

KEYWORD INDEX

- 2-alkylcyclobutanones, 459
2D electrophoresis, 287
30 kDa protein, 295
3-methylbutanal, 511
 κ -carrageenan-based film, 381
 μ -calpain, 281
 ω -3, 107
abattoir, 299, 341, 353
absorption, 711
accelerated chilling, 597
acceptance, 565
accommodation, 97
acid meat, 287
actin, 493
active package, 383
active packaging, 407
adipose tissue, 173, 655
ageing, 83, 221, 275, 525, 673
 time, 203
Alheira, 323
amino acids, 727
animal
 feeding system, 357
 species, 57
 welfare, 529
anisotropy, 637
antibiotics resistant, 313
antimicrobial activity, 501
antioxidant, 393, 407, 437, 439, 449, 451, 481, 517
antioxidation, 501, 703
antioxidative efficiency, 453
antithrombin, 251
appearance, 333, 543
apricot pulp powder, 499
aroma, 219, 585
 pattern, 225
ascorbate, 731
ATP, 243, 279
automation, 35
baby beef, 541
backfat, 231
bacterial migration, 303
bacterial quality, 347
bacteriocin, 329, 335, 351, 443
batters quality, 457
bauernspeck, 657
beef, 35, 61, 65, 97, 111, 139, 161, 167, 193, 209, 217,
 221, 257, 261, 263, 275, 281, 289, 291, 305, 311,
 317, 379, 393, 405, 407, 415, 417, 431, 463, 475,
 479, 491, 497, 499, 503, 515, 519, 521, 525, 533,
 535, 537, 541, 543, 545, 557, 559, 567, 573, 581,
 587, 601, 611, 621, 659, 663, 665, 667, 671, 683,
 689, 697, 699, 723, 725, 727
 breeds, 181
 burgers, 301, 465, 467
 cattle, 155
 fajita, 613
 grading, 619
meat, 693
patties, 731
quality, 115
sausage, 721
 tenderness, 295
betaine, 117
biceps femoris, 513, 519, 521
bile, 703
binding strength, 495
bioanalyzer, 157
biofilm, 331
biogenic amines, 367
biological additives, 715
biological hazards, 369
biopolymer film, 413
blade tenderisation, 613
blanching, 455
Blonde d'Aquitaine, 61
blood count, 715
boar taint, 73, 211
body weight, 151
boiled sausage, 435
botanical diversity, 159
bovine, 63, 77, 719
 candidate genes, 85
 diversity, 85
 skeletal muscle, 251
breast meat, 213
breast meat quality, 95
breed, 73, 225
 type, 135
Brochothrix thermosphacta, 277
broilers breast meat, 227
broilers' meat, 363
buffalo, 697, 725
 meat, 699
bullfrog, 445
calcium, 253
 infusion, 615
 soap, 173
calpain 1, 253
calpain system, 295, 635
calpains, 245
calpastatin, 271, 281
calves, 107, 135
camel meat, 673, 675
Campylobacter, 309, 333
carbon dioxide, 389, 405
carbon monoxide, 375, 387, 405, 565
carcass, 65, 105, 163, 193, 315, 321, 341, 347, 541
 characteristic, 235
 chilling, 645
 composition traits, 81
 evaluation, 679
 fatness, 689
 quality, 101, 109, 141
 traits, 69
Carnobacterium, 355

carnosine, 711
casing meat products, 411
catalase, 441
category, 723
cattle, 191, 265, 267, 677
 ranching, 677
cell culture, 231
cells, 271
challenge test, 337, 369
characteristics, 423
chemical composition, 155
chemometrics, 537
chicken, 95, 121, 213, 245, 539, 561
 fillet, 381
 meatball, 439
chicory, 125
chilled storage, 367
chilling, 609
chilling rate, 595
Chinese
 mahogany (*Toona sinensis Roemor*), 453
 meatball, 445
 semi-dry sausage, 441
chitosan, 409
cholesterol, 719
 content, 695
chorizo, 345, 423
chronic disease, 43
CIE a*, 225
