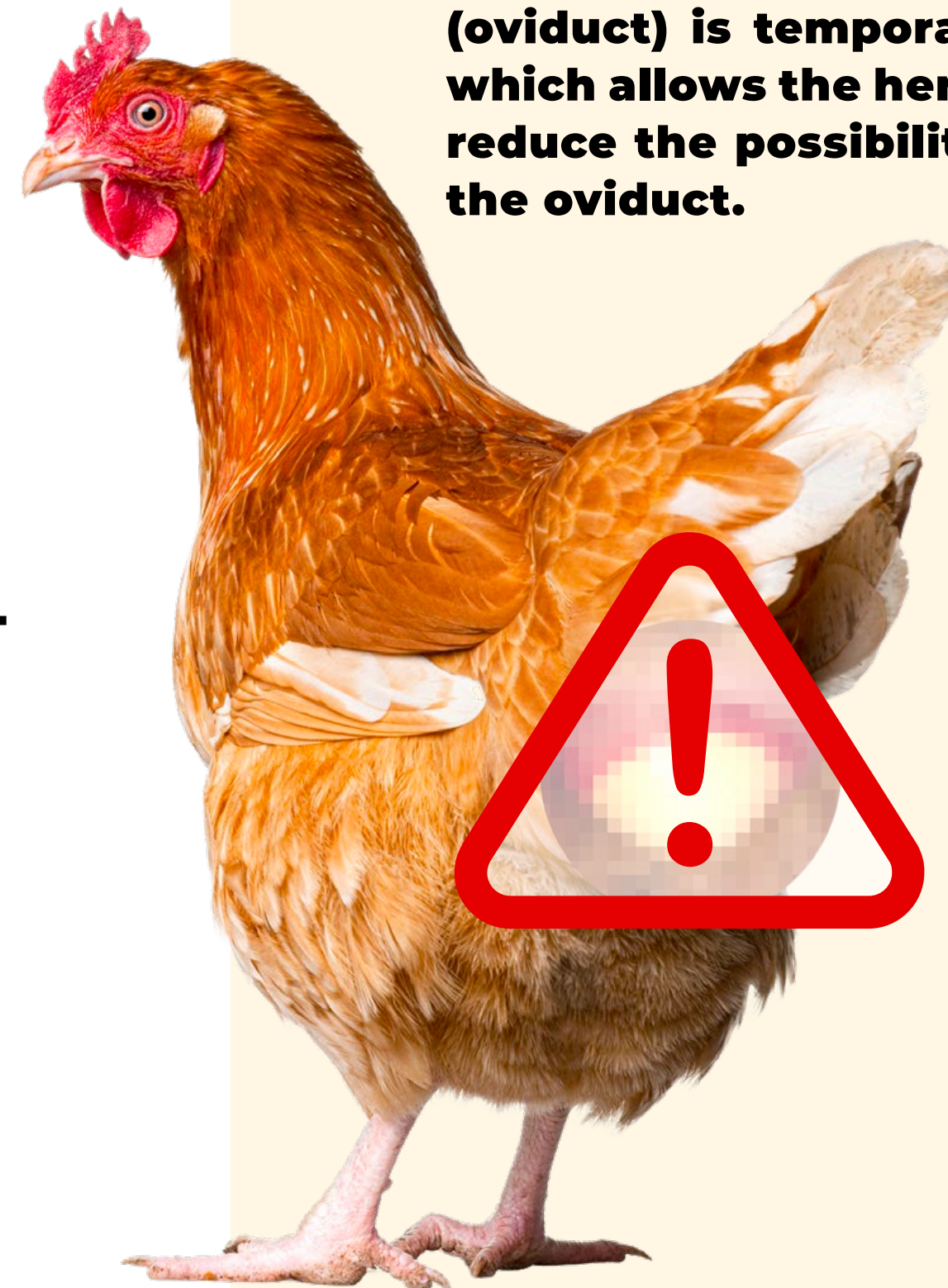
PROLAPSE IN LAYERS

PREVENTION AND TREATMENT

ENG

Prolapse in laying hens is one of the most common causes of concern amongst poultry farmers.

During the process of laying an egg, the lower part of the reproductive tract (oviduct) is temporarily turned inside out which allows the hen to lay a clean egg and reduce the possibility of bacteria entering the oviduct.



LOHMANN
BREEDERS



Sometimes the tissue does not retract after the egg has been laid and this condition is referred to as a prolapse.

- **If other hens notice the prolapse, they will be attracted to the moist, glistening texture of the oviduct which can lead to increased pecking behaviour.**
- The first indication of a prolapse problem is the presence of blood-streaked eggs. Early detection of such eggs may help to prevent further damage



Prolapse is usually related to skeletal development during rearing, regardless of the production bodyweight.

Therefore, it's important to achieve the upper limit of the target bodyweight through rear. In particular between weeks 4 -8.



What causes prolapse in chicken?

The following is a summary of conditions where prolapse related problems are most likely to occur.

Overweight or underweight birds

Overweight birds are more susceptible to prolapse as a result of general muscle weakness and a tendency to lay larger eggs.

