



National Diploma Animal Production

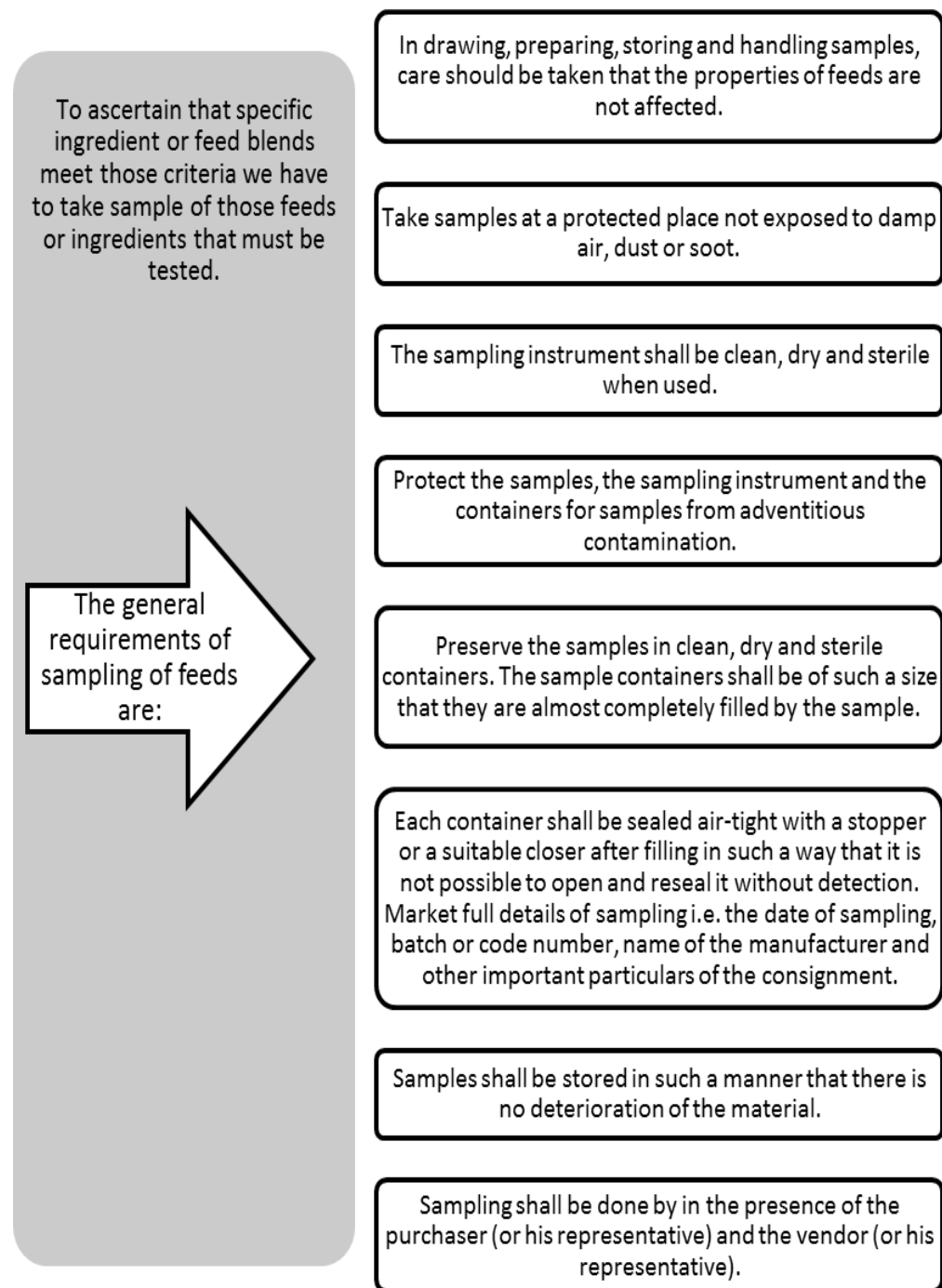
Livestock Production Part 5

Handout I5

Sampling Procedure

Sampling

Quality control specifications of various ingredients and compound feeds are laid down to ensure that they meet the minimum quality specifications, suitable for inclusion in the feed blends and indicating the maximum proportions of inclusion of feed stuffs.



When assessing the quality of samples we first have to identify the areas that can be tested to determine the quality of the tested samples. The following table gives a few examples of the test that

can be conducted on feed blends and ingredients. These test can be quantified; in other words the results can be counted to give the feed blend or ingredient a quality rating.

Sampling Procedures for Feed Analysis

In all cases, at least 10% of the packages should be sampled. A minimum of approximately 1kg should be collected from each load. All cores should be combined in an airtight container.

The normal recommendation is as follows:

Packages/ Bags	Number to be Sampled
1-10	1-3
11-25	2-4
26-50	3-6
51-75	6-8
76-100	8-10

All containers in a single consignment of the material drawn from a single batch of manufacture shall constitute a lot. If a consignment is declared to consist of different batches of manufacture, the batches shall be grouped separately and the containers in each group shall constitute a separate lot.

Samples shall be tested for each lot to ascertain conformity of the material to the requirements of the specification.

The number of containers to be selected from the lot shall depend on the size of the lot and shall be in accordance with column 1 and 2 of table.

Number of Containers to be Selected for Sampling

Lot Size	Number of Containers to be Sampled
	2
16 to 50	3
51 to 100	4
101 to 150	5
151 to 300	7
301 and above	10

The containers shall be chosen at random from the lot and for this purpose a random number table as agreed to between the purchaser and the vendor shall use.

Arrange all containers in the lot in a systematic manner from any container count 1, 2, 3, etcetera, and so on. Every 5th container shall be withdrawn from the lot to give a sample for test.

Test Samples and Reference Samples

The next step is to prepare the individual samples of the ingredients for assessment. To do this we draw, with an appropriate sampling instrument, equal quantities of the material from different parts of each container selected accordingly.

The total quantity of the material drawn from each container shall be not less than 1.5 kg. Mix all the portions of the material drawn from the same container thoroughly. Take out about 0.75 kg of the material and divide into three equal parts.

Each portion thus obtained shall constitute the test sample representing that particular container and shall be transferred immediately to clean and dry sample containers and sealed air-tight. These containers must be labelled accordingly. The individual samples obtained shall be formed into three sets in such a way that each set has test sample representing each container selected. One of the sets shall be for the purchaser, another for the vendor and the third a reference.

The Reference Sample:

Reference samples shall consist of a set of test samples and composite samples, and shall bear the seal of the purchaser and the vendor and shall be kept at a place agreed to between the two.

Testing of Samples:

Samples shall be tested for each lot in order to ascertain the conformity of the material to the requirements of the predetermined quality standards. A lot shall be considered as conforming to the specification when the test results of the individual samples meets all the set quality criteria.