cinnamon bark extract, 439
citrus juice marinades, 601
CLA, 93, 107, 119, 689
cleaning, 353
clove buds extract, 439
coating, 409
collagen, 409, 533, 571, 635
 isoform, 261
 paste, 411
 solubility, 229
colour, 97, 99, 133, 161, 183, 185, 189, 219, 277, 375,
 377, 387, 391, 393, 395, 399, 403, 405, 449, 455,
 485, 517, 531, 579, 597, 607, 735
 and lipid stability, 167
 and sensory evaluation, 489
 stability, 379, 483, 525
commercial muscles, 119
commercialisation, 677
compensatory growth, 123, 143
composition, 409, 423
computed tomography, 207
conditioning, 567
conformation, 679
conjoint analysis, 543
conjugated linoleic acid, 139
connective tissue, 285, 649
consumer, 25, 29, 549, 551, 553, 559, 563
 intakes, 705
 panel, 129, 535, 613
 perception, 547
 test, 555
consumption, 557
contamination, 315

contamination of spices, 359
contextual analysis, 207
contextual volume grading, 205
contraction and permeability, 465
cooked
 ham, 385
 meat, 569
 sausages, 457
cooking, 503, 577
 loss, 189, 495, 523, 545
 method, 619, 729
 properties, 523
 temperature, 573
 values, 513
corned beef, 455
correlation, 119
Corriedale, 75
corticoids, 365
critical points, 529
cross-breeding, 425
crossing, 541
cross-link, 229
CT scans, 205, 653
cured cooked-ham, 395
cured meat products, 483
curing, 435, 455, 491, 519, 521, 585
cutter knives, 457
cutting process, 457
cutting yield, 233
decomposition, 603
decontamination, 317, 599
dehydration, 117, 129
demographic, 559
desalting, 469
desmin, 295
detection, 73
 methods, 309
dexamethasone, 365
diet, 73, 105, 163, 691
dietary fibre, 421, 499
dietary history, 667
differential scanning calorimetry, 477
differentiation, 231
display, 525
 lighting, 485
dissection, 199, 641
distribution, 705
DNA, 305
 marker, 85
donkey, 59
double-muscled, 229
drip loss, 99, 189, 223, 269, 283, 645
dry cured
 beef, 471
 ham, 493, 509, 605, 647
 Iberian ham, 607
 Istrian ham, 469
 meat, 657
dry curing, 461, 463
dry fermented sausage, 327, 449, 451, 585
dry sausage, 497
drying, 497

- duck, 213, 583
 Duroc, 169, 235
 dynamic headspace-GC-MS, 357
 dynamic rheology, 273
E. coli O157:H7, 339
E. coli serotypes, 311
 East Friesian, 75
 eating quality, 577, 611, 633
 electrical
 conductivity, 223
 properties, 637
 stimulation, 621, 623, 625, 627, 629, 631, 633
 stunning, 621
 electronic nose, 569, 647, 663
 electrophysiology, 629
 elevated brine temperature, 521
 ELISA, 63
 energy consumption, 457
 energy metabolism, 265
 enhanced beef, 611
 E-Number, 435
 environment, 313
 environmental surfaces, 321
 enzymatic tenderisation, 475
 enzyme, 507
 equipment, 599
 ethanol extract, 349
 evaluation, 549
 ewe milk, 175
 extrudates, 603
 fabrication, 679
 fat, 191, 193, 197, 579, 671, 705, 719
 depot, 93
 level, 523, 685
 quality, 201
 score, 237
 fatty acid, 103, 123, 139, 159, 163, 171, 173, 225, 373,
 587, 691, 699, 713
 composition, 115, 153, 175, 399, 655, 683, 689
 profile, 137, 553
 Fe²⁺ chelation, 703
 feed, 121
 residues, 365
 restriction, 137
 feeding, 99
 system, 153
 FEMLAB, 467
 femur strength, 215
