Rate of Gain Worksheets

SUCCESSFUL MARKET LIVESTOCK PROJECTS include enough information about how much weight is gained, how much feed is consumed, how efficiently feed is used and how much money is spent and earned for you to judge the success of your project this year and plan improvements for future projects.

3 NECESSARY INGREDIENTS:

1. Pencil, paper, and scale (or weight tape)
2. Records of everything you weigh, feed, buy and sell, or earn
3. Weights of project animal(s) over time and feed

INFORMATION YOU WILL NEED TO KNOW AND HOW TO FIND IT:

1. The rate at which an animal gains weight can be calculated from your weight records.

AVERAGE DAILY GAIN (ADG) = Weight gained (lbs) = Pounds gained per day = lbs/day
Number of days fed (days)

Ex.: A calf weighed 90 lbs when purchased and it weighed 290 lbs after feeding it for 100 days.
Weight gained = 290 lbs – 90 lbs = 200 lbs.
ADG = 200 lbs = 2 lbs/day
100 days
Question: Is ADG in May the same as ADG in July? Can you change your ADG?

Calculate your ADG Prior to Fair Entry Day

Animal #1 _____ 1bs = _____ lbs/day Animal #2 _____ lbs = _____ lbs/day
Days days

Calculate your ADG from Official Fair Weight

Animal #1 _____ 1bs = _____ lbs/day Animal #2 _____ lbs = _____ lbs/day
Days days

2. The amount of feed an animal eats per day can be calculated from your feed records.

AVERAGE DAILY FEED INTAKE (ADFI) = Total Feed (lbs) = lbs. eaten per day = lbs/day
Number of days

Ex.: A pig ate 550 lbs of feed (including pig chow, grain, concentrates, milk solids, etc.) in a Period of 100 days.
ADFI = 550 lbs = 5.5 lbs of feed eaten per day
100 days
Question: Why is ADFI different from ADG?

Calculate your ADFI

Animal #1 _____ 1bs = _____ lbs/day Animal #2 _____ lbs = _____ lbs/day
Days days

3. The amount of feed required for each pound of an animal gains can be calculated from weight and feed records.

FEED CONVERSION (FC) = Total Feed (lbs) = Pounds eaten per pound gained = lbs/lb
Weight gained (lbs)

Ex.: A goat ate 150 lbs of feed (hay, grain goat chow, concentrates, milk solids, etc.) during a period of 100 days. It weighed 30 lbs when purchased and it weighed 80 lbs after 100 days.

Weight gained = 80 lbs – 30 lbs = 50 lbs.

FC = 150 lbs = 3 lbs of feed eaten/lb gained
50 lbs

Question: Do you want your FC to be a big number or a little number?

Calculate your FC

Animal #1 _____ 1bs = _____ lbs/lb
lbs

Animal #2 _____ lbs = _____ lbs/lb
lbs

4. The amount it costs for each pound gained by an animal can also be calculated from feed and weight records.

FEED COST PER POUND OF GAIN = Cost of Feed ($) = $/lb

Ex.: A turkey ate 2 bags of turkey feed, which cost $40.00 ($20.00 per bag). It weighed 1/4 lb when obtained and it weighed 20 and 1/4 lbs at the end of the project. Weight gained was 20 lbs.

Feed Cost = $40.00 = $2.00/lb
Lb of gain 20 lbs

Question: Can you change your feed cost per pound of gain? How?

Calculate your Feed Cost per Pound of Gain

Animal #1 $ _____ = $ _____ /lb
lbs

Animal #2 $ _____ = $ _____ /lb
lbs