

**MJF College of Veterinary and Animal Science Chomu (Jaipur)**

**Topic -Type and form of feed and feeding method in poultry**

# Type of feed :

The correct type of feed for chickens depend on :

a)Age

b) Meat birds/laying birds or breeding birds

## **Eight type of chicken feed:**

1)Broiler feed.

2)layer feed

3)Broiler breeder feed

4)layer breeder feed

5)Flock raiser.

6)Game bird feed

7)Fermented feed.

8)Chicken feed

# BROILER FEED

## A) Broiler Pre-starter Feed (BPSF)

- Ration to be fed to **chicks** and to be used from **1 to 7 days**
- It is a kind of grain feed that has the **highest amount of protein** (CP-23%, ME-3000kcal/kg)
- Use of pre-starter diet with higher nutritional levels and nutritive solution improves the broiler performance-**grow quick and healthy**
- It is in **crumbs** form, so that the chick can **easily eat** and swallow the chicken feeds.



## B) Broiler Starter/grower Feed (BSF)

- Ration to be fed to **growing chickens** and to be used from **8 to 21 days (CP-22% ,ME-3100 kcal)**
- Fed as a **complete feed** to meat type birds-may be **crumble or pellet**
- For optimum feed intake , growth and FCR ,provisions of the correct diet nutrient density, **especially energy and amino acids** is critical
- Therefore it needs to be supported by adequate nutrient intake

- May contain **3-5% added fat** to increase energy content
- Includes **high dose of antibiotics & coccidiostat** to reduce mortality and initiate more rapid growth



### C) Broiler Finisher Feed (BFF)

- A ration to be fed to growing chickens , from **22 days to finish**
- **CP- 20% ,ME-3200 kcal/kg**
- Broiler finisher feeds account for the **major volume and cost** of feeding
- So feeds are designed to **maximise financial return** for the type of products being produced



# LAYER FEED

## A) Chick Feed for Layer (CFL)

- A ration to be fed to **chicks**. intended for egg production, from **0 to 8 weeks** (CP-20%,ME-2800 kcal)

## B) Grower Feed for Layer (GFL)

- A ration to be fed to **growing chickens**, from **9 to 20 weeks** or until laying commences (CP-16%,ME-2500 kcal)
- **Lower protein diet** –to slow growth to allow strong bones and adult body weight before laying begins
- If **high protein**-development happens quickly and **lays birds to early**



### C) Layer Feed for Phase I (LFP-I)

- A ration to be fed to laying birds from **21 to 45 weeks** ( CP-16%,ME-2600 kcal)
- **Calcium content** should be increased (3%) for strong egg shell and to avoid cage fatigue (*avoid in non laying hens as high calcium is harmful to the liver and kidney* )
- **Salt content may be decreased** to reduce incidence of wet droppings

### D) Layer Feed for Phase II (LFP-II)

- A ration to be fed to laying birds from **46 to 72 weeks** ( CP-18% & **calcium -3.5%** ,ME-2400 kcal)
- Phase I and II feed is necessary because there are changes in production, egg size, requirement of calcium, age. etc.



# **BROILER BREEDER FEED**

## **A) Breeder Chick feed for Broiler(BCFB)**

- A ration to be fed to chicks, intended for broiler breeding, **from 0 to 4 weeks** (CP-20%,ME-2800 kcal)

## **B) Breeder Grower Feed for Broiler (BGFB)**

- A ration to be fed to chickens , from **5 to 22 weeks** (CP-16% ,ME-2750 kcal)

## **C) Breeder Layer Feed for Broiler (BLFB)**

- A ration to be fed to laying birds, **from week 23 onwards** (CP-16%, ME-2800%)

**D) Breeder Broiler Feed for Male (BBFM)** - a ration to be fed to male birds , from week 23 onwards. (CP-15%,ME-2750%)

# LAYER BREEDER FEED

**A) Chick Feed for Layer Breeder (CFLB)** -a ration to be fed to chicks, intended for layer breeding, from **0 to 4 weeks** (CP-20%,ME-2800kcal)

**B) Grower Feed for Layer Breeder (GFLB)** - a ration to be fed to chickens, from **5 to 22 weeks** (CP-16%, ME-2600kcal)

**C) Breeder Layer Feed (BLF)** -a ration to be fed to laying birds , from week **23 onwards** (CP-17% ,ME-2600kcal)

**D) Breeder Layer Feed for Male (BLFM)** - a ration to be fed to male birds , from week 23 onwards (CP-16%, ME-2600%)

# FLOCK RAISER

- The layer feed is another type of feed for all the **mixed flock** of chickens you have
- Whether the flock has some **egg laying hens** and some **young chickens** or even some rooster
- This is the **all-around feed for all ages**
- However, feeding this type of feed to the **hens that lays eggs** means that the feed has **less calcium** that hen needs for egg production
- Resulting in **weak eggs** and the **bodies** of those hens also weakens.