 fermentation, 335, 497
 kinetics, 515
 fermented
 beef, 329
 dry sausage, 325
 sausage, 369, 399, 685
 fibre type, 113, 293
 fibroblasts, 285
 flavour, 515, 519, 561, 567, 587, 725
 flaxseed, 167
 food
 industry, 411
 microbiology, 327
 safety, 337
 safety systems, 311
 forequarter, 503
 frankfurters, 367, 701
 free amino acid, 243, 583
 free sugar, 243
 freezing, 471, 545, 675
 fresh
 chicken sausage, 453
 meat, 339
 pork sausage, 377, 485
 frozen storage, 673
 frying, 465
 FT-IR micro-spectroscopy, 639
 functional
 effect, 701
 food, 717
 lactic acid bacteria, 685
 properties, 675
 garlic, 443, 501
 GC-MS, 505
 gelatin, 413, 539
 gelation, 273
 gender, 121, 221
 gene expression, 67
 genetic diversity, 75
 genotype, 83, 87, 105, 635, 691
 geriatric food, 539
 GH, 193
 global food market, 25
 glucose-6-phosphate dehydrogenase, 169
 glutathione peroxidase, 441
 glycogen, 99
 glycogen debranching enzyme, 247
 goat, 547, 679
 grading, 641
 grape, 731
 seed extract, 481
 grass, 123, 139
 silage, 139
 grazing, 159
 grinding, 389
 ground
 beef, 391, 733
 meat, 481
 semi-prepared foods, 715
 turkey meat, 389
 growth, 89, 149, 271, 653
 performance, 109, 211
 promoters, 365
 HACCP, 321
 halothane gene, 71
 ham, 71
 quality, 469, 509
 hamburger quality, 489
 hanging method, 83
 Hanwoo beef, 87, 195
 health, 43
 heat-processed meat products, 59
 heating, 639
 heavy metals, 363
 hedonic, 547
 heifers, 161

- heme iron, 693
 heme pigments, 375
 herbs, 361
 hexanal, 607
 high oxygen modified atmosphere, 379
 high oxygen packaging, 391
 high pressure, 367
 histochemical characteristics, 255
 histochemical properties, 259
 histology, 415
 horcal onion, 419
 horse, 59
 hot
 - boning, 521
 - deboning, 241
 - water, 333
 Hounsfield spectrum, 205
 housing, 97, 127
 Huasteca, 423
 human health, 683
 hydrophobicity, 273, 331
 hypermarket, 385
 Iberian, 169
 - pig, 137
 IGF-I, 193
 IGF-II allele, 71
 image analysis, 649, 653
 IMF, 223
 Improvac, 211
 inorganic selenium, 95
 instrumental measurement, 531
 internal cooked colour, 401
 intramuscular fat, 85, 137, 143, 157, 643
 ionising radiation, 517
 irradiation, 459, 607
 isoflavone, 141
 isoform, 249, 275
 isometric tension, 241
 Italian steers, 171
 Japanese
 - Black Cattle, 67
 - consumer, 543
 - Shorthorn, 229
 kid meat, 695
 Korean cattle, 87
 LAB, 369
 labelling, 543, 547
 lactic acid, 99
 lactic acid bacteria, 329
Lactobacillus, 355
 lairage, 179, 341, 353
 lamb, 117, 129, 133, 153, 185, 187, 529, 565, 575, 589, 623, 625, 627, 633
 - meat, 103, 373, 695
 LC-MS/MS, 717
 lean, 149
 - meat, 641
 - percentage, 197, 233
 - weight, 205
 leptin, 193
 leucine, 511
Leuconostoc, 355
 light, 395
 lambs, 93
 lipid, 163, 459
 - content, 695
 - oxidation, 133, 185, 277, 393, 395, 403, 485, 693, 735
 lipogenic enzymes, 169
 lipolysis, 451
Listeria monocytogenes, 331, 337, 343
 liver, 703
 - like, 587
 loaves, 539
 loin hams, 427
longissimus dorsi, 111, 131, 155, 157, 189, 221, 223, 247, 255, 269, 283, 289, 291, 293, 379, 533, 573, 575, 609, 659, 671, 697
