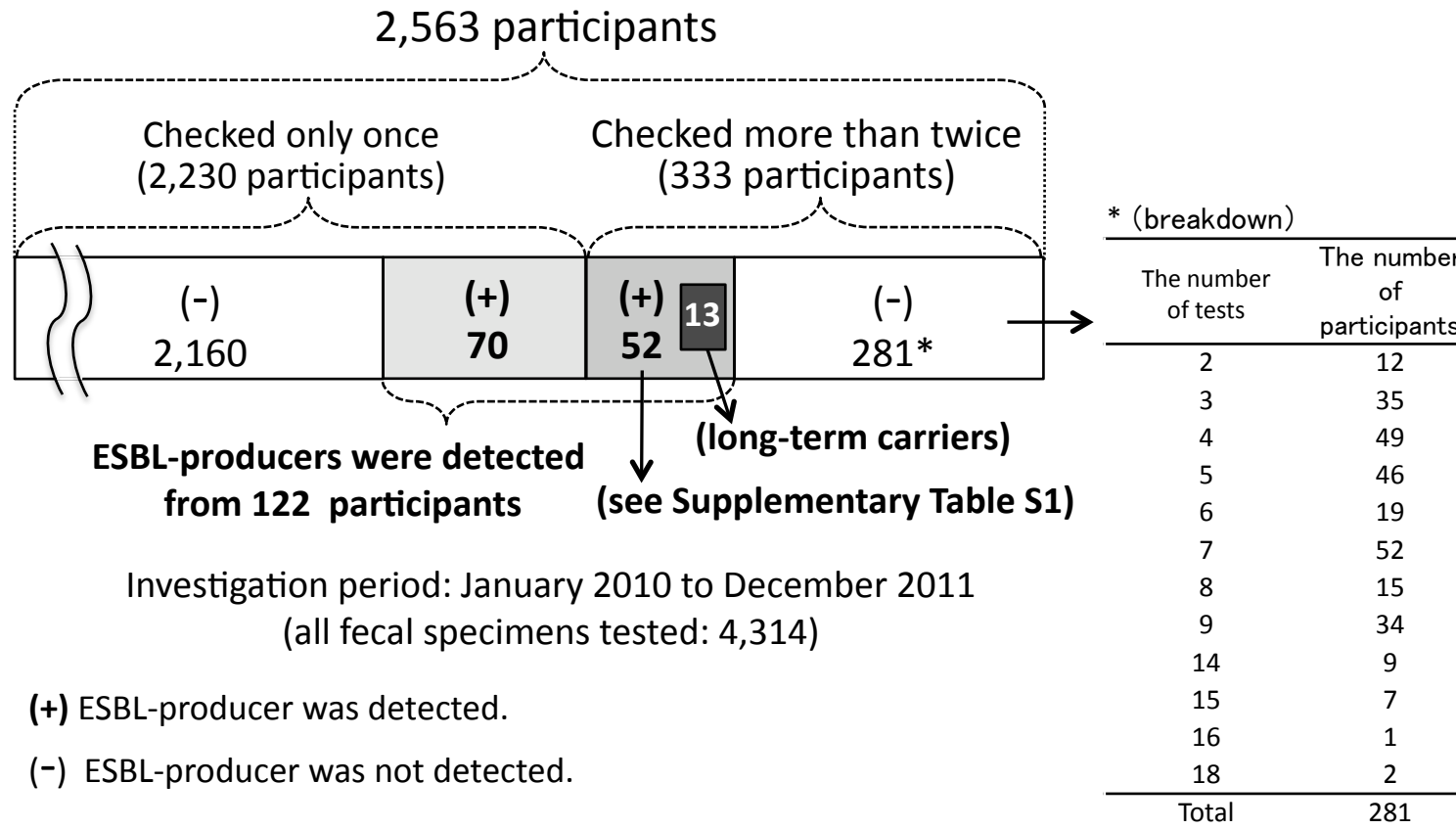


Supplementary Table S1. Detection situation of *bla*_{CTX-M}-harboring *E. coli* isolated from 52 carriers of 333 participants checked more than twice

