

**Trade Release**

Geneva, 28 April 2021

The Journal of Nutrition publishes clinical results confirming TurmiPure Gold® delivers superior curcuminoids bioavailability at a low dose

Newly published randomised crossover study in healthy adults compares the efficacy of five turmeric formulas at their recommended daily dose, with TurmiPure Gold® demonstrating bioequivalence at a low dose for the first time.

Renowned academic publication The Journal of Nutrition has published the results of a new gold-standard comparative clinical pharmacokinetic study demonstrating that the bioavailability of curcuminoids is impacted significantly by the different delivery technologies used to formulate the turmeric ingredients.

The clinical study was designed in line with the latest best practice: randomised, cross-over, high number of subjects (30 healthy adults), 24-hour kinetics, consistent delivery format, clear statistical plan, and the most exhaustive quantification of curcuminoids metabolites carried out to-date. It compared five turmeric products consumed orally at their recommended daily dose for efficacy: standard turmeric extract (1,500mg), piperine-curcuminoid combination (1,515mg), phytosome formulation (1,000mg), liquid micellar preparation (1,000mg) and natural patented dried colloidal suspension turmeric formulation – TurmiPure Gold® (300mg).

The researchers found that a low dose of TurmiPure Gold® delivered significantly more curcuminoids in blood than a higher dose of any of the other four formulas tested, clearly demonstrating bioequivalence at a low dose. Across the 24-hour study period, a small dose of TurmiPure Gold® (300mg) was shown to deliver as many curcuminoids to the blood as 1,920mg of standard turmeric extract or 2,260mg of a piperine-curcuminoid blend.

The study also addressed an area of major scientific interest: better understanding of the factors affecting the absorption of curcuminoids. The study shed new light on the proportion of free curcumin vs metabolites really absorbed, but also on dose impact on bioavailability as well as calling into question the need for piperine to maximise absorption.

Pascale Fañça-Berthon, Category Technical Leader, Health at Givaudan, said: "Publication of this paper in such a reputable journal underlines the quality of the science involved in this study. The results indicate that TurmiPure Gold® is the most bioavailable low-dose turmeric extract available on the market."

She added: "TurmiPure Gold® delivers the natural wellbeing benefits that consumers want at a low and cost effective dose. Instantly water-dispersible, it is 100% natural and safe. This innovation broadens the potential for application development and is perfectly aligned with Givaudan's commitment to support healthy living through its 'Does Good' Food Experience space."





Part of Givaudan's Health Essentials bioactive and clinically proven botanical ingredients, TurmiPure Gold® has been subjected to best-in-class human clinical trials to confirm its safety. It is also Generally Recognized as Safe (GRAS) by an expert Panel in the US, making it suitable for Food & Beverage applications.

This trade release is intended to provide business-to-business information. It is not for communication to end consumers. The information provided and its uses must be checked for compliance under appropriate local regulations.

About Givaudan

Givaudan is a global leading company in taste and wellbeing, and fragrance and beauty. With its heritage stretching back over 250 years, the Company has a long history of innovating scents and tastes. From a favourite drink to your daily meal, from prestige perfumes to cosmetics and laundry care, its creations inspire emotions and delight millions of consumers the world over. The Company is committed to driving purpose-led, long-term growth while leading the way to improve happiness and health for people and nature. In the fiscal year 2020, the Company employed almost 16,000 people worldwide and achieved sales of CHF 6.3 billion and a free cash flow of 12.8% of sales. Let's imagine together on www.givaudan.com.

About Givaudan Taste & Wellbeing

Powered by innovation and creativity, Givaudan Taste & Wellbeing aims to shape the future of food by becoming the co-creation partner of choice to its customers. Built on its global leadership position in flavours and taste, the Company goes beyond to create food experiences that do good and feel good, for body, mind and planet. With an expanded portfolio of products across flavours, taste, functional and nutritional solutions and a deep knowledge of the food ecosystem, Givaudan's passion is to collaborate with customers and partners to develop game changing innovations in food and beverage. Let's imagine together the future of food. Learn more at www.givaudan.com/taste-wellbeing.

For further information please contact

Eve Landen, Taste & Wellbeing Communications

T +33 4 9023 7020

E eve.landen@givaudan.com