

A STUDY ON THE PROCESSING TECHNIQUES OF PRESERVED GOAT MEAT

Meng Xianmin, Liu Nanyu, Zhang Suquan
and Ma Lizhen

Dept. of Food Science, Shanxi
Agricultural University, Taigu,
Shanxi, P.R.China

ABSTRACT

In this study, a new formula and the corresponding processing technique were proposed. With rational selection of fresh goat meat, utilization efficiency was increased by 3.62 times, economical profit increased by 2.7 times, compared to the commonly used techniques. Four kinds of preserved goat meat of different flavors were formulated. This study is of importance in enriching meat market by supplying preserved goat meat, and will play an important role in promoting goat production in Shanxi province.

Preserved meat is characteristic of the traditional Chinese foodstuff. However, the preserved meats in the market are only pork and beef products. In order to sufficiently use the goat resources of Shanxi province, and to explore new goat products, we, in 1985, started a systematic research project of new goat meat products. Eight products have been put into practice, including braised goat meat, goat bacon, goat sausage and so on. A detailed study was specially conducted on the processing techniques of preserved goat meat.

EXPERIMENTAL METHODS AND DESIGN

MATERIALS AND TREATING PROCEDURES

The local fresh cherron and frozen goat meat were used as raw materials in this study. The other ingredients included sugar, glucose, table salt, soy sauce and spices.

The fresh or the thawed frozen meats were deprived of fat and dendon (5% of the fat was allowed with). The lean meat was then sliced, chopped and mashed up for use.

All the additives were separately mashed and passed through a 0.5 mm sieve. Different flavors of spicing agents were then prepared according to the prescriptions, in either solid or liquid form.

EXPERIMENTAL METHODS

The experiment was divided into four groups with each of the spicing agents: sweet flavored, peppery flavored, fruit flavored and walnut flavored.

When preparing the spicing agents, the amount of the major ingredient was first singled out by the method of "0.618", and the optimum amounts of the others were then determined by the method of multiple descending dimensions.

DESIGN OF THE PROCESSING PROCEDURES

LEAN MEAT SEVERANCE----DENDON REMOVAL
----SLICING---LEAN MEAT MIX---MINCING
----CHOPPING----FURTHER MIX----FLAVOR-
ING---MOLDING---SHAPING----REMOISTING
----BAKING---GLAZING---PACKING---CHECK-
ING---PRODUCT.

ANALYSIS OF THE EXPERIMENTAL RESULTS

Processing of the preserved goat meat foodstuff. The key procedures, such as stuffing and treating techniques are quite different from those when dealing with other preserved food.

Raw meat can be selected from all parts throughout the goat body, without any limitation that only buttock meat is used in the processing of other preserved meats. Through an analysis of 25 slaughtered goats, the buttock meat accounted for 13.72%, while the lean meat of the whole body took

63.45%, Therefore, meat utilization was increased by 3.62 times, and the profit increased by 2.7 times, compared to the technique only using buttock meat. The analysis of the products showed that the contents of protein and micronutrients approximated that of the preserved meat of using buttock meat.

The treating procedure is reasonable. The muscle fibers are shortened after being chopped and mashed, which makes it easy to digestion. The addition of phosphates enforced the milkiness, and also improved its tastes and tenderness. All this would be of great help for its consumption.

Molding is standard. this brings the product an uniform shape, which is convenient for packing and shipping.

The shaping procedure uses nontoxic plastic film as matting material, shortening the shaping time to about 50% of the other techniques, and saving energy by about 50%.

The experiment shows that the proper moisture content in the product should be 10-15%. The product would be deteriorated when moisture content is over 15%.

The processing techniques of preserved goat meat can be expanded to the meat processing of other animals and poultry, and it is also applicable to the production of all kinds of fruit sheets.