Too much deposition of fat around reproductive organs increases the susceptibility to prolapse.

Unbalanced feed rations

Insufficient calcium in the diet will bring challenges with eggshell formation but lead to reduced muscle tone.

Calcium is important for proper muscle tone, and weak muscles may make it harder to bring the oviduct back into the body, increasing the amount of time the oviduct is exposed.

Prolapse

Incorrect application of pre-lay management and/or any nutritional changes made in the two weeks prior to the start of egg production

Reproductive age of the flock of birds

Prolapse is more likely to occur at the hens peak of production & at the period of peak egg mass as a result of the large demand placed on the hens metabolism at these times.

Hens laying double yolked eggs

The excessive size of these eggs will stretch and possibly weaken cloacal muscles.

High light intensity

Under high light intensity conditions, **birds are more likely to see and be attracted to the everted oviduct.**





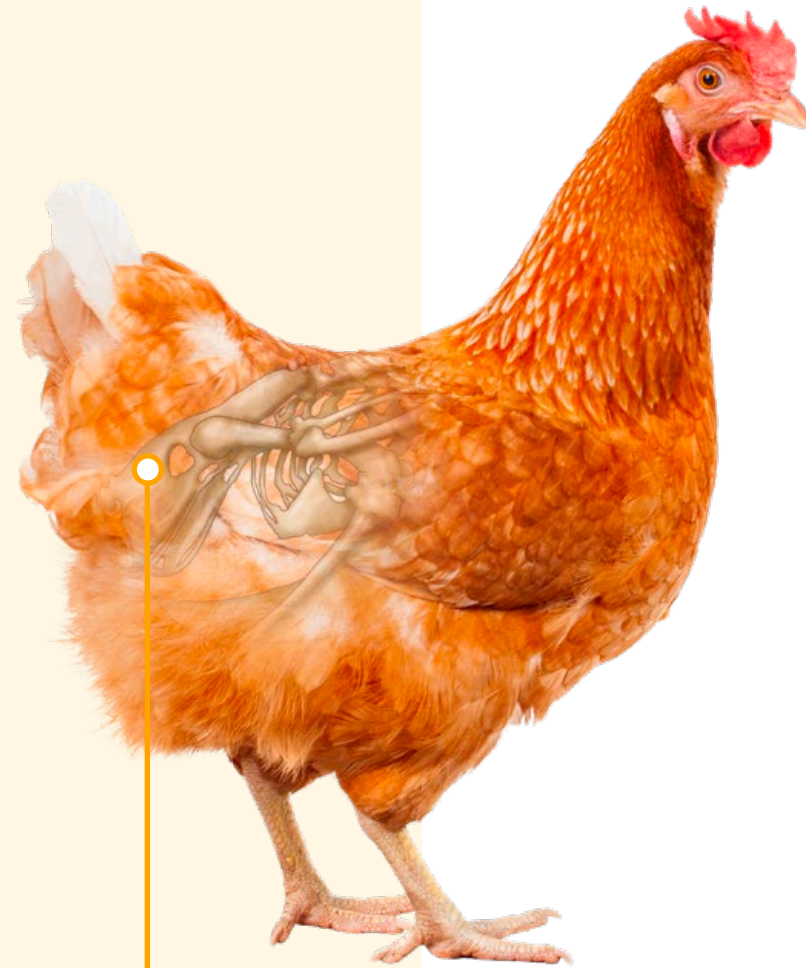
TOOL
BOX
by LOHMANN

MANAGEMENT

The potential for cases of oviduct prolapse in layers generally begins during the growing and developmental stages in rear, **when the pelvic girdle is underdeveloped, most often due to low developmental body weights.**

Having more energy in the diet than required may increase the carbohydrate level in the diet which can contribute to increased intestinal fat reserves.

A too high overall fat content in the feed will also contribute to the risk of prolapse, due to the increased accumulation of fat in the abdominal region, which in turn, narrows the egg passage causing the hens to strain themselves when pushing the egg out, often resulting in prolapse.



How to prevent prolapse in chickens?

- **The key to preventing the onset of prolapse issues is through good management.** Early detection and prompt action is key in minimizing the effects of prolapse.
- When a prolapse issue is evident in the flock we often attribute the increased mortality figures to the occurrence of the prolapse itself. This is generally not the case.
- The increase of mortality can be associated to an increase in cannibalism through picking and pecking at the inverted vent of other hens **leading to blood loss and intestinal damage.**
- Often one of the first signs we see of a prolapse outbreak is an increase in blood streaked eggs. **This should be used as a prompt to implement management techniques to reduce the impact of the issue and prevent further associated health issues.**

Note the following



Photo-stimulation should occur when the birds reach the weight and age recommended by the breeder.



Balanced feed rations are required to sustain egg production and maintain body weight at recommended levels.



Ensure that light intensity in the house is at the breeder's recommended level. In high intensity situations look to covering the windows, if present and reducing the wattage of your bulbs.



Observation is key to detect any undesired vent - pecking behaviour, before it becomes a serious issue.



Spray any prolapsed vents with a suitable medicated spray such as Oxytetravet (if possible) to aid recovery.