| No. ^a | Personal ID | Number of tests | Tested month ^b | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|-------------|-----------------|---------------------------|---|---|---|---|---|---|---|---|----|----|----|------|---|---|---|---|---|---|---|---|----|----|----|
| | | | 2010 | | | | | | | | | | | | 2011 | | | | | | | | | | | |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1 | 29 | 3 | | ● | ● | ● | | | | | | | | | | | | | | | | | | | | |
| 2 | 60 | 12 | × | × | × | ● | ● | ● | ● | | ● | ● | ● | ● | | | | | | | | | | | ● | |
| 3 | 66 | 17 | ● | ● | ● | ● | ● | ● | ● | | ● | | ● | ● | | | ● | ● | | | | ● | | ● | ● | ● |
| 4 | 12 | 2 | ● | | | | | | | | ● | | | | | | | | | | | | | | | |
| 5 | 64 | 16 | ● | ● | ● | ● | × | × | ● | | × | | × | × | | | × | × | × | | × | | | × | | × |
| 6 | 69 | 15 | ● | ● | △ | ● | ● | × | | ● | × | | × | × | | | | | | | × | | × | × | × | × |
| 7 | 106 | 9 | | | × | ● | ● | ● | × | | | | × | ● | × | | | | | | | | | | | × |
| 8 | 82 | 14 | ● | ● | ● | ● | | | ● | | | × | | | × | | | × | × | × | × | | | | × | × |
| 9 | 88 | 15 | ● | ● | ● | ● | ● | ● | ● | | | | ● | | × | | | × | × | × | | × | | | × | × |
| 10 | 49 | 15 | ● | ● | ● | ● | | | ● | ● | | | | × | × | × | | × | | | × | | × | | × | × |
| 11 | 87 | 2 | | ● | | | | | | ● | | | | | | | | | | | | | | | | |
| 12 | 26 | 3 | | ● | ● | ● | | | | | | | | | | | | | | | | | | | | |
| 13 | 50 | 15 | ● | ● | ● | ● | ● | ● | ● | | | × | × | × | × | | × | × | × | × | | | | | | × |
| 14 | 1 | 4 | | | ● | | | | | | | × | | | | | | | × | | | | | | | × |
| 15 | 10 | 2 | | | | | | | | ● | | | | | | | | | | | | | | | | × |
| 16 | 18 | 2 | ● | | | | | | | × | | | | | | | | | | | | | | | | × |
| 17 | 22 | 2 | ● | | × | | | | | | | | | | | | | | | | | | | | | |
| 18 | 25 | 14 | × | ● | | | | × | | × | × | | × | | × | | | | × | × | | × | × | | × | × |
| 19 | 27 | 14 | | × | ● | × | × | × | × | × | × | | × | | × | | | | × | | × | | × | | | × |
| 20 | 28 | 14 | × | ● | | | | × | | × | | × | | × | | | | | × | | × | | × | | × | × |
| 21 | 30 | 7 | | × | | ● | | × | | × | | | × | | | | | | × | | × | | | | | |
| 22 | 32 | 15 | × | × | ● | | × | × | | × | | × | | × | | | | | × | × | × | | × | × | | × |
| 23 | 33 | 15 | × | × | ● | | × | | | × | × | × | | × | | | | | × | | × | × | | × | × | × |
| 24 | 34 | 2 | | ● | | | | | | | | | × | | | | | | | | | | | | | |
| 25 | 36 | 2 | | | | ● | | | | | | × | | | | | | | | | | | | | | |
| 26 | 37 | 9 | × | | × | | × | | ● | | × | | × | | | | | | | | × | | × | | × | × |
| 27 | 39 | 2 | × | | | | | | | ● | | | | | | | | | | | | | | | | |
| 28 | 40 | 8 | | ● | | × | | × | | × | × | | × | × | | | | | | | × | | | | | |
| 29 | 42 | 6 | | × | | × | | ● | | × | | × | | × | | | | | | | | | | | | |
| 30 | 43 | 2 | × | | | | | | | ● | | | | | | | | | | | | | | | | |
| 31 | 44 | 3 | | | | | | ● | | | | | | | | | | | × | | | | | | | × |
| 32 | 45 | 7 | | × | | | | | | | | ● | | × | | | | | × | | | × | | | | × |
| 33 | 53 | 13 | × | | × | | × | | ● | × | × | | × | | × | | | | × | | × | | × | | × | × |
| 34 | 55 | 8 | | | | | × | × | ● | | | | × | | | | | | × | | × | | × | | | × |
| 35 | 57 | 2 | × | | | | | | | ● | | | | | | | | | | | | | | | | |
| 36 | 61 | 2 | ● | | | | | | | | × | | | | | | | | | | | | | | | |
| 37 | 62 | 2 | | | | × | | ● | | | | | | | | | | | | | | | | | | |
| 38 | 72 | 2 | | | | | | | ● | | | | | | | | | | | × | | | | | | |
| 39 | 75 | 2 | | | ● | | | | | | | × | | | | | | | | | | | | | | |
| 40 | 76 | 4 | | | | ● | | | | | | | | × | | | | | | | × | | | | | × |
| 41 | 93 | 2 | | | | | | | ● | | | | | | | | | | | × | | | | | | |
| 42 | 97 | 3 | × | | | | | | | ● | | | | | | | | | | × | | | | | | |
| 43 | 102 | 2 | × | | | | | | | ● | | | | | | | | | | | | | | | | |
| 44 | 108 | 2 | × | | | | | | | ● | | | | | | | | | | | | | | | | |
| 45 | 109 | 2 | × | | | | | | | ● | | | | | | | | | | | | | | | | |
| 46 | 111 | 2 | | | | | | × | | ● | | | | | | | | | | | | | | | | |
| 47 | 114 | 2 | | | | | | | ● | | | | | | × | | | | | | | | | | | |
| 48 | 118 | 4 | | × | | | | | | | | ● | | | | | | | | × | | | | | | × |
| 49 | 122 | 2 | ● | | | | | | | | | | × | | | | | | | | | | | | | |
| 50 | 123 | 2 | | | × | | ● | | | | | | | | | | | | | | | | | | | |
| 51 | 125 | 14 | × | | ● | | × | | × | × | | × | | × | | | | | × | | × | × | | × | × | × |
| 52 | 126 | 2 | | × | | | | | | | | ● | | | | | | | | | | | | | | |

