

Poultry Diseases

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General information about poultry industry

- 1930 Merkez Tavukçuluk enstitüsü
- 1952 The first import of pure race
- 1963 Import of Parent Stock (Damızlık)
- 1970 Increase in investment
- 1990 Modernization
- 2000 Product quality and Marketing

Development in broiler sector for the last 30 years

Consumption of chicken per person (kg)

1980-81	1.7 kg
1996-98	9.7 kg
2005	13-14 kg

Main problems of poultry industry

Issues affecting poultry production in Turkey and on which intensive work should be done:

1. Highly productive hybrid breed

- Main factor in development in poultry sector
- Insufficient hybrid breed in Turkey

2. Feed raw materials

- Sufficient feed raw materials are not produced in Turkey
- Poultry population are getting increase each year but there is no increase in production of feed raw materials

3. Vaccine, medicine and feed additives

- Production and utilization of local vaccines are getting decrease.
- Studies on vaccine effectiveness are not enough!
- Almost all medicine which used to solve the problems of the diseases are imported
- Most feed additives are imported

4-Health problems and quality of product

- Poultry diseases can be evaluated in two different ways;

Affect on poultry health

Affect on public health

- Most of the diseases which are seen in the world are also seen in our country
- In regions where poultry farming is intense, problems related to infectious diseases are more common.
- Implementation of preventive programs
- Implementation of product quality control systems
 - GMP

Other subjects

- Diagnosis of the diseases are performed laboratory.
- After this stage the necessary treatment is being performed or the necessary protective measure are taken

Diagnostic Methods

1. Bacteriological Methods
2. Methods on Virology
3. Methods on Mycology
4. Methods on Parasitology
5. Histopathologic Methods
6. Toxicological and Chemical Analysis
7. Serologic Methods
8. Molecular Methods

Serologic methods

1. Agglutination
 2. Hem agglutination
 3. Hem agglutination Inhibition
 4. Precipitation
 5. Neutralization
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1. Immunofluorescence
 2. Radio-immunology
 3. Immuno-enzymology

Molecular methods

1. Analysis on protein
2. Electrophoresis (SDS-PAGE)
3. Immunoblot (Western Blot)
4. Analysis on Nucleic Acids
5. Polymerase Chain Reaction (PCR)
6. Reverse Transcription (RT-PCR)
7. Restriction Enzyme Analysis (RFLP)