

Research facilities Turkeys

Wageningen University & Research has the possibilities to carry out experiments with turkeys. At Carus there are possibilities for experiments between 0 and 21 weeks of age on different scale from 5 to 40 birds per pen. All experiments will be conducted in floor pens with or without a slatted floor for excreta collection. Experiments in floor pens without slatted floors are used for testing feed composition, feeding strategies and feed additives (efficacy and tolerance studies). Experiments in floor pens with slatted floors are suitable for effects of feed ingredients and feed additives on digestibility (digestibility studies). Turkeys will only be housed on slatted floors during the main period (excreta collection). Data will be collected per pen per feeding phase on feed intake, body weight gain, feed conversion ratio and mortality. Also litter quality, foot pad dermatitis, bone quality, carcass quality, processing yields and intestinal health parameters can be carried out. Blood and tissues can also be sampled for additional measurements.

Examples of experiments

- Effect of diet composition on production performance of turkeys
- Effect of feeding strategies on production performance of turkeys
- Effect of feed additives on production performance of turkeys
- Effect of feed ingredients or feed additives on nutrient digestibility in turkeys

Accommodation and animals

Experiments can be carried out on a different scale:

- In case the experiment is considered to cause discomfort for the turkeys the next housing guidelines will be applied.

§ 32 experimental units of 3.00 m².

Body weight (kg)	Min. m ²	Min. m ² /animal	Animals/m ²	Min. height (cm)	Min. length feed trough per animal (cm)
< 0.3	2.00	0.13	7.7	50	3
> 0.3 – 0.6	2.00	0.17	5.9	50	7
> 0.6 – 1.0	2.00	0.30	3.3	100	15
> 1.0 – 4.0	2.00	0.35	2.9	100	15
> 4.0 – 8.0	2.00	0.40	2.5	100	15
> 8.0 – 12.0	2.00	0.50	2.0	150	20
> 12.0 – 16.0	2.00	0.55	1.8	150	20
> 16.0 – 20.0	2.00	0.60	1.7	150	20
> 20.0	3.00	1.00	1.0	150	20

- In case the experiment is considered not to cause discomfort for the turkeys and housing conditions should be according to commercial conditions:

§ 32 experimental units with 9 turkeys until 21 weeks of age

§ 36 experimental units with 40 turkeys until 21 weeks of age (males)

Measurements

Standard observations: feed intake, body weight gain, feed conversion ratio and mortality.

Additional observations:

- Litter quality: visual scoring system and/or dry matter content
- Foot pad dermatitis: visual scoring system
- Bone quality: chemically (bone ash, Ca, P) or physically (breaking strength)
- Carcass quality: visual scoring system (breast blisters, focal ulcerative dermatitis)
- Processing yields: griller, breast, thighs, legs, wings, cloacal fat, remaining carcass
- Intestinal health: viscosity, lesions, microflora
- Blood samples: hormones, metabolites, etc.
- Body composition: chemical analysis



Turkeys in semi-practical accommodation