



Propositions

1. *Propionibacterium freudenreichii* occupies a niche at the end of trophic chains.
(this thesis)
2. Application of mixed bacterial and fungal starter cultures opens a window of opportunities for innovations of fermented foods.
(this thesis)
3. The "Colombion Exchange" of food crops (Crosby, 1973) has benefitted Eurasia more than the Americas.
4. The fact that bees are able to discriminate between odd and even numbers (Howard *et al.*, 2022) indicates mathematical parity is evolutionary relevant.
5. The over-industrialization of our food system has led to significant decline of knowledge on artisanal food conservation and preparation methods in the general public.
6. It is the PhD candidate's responsibility to graduate in-time.

Propositions belonging to the thesis, entitled:

Propionibacterium freudenreichii, more than meets the 'eyes'

Alexander Dank
Wageningen, 11th of April, 2023

Propionibacterium
freudenreichii
more than meets the 'eyes'

Alexander Dank

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Advanced studies in Food Technology, Agrobiotechnology, Nutrition and health sciences

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Thesis

submitted in fulfilment of the requirements for the degree of doctor
at Wageningen University
by the authority of the Rector Magnificus
Prof. Dr A.P.J. Mol,
in the presence of the
Thesis Committee appointed by the Academic Board
to be defended in public
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Alexander Dank

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