

Wanted dead or Alive

What are the differences between live and dead beneficial bacteria



Probiotics are defined as live microorganisms that when administrated in adequate amounts confer a health benefit to the host.

Inactivated (“dead”) beneficial bacteria are not considered probiotics. They belong to the group of postbiotics.

Postbiotics are defined as preparations of inanimate microorganisms and/or their components that confers a health benefit on the host.

Dead and live bacteria can have common beneficial effects such as immunomodulatory actions however, there is also differences

What are the main differences between **Probiotics** and **Postbiotics** ^{[1][2][3]}

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| <ul style="list-style-type: none"> Can proliferate and colonize the intestinal microbiome Benefits are extensively documented in clinical studies for various health benefits Health benefits are strain specific Can excrete bacteriocins that inhibit pathogens Stimulate the production of beneficial SCFA Ability to metabolize harmful molecules (cholesterol), thus benefit host metabolism Limited stability Risk of transferring antibiotic resistance genes | <ul style="list-style-type: none"> Cannot proliferate and colonize the intestinal microbiome Benefits are not yet well established and more evidence is needed Different metabolite production by specific strains requires further research Do not excrete bacteriocins that inhibit pathogens Limited ability to stimulate the production of SCFA Limited ability to metabolize harmful molecules (cholesterol), thus benefit host metabolism High stability No risk of transferring antibiotic resistance genes |
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