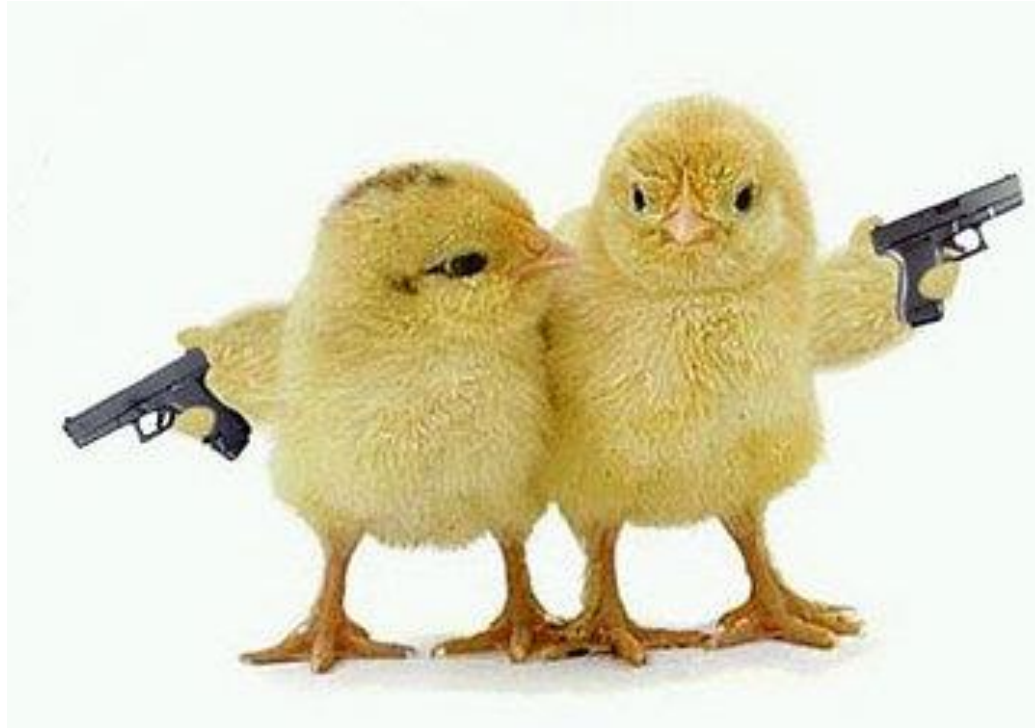


# Troubleshooting Egg Production

## in the Home Flock



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Livestock Agent

# Overview

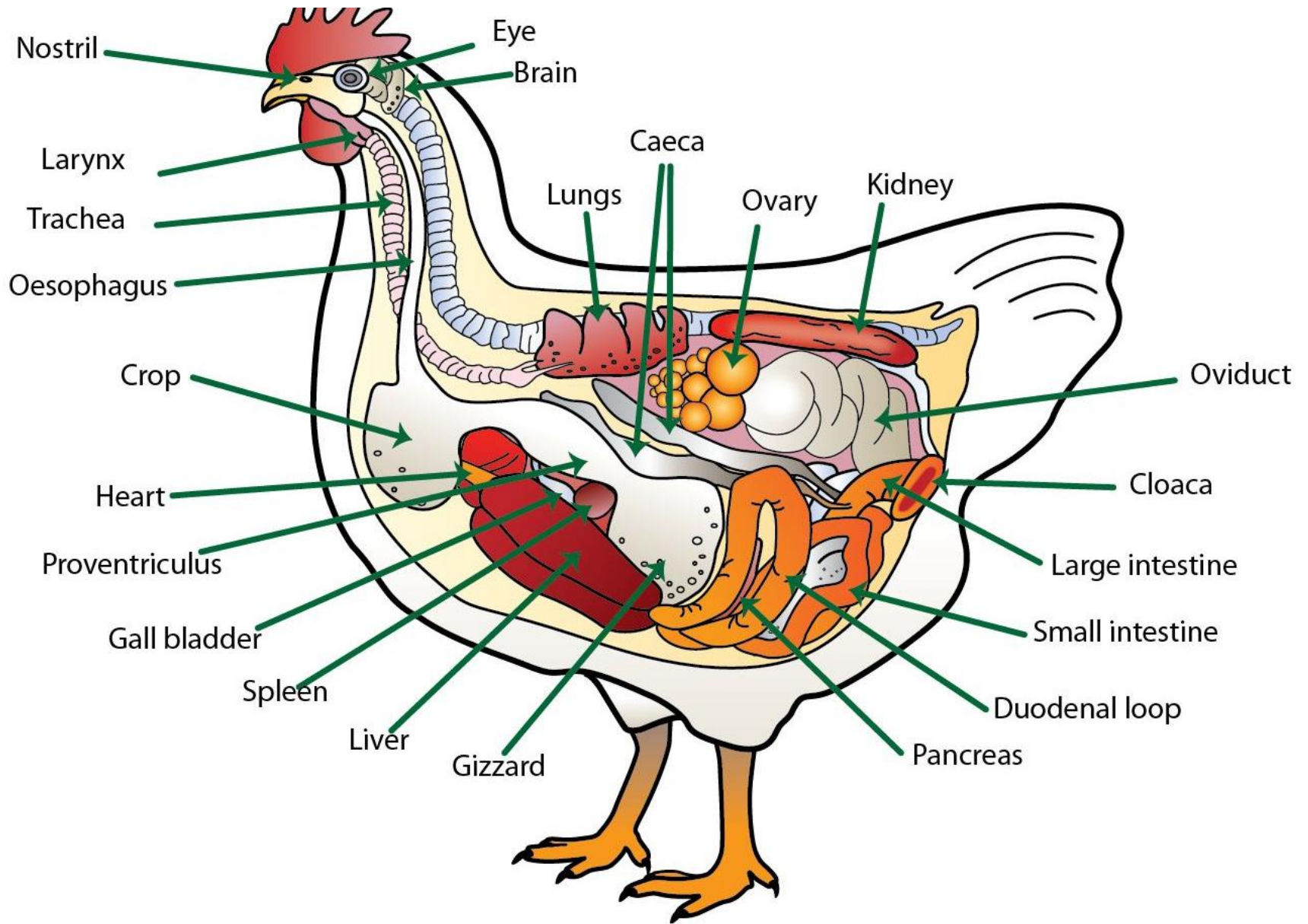
- What's Normal
  - Physiology of egg production
- Common Production Problems
  - Non-infectious
  - Infectious



# What's Normal?

- Egg Production typically begins at 18-22 weeks of age
- Production peaks at 6-8 weeks post first lay
- Dips to 65% after 12 months of laying

