

Updated C-Lock Inc. Feed Intake and Efficiency Test Guidelines (revised February 2024)

These guidelines summarize C-Lock Inc. Feed Intake and Efficiency Evaluation testing requirements for *C-Lock Certified Data*. C-Lock recognizes that various breed associations and individual seedstock providers may have additional and/or differing guidelines. For breed specific testing and data reporting standards, please refer to their policies. Standards for *C-Lock Inc. Certified Data* have been adapted from the [“Beef Improvement Federation Guidelines for Feed Efficiency Testing.”](#)

Animal Information and Record Requirements

- Animal RFID and visual ID
- Sex and breed/breed composition
- Individual birthdates or estimated age
- Individual animal chute body weight (BW) and dates
- Measured diet dry matter (DM) and diet ingredient composition

Always submit a [pre-experimental checklist](#) before beginning a trial using SmartFeed.

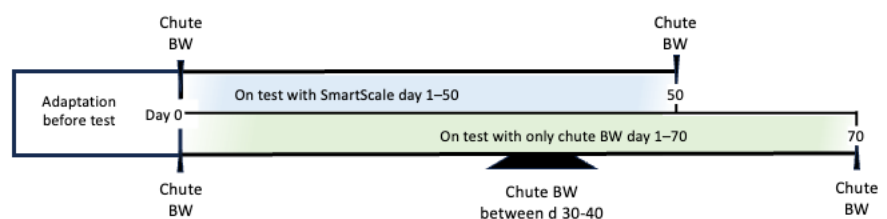
Testing Requirements

1. A minimum of **42 days of valid feed intake data** are required, with **one valid day of intake in the first 5 days** and **one valid day of intake in the last 5 days of the test period**.
2. **With SmartScales:** A **49-d test** is required for validation of average daily gain (ADG) using daily SmartScale BW measurements. **Chute BW measurements are required** within two days of the test start/end dates.
3. **Without SmartScales:** A **70-d test** period is recommended for accurate validation of ADG using chute BW measurements. Start and end test chute BW should be measured within two days of the test start/end dates, and a third mid-test BW should be measured between day 30 to 40.
4. Stocking rate of 7 animals per SmartFeed is recommended. However, please consult C-Lock Inc. for recommendations based on animal age, size, and diet type.
5. During the performance test, animals should have *ad libitum* access to water and a consistent diet with no additional feed or grazing. Rations used in tests with growing bulls should contain at least 2.4 Mcal ME/(kg DM). Rations used in tests with finishing steers should contain at least 2.9 Mcal ME/(kg DM).
6. An adaptation period of 21-d is recommended for animals not well adapted to the test diet and/or animals that have not previously been housed together. Animals previously adapted to the test diet and housed together may use a shorter adaptation period.

*It is recommended to verify the weight of your chute scale using known weight (*i.e.*, yourself, feed bag) before weighing cattle*

Valid feed intake data must have less than a 5% unknown intake. Days where animal feed intake is restricted (*e.g.*, weigh days, sickness) or equipment failure occurs should not count as valid intake days.

C-Lock data team will notify midway through your feed efficiency test with the current number of valid intake days.



Schedule for chute body weights (BW) during a feed efficiency test. Beginning BW is measured on day 0, and the first day (d 1) of the test is the following day. For tests with SmartScale, final BW is measured on day 50. For tests *without* SmartScale, mid-test BW is measured on day 30 to 40 and final BW is measured on day 70.