longissimus lumborum, 695
longissimus muscle, 191
longissimus thoracis, 107, 265, 699
 low salt, 707, 709
 low-fat, 721
 luciferase, 279
 lutein, 687
 lyoner, 435
M. semimembranosus, 597
M. Semitendinosus, 67
 MA, 377
 Mahalanobis distance, 659
 maize grain supplementation, 135
 Malaysian plants, 437
 malic enzyme, 169
 management, 73
 MAP, 375, 383, 387, 405
 marbling, 149, 261, 617, 699
 marination, 303
 market survey, 535
 Maronesa beef meat, 651
 mass and heat transfer, 465
 mass spectrometry, 287
 m-calpain, 281
 MCIR gene, 87
 meat, 29, 151, 159, 257, 307, 309, 331, 429, 507, 557, 711, 719
 - ageing, 637
 - aroma, 589
 - colour, 181, 627
 - cuts, 679
 - processing plants, 327
 - product quality factors, 571
 - products, 237, 337, 339, 687
 - quality, 65, 69, 75, 79, 83, 89, 101, 121, 125, 131, 135, 141, 143, 145, 149, 187, 195, 217, 227, 255, 283, 287, 403, 425, 531, 577, 669
 - tenderisation, 615
 - tenderness, 181
 - yields, 211
 meaty flavour, 585
 mechanical tenderisation, 611
 mechanically deboned chicken meat sausage, 437
 mechanically deboned meat, 445, 717
 medical-biological evaluation, 715
 melon seed meal, 721

- metabolism, 279
 methods, 199
 metmyoglobin, 391, 693
 Mexico, 557, 677
 microbial transglutaminase, 487
 microbiological counts, 377
 microbiological testing, 321
 microbiology, 319, 355, 471, 707
 microbiota, 367
 micronutrient isolation, 25
 microorganism, 349
 microscopy, 655
 microwave cooking, 523
 mid-voltage, 623, 627
 Milanese cut, 541
 milk, 151
 minced meat, 375, 415, 417
 mineral content, 725
 minerals, 587, 723
 mini-pig, 711
 Minke whale, 515
 MIR spectroscopy, 643
 mitochondrial DNA, 57
 MMP-3, 285
 MMP-9, 285
 model, 603, 617
 modified atmosphere, 185, 403
 modified atmosphere packaging, 103, 373, 393, 397, 399
 moisture, 191
 molecular PCR typing, 323
 Morcilla de Burgos, 419, 505
 motility, 331
 moulds, 359
 MSA, 619
 multi phase aggregation, 571
 multispectral imaging, 263, 669
 multivariate analysis, 175, 551, 563, 661
 muscle, 63, 89, 97, 195, 245, 503, 619, 723
 contraction, 629
 fibre, 141, 187, 213, 269
 metabolism, 145, 261, 265
 structure, 669
 turnover, 285
 type, 495, 713
 muscular hypertrophy, 581
 mycotoxins, 359
 myoblasts, 285
 myofibrillar protein, 571
 myoglobin, 263, 277
 myosin
 heavy chain, 249, 259
 heavy chain isoform, 113
 light chain, 259
 myostatin, 67
 mutation, 65
 n-6/n-3, 119
 natural antioxidants, 731
 Near Infrared Reflectance Spectroscopy, 651, 657, 671
 nham, 443
 nisin Z, 443
 nitrite, 325, 433, 455, 579
 N-line regions, 253
 nucleotides, 583
 nutrigenomics, 25
 nutrient composition, 43, 733
 nutritive value, 697
 odour, 343
 sensor, 567
 ohmic heating, 513
 omega-3 fatty acids, 553
 onion, 421, 501
 oregano, 407
 organic
 acids, 473
 meat, 483
 selenium, 95
 organoleptic analysis, 217
 origin, 361
 ostrich, 241
 ovotransferrin, 381
 oxidation, 375, 459
 oxidative damage, 581
 oxidative rancidity, 517
 oxidized oil, 165
 oxygen, 395, 405
 -permeable film, 377
 oxymyoglobin, 391
 package, 385
 packaging, 389
 technique, 401
