

PRESS RELEASE

Number 12

CAVACURMIN®: Study Reveals Increased Metabolic Bioavailability of Tetrahydrocurcumin

Munich, May 6, 2021 – A study recently published in the Journal of Functional Foods shows that ingestion of the curcumin-cyclodextrin complex CAVACURMIN® leads to an increased metabolic bioavailability of tetrahydrocurcumin. A large portion of supplemented curcumin is converted into tetrahydrocurcumin in the body. This metabolite is credited with anti-inflammatory and antioxidant properties. CAVACURMIN® is the only formulation on the market that demonstrably boosts the bioavailability of both curcumin and tetrahydrocurcumin.

Curcumin, the active compound in turmeric, is a powerful antioxidant that supports healthy aging and joint health, as has been demonstrated in various studies. As it is not water-soluble, curcumin is not readily absorbed in the human bloodstream. Its bioavailability can be boosted significantly with the aid of gamma-cyclodextrin. A study published in 2018 shows that the curcuminoids of WACKER's cyclodextrin complex CAVACURMIN® are absorbed around 40 times more efficiently in the body than those of a standard curcumin extract (Purpura et al. 2018)¹.

As part of a randomized double-blind study, it has now been shown that the metabolic bioavailability of tetrahydrocurcumin is also around 40 times higher following ingestion of CAVACURMIN® compared to a standard curcumin extract (Hundshammer et al. 2021)².

¹ Purpura, Martin, et al. "Analysis of different innovative formulations of curcumin for improved relative oral bioavailability in human subjects." *European journal of nutrition* 57.3 (2018): 929-938.

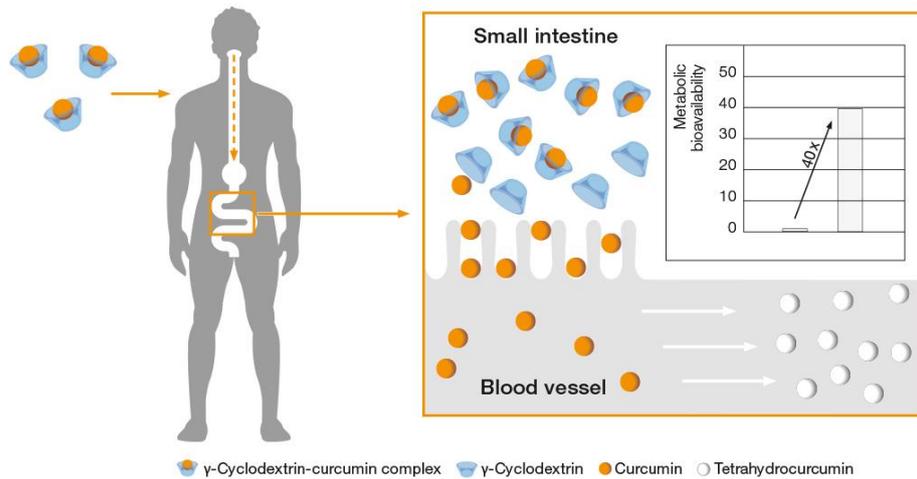
² Hundshammer et al. "Enhanced metabolic bioavailability of tetrahydrocurcumin after oral supplementation of a γ -cyclodextrin curcumin complex." *Journal of Functional Foods*, 79 (2021), 104410

Tetrahydrocurcumin is a curcumin metabolite credited with additional health-promoting properties. The metabolic bioavailability gives the ratio of the in-vivo production of tetrahydrocurcumin to the absorbed amount of curcumin. Another finding of the long-term study is that, after only four weeks, daily ingestion of CAVACURMIN® (approx. 340 milligrams curcumin each time) leads to a consistently high blood concentration of curcumin and tetrahydrocurcumin. This effect can be measured after 12 weeks as well. The long-term study furthermore confirmed very high tolerability of CAVACURMIN®.

CAVACURMIN® can be easily processed in food supplements, such as tablets, capsules and energy bars or functional beverages.

About WACKER BIOSOLUTIONS

Using advanced biotech processes, WACKER BIOSOLUTIONS provides tailored, innovative solutions and products to the life-science sector – including pharmaceutical proteins, cyclodextrins and fermentation-generated cysteine. Its portfolio is also complemented by catalog chemicals, such as acetylacetone. The division focuses on developing customized solutions for growth sectors, such as food ingredients, pharmaceutical actives and agrochemicals.



Ingestion of the curcumin-cyclodextrin complex CAVACURMIN® leads to 40 times higher metabolic bioavailability of tetrahydrocurcumin (image: WACKER).



CAVACURMIN® is a high-bioavailability complex of curcumin extract and gamma-cyclodextrin. Curcumin is extracted from turmeric. (photo: WACKER)

Note:

These images are available for download at:
<http://www.wacker.com/pressreleases>

For further information, please contact:

Wacker Chemie AG
Media Relations & Information
Manuela Dollinger
Tel. +49 89 6279-1629
manuela.dollinger@wacker.com
www.wacker.com
follow us on:   

The company in brief:

WACKER is a globally active chemical company with some 14,300 employees and annual sales of around €4.69 billion (2020).
WACKER has a global network of 26 production sites, 23 technical competence centers and 52 sales offices.

WACKER SILICONES

Silicone fluids, emulsions, rubber grades and resins; silanes; pyrogenic silicas; thermoplastic silicone elastomers

WACKER POLYMERS

Polyvinyl acetates and vinyl acetate copolymers and terpolymers in the form of dispersible polymer powders, dispersions, solid resins and solutions

WACKER BIOSOLUTIONS

Biotech products such as cyclodextrins, cysteine and biologics, as well as fine chemicals and PVAc solid resins

WACKER POLYSILICON

Polysilicon for the semiconductor and photovoltaic industries