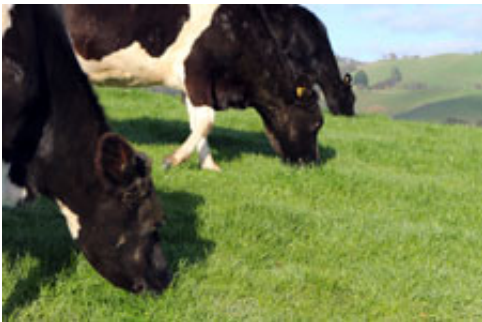


# Researchers developing next-generation sanitisers to control bovine mastitis in the dairy industry

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Researchers from the Universities of Otago and Auckland have teamed up with a leading New Zealand animal health innovator, Deosan, to develop new sanitisers for mastitis management. The development and implementation of new sanitisers will continue to enhance New Zealand's position as a global leader in milk quality by improving performance in mastitis prevention and guard against the emergence of antimicrobial resistance.

Mastitis is a bacterial infection of the udder and is the foremost production-limiting disease for dairying worldwide, costing the New Zealand [dairy industry](#) over \$280m per year in treatment and discarded milk.

Currently the dairy industry predominantly relies on just two antimicrobial sanitisers to control mastitis, administered through teat sprays. Both formulations contain bioactive ingredients (chlorhexidine or iodine) that are also widely used for infection control in hospitals. However the mounting threat of [antimicrobial resistance](#) in clinical environments and lower acceptance of chemical residues in consumer products are behind calls for the development of new types of products for use within the dairy industry.

Previous research by the team (supported by Agmardt) has uncovered a new class of molecules that have potent antimicrobial activity against mastitis-causing microorganisms that have the potential to synergise with current treatments, as well as being harmless to mammalian cells.

The \$1.7m Ministry of Business, Industry and Enterprise-funded study will use a combined microbiological and medicinal chemistry approach to advance these new anti-mastitis molecules and pave the way for entirely new teat care formulations, protecting New Zealand dairy herds from mastitis.

CEO of Deosan Kip Bodle says this project provides an ideal opportunity for key stakeholders in the industry to collaborate to ensure we maintain our position as a global leader in producing quality milk. "Our intention is to engage with government and industry leaders to ensure we are successful in commercialising products that could have global significance. Our more recent experience in the international arena strongly suggests that New Zealand innovation around milk quality resonates well with emerging dairy markets."

The Otago research team, led by Professor Greg Cook, Drs Michelle McConnell and Adam Heikal, are supported by the Auckland University team of Professor Margaret Brimble, Deosan, and other leading New Zealand experts in mastitis research and dairy processing aim to develop,

optimise and field-test new products for use by the dairy industry within two to three years.

Provided by University of Otago

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