

Meat ageing in burn sickness.

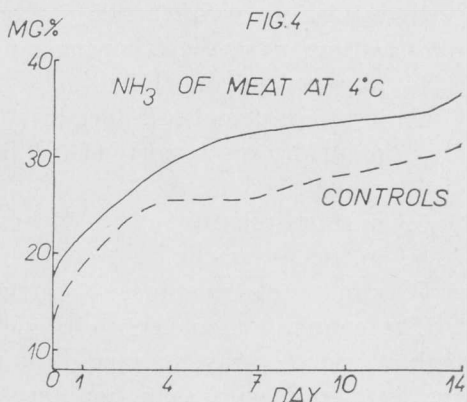
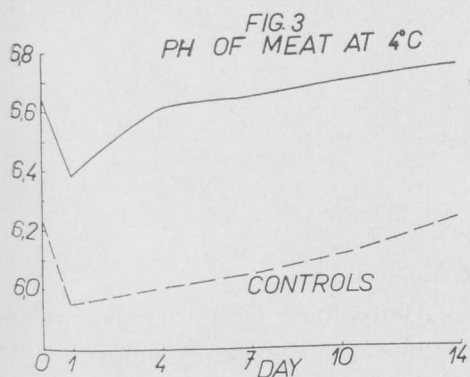
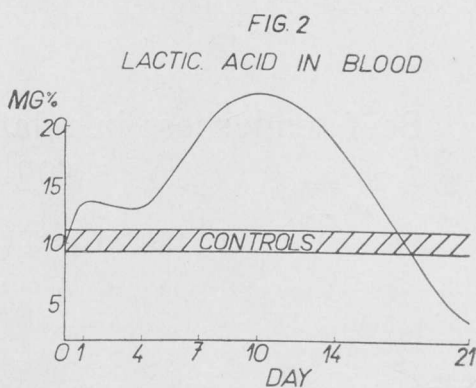
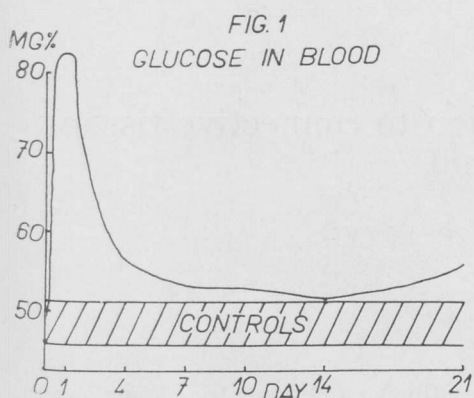
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The meat utilization of animals slaughtered in the course of burn sickness may come into consideration at extraordinary events in mass rate. Because of food shortage in such circumstances, it is necessary to reckon with making use of animals destroyed like that, for the purpose of shambles. The aim of our study was to determine the manner which in the changed metabolism of burned animals has effected the biochemistry of their muscular tissue.

The experiments were provided on a model of a slaughter ruminant represented in this case by a goat. In the group of goats there was provoked an uncontact burn of the second and the third degree and on 20 % of body surface on the average. During the course of the burn sickness the aerobic glycolysis in blood by means of glucose and lactic acid estimation has been followed up. In the case the clinical picture of the sickness developed to a prognosis quoad vitam that means infaustible, the animals were slaughtered. It was done in the second or third week after burn. The animal meat was stored at 4° C for the time of 14 days. The process of meat ageing was followed up by means of pH value and the NH_3 amount estimation. The amount of glucose in blood increased evidently on the first up to the fourth day after burn. The amount of lactic acid began to increase at the end of the first week and reached the top in the second week of the sickness course. The dynamics of the meat acidity process was rather the same in the controls as in burned animals. Meat pH values of burned animals were however of about 0,5 pH higher on the average in the course of the whole 14 days interval. The NH_3 amount in meat of the burned animals was more increased as well during the whole time of storage in comparison with the controls. It was exceedingly evident first of all after the fourth day of meat storage. (Figure 1—4).

In burned animals there occur carbohydrate metabolism changes due to the aerobic glycolysis disturbance which we found in the estimated glucose and lactic acid values. KORŽEVENKO, IVANOVCEV (1965) also refer in a similar way to fast starting hyperglycemia after burns in animals. SILOV, PILJUŠIN (1962) describe an often, however unconstant hyperglycemia in the first days after burns in human beings. The reports concerning the effect of



changed metabolism on the biochemistry of muscular tissue are very abrupt. KORŽEVENKO, IVANOVCEV (1965) found worse meat acidity. The results were reached in experiments provided on 2 calves and pigs only. GUIRGIU *et al.* (1967) refers however to a very serious metabolism change in burned pigs even. They prove mainly histamin in the muscle near the places of burns.

REFERENCES

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