

Understanding and Control of Foodborne Pathogens by Learning from Bacteriophages

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Recent approval by US FDA to apply bacteriophage to control specific foodborne pathogen increased the interest on its usefulness [1]. Genome of bacteriophage can become a part of the host and there make the strain-to-strain differences, called lysogenic conversion [2]. Studying the host-pathogen interactions is thus helpful to understand the bacterial pathogen. In addition, application of bacteriophage and/or its by-product, endolysin, comes to the spotlight in an effort to use them as a tool to detect and control foodborne pathogens; their advantages include specificity, safety and efficiency [3]. In this presentation, usefulness of bacteriophages to better understand and control their host bacterial pathogens will be discussed.

References

- [1] Food and Drug Administration *Federal Register*, **71**, 47729–47732 2006
- [2] Brüssow H, Canchaya C, and Hardt WD *Microbiology and Molecular Biology Reviews*, **68**, 560-602 2004
- [3] Carlton RM, Noordman WH, Biswas B, de Meester ED, and Loessner MJ *Regulatory Toxicology and Pharmacology*, **43**, 301–312. 2005