^a Nos.1 to 13 are long-term carriers. *E. coli* isolates showing the same serotype and harboring the same *bla*_{CTX-M} gene were recovered more than twice from 13 of the 52 carriers during the study period.

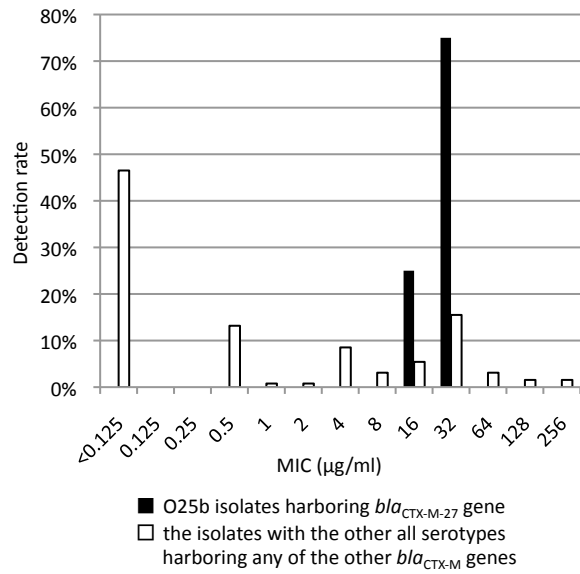
^b ●, Detection of *bla*_{CTX-M}-harboring *E. coli*; ×, No detection of *bla*_{CTX-M}-harboring *E. coli* despite performing fecal checking; △, prescription of unidentified antimicrobial.



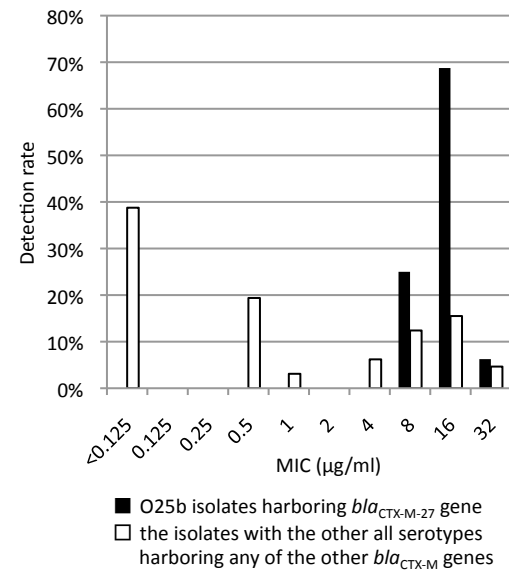
Supplementary Figure S1.