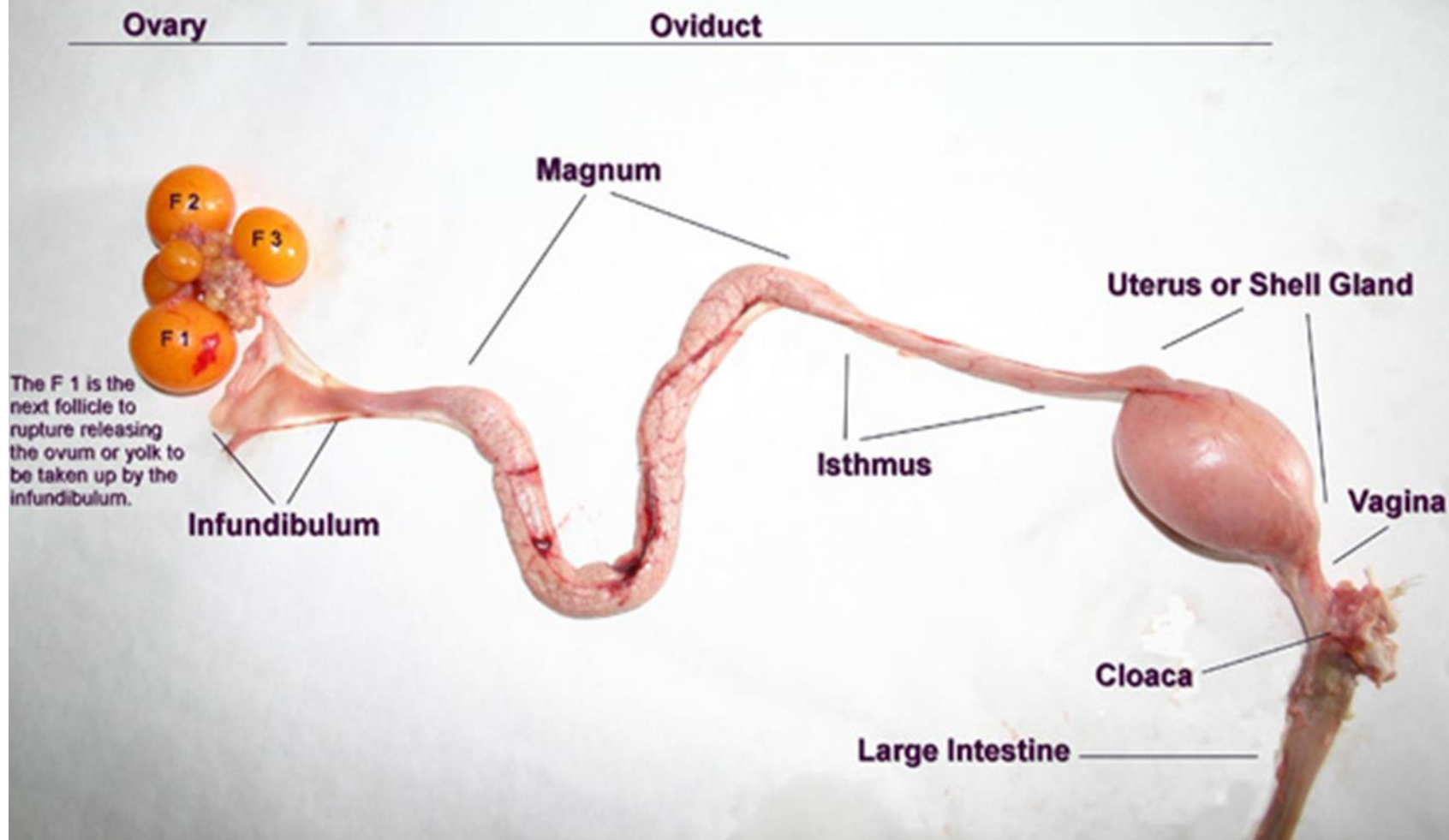








## Reproductive Tract of the Laying Hen

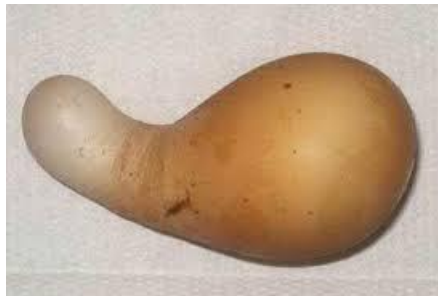
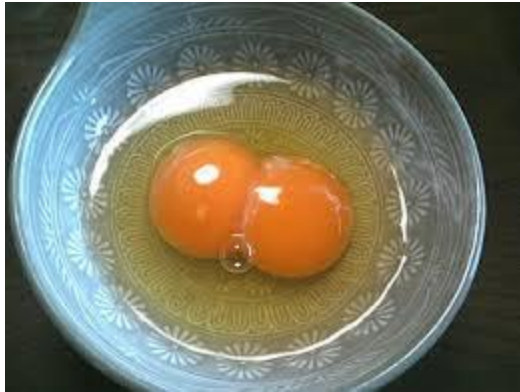


# Production Problems

- Odd Eggs?
- No Eggs?
- Fewer Eggs?



