

tening feed would be insufficient to support a large volume of long-term grain feeding operations in the foreseeable future. For these reasons it is desirable that cattle fattened in this area be fed to a moderate degree of finish. Cattle grading "U. S. Good" by the old system of grades, or "U. S. Choice" by the system of grades started January 1, 1951, sell to best advantage in North Florida at present.

Market Weight.—Heavy steers do not meet with favor in this section. The housewife prefers cuts from carcasses weighing no more than 600 pounds, which means that cattle should be marketed by the time they weigh 1,000 pounds on foot. This preference emphasizes the need for early-maturing cattle that can be fattened at an early age. Carcasses from steers weighing 750 to 900 pounds on foot sell most readily.

FATTENING STEERS IN DRY LOT RATION

Balanced Ration.—A balanced ration is one that furnishes the essential nutritive elements in adequate amounts and proper proportions to support the desired production most efficiently.

Total Digestible Nutrients.—The greatest need in a fattening ration is for total digestible nutrients or, more correctly, available energy. Fattening feeds such as corn furnish the major part of the total nutrients or energy required, although cattle may get part of their energy from hay and other roughages. When excessive amounts of a protein supplement such as cottonseed meal are fed, the excess is used for energy.

After the needs of maintenance are met, excess energy from any feed is stored in the form of fat. Thus, the higher the ration is in energy value, the larger the proportion that will be available for fattening after maintenance (or overhead). Grains and other concentrates are high in energy value, roughages relatively low. Consequently, if the ration contains too much roughage, less will be left for fattening after maintenance needs are satisfied.

Protein.—Protein is needed for replacing worn-out body cells, for growth of muscular tissue, for various body fluids such as digestive juices and for other body functions. Without adequate protein in the ration gains will be unsatisfactory and feed will not be utilized efficiently. Most fattening feeds are low in protein content and a protein supplement is needed to balance the ration.