# Article information:

The differing roles of flavins and quinones in extracellular electron transfer in Lactiplantibacillus plantarum | bioRxiv
<https://www.biorxiv.org/content/10.1101/2022.07.29.502109v1>

# Article summary:

1. Lactiplantibacillus plantarum is a lactic acid bacteria that can perform extracellular electron transfer (EET) when provided with an exogenous quinone, 1,4-dihydroxy-2-naphthoic acid (DHNA) and riboflavin.

2. This study seeks to understand the role of quinones and flavins for EET by monitoring iron and anode reduction in the presence and absence of these small molecules.

3. The results suggest that electron transfer to extracellular iron occurs through both flavin-dependent and DHNA-dependent routes, while electron transfer to an anode proceeds most efficiently through the DHNA-dependent pathway.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is reliable in terms of its scientific content as it provides evidence for its claims and presents data from experiments conducted to support its conclusions. However, there are some potential biases in the article which should be noted. Firstly, the authors do not explore any counterarguments or alternative explanations for their findings, which could lead to a one-sided view of the topic being presented. Additionally, there is no discussion of possible risks associated with manipulating EET for biotechnological uses, which could be important information for readers to consider before taking action based on this research. Furthermore, there is no mention of any potential conflicts of interest or sources of funding that may have influenced the research or conclusions presented in this article. Finally, there is no discussion of how this research could be applied in practice or what implications it may have for other areas of science or industry.

# Topics for further research:

* Counterarguments to EET manipulation
* Risks of EET manipulation
* Conflicts of interest in EET research
* Funding sources for EET research
* Applications of EET manipulation
* Implications of EET manipulation

# Report location:

<https://www.fullpicture.app/item/42677272ce18db5b8e474412c6dba238>