

Rancidness of steaks.

Key words: Split-plot

Description

In order to investigate the effect of two different types of feed (1 and 2) and 6 different storage conditions on the rancidness of steaks from cattle given the feeds, 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 (A and B) 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. The data, which are part of a larger experiment, are given in the following table:

Animal	Feed	A			B		
		2	5	8	2	5	8
1	1	2.0	2.3	2.3	0.6	2.1	2.1
2	2	0.8	1.7	1.4	0.4	0.8	1.2
3	1	1.2	2.1	2.7	0.9	1.5	1.9
4	2	0.4	0.9	1.3	0.1	1.1	0.9

Number of observations: 24

Variable	Description
animal	Cow identification, numbered 1-4
feed	Values 1,2
pack	Values A,B
storage	Values 2, 5, 8 weeks
LTBA	rancidness measurement

Source

The Royal Veterinary and Agricultural University, Denmark.

Analysis

Split-plot with 3-way ANOVA treatment structure.