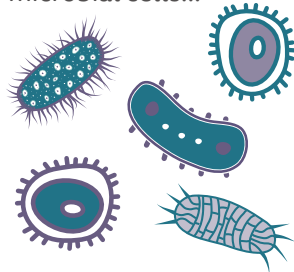


Postbiotics

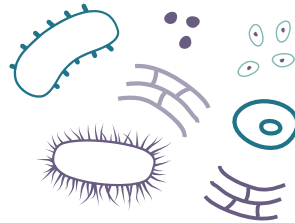
A postbiotic is a preparation of inanimate microorganisms and/or their components that confers a health benefit on the host.

COMPONENTS OF A POSTBIOTIC:

Postbiotics may contain intact inanimate microbial cells...

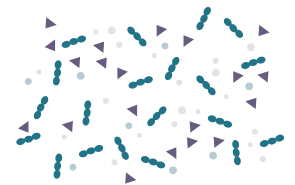


and/or microbial cell fragments/structures...



Cell walls, membranes, exopolysaccharides, cell-wall anchored proteins, pili, etc.

with or without metabolites/endproducts



Organic acids, peptides, secreted proteins, enzymes, bacteriocins, etc.

POSTBIOTIC:

- ✓ Derived from microorganisms, but a postbiotic does not have to be derived from a probiotic
- ✓ A deliberate process to terminate cell viability must be applied. The final postbiotic must contain inactivated microbial cells and/or metabolites or cell components
- ✓ Negligible number of viable cells remaining in final product
- ✓ Evidence of a health benefit in the target host
- ✓ Assessment of safety of the postbiotic preparation for the intended use

NOT POSTBIOTIC:

- ✗ Viruses, including bacteriophages
- ✗ Vaccines
- ✗ Filtrates without cell components
- ✗ Purified microbial components (e.g., proteins, peptides, exopolysaccharides)
- ✗ Purified microbial metabolites (e.g., organic acids)

THE POSTBIOTIC DEFINITION EXPLAINED:

Postbiotic is derived from “biotic”, relating to living organisms, and “post”, meaning after (life).

Preparation recognizes that the specific formulation, including microbial biomass, matrices, and inactivation methods, may play a role in the beneficial effect.

Inanimate recognizes that the terms ‘dead’ or ‘inactive’, may suggest an inert material, rather than a material capable of conferring a health benefit.

Components recognizes that health effects may be mediated by a variety of different cell parts or metabolites.



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