


Incubation/hatching of egg

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- Incubation is process in which fertile eggs are kept inside machine at a definite temperature and humidity for 21 days to have the next progeny
 - Incubation process is divided into 18 days period is incubator/setting and 3 days period in Hatcher.

Incubation period for different birds

- Quail : 16-17 days
- Pigeon : 18-21 days
- Chicken : 21 days
- Guinea fowl : 26-28 days
- Duck, turkey: 28 days
- Ostrich : 42 days

Method of incubation

1. Natural method : with help of broody hens(Healthy, quiet, a good sitter, have good body size)

She may be tested with dummy eggs for her interest to sit on eggs.

Broody hen should be taken out at least 2 times a day for about 30 minutes

- Hot/summer days it may be necessary to sprinkle eggs with a small quantity of water to maintain humidity
- Candling may be done on 4th to remove infertile eggs.
- Saucer shaped nest
- 10-15 eggs can be placed under one bird

Artificial methods

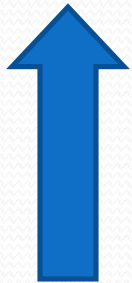
1. Still air incubators : experimental purpose

No fan inside incubator

2. Forced-draft types: used in all the country

Essential factor for hatching of eggs

1. Temperature : Most critical factor 99.7-99.8 F



Mortality of embryo, Small chicks,
Crooked toes, Shorter incubation time,
Spraddled egg



Late and poor hatchability

2. Humidity : Setter **60%** and **Hatcher 65%**

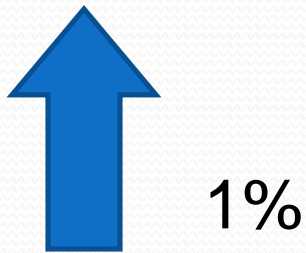
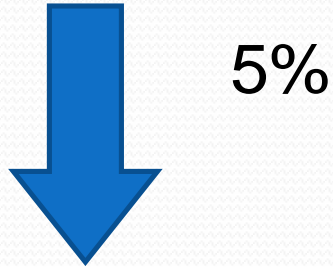


Weight loss, Small Chick




Soggy chicks, shell will be sticking to
chicks

3. Ventilation : Oxygen **21%**



Co₂ range between **0.3 - 0.5%** for maximum hatchability



4. Turning of eggs : eggs should be turned daily starting 3rd day of incubation.

The number of turnings should be 6-7 times a day at 3 hours interval.

The turning should be ceased after 18 days

Selection and care of hatching eggs

1. Egg size : 50-55gm
2. Shaped of egg : Oval, Shape index does effect the hatchability of egg.
3. Shell quality : Sound shell, clean, thick
4. Interior quality

Small size egg 80% hatchability

Extra-large eggs 71%

Cracked eggs - 53%

Misshapen eggs – 49%

Rough/thin shell 47%

Thanks