

ELENCO N. 1

Principi di funzionamento e operatività della strumentazione XRF

Preparazione e lettura NIRS di un campione di fieno di erba medica

Descrizione dei metodi di preparazione dei campioni di alimenti di origine zootecnica

ELENCO N. 2

Gestione dei rifiuti pericolosi e non pericolosi prevalentemente di origine chimica

Gestione dei rifiuti pericolosi e non pericolosi prevalentemente di origine sanitaria

Gestione dei RAEE (Rifiuti di Apparecchiature Elettriche ed Elettroniche)

ELENCO N. 3

Modalità e scopo della creazione di "Filtri" nel software applicativo Excel

Illustrare i principali scopi del software applicativo Excel

La funzione "Trasponi" nel software applicativo Excel



INTRODUCTION

It is now well accepted that consumers in most countries prefer to purchase meat with lower levels of fat than formerly. The main reason is the possible association between high levels of saturated fat and heart disease. However, there is a strong body of opinion which maintains that fat in meat contributes to eating quality and that reducing fat to too low levels will reduce satisfaction at a time when consumer interest in the quality of food in general is increasing. The dilemma is discussed in this chapter—what is the evidence for the role of fat in meat quality and what are the consequences of reducing fat?

The question is more complex than first appears. In practice, reductions in fatness are achieved on farms by changing breeds, sexes, production systems, weights and ages and each of these may exert effects on meat quality independently of fatness. Meat quality can also be affected by the way animals are handled before slaughter and carcasses processed after slaughter. In the latter case there is good evidence that carcass fatness modifies the effects exerted.

The aim of this chapter is therefore to unravel some of the direct and indirect associations between carcass fatness and meat quality.

DEFINITIONS OF MEAT QUALITY

In this chapter the main emphasis will be on eating quality, usually determined by taste panels and defined in terms of tenderness (texture), juiciness and flavour. Other attributes contribute to the overall appreciation of meat when eaten but these three are the most important, with tenderness being the most important of all (Asghar & Pearson, 1980).

Eating quality is usually assessed in taste panel tests in which the meat is prepared, cooked and presented in carefully controlled ways and standard scoring systems are used. Useful information can also be obtained in consumer tests in which people cook and eat the meat themselves and compare with past experience. Often the results of trained- and consumer-panel tests are in broad agreement although the former are considered more accurate (Wood *et al.*, 1986; Medeiros *et al.*, 1987). Objective tests are valuable although only tenderness can be reliably assessed this way. Measurements made using the Warner-Bratzler shear press or the Instron materials testing instrument correlate quite well with taste panel assessments of tenderness (Rhodes *et al.*, 1972; Harris, 1976). Moreover, results can be readily compared between experiments.

Visual appearance is an important aspect of meat quality especially at the point of sale. The ratio of lean to fat influences consumer choice as do colour and wetness (drip loss). Finally, presentational characteristics, including the firmness of tissues and cohesiveness between them, are important to consumers and butchers.

INTRODUCTION

Until recently, producers of cattle, pigs and sheep as sources of palatable protein for human consumption were not concerned with the extent of fat accretion concomitant with the accretion of muscle mass. Reasons for a low interest in reducing fat deposition included: the assumption that intramuscular fat (marbling fat) in bovine muscle is important for palatability; the relatively low cost of feeds in the USA, Canada and some countries of the European community; and little concern about the effects of fat on human health. Most of these factors have been radically changed in the last decade so that today there is a major impetus to produce a lean muscle product for human consumption.

The belief that intramuscular fat improves palatability (mainly juiciness and tenderness) applies particularly to cattle and is most strongly held in the USA. The US attitude to marbling fat has developed for a number of

