

Supplementary Tables

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Title: Added Insult to Injury? The Response of Meat-Associated Pathogens to Proposed Antimicrobial Interventions

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Supplementary Table 1. Genes upregulated in Control and Treated *Salmonella enterica* ser. Typhimurium.

Treatment	Control Samples	Treated Samples
Antimicrobial Marinade	30 Genes/Loci: <i>araB, ccmA, ccmB, fdhE, fdxH, groL, fdxH, groL, NUW86_00545, NUW86_00875, NUW86_02255, NUW86_02265, NUW86_05725, NUW86_05735, NUW86_08340, NUW86_15095, NUW86_19225, NUW86_19240, NUW86_21055, NUW86_22615, NUW86_22625, NUW86_22830, NUW86_22845, NUW86_23550, NUW86_24050, ppnN, rho, rseP, tcuA, tcuB, wecA</i>	1675 Genes/Loci: <i>accA, accD, aceA, aceE, aceF, acnA, acnB, acrB, acrD, acs, adeP, adhE, adk, alaC, alaS, allR, amiB, amtB, amyA, apbC, araA, arcA, arcA, arcB, argB, argE, argG, argP, argR, argS, arnA, arnC, arnD, arnE, arnF, arnT, aroC, aroG, artJ, artM, artQ, artP, asnA, asnB, aspS, atpA, atpB, atpD, atpG, atpH, bamA, barA, bcsE, bcsF, bcsG, bglX, bioA, bioB, bioC, bioD, bioF, birA, murB, brxL, btsT, btuB, murI, btuF, mtnN, cadA, caiF, carA, carB, casA, casB, cdsH, cgtA, chbG, cheW, cheZ, chiP, citD, citE, citS, clpB, clpX, cls, cmoM, mukB, mukE, mukF, coaBC, dut, copA, corA, corC, cpxA, cpxR, cra, creB, creC, crr, csgD, cstA, cyaA, cybC, cycA, cydA, cydB, cydC, cydD, cysA, cysP, cysT, cysW, cysD, cysG, cysI, cysJ, cysM, cysS, dacA, dacC, dacD, damX, dapA, dapD, dcd, dctA, dcuA, ddlA, deaD, yrbN, der, dgcJ, dgcQ, dgt, dinB, dksA, dld, dnaJ, dnaK, dnaX, dpiA, dpiB, dppB, dppC, dppD, dppF, dprA, smg, dsdX, dtpB, dusB, dxs, eamA, edd, emrB, eno, entD, entS, envC, envZ, ompR, epd, epmB, eptA, pmrA, ettA, eutA, eutH, eutK, eutP, eutQ, eutT, pta, fabB, fabF, fabG, fabI, fabY, fadA, fadB, fadI, fadJ, fbp, fdnG, fdnG, fepB, fepC, fepD, fepG, fetA, fetB, fhuE, fimH, fis, fldB, flgK, fliB, fliF, fliG, fliH, fliI, fnr, folK, pcnB, folP, glmM, foxA, frdA, frdB, fruA, fruB, fruK, fsa, ftsE, ftsX, ftsI, mraY, murE, murF, ftsL, rsmH, ftsW, murD, murG, ftsY, ftsZ, fucP, fumA, fusa, gabP, gabT, galK, galM, galP, gapA, gcl, gcvP, ggt, ghxP, glgA, glgC, glgP, glk, glmS, glmU, glnD, glnE, glnP, glnQ, glnS, glpK, glpX, glrR, qseG, gltB, gltD, gltJ, gltK, gltL, gltP, glyQ, glyS, gntR, gntT, gph, rpe, trpS, gpmA, grcA, greA, gsiA, gspE, hofC, gss, guaB, gudD, gyrA, gyrB, hcp, helD, hema, hemB, hflC, hflK, hflX, hild, hisA, hisB, hisC, hisD, hisF, hisH, hisIE, hisP, hmsP, hns, holA, lptE, hpaA, hpaE, hpaG, hpaX, hrpA, hscA, hsdR, hslU, hypB, hypC, hypD, hypE, iaaA, iadA, iagB, ibpA, ibpB, icd, ileS, lspA, ilvA, ilvC, ilvG, ilvM, infB, infC, invC, spaK, spaM, spaN, spaO, spaP, iolE, iolG1, iolH, iolI2, iprA, iscR, iscS, kdga, kdpB, kdpC, kdpD, kdpE, kdsB, ycaR, kefB, kefG, kefC, keff, kup, lapB, ldtB, lepB, leuA, leuB, leuS, lexA, lgt, lhgO, ligA, lipA, livF, livG, livH, livM, livJ, lolC, lolD, lolE, lon, lpdA, lpfE, lplA, lpoB, thiK, lptB, lptD, lptF, lptG, lpxA, lpxB, rnhB, lpxC, lpxD, lpxM, lpxO, lrp, lysA, lysP, lysS, macA, macB, maeB, maiA, malK, malM, malP, malZ, mazG, mdsA, mdsB, mdtA, mdtB, mdtK, mdtQ, melB, metB, meth, metK, metL, metQ, mfd, mgtA, miaA, mutL, mlrA, mnmE, mnmG, mpl, mrcA, mrcB, mrdB, mreB, mreC, mscM, mscS, mutM, nadD, nagB, nagK, nagZ, nanA, nanT, napA, napD, napF, narK, nfi, nfsB, nhaR, nifJ, nirB,</i>

