Interfering with the Pathogenesis Pathway of *Cronobacter* spp using Novel Antimicrobials

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Abstract. *Cronobacter* spp. (previously *Enterobacter sakazakii*) are bacteria described as emerging opportunistic food-borne pathogens. Neonates and infants are most at risk from infection and powdered infant formula (PIF) has been implicated as the source of infection in the majority of outbreaks. The sources of contamination, ecology and virulence characteristics of this genus are, as yet, poorly understood. There is a need to identify traits related to its pathogenesis and persistence in suspected food sources, especially PIF. An impressive 15% of the world's PIF is made in Ireland and an outbreak of *Cronobacter* would have serious detrimental consequences to the economy. This study aims to develop a novel food grade antimicrobial effective in interfering with the pathogenesis of *Cronobacter* spp. The development of such an agent, and its possible inclusion in PIF is a conceptually encouraging solution to the potentially devastating effects of a *Cronobacter* outbreak in Ireland.