

# Flagellin Gene Polymorphism Analysis of *Campylobacter* Compared with Antigen Serotyping

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Flagellin gene sequence polymorphisms were used to discriminate amongst 53 strains of *Campylobacter jejuni* and *C. coli*. The *Campylobacter* strains were made up of forty-three strains of *Campylobacter jejuni* and 10 strains of *Campylobacter coli*. The results were analysed in relation to Penner serotyping. Twenty DNA PCR-RFLP patterns (genotypes) were identified by analysis of Dde I fragment length polymorphisms in flagellin gene (fla A and fla B) polymerase chain reaction (PCR) products. Flagellin gene 13 genotype was a feature of 15% of strains, followed by flagellin gene 8 (9%). Differences in fragment patterns were observed not only between members of two species, but also between individual strains of the same species. The strains that were non-typable by the Penner serotype were distributed into 6 flagellin gene types.

In conclusion, Dde I fla typing is reproducible and offers high typability. However, when the scheme is used in combination with the Penner serotype it provides improved discrimination for the characterizing and subtyping of isolates.