nirD, nlpI, norV, norW, npr, rapZ, nrdB, yfaE, nrdD, nrfA, nudC, nudE, nudK, nuoC, nuoE, nuoF, nuoJ, nuoK, nuoL, nuoM, nuoN, nupC, nusA, NUW86_00030, NUW86_00050, NUW86_00055, dgoD, dgoR, NUW86_00115, NUW86_00130, NUW86_00140, ccmD, ccmE, dsbE, NUW86_00165, NUW86_00290, NUW86_00295, NUW86_00420, NUW86_00475, NUW86_00690, NUW86_00740, NUW86_00835, NUW86_00845, NUW86_00855, araD, ulaD, NUW86_00935, NUW86_01005, NUW86_01010, tag, NUW86_01065, NUW86_01070, NUW86_01080, NUW86_01180, NUW86_01190, NUW86_01195, NUW86_01445, NUW86_01450, NUW86_01470, ugpQ, NUW86_01655, NUW86_01695, NUW86_01900, NUW86_01905, NUW86_01945, NUW86_02225, NUW86_02290, NUW86_02340, panF, NUW86_02390, rng, NUW86_02480, NUW86_02490, NUW86_02530, NUW86_02585, NUW86_02790, NUW86_02870, NUW86_02930, NUW86_02935, NUW86_02975, NUW86_03115, NUW86_03135, NUW86_03150, NUW86_03320, nudF, NUW86_03345, NUW86_03360, NUW86_03395, NUW86_03480, NUW86_03510, hybA, hybB, hybC, hybE, hypA, NUW86_03530, NUW86_03535, NUW86_03600, NUW86_03825, NUW86_03905, NUW86_04095, NUW86_04340, rlmM, NUW86_04440, gudP, NUW86_04535, NUW86_04625, ispD, ispF, surE, truD, NUW86_04670, NUW86_04675, NUW86_04680, NUW86_04690, NUW86_04695, NUW86_04705, NUW86_04710, NUW86_04925, orgA, orgB, prgJ, prgK, NUW86_05015, NUW86_05035, hycF, hycG, hycl, NUW86_05255, NUW86_05390, NUW86_05430, NUW86_05435, NUW86_05440, NUW86_05450, NUW86_05455, NUW86_05530, NUW86_05535, NUW86_05765, pssA, NUW86_05785, NUW86_05920, NUW86_05925, NUW86_06015, NUW86_06020, NUW86_06025, NUW86_06030, NUW86_06035, NUW86_06080, NUW86_06085, NUW86_06090, NUW86_06105, NUW86_06110, NUW86_06115, NUW86_06125, NUW86_06130, NUW86_06135, NUW86_06245, NUW86_06250, NUW86_06340, NUW86_06345, NUW86_06350, NUW86_06355, NUW86_06360, NUW86_06430, NUW86_06435, NUW86_06440, NUW86_06450, NUW86_06455, NUW86_06460, NUW86_06545, NUW86_06555, NUW86_06565, NUW86_06640, NUW86_06760, NUW86_06905, NUW86_06940, NUW86_06985, NUW86_07110, NUW86_07190, NUW86_07320, NUW86_07380, NUW86_07390, NUW86_07395, NUW86_07405, NUW86_07575, NUW86_07590, truA, NUW86_07635, NUW86_07675, hisM, NUW86_07730, NUW86_07735, NUW86_07740, NUW86_07775, NUW86_07870, NUW86_07875, NUW86_08180, NUW86_08195,

