



ADVANCED
ORTHOMOLECULAR RESEARCH

AOR CODE: AOR04006

Premium

Curcumin Ultra

A Revolutionary Curcumin Formulation for Relief of Pain and Inflammation
2017 Silver Alive Retailer Choice Award Winner



- Combines free-form curcumin with turmeric polysaccharides for unparalleled efficacy and bioavailability
- Fast-acting relief for those experiencing chronic pain and arthritis
- Long lasting 24-hour relief of pain and inflammation

 Gluten Free  Non-GMO  Absorbables Brain Health Gastrointestinal Health Inflammation Osteoarthritis

AOR Code
AOR04006

Variant
60 SOFTGELS

Details

Curcumin, the active compound from turmeric root, is known for its antioxidant, anti-inflammatory and pain-relieving properties. It is unfortunately also known for its poor absorption. Curcumin Ultra utilizes the newest innovations in curcumin research, combining a proprietary form of curcumin called CurQfen® with a blend of beneficial water-soluble polysaccharides from raw turmeric extract known as Turmacin®. The result is a curcumin product with the highest levels of absorption and bioavailability on the market. Curcumin Ultra is both fast-acting and long-lasting, for rapid relief of pain and inflammation that lasts for up to 24 hours.

Anyone suffering from joint pain or arthritis, back pain, or any type of acute or chronic pain and inflammation will benefit greatly from this product. Curcumin Ultra is a powerful antioxidant and anti-inflammatory, and can therefore also be used by those who simply want to support their overall health and prevent disease.

Label Info

Discussion

Curcumin Ultra contains *Curcuma longa* extract, which is traditionally used in herbal medicine as an anti-inflammatory to help relieve joint pain, flatulent dyspepsia (carminative), to aid digestion, as a hepatoprotectant/liver protectant, and to increase bile excretion by the liver (cholorectic) and stimulate contraction of the gallbladder (cholagogue)

Product Variation

Product Code	Size
AOR04006	60 SOFTGELS

Supplements Facts

Serving Size: 1 Softgel	Amount
Curcumin (from curcuminoid-galactomannan complex)*	153 mg
Turmeric extract (12-14:1)	84 mg

*CurQfen®

Non-medical ingredients:

medium chain triglycerides, lecithin, gelatin (bovine), organic coconut oil, glycerin, water, isopropyl alcohol, silicon dioxide, turmeric oil, calcium carbonate

Guarantees

AORTM guarantees that all ingredients have been declared on the label. Contains no wheat, gluten, corn, nuts, peanuts, sesame seeds, sulphites, mustard, dairy or eggs.

Adult Dosage

Take 1 softgel 1 – 2 times per day, or as directed by a qualified health care practitioner.

Cautions

Consult a health care practitioner prior to use if you are pregnant, have stomach ulcers, excess stomach acid, gallstones, or bile duct obstruction or if you are taking anti-platelet medications or blood thinners. Consult a health care practitioner if symptoms persist or worsen.

Source

CurQfen® and Turmacin® (Cucumin- *Curcuma longa*/turmeric root)

Main Application

Acute or severe inflammation

Auto-immunity

Cognitive health

Gastrointestinal health

Liver health

Antioxidant

Cellular growth and differentiation

Lipid metabolism

Disclaimer

The information and product descriptions appearing on this website are for information purposes only, and are not intended to provide or replace medical advice to individuals from a qualified health care professional. Consult with your physician if you have any health concerns, and before initiating any new diet, exercise, supplement, or other lifestyle changes.

Research

Background

What is Curcumin *Ultra*?

Curcumin *Ultra* is a new product from AOR, which unlike any other product on the market is a unique combination of free-form curcuminoids (CurQfen®) with water-soluble turmeric polysaccharides (Turmacin®). This new formulation not only combats the issues most curcumin products on the market face, such as poor bioavailability, but it also provides the highest levels of bioactive free-form curcuminoids on the market.

Why is Curcumin *Ultra* Important for Health?

CurQfen® is a new enhanced bioavailable curcumin formulation using fenugreek-derived soluble dietary fibre containing galactomannans. In a double-blind randomised crossover study of 50 patients, the bioavailability of CurQfen® was compared to standard curcumin and plasma concentrations were measured (4). The authors found that at two different concentrations (1000 mg and 250 mg), the plasma concentration of free-form curcumin was higher in patients treated with CurQfen® at both doses. The plasma levels are also the highest concentration of free-curcuminoids published (2.274 µg/mL.h). Finally, this study was the first to report the ratio of conjugated to free-form, which was approximately 1:3, indicating a significant distribution of free-form curcumin.

Pre-clinical studies in rats, showed that oral administration of CurQfen® resulted in increased plasma concentration, improved BBB permeability, and increased tissue distribution and uptake in the heart, liver, kidney and spleen (2). Despite many other curcumin products claiming increased bioavailability (higher plasma concentrations), studies using these products have not been completed to show the uptake of curcumin by various tissues and organs in the body. That is, some products may be more bioavailable, but not necessarily more bioaccessible. This is the first report on tissue distribution kinetics of free-form curcumin, showing actual uptake of CurQfen® by various tissues in the body.

Despite being water-dispersible, CurQfen® is not water-soluble. Supplementation with water-soluble

turmeric polysaccharides (Turmacin®), further improves the bioavailability of free-form curcuminoids 10-fold. Preliminary clinical trials in osteoarthritic patients have shown promising results.

