Supplementary Table: Details of main treatments and accompanying controls with profiles of additives used in the assays. Results are shown as viabilities with SEM's in brackets based on at least 3 replicates; ranges are shown where appropriate.

Main treatments (MT + number, in bold) plus controls (Ref. to fig/table no. in main text in brackets)	Additives (final concentrations shown)							Results
	Catechin (µM)	Iron(II)/(III) (µM)	Copper(II) (µM)	VitaminC (µM)	EDTA (µM)	Catalase (µg mL^{-1})	Inocula (0.5 McFarland standard)	Viability (log_{10} cfu mL^{-1})
Buffer (fig 2)	[b]Lambda						*S. aureus, E. coli, Ps.aeruginosa, P.mirabilis,*	*Sa*, 7.66 (± 0.52); *Ec*, 7.08 (± 0.21) *Psa*, 7.83(± 0.21); *Pm*,7.18 (±1.08)
(+)-Catechin alone (fig 2)	214						〃	*Sa*, 7.66 (± 0.52); *Ec*, 7.08 (± 0.21)
							〃	*Psa*, 7.83(± 0.21); *Pm*,7.18 (±1.08)
Ringer's pH: 3.5	Ringer's						〃	*Sa*, 7.63 (± 0.76); *Ec*, 7.77 (± 0.40)
							〃	*Psa*, 7.92(± 0.55); *Pm*,7.87 (±0.43)
pH: 5.5	Ringer's						〃	*Sa*, 7.61(± 0.82); *Ec*, 7.89 (± 0.83)
							〃	*Psa*, 7.59(± 0.65); *Pm*,7.79 (±0.50)
pH: 7.2	Ringer's						〃	*Sa*,7.65 (± 0.85); *Ec*, 7.60 (± 1.03)
							〃	*Psa*, 8.01 (± 0.40);*Pm*,7.53 (±0.82)
Cu(II): fresh (fig 2)	Ringer's		214				*S. aureus, E. coli, Ps.aeruginosa, P.mirabilis,*	*Sa*, 5.92 (± 0.89); *Ec*, 3.09(± 0.56) *Psa*, 6.65(± 0.54); *Pm*,5.13 (±0.62)
MT1. (+)-Catechin + copper(II) (fig 2)	214		214				*S. aureus, E. coli*	*Sa*, 4.93 (± 0.66); *Ec*, 2.83(± 0.48)
							〃	*Psa*, 4.11(± 0.73); *Pm*,4.11 (±0.73)
Fe(II): fresh, (fig 3)	Ringer's	214 Fe(II) fresh					〃	*Sa*, 7.50 (± 0.82); *Ec*, 6.75 (± 0.62)
heated,	Ringer's	214 Fe(II) heated					〃	*Sa*, 6.99 (± 0.37); *Ec*, 7.44 (± 0.62)
autoclaved	Ringer's	214 Fe(II) autoclvd.					〃	*Sa*, 7.52 (± 0.55); *Ec*, 7.91 (± 0.76)
Fe(III): fresh,	Ringer's	214 Fe(III) fresh					*S. aureus, E. coli*	*Sa*, 7.33 (± 0.48); *Ec*, 7.87 (± 0.61)
heated,	Ringer's	214 Fe(III) heated					〃	*Sa*, 7.49 (± 0.46); *Ec*, 7.77 (± 0.49)
autoclaved	Ringer's	214 Fe(III) autoclvd.					〃	*Sa*, 7.99 (± 0.44); *Ec*, 8.03 (± 0.41)
Cu(II): heated	Ringer's		214				〃	*Sa*, 6.01 (± 0.57); *Ec*, 4.25(± 0.38)
							〃	
MT2. (+)-Catechin + fresh, or heated or autoclaved Fe(II) or Fe(III)	214	214 Fe(II) fresh (fig3)					〃	*Sa*, 5.38 (± 0.53); *Ec*, 6.93 (± 0.50)
	214	214 Fe(II) heated					〃	*Sa*, 7.51 (± 0.50); *Ec*, 8.05 (± 0.38)
	214	214 Fe(II) autoclvd.					〃	*Sa*, 7.92 (± 0.42); *Ec*, 7.89 (± 0.61)
	214	214 Fe(III) fresh					〃	*Sa*, 7.84 (± 0.68); *Ec*, 7.71 (± 0.48)
	214	214 Fe(III) heated					〃	*Sa*, 7.22 (± 0.50); *Ec*, 8.64 (± 0.48)

