The following data was collected from three manufacturers of ground beef patties. Each establishment followed a raw material testing protocol and similar finished product protocols. Each manufacturer's protocol and results are briefly explained below.

Manufacturer A

Combo Testing

The combo testing protocol required that each load of twenty combos be divided into four (A, B, C and D) five-combo lots. A grab sample was taken from each combo (13 pounds or 5,897 grams). Each combo sample is ground and three (3) 25-gram samples are pulled. The three (3) samples are combined to make up a 75-gram composite for the combo. The five composites (75g each), one from each combo, are then combined to make a 325 gram composite sample for the lot. Each lot that tested positive for E.coli 0157:H7 was condemned. Each lot that tested negative was used for the manufacture of ground beef patties.

Finished Product Testing

This protocol has been designed to provide a 95% confidence level of detection at 1/500g in the specific facility.

Every 3000-pound batch of finished product is tested. 50-gram samples are collected at the final grinder head at three distinct points in the batch; front, middle and end. Half of each 50-gram sample is placed in a sterile sample bag to represent the specific batch. The other portion is placed in a sterile composite sample bag. Samples from 4 batches are composited into the sterile composite bag and analyzed as one sample. If a positive is obtained from the composite, representing four 3000-pound batches, then the independent samples for those four batches are analyzed.

Testing Methodology

Initial test is an ELISA based screen. Presumptive results are confirmed using standard cultural methods.

Results

The data summarized in the following three examples indicates that in those instances when a portion (lot) of a load has tested positive and the remaining portions (lots) tested negative, that the use of the negative lots did not show contamination in the finished product.

Example 1

In this example a load of boneless beef 50/50 trimmings was pre-screened following the above protocol for combo testing and only lot C from the load tested positive. That portion of the load was sent to a rendering company and the balance of the load was used for the production of ground beef patties. Lots A and B from the load were used to manufacture ground beef patties for a customer requiring serial sampling. Through the serial sampling no positive results were obtained.

Example 2

In this example a load of boneless beef 90/10 cow trimmings was pre-screened following the above protocol for combo testing and only lot C from the load tested positive. That portion of the load was returned to the slaughterer and the balance of the load was used for the production of ground beef patties. Lots A and B from the load were used to manufacture ground beef patties

that were tested under , above finished product testing protoc . Through the serial sampling no positive results were obtained.

Example 3

In this example a load of boneless beef 90/10 cow trimmings was pre-screened following the above protocol for combo testing and lot A from the load tested positive. That portion of the load was returned to the slaughterer and the balance of the load was used for the production of ground beef patties. Lot B and C from the load were used to manufacture ground beef patties that were tested under the above finished product testing protocol. Through the serial sampling no positive results were obtained.

Manufacturer ∪

Combo Testing

The combo testing protocol required that each load of combos be separated by establishment number and then by bone date. The following chart details the number and weight of samples taken from each combo.

# of Combos w/single Bone Date	Number of Samples From Each Combo	Total Analyzed
10+	Divide lot into two combo lots and take 37.5 grams per combo and composite into 75 grams per lot	750 g
9	Divide into four two combo lots and one single combo lot. Take 37.5 grams from each combo in the composite lots and 75 grams from the single combo lot.	375 g
8	Divide into three two combo lots and two single combo lots. Take 37.5 grams from each combo in the composite lots and 75 grams from the single combo lots.	375 g
7	Divide into two two combo lots and three single combo lots. Take 37.5 grams from each combo in the composite lots and 75 grams from the single combo lots.	375 g
6	Divide into one two combo lot and four single combo lots. Take 37.5 grams from each combo in the composite lots and 75 grams from the single combo lots.	375 g
5	One 75 gram sample per combo	375 g
4	One 75 gram sample per combo and one 75 gram sample from any one of the four combos (at random).	375 g
3	One 75 gram sample per combo and two 75 gram samples from any two of the three combos (at random).	375 g
2	Two 75 gram sample per combo and one 75 gram sample from any one of the two combos (at random).	375 g
1	Five 75 gram samples.	375 g