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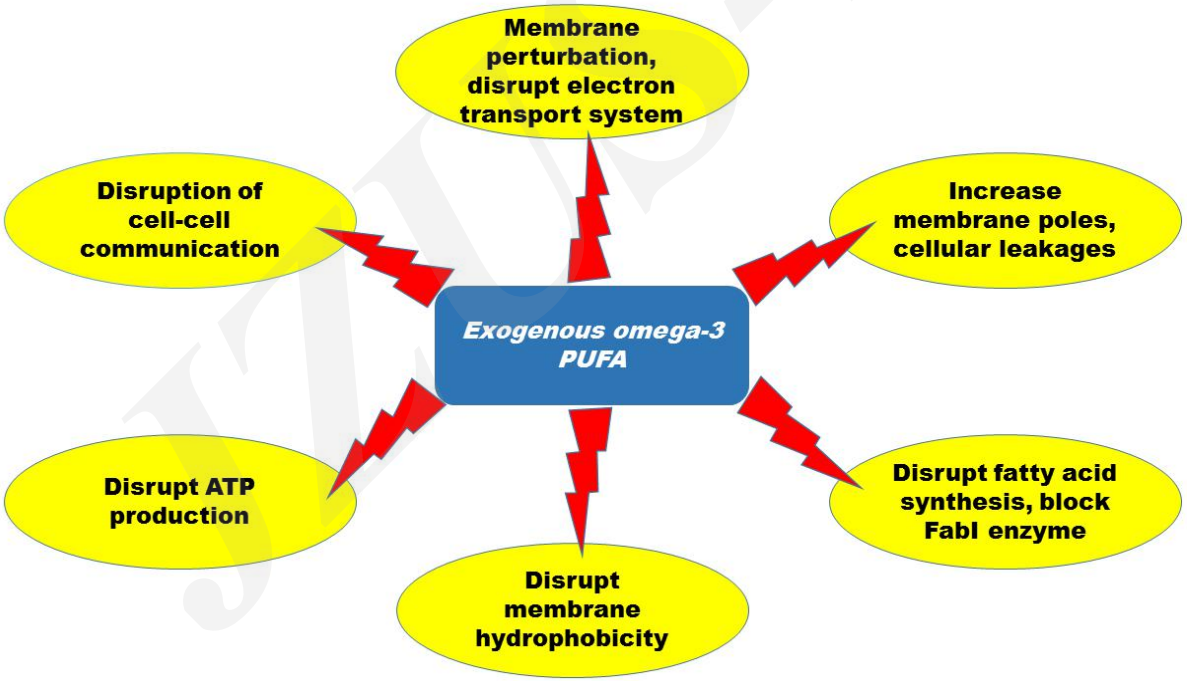
Effectiveness of omega-3 polyunsaturated fatty acids against microbial pathogens

Key words: Linolenic acid, Omega-3 fatty acid, Eicosapentaenoic acid (EPA), Docosahexaenoic acid (DHA), Antimicrobial agent, Fatty acid

Research Summary

This review focuses on the efficacy, mechanism, and toxicity of omega-3 fatty acids as alternative therapeutic agents for treating and preventing diseases associated with pathogenic microorganisms



- **Summarizes the action of omega-3 on microbial cells**

Innovation points

- **Introduction** on the sources, types and several efficacious roles of omega-3 PUFA play in our bodies, such as the anti-inflammatory and immunomodulatory functions.
- **Summary** of recent research progress about omega-3 utilization in pre-clinical and clinical studies, and their associated drawbacks.
- **Emphasis** on taking advantage of the broad spectrum properties of omega-3 PUFA on pathogenic microbes as alternative antimicrobial agents.

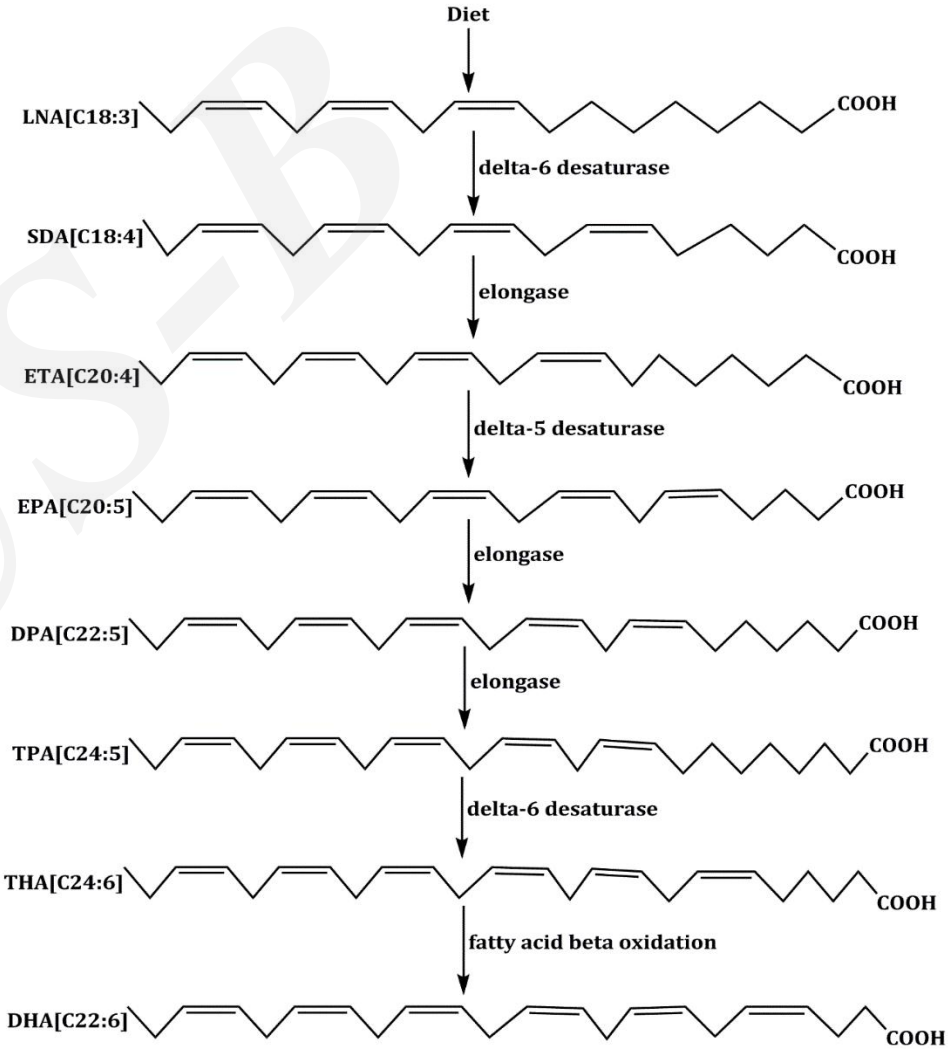


Figure 1

Innovation points

A generated table to present an overview of the antimicrobial properties of omega-3 PUFA on several pathogens.

Table 1 | Antimicrobial Activity of Omega-3 PUFA.