 palatability, 619
 papain, 613
 paprika, 345
 partial least squares analysis, 663
 pasture, 107
 pathogen, 341
 patty, 447
 PCB, 361
 PCR, 57, 59
 pectoralis profundus, 521
 pediocin PA-1, 443
 pelibuey, 403
 pelvic suspension, 593
 peptide sequencing, 493
 peptides, 583
 performance objectives, 301
 permitted level, 433
 PFGE, 315
 pH, 99, 177, 183, 451, 621, 661
 decline, 247, 625, 631
 phosphate, 579
 physical and chemical aspects, 707
 physico-chemical, 447
 analysis, 351, 419
 properties, 673, 685
 pig, 35, 69, 79, 81, 101, 111, 123, 131, 141, 143, 145, 165, 201, 211, 215, 231, 233, 247, 347, 425, 719
 breeds, 255
 carcass, 641
 housing, 109
 hybrid, 127
 skin, 411
 plasma, 487

- PLS regression, 641
 podolian, 203
 Poll Dorset crossbred lambs, 89
 polychlorinated biphenyls, 361
 polyphenols, 717
 polyunsaturated fatty acids, 161
 porcine, 595
 porcine carcass, 199
 pork, 99, 105, 149, 157, 163, 179, 223, 225, 235, 243, 269, 271, 279, 283, 293, 299, 315, 401, 447, 459, 461, 481, 515, 553, 557, 577, 593, 597, 609, 643, 645, 653, 663, 691
 meat, 197, 617, 639
 patties, 523
 proteins, 273
 quality, 109, 259
 Portuguese sausage, 707, 709
post mortem, 245, 631
 pH, 645
 potassium lactate, 485
 poultry, 313, 333
 frankfurters, 579
 PPAR γ 2, 67
 preadipocyte, 231
 precursors, 561
 prediction, 663
 predictive modeling, 337
 predictors, 61
 preservation, 473
 pre-slaughter diet, 665
 pre-slaughter holding, 347
 prevalence, 299, 339
 principal components analysis, 155
 PRKAG3, 79, 81
 processed meat, 43
 processed pork meat, 355
 processing, 237, 313, 583
 parameters, 511
 product development, 29
 product quality, 427
 production systems, 201
 proteases, 267
 proteasome, 63
 protective starter cultures, 335, 351
 protein, 191, 197, 287, 643
 profile, 157
 proteolysis, 245, 283, 293, 493
 proteome, 61, 131
 proteomics, 265, 493, 631
 PSE, 71, 223, 227
 syndrome, 509
Pseudomonas fragi, 277
 PUFA/SFA, 119
 purification, 251
 qRT-PCR, 113
 quality, 105, 127, 179, 235, 237, 389, 491, 603, 637
 audit, 209
 control, 551
 of halves, 425
 traits, 657
 rabbit, 125
 radio frequency heating, 429, 467
Rana catesbeiana, 445
 rancidity, 565
 RAPD markers, 75, 89
 raw meat, 357
 real-time PCR, 77, 87, 305, 307
 rearing system, 145, 203
 red meat, 43
 reduced nitrite, 483
 reflection spectra, 401
 regression equations, 733
 regulation, 271
 reindeer meat, 555
 related compounds, 243
 relative humidity, 605
 resistance, 467
 response surface methodology, 413, 479
 resting, 605
 restructured beef steak, 701
 restructured meat, 495, 499, 729
 rheology, 709
 RJD, 63
 rigor shortening, 241
 ripening process, 345
 risk assessment, 299, 301
 RN genotype, 247, 593
 RNA, 305
 stability, 77
 rosemary, 133, 693
 ruminally-protected, 161
 safety, 335
 salami, 165, 515
 salchichon, 397
Salmonella, 299, 303, 307, 313, 315, 323, 339, 341
 salt, 417
 levels, 427
 reduction, 435
 sample variation, 575
 sarcomere length, 183, 635
 sarcoplasmic protein, 571
 sausages, 335, 421, 423, 433, 499
Scutellaria baicalensis Georgi, 489