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		<p><i>pykF, pyrD, pyrF, yciH, pyrG, qseE, radA, rapA, rarA, ratA, rbsB, recC, recA, recG, recJ, relA, rep, rfaC, rfaF, rfbA, rffG, wecB, wecC, rhaA, rhaB, rhaS, rhlE, ribA, ribF, ridA, rlmB, rlmI, rna, rne, rnhA, rnm, rnpB, robA, rph, rplA, rplB, rplC, rplD, rplW, rplF, rplJ, rplL, rplO, rplQ, rplR, rplV, rpmB, rpmD, rpoB, rpoC, rpoD, rpoE, rseD, rppH, rpsA, rpsB, rpsD, rpsG, rpsH, rpsJ, rpsK, rpsM, rpsO, rpsT, rseA, rseB, rseC, rsmE, rspA, rsuA, ruvA, sada, sapA, sapB, sapC, sapD, sapF, sbcB, sbcC, sbcD, sdaB, sdaC, sdhA, sdhC, sdhD, secA, secF, secG, secY, selD, serA, setB, sgrR, shdA, siiE, siiF, sipA, sitA, sitB, sitC, sitD, slrP, sltY, slyD, sodA, solA, sopA, sopD, speB, speD, speE, srmB, ssb1, sseA, sseB, sspH2, ssrA, stbD, stbE, sthA, stjC, sucA, sucC, sucD, suhB, tamA, tamB, tatB, tatE, tcyL, yecC, tdcC, tdh, tgt, thiB, thiP, thiQ, thiL, thpR, thrA, thrB, thrC, thrS, thyA, tkt, tkt, tmcA, tmpA, tola, tolB, tolC, topA, topB, torS, tpiA, treY, treZ, trmA, trxB, tsf, tssH, tuf, tuf, tus, typA, tyrA, tyrB, tyrR, tyrS, ubiA, ubiC, ubiD, ugpB, uhpA, uhpB, uhpT, ushA, uvrA, uvrB, uvrC, uvrY, wzz(fepE), wzzE, xanP, xylA, yajC, ybeD, ybiO, yccA, yccX, ycdR, ychH, ydgT, yeaG, yeaR, yejF, ygiD, ygiG, yhaJ, yhdP, yiaK, yicI, yidC, yieH, yjiA, yoaE, yvcK, zapA, zapE, zirT, znuA, znuB, znuC, zraR, zraS, zwf</i></p>
Spark PFW	<p>27 Genes/ Loci: <i>araB, atpA, ccmA, ccmB, dnaA, dnaE, fdhE, fdol, fdxH, NUW86_00545, NUW86_00875, NUW86_02255, NUW86_05725, NUW86_08340, NUW86_15095, NUW86_16360, NUW86_19240, NUW86_21055, NUW86_22625, NUW86_22845, NUW86_24060, ppnN, rho, rseP, tcuA, tcuB, wecA</i></p>	<p>1304 Genes/Loci: <i>aas, aat, accA, accB, accC, aceA, aceB, aceE, aceF, aceK, ackA, acnB, acpP, acpS, pdxJ, acrB, acrD, acs, adeP, adhE, adk, ahpC, alaC, alaS, aldB, alkB, allD, amiA, ampG, ampH, amyA, ansA, ansB, ansP, apt, araC, araE, arcB, argH, argR, argS, argT, arnA, arnC, arnD, arnE, arnF, arnT, aroA, aroB, aroG, aroK, artJ, artM, artQ, artP, asd, asmA, asnB, asnS, aspS, atpD, azoR, bamA, bamC, bamD, bcsB, bcsC, bcsZ, bepA, bioA, bioB, bioC, bioD, bioF, bioH, birA, murB, brxL, btsT, btuF, mtnN, cada, cadB, caiF, caiT, can, carA, carB, chaA, chbG, cheB, cheR, cirA, citC, citD, citE, citD, citE, citF, citG, citX, citS, clcA, clpB, clpP, cmoM, mukB, mukE, mukF, cnoX, coaA, copA, corA, cpdA, yqiA, cpoB, cpsG, cpxA, cpxR, cpxP, creB, creC, creD, crp, csdA, csdE, csiE, cspE, cspE, cstA, cueP, cueR, cybC, cycA, cydA, cydB, cysA, cysP, cysT, cysW, cysD, cysE, cysG, cysH, cysM, cysS, dacA, dacD, dadX, dam, damX, dapD, dapE, dbpA, dcuB, dcuC, ddlA, deaD, yrbN, degP, deoA, deoB, der, dinG, dld, dmsA, dmsB, dnaG, dnaJ, dnaK, dnaN, dnaX, dpiA, dpiB, dppB, dppC, dppD, dppF, dsbA, dsdA, dsdX, dtpA, dtpB, dtpD, dusB, dusC, eco, efp, emrD, eno, entE, envC, epmA, era, rnc, eutA, eutH, eutB, eutC, eutR, fabA, fabB, fabF, fabH, fadB, fbaA, fbaB, fbp, fdhD, fdnG, fdnG, feoB, fepC, fepD, fepG, fes, fetA, fetB,</i></p>

