

Figure S1. UV-vis absorption spectrum of γ -CD and γ -CD-ITCs

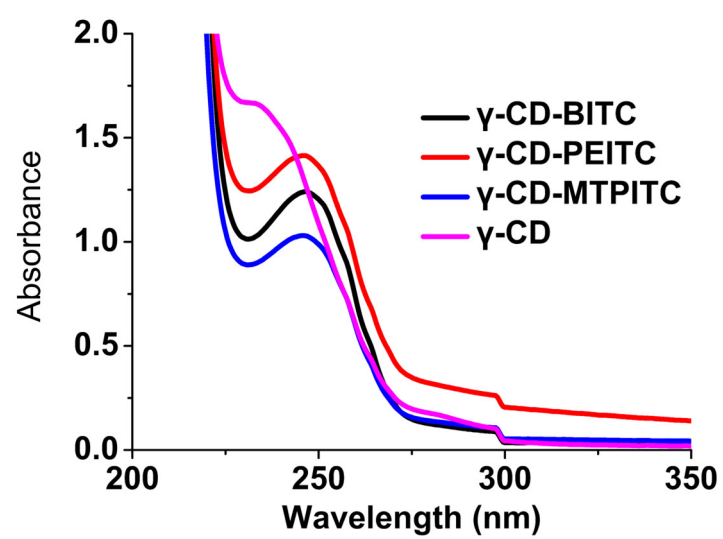


Table S1. Sequences of primers used in qRT-PCR

Gene	Primer	Sequence (5'–3')
<i>16S rRNA</i>	<i>16S rRNA-F</i>	CGTGCTACAATGGACAATACA
	<i>16S rRNA-R</i>	ACAATCCGAACTGAGAACAAC
<i>Cp8F</i>	<i>Cp8F-F</i>	ACAGACTTTAGTTATCCCTTAC
	<i>Cp8F-R</i>	TGATGCCAGTGATTACCTTTA
<i>CP5D</i>	<i>CP5D-F</i>	CTTTAGTTGTTGGTGCTGGTC
	<i>CP5D-R</i>	CGGTTCAAGTTTCATTTCGTC
<i>nuc</i>	<i>nuc-F</i>	GAAAGGGCAATACGCAAAG
	<i>nuc-R</i>	ACGCCATTATCTGTTTG
<i>spa</i>	<i>spa-F</i>	ATAAGAAGCAACCAGCAAAC
	<i>spa-R</i>	GGCTAATGATAATCCACCAA
<i>clf</i>	<i>clf-F</i>	ACGAATGGCGATGTTGTAGC
	<i>clf-R</i>	CTCGGTCTGTAAATAAAGGTAATG
<i>SarA</i>	<i>SarA-F</i>	ATGATTGCTTTGAGTTGTTA
	<i>SarA-R</i>	TTTGTTTTCGCTGATGTATG
<i>agr</i>	<i>agr-F</i>	AGACCTGCATCCCTAATCGTA
	<i>agr-R</i>	TCAGTTTGCCACGTATCTCA

Table S2. Growth parameters of secondary models to predict the growth of *S. aureus* under BITC and γ -CD-BITC

Parameter	Temperature (°C)	Sulfur-containing spices		
		Control	BITC	γ -CD-BITC
SGR	10	0.03±0.00 ^{Aa}	-0.02±0.00 ^{Ab}	-0.02±0.00 ^{Ab}
	15	0.05±0.00 ^{Aa}	-0.02±0.00 ^{Ab}	-0.02±0.00 ^{Ab}
	20	0.10±0.01 ^{Ba}	0.05±0.00 ^{Bb}	0.04±0.00 ^{Bc}
	25	0.24±0.01 ^{Ca}	0.13±0.01 ^{Cb}	0.10±0.01 ^{Cb}
LT	10	45.09±3.6 ^{Aa}	101.20±6.1 ^{Ab}	234.30±11.17 ^{Ac}
	15	21.77±2.3 ^{Ba}	44.34±3.7 ^{Bb}	106.90±5.37 ^{Bc}
	20	14.39±1.4 ^{B_a}	22.10±2.2 ^{Ca}	35.34±2.2 ^{Cb}
	25	10.90±0.60 ^{Ca}	18.51±0.81 ^{Cb}	23.89±1.3 ^{Cc}

SGR, maximum specific growth rate; LT, lag time; T, temperature. $P < 0.05$.

Table S3. Development and validation of secondary models for growth factors of *S. aureus* in cooked chicken breast under BITC and γ -CD-BITC

Sulfur-containing spices	Secondary model equations	Bf	Af	R ²
Control	SGR = 0.14211-0.02123×T + 0.0009819 × T ²	1.00	1.04	0.97
	LT = 105.60–7.892×T + 0.16423 × T ²	1.00	1.08	0.94
BITC	SGR = 0.11667-0.02484×T + 0.00105 × T ²	0.94	1.23	0.90
	LT = 272.22–22.22×T + 0.48278 × T ²	1.00	1.05	0.98
γ -CD-BITC	SGR = 0.10784-0.02128×T + 0.0008718 × T ²	1.02	1.21	0.91
	LT = 671.37–55.37×T + 1.1789×T ²	1.00	1.00	0.99

SGR, maximum specific growth rate; LT, lag time; T, temperature. Bf, bias factor; Af, accuracy factor; R², correlation coefficient.