

HYGIENE AND QUALITY ASSURANCE IN POULTRY SLAUGHTERHOUSES: A PRACTICAL EXAMPLE OF APPLICATION OF A HAZARD ANALYSIS AND CRITICAL CONTROL POINT (HACCP) PROGRAMME.

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SUMMARY:

The present work fundamentally consists in the introduction of an HAZARD ANALYSIS AND CRITICAL CONTROL POINTS PROGRAMME (H.A.C.C.P.P.) in an industrial poultry slaughterhouse in Spain.

INTRODUCTION:

The H.A.C.C.P.P. is carried out under the protection of the E.C. Guidelines 93/43/C.E.E., dated 14/06/1993 in whose Article 3.2 points out the importance of the introduction of such a program, in order to guarantee the safety of their processed product. Thus, a precise plan has been worked out, for an industrial slaughterhouse that slaughters and processes 31,000 chickens per day from a unintegrated circuit, this supposes that it does not have a direct control on the livestock that is received. This work consists exclusively in optimizing its job with the existing installations in the above-mentioned slaughterhouse. On the other hand, it is necessary to describe the most important points where this program can be improved, in the hypothetical case that the slaughterhouse controls the process of chickens and if reforms could be put into effect, which due to their costs, are impossible nowadays.

METHODS:

The process is observed in the flow chart (figure.1). The points where the contamination is controlled, can be seen in tables 1,2,3 and 4.

RESULTS:

Controlling the aforementioned points immediately after the H.A.C.C.P.P. would be much more efficient.

1.- Control of production: 1.1.- Salmonella control on reproductive hens. (ICMSF.1991) 1.2.- Control on feed (Frazier. et al.1985) 1.3.- Control on hygiene in incubation wards. (ICMSF.1991) 1.4.- Control on the supplying farms. By controlling the production, the sanitary state in which the chickens reach the slaughterhouse are secured to a great extent, furthermore homogenizing the batches, are achieved by size and weight, by which way the stunning, slitting, scalding, and plucking are much better optimised (ICMSF.1991, Goodwin.1993, Valls.1993).

2.- Optimization of stunning: On having all the chickens of similar size and weight during all the procedure, the optimum electrical discharge for each batch is made more specific (Goodwin.1993, Valls.1993).

3.- Scalding: To improve the procedure there are three existing possibilities: 3.1.- to install a multi-stage scalding system during various stages. 3.2.- to install a scalding system with a previous washing stage. 3.3.- to install a scalding system that uses some germicidal chemical compounds (Veerkamp.1991.1990, Valls.1993).

4.- Plucking: Hygiene in plucking, although difficult to control, can be improved to a great extent if the plucking machines are cleaned with detergent and/or disinfectant solutions, taking advantage of the unloading space between lorries (ICMSF.1991,Valls.1993).

5.- Evisceration: This stage of the process would be spectacularly improved with the installation of an automatic eviscerating machine, which would assure a total evisceration with continuous internal washing of the carcass (ICMSF.1991,Valls.1993).

CONCLUSION:

The improvements described before cannot be undertaken immediately by the aforementioned slaughterhouse, due to the high economical investment that is needed. Therefore, an improvement of the process controls with the present installations and conditions of the slaughterhouse has been tried.

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