

four by 16 feet. The steers were allowed to exercise for a short period at intervals of from seven to 10 days. Cattle and pens were sprayed every three weeks with a 1.5 percent DDT solution to control flies.

The feeds used in each ration were as follows:

- Lot 1 Hay, cottonseed meal and ground snapped corn
- Lot 2* Hay, cottonseed meal and dried citrus pulp
- Lot 3 Hay, cottonseed meal, two pounds ground snapped corn and dried citrus pulp
- Lot 4 Hay, cottonseed meal and fresh grapefruit
- Lot 5 Hay, cottonseed meal, two pounds ground snapped corn and fresh grapefruit.

* Fed only in the 1946-47 and 1947-48 trials.

All steers in a trial were fed the same amount of hay and cottonseed meal. The hay was mixed Carpet, Bermuda, Bahia and Pangola grasses grown at the Range Cattle Station. In the 1945-46 trial the cottonseed meal contained 41 percent protein, in the two subsequent tests 36 percent. The hay provided roughage, always essential when citrus is fed, and the protein was necessary to balance the ration.

The ground snapped corn was a white variety of unknown origin. Grapefruit was either seedling or Marsh Seedless, picked at from six to 10-day intervals and quartered as used.

Steers were fed twice a day at 8:00 A.M. and 4:30 P.M. The cottonseed meal was mixed with the dried citrus pulp and poured over the fresh grapefruit at feeding time and the hay was given after the morning feeding.

During the trials all steers had access to a mineral mixture. The amount of some of the ingredients was changed over the three-year period as it was found advisable, either for nutritive reasons or because of the cost, to alter the formula. The mineral mixtures were made up as follows:

	1945-46	1946-47	1947-48
	Pounds	Pounds	Pounds
Steamed bonemeal	52.00	26.00	29.00
Defluorinated superphosphate		25.00	29.00
Common salt	33.89	33.89	34.22
Red oxide of iron	3.39	3.39	3.42
Copper sulfate	0.68	0.68	0.34
Cobalt chloride	0.04	0.04	0.02
Cottonseed meal	5.00	5.00	2.00
Blackstrap molasses	5.00	5.00	2.00
TOTAL	100.00	100.00	100.00

Rib cuts, consisting of the 9th, 10th and 11th ribs from each side of the carcass, were taken for physical, chemical and cooking tests. The data on the meat will be published later.