Goal: Study the effect of the **cooling process** and **pH** on the tenderness of pork

Design: 6 pigs were divided into two groups by pH (low vs high).

After slaughtering each pig, two cuts were made, and each cut was treated with either Tunnel cooling, or Fast (conventional) cooling.

After a storage period the tenderness of each piece was measured

Goal: Study the effect of **2 different types of Feed** and **6 different storage conditions** on the **rancidness of steaks** from cattle given the feeds

Design: 4 cows were randomized on the two types of feed so that 2 cows were given each type.

After slaughtering 6 steaks from each animal were used in a storage experiment.

Two types of packaging were used along with 3 storage periods (2, 5, and 8 weeks).

After the storage period the rancidness of each steak was determined by an LTBA-measurement.

Example IV: Weed Biomass in Wetlands (Oehlert, 2000, Ex. 16.7)

- Experiment studies the effect of
  - **nitrogen** (4 levels of nitrogen)
  - **weed** (3 levels)
  - **clipping treatments** (2 levels: clipping / no clipping)

  on **plant growth** in wetlands.
- Experiment was performed as follows:
  - 8 **trays**, whereof each holds three artificial wetlands (rectangular wire baskets)
    - 4 of the trays were placed on **a table near the door** of the greenhouse
    - 4 of the trays on **a table in the center** of the greenhouse
- On **each table**, we randomly assign one of the trays to each of the 4 **nitrogen treatments**.
- Within **each tray**, we randomly assign the 3 **weed treatments**.
- In addition, each wetland is split in half. One half is chosen at random and will be clipped, the other half is not clipped.
- After 8 weeks: measure fraction of biomass that is nonweed.