

for liquid actives

OPTIMISED BIOAVAILABILITY
INCREASED FUNCTIONALITY
CLINICALLY PROVEN ABSORPTION

Supercharge bioavailability by up to 600%

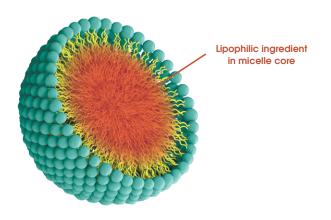
AquaCelle® is a patented delivery system, clinically proven to optimise bioavailability of lipophilic actives while maintaining product stability and offering functional benefits.

Award winning, micellar technology developed and made in Australia.

OPTIMISED MICELLE FORMATION FOR INCREASED BIOAVAILABILITY

AquaCelle® is a Self Emulsifying Delivery System (SEDDS). When AquaCelle® is mixed with a lipophilic (oil loving) active, the mixture immediately emulsifies upon contact with water to then form micelles. Micelle formation is essential for our body to absorb fat soluble nutrients, as our GI Tract is a water-based environment.

AquaCelle® increases the surface area of nutrients in the GI tract, which is how vastly improved bioavailability results are achieved.



AquaCelle® micelle cross section

AquaCelle® micelles are normally in a range of 0.1-40 microns in diameter which allow them to be more easily absorbed by the body.

FUNCTIONALITY

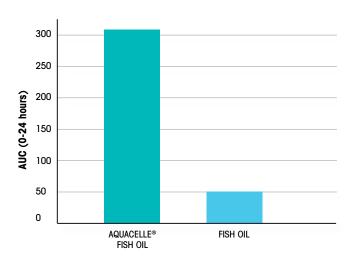
You can now include oily actives in highly bioavailable formulas with innovative formats. Oral gels, drops, functional foods/drinks, gummies are all dosage formats that are now achievable.

SUBSTANTIATED ABSORPTION

Human pharmacokinetic studies prove the active nutrient is delivered to systemic circulation at significantly higher levels with AquaCelle®.

- 6x increase in bioavailability performance with Omega-3 Fish Oils.
- 3x increase in bioavailability performance with CoQ₁₀.
- Equivalent absorption to Ubiquinol (without risk of unstable formula).
- 3x increase in bioavailability with lutein.

Absorption comparison of AquaCelle® enhanced fish oil vs standard fish oil



The area under the curve (or AUC) of plasma concentration of an active ingredient versus time after dosage, gives insight into the extent of exposure to an active ingredient and its clearance rate from the body

AquaCelle® in your formulation meets consumer needs like:

- Pill Fatique
 - "I want to take fewer and smaller pills."
- Sustainability
 - "I don't want to consume more than I need."
- Convenience
 - "I forget to take my supplements with a fatty meal."
- - "I'll try it but if I experience unpleasant side effects I might stop."
- Health Outcomes
 - "Is this the best product I can take to reach my health goals."

AquaCelle® allows you to:

- Improve cost per dose.
- Reduce dose size/number of capsules.
- Create supplements which can be taken without food.
- Develop highly bioavailable formulas.
- Make room for multi-active formulations.
- Overcome unpleasant side effects such as fishy reflux.
- Include oily actives in water based formulas.
- Overcome stability risks and overage issues associated with unstable actives (eg ubiquinol and lutein).

Multi-award winning, supported by pharmacokinetic and clinical studies published in high impact journals, with a raft of continuing clinical studies under way.

- 1 PK Study AquaCelle® Omega-3: A self-emulsifying Omega-3 ethyl ester formulations AquaCelle® significantly improves eicosapentaenoic and docosahexaenoic acid bioavailability in healthy adults. Bremmell, K.E., Briskey, D., Meola, T.R. et al. Eur J Nutr 59, 2729-2737 (2020). doi.org/10.1007/s00394-019-02118-x
- 2 PK Study AquaCelle® CoQ₁₀: The impact of micelle size and increased absorption of ubiquinone using a novel delivery system (AquaCelle®). David Briskey, Andrew T Sax, Alistair R Mallard, Charlie Ng and Amanda Rao. International Journal of Pharmacokinetics vol.4, no. 2 (2019). doi.org/10.4155/ipk-2019-0004

AWARDS



AquaCelle® Omega-3

Ingredient of the Year

Healthy Ageing

ASIA





USA

AquaCelle® Q₁₀ Healthy Ageing Ingredient of the Year



ASIA

AquaCelle® Q, Ingredient of the Year Healthy Ageing

FUROPE

AguaCelle Nutrition Research Project of the Year

AWARDS 2019

EUROPE

AquaCelle® Q₁₀ Healthy Ageing Ingredient of the Year



2023 Australia

Quality Wholesaler/Distributor of the Year

2022

Quality Wholesaler/Distributor of the Year

Quality Raw Material Supplier of the Year

Quality Raw Material Supplier of the Year



2023 Australia

Exporter of the Year

Manufacturing and **Advanced Materials**

2022 Australia

International Health Winner

Applying AquaCelle® trademark on your product pack tells your customers you are offering a product of quality, proven efficacy, clinical validation and innovation.

FOR FURTHER INFORMATION ABOUT AQUACELLE® OR TO DISCUSS HOW AQUACELLE® CAN BENEFIT YOU, CONTACT:



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