	214	214 Fe(III) autoclvd.					〃	*Sa*, 7.23 (± 0.67); *Ec*, 4.53 (± 0.65)
Fe(II) + Cu(II) (fig 3)	Ringer's	214 Fe(II) fresh	214				〃	*Sa*, 5.03 (± 0.65); *Ec*, 3.79 (± 0.70)
MT3. (+)-Catechin + Fe(II)+Cu(II) (fig 3)	214	214 Fe(II) fresh	214				〃	*Sa*, 4.75 (± 0.45); *Ec*, 2.50(± 0.44)
Vit. C alone	Ringer's			1712			〃	*Sa* 7.58 (± 0.56); *Ec*, 7.64 (± 0.44)
(+)-Catechin + vit. C	214			1712			〃	*Sa*, 7.82 (± 0.34); *Ec*, 7.97 (± 0.51)
Cu(II) + vit. C alone (table 1)	Ringer's		214 214 214	428 856 1712			〃 〃 〃	*Sa*, 4.85 (± 0.52); *Ec*, 0 $\log_{10}$ units *Sa*, 4.37 (± 0.73); *Ec*, 0 $\log_{10}$ units *Sa*, 2.41 (± 0.79); *Ec*, 0 $\log_{10}$ units
MT4. (+)-Catechin + Cu(II) + vit. C (table 1)	214 214 214		214 214 214	428 856 1712			〃 〃 〃	*Sa*, 3.77 (± 0.82); *Ec*, 0 $\log_{10}$ units *Sa*, 3.11 (± 0.12); *Ec*, 0 $\log_{10}$ units *Sa*, 1.29 (± 0.48); *Ec*, 0 $\log_{10}$ units
Fe(II) + vit. C	Ringer's	214 Fe(II) fresh		856			〃	*Sa*, 8.15 (± 0.63); *Ec*, 7.63 (± 0.15)
MT5. (+)-Catechin + Fe(II) + vit. C	214	214 Fe(II) fresh		856			〃	*Sa*, 8.21 (± 1.11); *Ec*, 7.38 (± 0.55)
Fe(II) + Cu(II) + vit.C	Ringer's	214 Fe(II) fresh	214	856			〃	*Sa*, 4.94 (± 1.02); *Ec*, 7.44 (± 0.59)
MT6. (+)-Catechin + Fe(II) + Cu(II) + vit. C (fig 3)	214	214 Fe(II) fresh	214	856			〃	*Sa*, 4.76 (± 0.67); *Ec*, 2.60 (± 0.55)
EDTA alone	Ringer's				2140		〃	*Sa*, 8.23 (± 0.41 ; *Ec*, 7.21 (± 0.51)
Fe(II) + Cu(II) + EDTA	Ringer's	214 Fe(II) fresh	214		535		〃	*Sa*, 8.02 (± 0.33); *Ec*, 7.12 (± 0.49)
MT7. (+)-Catechin + Fe(II) + Cu(II) + EDTA	214	214 Fe(II) fresh	214		1070		〃	*Sa*, 7.97 (± 0.36); *Ec*, 7.50 (± 0.42)
MT8. Cu(II) + catalase	Ringer's		214			0 - 200 0 - 600	〃 〃	*Sa*, 6.62-7.49 (± 0.33-1.02) *Ec*, 2.98-7.70 (± 0.25-1.09)

