To examine the relation of Campylobacter jejuni isolates to the development of Guillain-Barré syndrome, a total of 120 strains isolated from 56 gastroenteritis patients and 64 samples of chicken meat and giblet were characterized with serological test, PCR-detection of cst-II, cgtA, and cgtB genes associated with ganglioside-like mimicry of lipooligosaccharide (LOS), and antimicrobial susceptibility test. The 24 human-derived strains and the 19 chicken-derived strains were found to represent 12 and 10 different Penner's serogroups, respectively. Those three LOS genes were simultaneously detected from 9 human-derived strains and 9 chicken-derived strains. Among those 18 strains, only 1 chicken-derived strain carried cst-II (Asn51), and the other 17 strains carried cst-II (Thr51). The serogroups of the strains which harbored the three LOS genes were as follows: serogroup C (O:3), O (O:19) and R (O:23,36,53) respectively in 3 human-derived strains; serogroup B (O:2) in a chicken-derived strain; serogroup D (O:4,13,16,43,50) in 4 chicken-derived strains. The antimicrobial sensitivity test showed a high frequency of resistance to 4 quinolones (nalidixic acid, norfloxacin, ofloxacin and ciprofloxacin) in 22 of 56 human-derived strains (39.3% ) and 22 of 64 chicken-derived strains (34.4%). The frequency of tetracycline resistance was high: 24 of 56 human-derived strains (42.9%) and 16 of 64 chicken-derived strains (25.0%), however, that of fosfomycin resistance was low: 6 of 56 human-derived strains (10.7%) and 4 of 64 chicken-derived strains (6.3%). All 120 strains were sensitive to erythromycin.