Review

Prevalence and Distribution of Thermotolerant *Campylobacter* Species in Poultry: A Comprehensive Review with a Focus on the Factors Affecting the Detection and Enumeration of *Campylobacter jejuni* and *Campylobacter coli* in Chicken Meat

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**Supplementary Material**

**Table S1.** List of thermotolerant *Campylobacter* species currently identified\*.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Campylobacter* spp. \*\*** | **Origin** | **Sample type**  **or**  **Isolated from** | **Source** | **Original**  **Reference** | **Year of**  **publication** |
| *C. anatolicus* | Animal | Feline | Squirrel feces | [18] | 2022 |
| *C. armoricus* | Environmental/Clinical | Water/Human | Surface water/Stools | [19] | 2019 |
| ***C. aviculae*** | Animal | Avian | Zebra finch feces | [20] | 2021 |
| ***C. avium*** | Animal | Poultry | Chicken cecal content | [21] | 2009 |
| ***C. bilis*** | Animal | Poultry | Bile of chickens with spotty liver disease | [22] | 2022 |
| *C. blaseri* | Animal | Pinniped | Seal feces | [23] | 2018 |
| ***C. canadensis*** | Animal | Avian | Cloacal swabs of whooping crane | [24] | 2007 |
| *C. coli* | Animal/Clinical | Porcine/Human | Pig feces/Blood | [25] | 1973 |
| *C. concisus* | Clinical | Human | Gingival ulcus | [26] | 1981 |
| *C. corcagiensis* | Animal | Apes | Lion-tailed macaque feces | [27] | 2014 |
| *C. cuniculorum* | Animal | Lagomorpha | Rabbit cecal content | [28] | 2009 |
| *C. curvus* | Clinical | Human | Alveolar abscess | [29] | 1991 |
| ***C. estrildidarum*** | Animal | Avian | Zebra finch feces | [20] | 2021 |
| *C. fetus* subsp. *fetus* | Animal/Clinical | Ovine/Human | Sheep fetus brain/Blood | [30] | 1963 |
| *C. geochelonis* | Animal | Reptile | Turtle cloacal swabs | [31] | 2016 |
| *C. gracilis* | Clinical | Human | Gingival ulcus | [32] | 1995 |
| *C. helveticus* | Animal | Feline | Cat feces | [33] | 1992 |
| ***C. hepaticus*** | Animal | Poultry | Livers of chickens with spotty liver disease | [34] | 2016 |
| *C. hominis* | Clinical | Human | Feces | [35] | 2001 |
| *C. hyointestinalis* | Animal | Porcine | Pig intestine | [36] | 1985 |
| *C. iguaniorum* | Animal | Reptile | Cloacal and rectal swabs of lizards | [37] | 2015 |
| *C. insulaenigrae* | Animal | Pinniped | Rectal swabs of seals and a porpoise | [38] | 2004 |
| *C. jejuni* subsp. *jejuni* | Animal | Bovine | Feces | [25] | 1973 |
| *C. lanienae* | Clinical | Human | Feces | [39] | 2000 |
| ***C. lari*** | Animal | Avian | Cloacal swabs of herring gulls | [40] | 1983 |
| *C. majalis* | Animal | Porcine | Gastrointestinal mucosa | [41] | 2022 |
| *C. massiliensis* | Clinical | Human | Gingival ulcus | [42] | 2021 |

**Table S1.** List of thermotolerant *Campylobacter* species currently identified\* (continued)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Campylobacter* spp. \*\*** | **Origin** | **Sample type**  **or**  **Isolated from** | **Source** | **Original**  **Reference** | **Year of**  **publication** |
| *C. mucosalis* | Animal | Porcine | Small intestine | [43] | 1985 |
| ***C. novaezeelandiae*** | Environmental/Animal | Water/Avian | River water/Bird feces | [44] | 2020 |
| ***C. ornithocola*** | Animal | Avian | Wild bird feces | [45] | 2017 |
| *C. peloridis* | Animal | Molluscan | Shellfish | [46] | 2009 |
| *C. pinnipediorum* | Animal | Pinniped | Abscesses and internal organs of different seal species | [47] | 2017 |
| *C. portucalensis* | Animal | Bovine | Preputial mucosa of bulls | [48] | 2021 |
| *C. rectus* | Clinical | Human | Periodontal pocket | [29] | 1991 |
| *C. showae* | Clinical | Human | Oral cavity | [49] | 1993 |
| *C. sputorum* subsp. *sputorum* | Clinical | Human | Oral cavity | [25] | 1973 |
| ***C. subantarcticus*** | Animal | Avian | Fecal swabs from birds in the sub-Antarctic region | [50] | 2010 |
| *C. suis* | Animal | Porcine | Gastrointestinal mucosa | [41] | 2022 |
| ***C. taeniopygiae*** | Animal | Avian | Zebra finch feces | [20] | 2021 |
| *C. upsaliensis* | Animal/Clinical | Canine/Human | Dog feces/feces | [51] | 1991 |
| *C. ureolyticus* | Clinical | Human | Amniotic fluid | [52] | 2010 |
| ***C. volucris*** | Animal | Avian | Rectal swab from black-headed gulls | [53] | 2010 |
| *C. vulpis* | Animal | Canine | Cecal content of wild red foxes | [54] | 2021 |

\* Retrieved from <https://www.bacterio.net/genus/campylobacter> [16,17].

\*\* Species in bold were originally isolated from samples obtained from poultry or avian species.