(fig 4) Catalase alone	Ringer's					600	〃	*Sa*, 7.72 (± 0.33); *Ec*, 7.34 (± 0.45)
(+)-Catechin + catalase	214					600	〃	*Sa*, 7.43 (± 0.49); *Ec*, 7.87 (± 0.48)
Fe(II) + Cu(II) +catalase	Ringer's	214 Fe(II) fresh	214			600	〃	*Sa*, 8.16 (± 0.70); *Ec*, 6.60 (± 0.44)
Vit. C + catalase	Ringer's			856		600	〃	*Sa*, 7.53 (± 0.48); *Ec*, 7.10 (± 0.62)
MT9. (+)-Catechin + Cu(II) + vit. C + catalase (fig 5)	214	214 Fe(II) fresh		856		0 - 200 0 - 600	〃 〃	*Sa*, 1.84-7.74 (± 0.18-0.32) *Ec*, 2.12-7.27 (± 0.25-0.55)
Cu(II) + Vit.C + catalase	214					0 - 200 0 - 600	〃 〃	*Sa*, 2.35-7.68 (± 0.08-1.10) *Ec*, 2.00-7.57 (± 0.31-0.46)
MT10. (+)-Catechin + Fe(II) + Cu(II) + catalase	Ringer's		214			600	〃	*Sa*, 8.02 (± 0.35); *Ec*, 7.77 (± 0.53)
(+)-catechin + Fe(II) + catalase	214	214 Fe(II) fresh	214			600	〃	*Sa*, 7.23 (± 0.42); *Ec*, 8.01 (± 0.53)
(+)-catechin + Cu(II) + catalase	214		214			600	〃	*Sa*, 7.57 (± 0.48); *Ec*, 7.16 (± 0.49)

Fe(II) = aqueous iron(II) sulphate heptahydrate**; Fe(III) =** aq. iron(III) chloride solution; **Cu(II) =** aq. copper(II) sulphate pentahydrate; **EDTA** = aq. Ethylenediamine acetic acid disodium salt; **Catalase** = bovine liver catalase solution 50 mg mL^{-1} with an activity of *ca.* 47 kU mg^{-1} protein. **Inocula:** *Sa* = *S. aureus* = *Staphylococcus aureus* NCTC 06571, *Psa* = *Ps.aeruginosa* = *Pseudomonas aeruginosa* NCTC 950, *Pm* = *P.mirabilis* = *Proteus mirabilis* NCTC 7827, *Ec* = *E. coli* = *Escherichia coli* NCTC 14441

Notes on Methodology
The assay mixtures made up to produce the final concentrations shown above used following volumes and concentrations of solutions shown below:

Main treatments (MT + number, shown in bold) and controls:

Buffer: [b]All assays featured 1000µL control samples of lambda buffer adjusted to pH 7.2 as a control.
Ringer's solution adjusted to different pH values: 1000 µL Ringer's solution adjusted to pH 3.5, or 5.5, or 7.2
(+)-Catechin alone: 330 µL 1000 µM (+)-catechin + 700 µL Ringer's solution
Cu(II) alone, fresh, heated: 330 µL Ringer's solution + 700 µL 472 µM $Cu(II)SO_4$
MT1: 330 µL 1000 µM (+)-catechin + 700 µL 472 µM $Cu(II)SO_4$
Fe(II) alone, fresh, heated, autoclaved: 330 µL Ringer's solution + 700 µL 472 µM $Fe(II)SO_4$ either freshly made, or freshly made and then heated ,or freshly made and then autoclaved