Poor nest box management which allows the hens to stay in the boxes longer than necessary can increase the risk of vent pecking behaviour.








TOOL
BOX
by LOHMANN

MANAGEMENT

The following tips may help reduce losses in the flock in the face of a prolapse issue

-  **Do not exceed 16 hours light duration (better 15 hours).** Also reduce light intensity (maximum 40 lux in open houses, 20-30 lux in environment control houses).
-  **Adjust ME in feed to lower limit of recommendations in developer phase.**
-  **Supplement Vitamin C @ 1 g/l drinking water in morning hours.**

Disclaimer

This TOOLBOX article remains the property of LOHMANN BREEDERS. You may not copy or distribute any portions of the article without the prior written consent of LOHMANN BREEDERS.

For more information and further toolbox articles, please visit our website www.lohmann-breeders.com or contact us directly:

LOHMANN BREEDERS GMBH

Am Seedeich 9 – 11

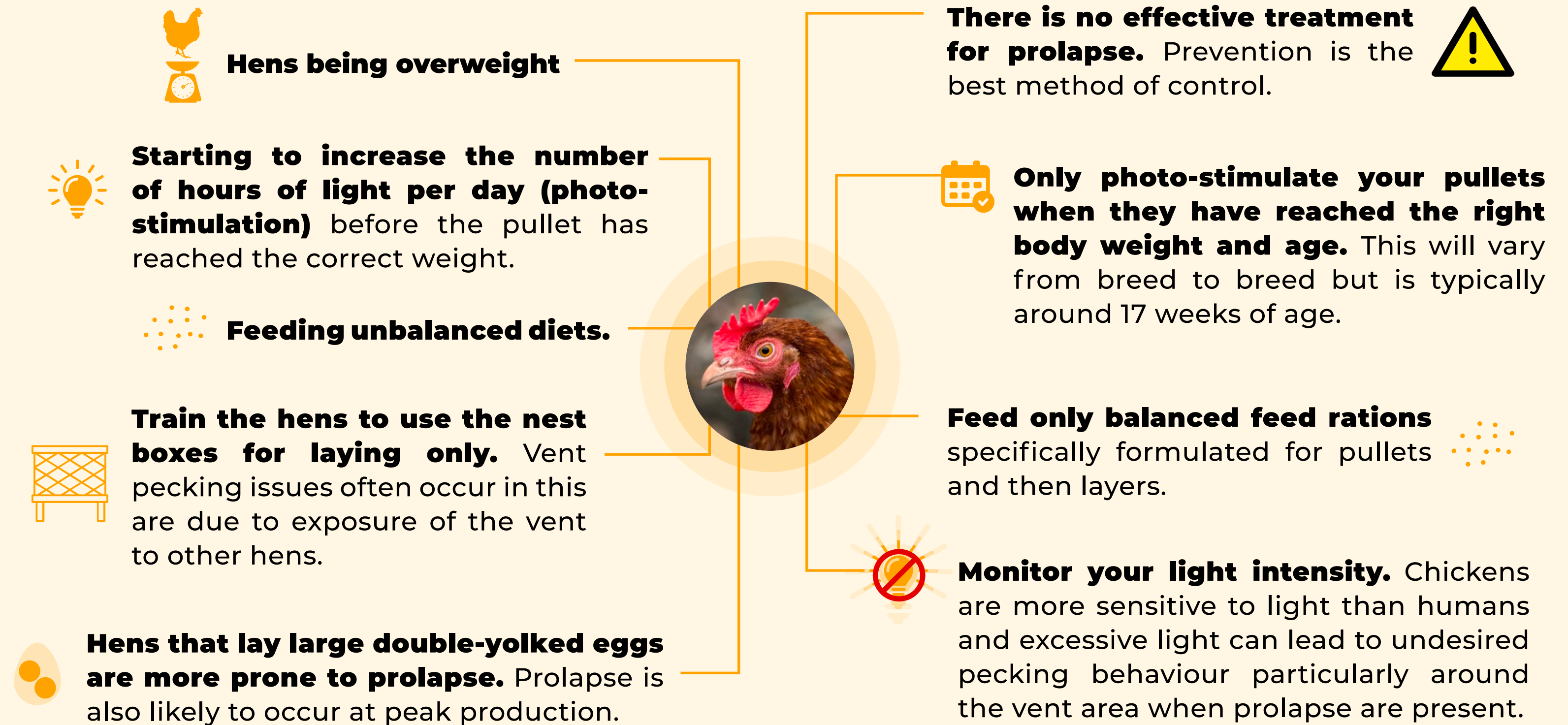
27472 Cuxhaven / Germany

E-mail: info@lohmann-breeders.com

Thereafter resume normal practices

In most cases, the onset of prolapse issues in laying hens is caused by a combination of factors.

Understanding trigger points can help prevent these issues occurring:



With reference to:

Dr. Rajesh Kumar Singh, JAMSHEDPUR, JHARKHAND, INDIA, 9431309542, rajeshsinghvet@gmail.com - July 11, 2019

Dr. Jacquie Jacob, University of Kentucky; eXtension

Dr. Martin Zuidhof, University of Alberta, Edmomton - July 18, 2002