# Odd Eggs





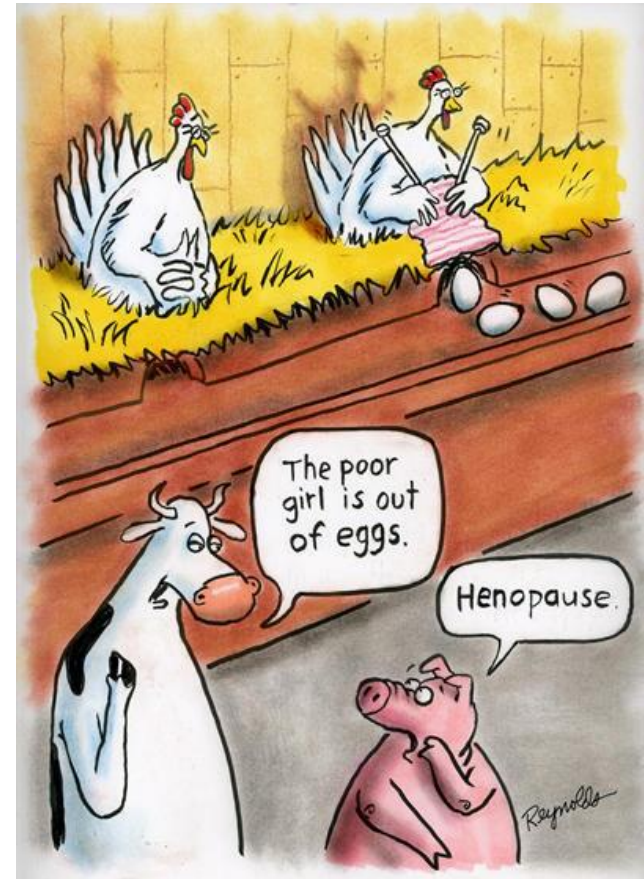
# No Eggs

- Are you certain?
  - Egg eating
  - Predators
  - Free Ranging



# Noninfectious Causes

- Aging Hens
  - Sharp drop in production at 2-3 years of age



# Inadequate Daylength

- Need 14 hours of daylight
  - May be provided artificially
- Lack of adequate light period may also cause a molt



# Stress

- Excessive handling
- Sudden weather changes
- Predators





# Feed Management Mistakes

- Out of Water
  - Most essential nutrient
- Out of Feed
  - More than several hours may result in a drop in egg production
  - Feed stored on farm for longer than two weeks may become moldy and vitamin potency decreases

# Improper Nutrition

- Balanced diet required for persistent lay
- Salt deficiency
  - Feather pecking
  - Decline in egg production
- Calcium deficiency
  - Egg shell is mostly calcium carbonate
  - Cage layer fatigue
- Vitamin D
  - Required for calcium absorption

# Improper Nutrition

- Protein deficiency
  - Poor egg production and poor hatchability
- Fat deficiency
  - Impairment of fat soluble vitamin absorption

# Parasites

- Ectoparasites
  - Anemia
  - General unthriftiness and discomfort
- Endoparasites
  - Unthriftiness, poor growth, reduced egg production
  - Can be fatal



# Infectious Diseases

- Fowl Pox
- Infectious Bronchitis
- Coccidiosis
- Newcastle disease
- Avian influenza
- Avian encephalomyelitis
- Fowl cholera
- Others...



# Questions to Ask

- How old are the birds?
- What time of year is it?
- How much feed are they consuming?
- Have any feeding changes been made lately?
- Are they getting enough clean water?
- Are there signs of disease or parasites?

# Who is Laying?

- Can Evaluate both the Persistency and Intensity of Lay
  - Bleaching
  - Handling Qualities

# Persistency of Lay

- Xanthophyll gives yolks their yellow color
  - Bleaching = Loss of yellow pigment
    - Lost and replaced in a predictable manner
  - Vent
  - Eyering
  - Earlobe
  - Beak
  - Shanks
  - Tops of Toes
  - Replaced in same order



# Loss of Pigmentation

- Vent (0-2 weeks)
- Eyerings (14 days)
- Earlobes (2.5 weeks)
- Beak (4-6 weeks)
- Bottoms of feet (16 weeks)
- Entire shank (16-20 weeks)
- Tops of toes & hock (30 weeks)



# Intensity of Lay

- Handling Quality
  - Good
    - Thin pliable pubic bones and skin
  - Bad
    - Thick skin, thick inflexible bone, hard abdomen



# Abdominal Capacity

- Measure distance between pubic bones and between pubic bone and keel bone
  - Greater spread = more productive hen





# Handling the Chronic Problem Bird

- Livestock or pet?