Fe(III) alone, fresh, heated, autoclaved: 330 µL Ringer's solution + 700 µL 472 µM Fe(III)Cl_3 prepared as Fe(II) above
Fe(II) + Cu(II): 330 µL Ringer's solution + 350 µL 944 µM Fe(II)SO_4 + 350 µL 944 µM Cu(II)SO_4
MT2: 330 µL 1000 µM (+)-catechin + 700 µL 472 µM [f]Fe(II)SO_4 or Fe(III)Cl_3 , in each case either freshly made, or freshly made and then heated ,or freshly made and then autoclaved
MT3: 330 µL 1000 µM (+)-catechin + 350 µL 944 µM Fe(II)SO_4 + 350 µL 944 µM Cu(II)SO_4
Vitamin C alone: 330 µL Ringer's solution + 700 µL 1510 µM vit. C
(+)-Catechin + vit. C: 330 µL 1000 µM (+)-catechin + 700 µL 1510 µM vit. C
Cu(II) + vit. C alone: 330 µL Ringer's solution + 350 µL 944 µM Cu(II)SO_4 + 350 µL 1888 µM, or 3776 µM ,or 7552 µM vit. C respectively
MT4: 330 µL 1000 µM (+)-catechin + 350 µL 944 µM Cu(II)SO_4 + 350 µL 1888 µM, or 3776 µM, or 7552 µM vit. C respectively
Fe(II) + vit. C: 330 µL Ringer's solution + 350 µL 944 µM Fe(II)SO_4 + 350 µL 3776 µM vit. C
MT5: 330 µL 1000 µM (+)-catechin + 350 µL 944 µM Fe(II)SO_4 + 350 µL 3776 µM vit. C
Fe(II) + Cu(II) + vit. C: 330 µL Ringer's solution + 175 µL 1888 µM Fe(II)SO_4 + 175 µL 1888 µM Cu(II)SO_4 + 175 µL 3776 µM vit. C
MT6: 330 µL 1000 µM (+)-catechin + 175 µL 1888 µM Fe(II)SO_4 + 175 µL 1888 µM Cu(II)SO_4 + 175 µL 3776 µM vit. C
EDTA alone: 330 µL Ringer's solution + 700 µL 2140 µM EDTA solution
Fe(II) + Cu(II) + EDTA: 330 µL Ringer's solution + 175 µL 1888 µM Fe(II)SO_4 + 175 µL 1888 µM Cu(II)SO_4 + 175 µL 2140 µM EDTA
MT7: 330 µL 1000 µM (+)-catechin + 175 µL 1888 µM Fe(II)SO_4 + 175 µL 1888 µM Cu(II)SO_4 + 175 µL 2140 µM EDTA
MT8: 330 µL Ringer's solution + 700 µL 472 µM Cu(II)SO_4 + [*]catalase at concentrations specified
[c]Catalase alone: 1000 µL Ringer's solution + catalase at concentration specified
(+)-Catechin + catalase: 330 µL 1000 µM (+)-catechin + 700 µL Ringer's solution + catalase at concentration specified
Fe(II) + Cu(II) + catalase: 330 µL Ringer's solution + 350 µL 944 µM Fe(II)SO_4 + 350 µL 944 µM Cu(II)SO_4 + catalase at concentration specified
Vit. C + catalase: 650 µL Ringer's solution + 350 µL 3776 µM vit. C + catalase at concentration specified
MT9: 330 µL 1000 µM (+)-catechin + 350 µL 944 µM Cu(II)SO_4 + 350 µL 3776 µM vit. C + catalase at concentrations specified
Cu(II) + vit. C + catalase: 650 µL Ringer's solution + 350 µL 3776 µM vit. C + catalase at concentrations specified
MT10: 330 µL 1000 µM (+)-catechin + 350 µL 944 µM Fe(II)SO_4 + 350 µL 944 µM Cu(II)SO_4 + catalase at concentration specified
(+)-Catechin + Fe(II) + catalase: 330 µL 1000 µM (+)-catechin + 700 µL 472 µM Fe(II)SO_4 + catalase at concentration specified
(+)-Catechin + Cu(II) + catalase: 330 µL 1000 µM (+)-catechin + 700 µL 472 µM Cu(II)SO_4 + catalase at concentration specified

[c]Catalase was added immediately prior to addition of inoculum
Full details of the assay procedure is described in 'Antimicrobial activity of (+)-catechin and transition metal ion combinations' in the Materials & Methods section of main article