ffh, fhuB, fis, flgG, fliE, fliF, fliG, fliH, fliI, fliM, fliN, fliO, fliP, fliR, fliS, fliT, fnr, folD, folK, pcnB, fraB, frdA, frdB, fruB, fruK, fsa, ftsA, ftsQ, ftsH, ftsI, mraY, murE, murF, ftsK, ftsL, rsmH, ftsN, ftsW, murD, murG, ftsZ, fucA, fumB, fusA, gabD, gabT, galE, galK, galM, galP, galR, galT, gapA, garD, garR, gatD, gcvA, gcvP, gcvT, gdhA, ggt, glgA, glgC, glgB, glgX, glgP, glmS, glmU, glnA, glnE, glnG, glnH, glnL, glpE, glpK, glpX, gltB, gltD, gltJ, gltK, gltL, gltX, glxR, glyQ, glyS, gndA, gntK, gntU, gntR, gntT, golT, gpsA, secB, grcA, greA, gshA, gsiD, gspE, hofC, guaA, guaB, gudD, gutQ, srlR, gyrA, gyrB, hcp, helD, hemC, hemD, hemE, hemH, hemL, hemN, hflD, hflK, hflX, hfq, hilC, hisA, hisB, hisC, hisD, hisF, hisH, hisIE, hisS, hmpA, hmsP, hns, holB, tmk, yceG, hpaD, hpaE, hpaG, hpaI, hpt, hrpA, hrpB, hscA, hsdR, htpG, htpX, hutG, hutI, hutH, hycB, hycC, hycE, iaaA, ibpA, icd, ihfA, ileS, lspA, ilvA, ilvB, ilvC, ilvD, ilvE, ilvG, ilvM, ilvN, infB, infC, invC, spaK, spaM, spaN, spaO, spaP, iolB, iolC, iolE, iolT1, iroC, iscS, ispA, ispG, katE, katG, kdpB, kdsC, lptA, lptC, kup, ldcC, ldtA, ldtB, ldtD, lepA, leuA, leuB, leuC, leuE, leuS, lipA, livF, livG, livH, livM, livJ, livK, lldD, lldP, lldR, lolC, lolD, lolE, lon, lpdA, lplA, lplT, lptD, lpxA, lpxB, rnhB, lpxC, lpxD, lsrA, lsrC, lsrD, lsrB, lsrK, lysC, lysP, lysS, maa, maeB, malF, malG, malK, malP, malQ, malT, manA, manX, mazG, mdh, mdoG, mdoH, mdsA, mdsB, mdtA, mdtB, mdtD, mdtQ, mepS, meta, metE, metF, metG, metH, metK, metL, metQ, mfd, mglA, mglB, mgtA, miaA, mutL, minD, minE, mioC, mlaB, mlaC, mlaE, mltB, mltD, mnmA, mnmE, mnmG, moaA, moaB, moaE, motA, motB, mraZ, mrdA, mrdB, mreB, mreC, mtlA, mug, mutM, nadA, nadB, nadC, nadE, nadR, nagA, napG, napH, nepI, nfuA, nhaA, nifJ, nirB, nirD, nirC, nlpE, nlpI, nnr, tsaE, nrdA, nrdB, yfaE, nrdD, nrdR, nrfB, nrfC, nrfD, nrfEF, nrfG, nudC, nuoA, nuoC, nuoG, nuoH, nuoI, nuoJ, nuoK, nuoL, nuoN, nupC, nusA, nusG, NUW86_00030, NUW86_00050, NUW86_00055, dgoD, dgoR, NUW86_00065, NUW86_00115, NUW86_00130, NUW86_00140, ccmD, ccmE, dsbE, NUW86_00240, NUW86_00360, NUW86_00365, NUW86_00375, dgaE, NUW86_00385, NUW86_00435, NUW86_00475, NUW86_00775, NUW86_00910, NUW86_00965, NUW86_00970, NUW86_01005, NUW86_01010, tag, NUW86_01020, NUW86_01070, NUW86_01080,