# GAME BIRD FEED

- The game bird feed - **a high protein amount**, but less than the broiler feed
- This is usually fed to **show chickens**
- It can make their **feathers shinier** and have the chicken gain a bit more weight than normal chickens
- Some people also use this feed for **elderly chickens** for them to gain more weight
- This feed is a bit **more expensive** than what you usually feed the whole flock.

# FERMENTED FEED

- Fermented feed is made by adding any type of **feed of your choice** and **mixing it with warm water** and placing it in a container or an airtight bucket and letting it sit in hot or warm weather for 2 to 5 days
- This triggers the **fermentation process** that changes the chemical composition of the feed and **adding beneficial bacteria** to it
- It is like pickles for the chicken, but feeds instead



# CRACKED CORN

- The cracked corn is a type of feed that is **very cheap**, but **does not** have enough protein and nutrients that the chicken need
- It is a type of feed that **is high in fat** and very low in nutrients
- Some people usually use cracked corn as a treat for their chickens or can be used as their feed during winter, where fats is needed



# FORMS OF FEED

- Chicken and poultry feed comes in three forms: **Mash, pellet, crumble**

## Particle size and feed consumption

- Birds tend to **eat larger particle size** as chickens has the ability to pick the larger cereal grains
- **Feed consumption will improve as the particle size is reduced** to medium by mash , pellet and crumbles preparation compared to whole grains



# PROCEDURE

## Complete feed

( A mixture of individual feed ingredient , ground)



## Mash (Dry)

Addition of water

Mash feed is subjected to temp.& steam and forced to pass through die made of holes

Wet Mash



## Pellets(3-5 mm)

For chicks above 3 weeks of age



## Crumbles

For chicks up to 3 weeks of age



# Mash Feed

- It is complete form of feed that is **finely ground** and mixed so that birds can not easily out ingredients
- It is ground feed and the usual end product resulting from **mixing poultry feedstuffs**
- Provides well balanced diet
- Simple manufacturing process
- *Ground feed is **not so palatable** and does not retain their nutritive value so well as unground feed*



# Pellet form

- Composed of **mash feed that are pelleted**
- Birds usually **consume more** of pelleted ration than the same ration in mash form
- **Advantages:**
  - Reduction in dustiness of feed
  - Higher **nutrient density**
  - Prevention of selective feeding
  - Higher **palatability** and increase feed intake
  - Destruction of pathogenic microorganism
  - Increase **digestibility** of certain nutrients
  - Improved growth and feed conversion



## Cont'd..

- Easy handling of feed
- Suitable to storage
- **Reduction in segregation of high density** ingredients and micro nutrients
- Reduces wastage of feed

### ➤ **Disadvantages :**

- Higher **cost**
- **Susceptibility of mycotoxins** if properly not dried
- **Increases water intake** and wet litter problems
- No further mixing of any ingredients
- Increases **cannibalism**
- Destruction of vitamins and certain feed additives

# Crumbles

- Pellets pass through **rollers** —→ crumbs
- Crumbles lies between **mash and pellet**
- These crushed pellets are used -to feed **younger birds**
- **Coarseness** of crumbles: Texture is intermediate between mash and pellet
- Enables young chicks to **eat more**
- **Reduces** cannibalism



# Feeding Methods

- A well balanced ration improperly fed will not give the most satisfactory result unless **proper method** is followed
- Various feeding methods :
  - ❖ **Whole grain feeding method**
  - ❖ **Scratch grain/mash method**
  - ❖ **Grain mash method**
  - ❖ **All mash method**
  - ❖ **Wet mash method**
  - ❖ **Pellet feeding**
  - ❖ **Controlled feeding practices**
    - Restricted feeding
    - Phase feeding
    - Forced feeding





**THANK YOU**