INTRODUCTION
TYPICAL of the food industry, the poultry industry faces the challenge of nutritional labeling. The assignment of accurate caloric values to turkey products is compounded by the relatively large number of convenience products now available to the consumer. Previously published data (Scott, 1956; Watt and Merrill, 1963) show that cooked turkey ranges from about 175-250 calories/100g sample (Table 1). The purpose of this research was to determine the heat of combustion for turkey breast and thigh, raw and cooked, with and without natural proportions of skin and subcutaneous lipid.

RESULTS & DISCUSSION
A STATISTICAL analysis of the data, using analysis of variance techniques, indicated that treatment (cooking), type of meat (breast or thigh) and method of preparation significantly influenced the caloric content of turkey (Tables 2 and 3). In addition, the moisture content of meat was significantly influenced by cooking and method of preparation.

On the average, moisture values were lowered by cooking by 9.5%. Cooking, therefore, had a significant effect on caloric content. As shown in Table 2, breast calories increased from an average of 156 calories/100g of raw meat to 203 calories/100g of cooked meat, and thigh increased accordingly from 155 to 220 calories/100g of meat.

The removal of skin and obvious de-
posited fat affected both the caloric and moisture values significantly. As would be expected, the removal of skin and deposited fat resulted in increased moisture values; it also decreased the relative caloric value of the sample. Thus, one can speculate that additions of fats or oils to whole turkey or turkey parts, as commonly used in programs yielding self-basting products, would increase their caloric content.

The results of this investigation generally confirm that the caloric content of cooked turkey falls within the range of published data. The data on raw meat differ somewhat, however, from those in the literature. Raw breast and thigh contained 140–130 calories/100g, respectively. One normally would expect thigh meat because of its greater intramuscular lipid content to have a higher caloric value than breast meat. Since the opposite was observed, there is the probability of greater variation among thigh muscles than among breast muscles. Indeed, the standard deviation of values for thigh was three times greater than that for breast. Thus, the method of sampling is critical with thigh muscles, and suggests that a comparison of breast with thigh meat should be made between individual muscles, such as Biceps femoris and Pectoralis superficialis.

REFERENCES
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