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		<p><i>secF, secY, selD, serA, shdA, sifA, siiF, sitA, sitB, sitC, sitD, sltY, smpB, smvA, sodA, sodB, speA, speG, spoT, srfJ, srlD, sseD, sspA, ssrA, sstT, stbD, stbE, stdB, stfD, sthA, sthE, sucA, sucC, sucD, sufA, sufC, sufD, sufS, tadA, tal, tamA, tamB, tatC, tatD, tgt, thiG, thiH, thiI, thrA, thyA, tig, tkt, tnpA, tnpA, tolB, tonB, topB, torA, torC, torD, tpiA, treB, trmD, trpA, trpB, tsf, tsr, tssK, tssL, ttcA, ttdA, ttdB, tuf, typA, tyrB, ubiF, ubiK, uhpA, uhpB, uhpT, ulaA, ulaB, ulaC, ulaG, uraA, ushA, uvrA, uvrB, uvrC, uvrY, uvrD, vapB, vapC, waaa, wcaM, wzz(fepE), xanP, xthA, yacL, ybiO, ycjG, yeaG, yegQ, yejM, yfhh, ygbI, ygfZ</i></p>
Glow PFW	<p>33 Genes/Loci: <i>araB, atpA, carB, ccmA, ccmB, cysI, cysJ, dnaA, dnaE, fdhE, fdol, fdxH, groL, NUW86_00545, NUW86_00875, NUW86_02255, NUW86_05725, NUW86_08340, NUW86_15095, NUW86_16360, NUW86_19240, NUW86_21055, NUW86_22625, NUW86_22845, NUW86_23565, NUW86_24060, ppnN, rho, rpoC, rseP, tcuA, tcuB, wecA</i></p>	<p>137 Genes/ Loci: <i>acpS, araD, argG, asnB, atpE, bsmA, cgtA, clcA, clpX, crr, ccmD, ccmE, cspE, csrA, cysA, cysP, cysT, cysW, cysK, cysS, dacB, ddlA, dnaK, dsbE, fdhD, fldA, fljA, ftsZ, glgP, glrR, qseG, gltB, gltD, glyS, guaB, hybG, hycE, ibpA, kup, ldcC, lon, lplA, lpxD, lysM, manY, metB, metR, norV, norW, NUW86_00845, NUW86_00855, NUW86_01190, NUW86_01225, NUW86_02265, NUW86_03110, NUW86_05460, NUW86_05735, NUW86_06015, NUW86_06020, NUW86_06025, NUW86_06030, NUW86_06035, NUW86_06105, NUW86_06110, NUW86_06440, NUW86_06640, NUW86_06655, NUW86_06660, NUW86_08180, NUW86_08195, NUW86_08205, NUW86_08785, NUW86_09415, NUW86_10395, NUW86_13455, NUW86_13460, NUW86_14090, NUW86_14170, NUW86_14175, NUW86_14180, NUW86_14185, NUW86_14190, NUW86_16070, NUW86_16600, NUW86_19225, NUW86_20220, NUW86_20240, NUW86_21740, NUW86_22290, NUW86_22615, NUW86_22830, NUW86_23550, NUW86_23875, NUW86_24050, oadA, ppc, pdxJ, ppiB, prfC, proY, prpR, pta, rarA, rffM, rhaT, rluC, rnpB, rplB, rplD, rplW, rplU, rpmA, rpoA, rpsB, rpsC, rrf, sdhB, secY, setB, sopB, ssbI, ssrS, sucC, sucD, thrS, topA, tuf, tyrS, ubiD, ubiF, udp, ulaD, uvrD, waaZ, wzxE, wzyE, yeaG</i></p>
Ultraviolet LED	<p>34 Genes/ Loci: <i>araB, atpA, carB, ccmA, ccmB, cysI, cysJ, dnaA, dnaE, fdhE, fdol, fdxH, groL, NUW86_00545, NUW86_00875, NUW86_02255, NUW86_02265, NUW86_08340, NUW86_15095, NUW86_16360, NUW86_19240, NUW86_21055, NUW86_22615, NUW86_22625, NUW86_22830, NUW86_23550, NUW86_24050,</i></p>	<p>40 Genes/Loci: <i>adhE, adiC, dnaX, dppD, dppF, fusA, gmk, hmsP, malE, mdh, nrdD, nuoJ, nuoK, nuoL, NUW86_01945, NUW86_02600, NUW86_04215, NUW86_05725, NUW86_05735, NUW86_06440, NUW86_11345, NUW86_14090, NUW86_16245, NUW86_16800, NUW86_19225, NUW86_22845, NUW86_23565, NUW86_23895, rffC, NUW86_23975, NUW86_23980, NUW86_24060, parC, phnW, ppc, rplB, rpoB, secY, tuf, yoaE</i></p>

	<i>ppnN, rho, rpoC, rseP, tcuA, tcuB,</i> <i>wecA</i>	
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