 SDS-PAGE, 291, 295
 sea buckthorn, 717
 semimembranosus, 283, 595
Semitendinosus muscle, 477
 sensor, 637
 sensorial, 471
 sensory, 237, 535, 551, 553, 563
 analysis, 257, 533
 characteristics, 203, 449
 evaluation, 405, 709
 hardness/tenderness, 537
 panel, 219
 property, 195, 605
 quality, 61, 545, 581, 593
 Serrano ham, 647
 Seville orange juice, 601
 shear force, 575, 593, 659
 sheep, 189, 319, 629
 shelf life, 383, 385, 387, 397, 473, 483, 563, 689
 shortening, 241
 shrinkage, 269

- Sicily, 153
 simulation, 467
 singeing, 319
 skeletal muscle, 249, 267
 skin-on carcass, 319
 slaughter, 35
 - season, 713
 slaughterhouse, 183, 315, 321
 sliced pork, 383
 SNP, 289
 sodium
 - ascorbate, 501
 - chloride, 117, 415, 477
 - tripolyphosphate, 477
 softening, 431, 539
 Solid Phase Dynamic Extraction, 505
 source, 323
 sous vide system, 479
 sow feeding, 141
 Spanish Merino, 93
 species identification, 59
 specifications, 549
 Sremska sausages, 351
 stability, 165
 stable isotopes, 665, 667
Staphylococcus simulans, 511
 starter cultures, 519
 steak competition, 549
 steaks, 705
 steam, 333, 599
 - vacuuming, 317
 STEC/EHEC, 325
 steers, 97
 stocking density, 177
 storage, 495, 607
 - characteristics, 227
 straw, 109
 stress, 179
 - genotype, 71
 - hormones, 145
 stunning, 185
 subcutaneous fat, 137, 233, 653
 suckling lamb, 173, 175, 177, 589
 Sucuk, 497
 sulphite, 731
 superoxide dismutase, 441
 superoxide scavenging, 703
 supplementation, 151
 supply chain, 549
 surface, 599
 system analysis, 603
 taste, 219, 343
 - panel, 531
 - sensor, 567
 taurine, 727
 TBA, 399
 TBARS, 377, 481
 TBA-RS, 607
 tea, 731
 - catechins, 735
 temperature, 429, 569, 599
 - decline, 645
 tempering, 429
 tendercut, 257
 tenderisation, 283, 289, 291, 431, 491, 545, 573, 581, 601, 637
 tenderness, 83, 111, 257, 475, 503, 535, 555, 609, 611, 621, 635, 649, 651, 725
 tenderstretch, 615
 texture, 219, 221, 343, 471, 475, 531, 533, 729
 - profile, 203
 thermal treatment, 121
 tissue classification, 207
 tissue deposition rates, 143
 titin, 253
 - polymerization, 253*Toona sinensis*, 349, 447
 total fat, 171
 total viable count, 305
 traceability, 357
 tracing, 323
 trained panel, 555
 transglutaminase, 507
 transport, 179, 529
 - time, 177
 tropomyosin, 249
 troponin T, 275
 tumbling, 461, 463
 turkey, 387, 489
 - muscle, 303
 two-dimensional gel electrophoresis (2DE), 275
 ultimate pH, 181
 ultrasound measurement, 233
 ultrastructure, 417, 675
 urinary catecholamine's, 181
 urine specific gravity, 129
 vacuum, 385
 - packaging, 373, 431, 473
 - pulsing, 461, 463
 - storage, 379
 veal, 713
 venison, 555
 very fast chilling, 615
 virtual dissection, 205, 207
 visible spectroscopy, 661
 vitamin D3, 101, 111
 vitamin E, 103, 111
 volatile, 505, 589
 - compounds, 357, 647
 walnut, 701, 729
 washing, 353
 water, 197
 - residues, 365
 WB shear press, 537, 631
 weight prediction, 207
 welfare, 127
 WHC, 609
 whey protein, 479
 X-Ray tomography, 653
Yersinia enterocolitica, 343
 yield, 479
 young bulls, 209
 zymography, 267