# DIGESTIVE SYSTEM OF LAYING HENS KEY INSIGHTS



# 5

Beak

N

Picks up feed (prefers coarse particles!) Saliva moistens feed – contains mucoproteins Coarse feed increases intake!

#### Proventriculus (Glandular Stomach)

Produces HCl & enzymes (pepsin)
pH lowered to 3–5 → supports protein digestion





#### Rectum & Caecum

Absorb water & electrolytes Site of fibre fermentation

Risk of dysbiosis from undigested protein

## Gizzard (Mechanical Stomach)

Grinds feed (to <0.1 mm!)

**Mixes digestive fluids** 

Key regulator of digestion & satiety

Coarse feed + insoluble fibre → longer retention, better digestibility, stronger immunity



#### **Small Intestine**

Duodenum: Enzymes + bile

Nutrient absorption is highly efficient pH: 6–6.8

**Energy loss during digestion** (especially proteins): adjust for hot climates!



**Conclusion** Efficient digestion starts with the right **feed texture** and ends with **healthy nutrient absorption**.

**Optimising gizzard function** and **considering energy losses** are key to high-performing hens!



### **BREEDING FOR SUCCESS... TOGETHER**

www.lohmann-breeders.com