Supplementary FIG S1. Overall flow of the study in view of “participants”

An overview of the test flow of the 2,563 independent participants in the study of ESBL producer from Japanese people who handle or process foods is shown. Among the 2,563 participants, 2,230 were checked only once, but 333 participants were checked more than twice in the study period. ESBL-producers were detected only once from 70 of the 2,230 participants in a one point study. Among the 333 participants tested more than twice, ESBL producers were recovered from 52 participants at least once, and the ESBL producers were detected more than twice from 13 of the 52 participants, and they were designated as “long-term carriers”. The details of detection situation of ESBL producers from the 52 participants are shown in the Supplementary Table S1.



(a) Ciprofloxacin



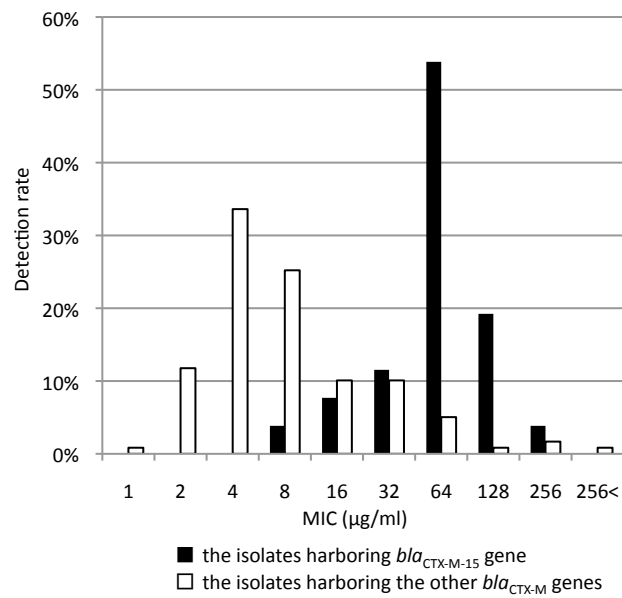
(b) Levofloxacin

Supplementary Figure S2.

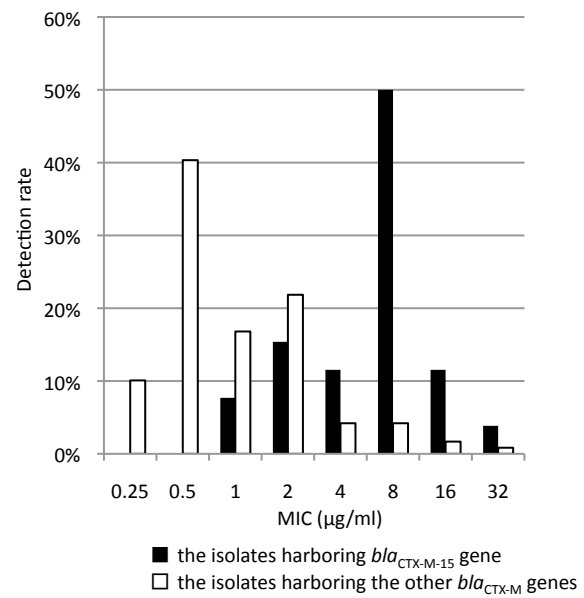
Supplementary FIG S2. Distribution of MIC data of FQs

(a) MIC data of ciprofloxacin for serotype O25b isolates harboring *bla*_{CTX-M-27} gene and those for the isolates with the other all serotypes harboring any of the other *bla*_{CTX-M} genes .

(b) MIC data of levofloxacin for serotype O25b isolates harboring *bla*_{CTX-M-27} gene and those for the isolates with the other all serotypes harboring any of the other *bla*_{CTX-M} genes.



(a) Aztreonam



(b) Ceftazidime

Supplementary Figure S3.

Supplementary FIG S3. Distribution of MIC data of aztreonam and ceftazidime.

(a) MICs of aztreonam for the isolates harboring *bla*_{CTX-M-15} gene and those for the isolates harboring the other *bla*_{CTX-M} genes regardless of the bacterial serotypes.

(b) MICs of ceftazidime for the isolates harboring *bla*_{CTX-M-15} gene and those for the isolates harboring the other *bla*_{CTX-M} genes regardless of the bacterial serotypes.