



Lecture title: Egg Selection, Cleaning and Storage

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Summary:

There are three aspects to the preparation of the eggs for incubation:

1. Selection.
2. Cleaning (Disinfection).
3. Storage.

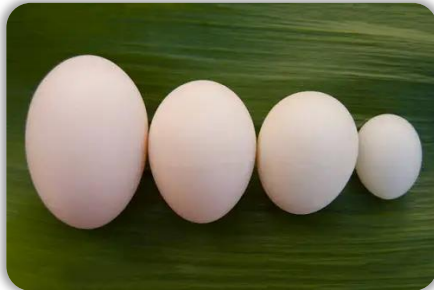


Selection of eggs for hatching

- **Select your eggs wisely :** If you are able to select your own hatching eggs, there are several things you should look out for.
- You should select eggs from **breeding hens that are well developed, mature and healthy**, they should be **compatible with their mates and produce a high percentage of fertile eggs**.
- The breeding hens should also be fed a complete breeder's diet.



- **Avoid excessively large or small eggs, or misshapen eggs** : Large eggs hatch poorly and small eggs produce small chicks.



- **Avoid eggs**

with cracked or thin shells : These eggs have difficulty retaining moisture needed for proper chick development.

- Cracked or thin shells also make it easier for disease to penetrate.



- **Using clean egg only, avoid contaminated egg** : These will block the pores in the shell and block the chicks access to fresh air.



Cleaning the eggs:



- Eggshell is porous, air and water can pass through it. Dirt and disease-bearing organisms can also pass through the eggshell. Reduce the risk of disease by **using clean eggs**.

1. Never use very dirty eggs for hatching, and if they are soiled, clean them with a dry cloth.
2. Do not wash eggs in water, water will open up the pores and give poor hatching results.
3. Be sure eggs are dry before storing.



Storage:

- Optimal level of **relative humidity** for storing hatching eggs is 70 - 85%.
- If you find mold on your eggs, the humidity is too high. Never use moldy eggs for hatching.
- The recommended storing temperature is: 10-14°C.
- All poultry eggs should be stored with the air space inside the eggs uppermost.
- Do not store eggs for more than two weeks as maximum period. After 14 days of storage, hatchability begins to decline significantly.
- Just before setting the eggs, allow them to warm to room temperature (25°C) and remove any cracked eggs.

The main effects of storing eggs are:

1. **Storage prolongs incubation time** : On average, one days storage adds one hour to incubation time. This must be taken into account when eggs are set.
2. **Hatchability is decreased** : The percentage increases with storage time after the initial six-day period, resulting in losses of 0.5 to 1.5% per day.
3. **Chick quality will be affected** and hence broiler weights can be depressed in chicks from eggs that have been stored for 14 days or more.

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