

THE TAUREAU DE CAMARGUE AOC SPECIFIC FEATURES OF AOC CAMARGUE BULL BEEF MUSCLE

PICARD B., SANTÉ-LHOUELLIER V., FIOT I., GA TELLIER P., DURAND D., MICOL D.

AOC Taureau de Camargue bulls (*di Biou* and *Brava*) are by-products of Camargue-style bullfighting culture. Their muscle is very slow-oxidative, with few fast-twitch muscle fibres. The deep red colour can present stability concerns during conservation. The meat has a very low intramuscular fat content and a very high proportion of C18:3 fatty acids.

Keywords: taureau de Camargue, AOC, muscle, fatty acids, quality, meat, colour

MICROBIAL ECOLOGY OF FRENCH CHORIZO

IMPACT OF TECHNOLOGICAL PARAMETERS ON PRODUCT SAFETY

CHRISTEANS S., DORCHIES G., CHA CORNAC J.P., LEROY S., TALON R.

In this research project funded by FranceAgriMer (formerly Office de l'Élevage), microbial ecology of Chorizo processed by five different companies has been studied. It was found that the raw materials are contaminated by spoilage flora and pathogenic bacteria. However, the manufacturing process does eliminate the pathogenic flora and to a variable extent the spoilage bacteria.

Keywords: chorizo, bacterial ecology, manufacturing process

NATURAL PRESERVATION OF DRY SAUSAGE

INHIBITION OF *LISTERIA*

MONOCYTOGENES GROWTH IN DRY SAUSAGE USING LACTIC BACTERIA

RIV OLLIER M., CHRISTEANS S.

The ADIV, under the framework of the European TRUEFOOD (Traditional United Europe Food - Contract FOOD-CT-2006-016264) programme, has conducted research on using lactic bacteria for the natural preservation of dry sausage. The study focused on three *Lactobacillus sakei* strains (IM8, DM2 and DM3) previously selected for their ability to produce anti-*Listeria* bacteriocins in vitro. The aim was to confirm whether conserving pork meat (raw material) under natural preservation conditions enabled these three strains to reproduce their anti-*Listeria* effect during pilot production of dry sausages. Assessments run on the bioprotective effect of the *L. sakei* strains showed that adding lactic bacteria IM8 resulted in a significant $1 \log_{10}/g$ drop in the pathogenic bacteria compared to the $0.5 \log_{10}/g$ drop with the other two strains (DM2 and DM3). A protocol optimization phase is scheduled to be followed by demonstration sessions in order to enable a technology transfer so that interested industry producers can adopt the natural preservation method employed.

Keywords: natural preservation, lactic bacteria, Listeria, dry sausage.

VOLATILE ORGANIC COMPOUNDS IN MEAT PRODUCTS CONTAINING A HIGH CONCENTRATION OF OMEGA-3

POLYUNSATURATED FATTY ACIDS

SCHLICH THERLE-CERNY H., OBERHOLZER D., SOTTNIKOVA I., SCHEEDER M.R.L., HADORN R.

The fatty acid composition of dry-cured ham and bacon produced from porks fed a diet enriched in long-chain omega-3 (n-3) polyunsaturated fatty acids showed more polyunsaturated fatty acids, especially more α -linoleic acid C18:3n-3, eicosatrienoic acid C20:3n-3, and eicosapentaenoic acid C20:5n-3. Their susceptibility to autoxidation, analysed by dynamic headspace analysis revealed 1.6 to 4.5 fold higher signals in the experimental meat products for volatile aldehydes, such as pentanal, hexanal, heptanal, and nonanal, as well as for 1-penten-3-ol compared to the meat products manufactured from fed animals a traditional diet. Solvent extraction combined with olfactometry yielded more intense signals for butanoic acid (rancid/sweaty odour), and 2-heptanone (cheesy), 2-undecanone (odour like oxidised frying oil) and 1-octen-3-ol (mushroom-like odour) in the experimental bacon compared to the control sample. 2,4-(E,E)-Decadienal, another oxidation product of e.g. linoleic acid, exhibiting a fatty odour like oxidised frying oil, was also detected more intensely in the experimental bacon compared to the control. The aldehydes and vinyl alcohols could be useful markers for lipid oxidation determining the quality of meat products enriched in long-chain polyunsaturated fatty acids.

Keywords: linseed oil, omega-3 fatty acids, salted dried meat products, fat oxidation, aroma, VOC

KINETICS OF THE DROP IN PH BETWEEN 18 AND 72 H POST-MORTEM pH PATTERNS IN CRUDE AND BONED HAMS

VA UTIER A., GAULT E., BOULARD J.

This study produced detailed indications of pH time-course patterns over a period critical to industrial operators, i.e. 18 to 72 h *post mortem*. Following the initial *post mortem* decay phase, pH rallies slightly (by +0.03 to +0.04) before stabilizing. This recovery, which reaches values just above the measure of precision, remains a systematic trend. This slight recovery in pH takes place in a post-mortem time-range that varies between slaughterhouses, generally between 18 and 27 h.

The 18-24 h *post-mortem* period is therefore sufficiently unstable to introduce bias into measurements of ultimate pH. A measure at 30 h *post mortem* would give more reliable results.

Keywords: ultimate pH, sorting, ham



English

Summary

vigie  iande

Le réseau d'information scientifique
et technique de la filière viande

ABONNEZ-VOUS pour participer
au réseau professionnel et
recevoir par courriel : résultats de
recherche, colloques, infos...

INSCRIPTION GRATUITE SUR
<http://www.vigie-viande.info>