Research

In a randomized, single-blind, placebo controlled trial, the effects of Turmacin® (100 mg/day) on a variety of clinical parameters was compared to glucosamine (1500 mg/day), Turmacin and glucosamine (2500 mg/day), and placebo (800 mg/day) over a 42 day period (unpublished data). Osteoarthritis patients showed the greatest symptom improvement (measured by physical performance, questionnaires and clinician assessment) when given Turmacin® over time. Turmacin® was well-tolerated and no adverse reactions associated with treatment was reported.

In animal studies, Turmacin® has shown a reduction in inflammatory agents (interleukin-12 and PGE2) and stimulation of anti-inflammatory factors (interleukin-10). Again, Turmacin® was found to be well tolerated.

Market Trends

Current curcumin products on the market

Biochemical analysis has shown that curcumin is insoluble in water and gastrointestinal fluid, rapidly metabolized, poorly absorbed by cells, has poor blood brain barrier (BBB) permeability and is rapidly eliminated from the body. All of these factors limit its use as an efficient natural therapeutic agent.

Consumers familiar with curcumin will know that there are a plethora of health products containing this ingredient on the market, and it can be difficult to choose the right one. Curcumin exists in two forms: conjugated and unconjugated (free-form). Various reports have highlighted that the conjugated curcumin metabolites possess low bioavailability and bioactivity, in contrast to the free-form (1-3). Despite this knowledge, food-grade formulations capable of providing therapeutically significant levels of free curcuminoids are limited. As such, the unconjugated and less effective form of curcumin continues to flood the market.

AOR Advantage

Curcumin *Ultra* is a new product from AOR's *Ultra* Series, which unlike any other product on the market is a unique combination of free-form curcuminoids (CurQfen®) with water-soluble turmeric polysaccharides (Turmacin®). This new formulation not only combats the issues most curcumin products on the market face, such a poor bioavailability, but it also provides the highest levels of bioactive free-form curcuminoids on the market.

References

1. Ji et al. Can improving the bioavailability improve the bioactivity of curcumin. Trends in Pharmacological Sciences. 2014. 35(265-266)
2. Krishnakumar et al. Improved blood-brain barrier permeability and tissue distribution following the oral administration of a food-grade formulation of curcumin with fenugreek fibre. Journal of Functional Foods. 2015. 14(215-225)
3. Sandur et al. Curcumin, demethoxycurcumin, bisdemethoxycurcumin, tetrahydrocurcumin, and

turmerones differentially regulate anti-inflammatory and anti-proliferative responses through a ROS independent mechanism. *Carcinogenesis*. 2007 28(1765-1773)

4. Kumar et al. Enhanced bioavailability and relative distribution of free (unconjugated) curcuminoids following the oral administration of a food-grade formulation with fenugreek dietary fibre: a randomised double-blind crossover study. *Journal of Functional Foods*. 2016 22(578-587)

Abstract

Safety, Tolerance, and Enhanced Efficacy of a Bioavailable Formulation of Curcumin With Fenugreek Dietary Fiber on Occupational Stress: A Randomized, Double-Blind, Placebo-Controlled Pilot Study. *J Clin Psychopharmacol*. 2016 Jun;36(3):236-43.

Pandaran Sudheeran S, Jacob D, Natinga Mulakal J, Gopinathan Nair G, Maliakel A, Maliakel B, Kuttan R, Im K.

Drug delivery systems capable of delivering free (unconjugated) curcuminoids is of great therapeutic significance, since the absorption of bioactive and permeable form plays a key factor in mediating the efficacy of a substance which undergoes rapid biotransformation. Considering the recent understanding on the relatively high bioactivities and blood-brain-barrier permeability of free curcuminoids over their conjugated metabolites, the present human study investigated the safety, antioxidant efficacy, and bioavailability of CurQfen (curcumagalactomannoside [CGM]), a food-grade formulation of natural curcumin with fenugreek dietary fiber that has shown to possess improved blood-brain-barrier permeability and tissue distribution in rats. In this randomized double-blinded and placebo-controlled trial, 60 subjects experiencing occupational stress-related anxiety and fatigue were randomized to receive CGM, standard curcumin, and placebo for 30 days (500 mg twice daily). The study demonstrated the safety, tolerance, and enhanced efficacy of CGM in comparison with unformulated standard curcumin. A significant improvement in the quality of life ($P < 0.05$) with considerable reduction in stress ($P < 0.001$), anxiety ($P < 0.001$), and fatigue ($P < 0.001$) was observed among CGM-treated subjects as compared with the standard curcumin group, when monitored by SF-36, Perceived Stress Scale with 14 items, and Beck Anxiety Inventory scores. Improvement in the quality of life was further correlated with the significant enhancement in endogenous antioxidant markers ($P < 0.01$) and reduction in lipid peroxidation ($P < 0.001$). Further comparison of the free curcuminoids bioavailability after a single-dose (500 mg once per day) and repeated-dose (500 mg twice daily for 30 days) oral administration revealed enhanced absorption and improved pharmacokinetics of CGM upon both single- (30.7-fold) and repeated-dose (39.1-fold) administrations.

Enhanced bioavailability and safety of curcumagalactomannosides as a dietary ingredient. *Food Funct*. 2015 Jan;6(1):276-86. doi: 10.1039/c4fo00749b. Epub 2014 Nov 27.

Liju VB, Jeena K, Kumar D, Maliakel B, Kuttan R, I M K.

In spite of the various bioavailable formulations of curcumin for pharma and dietary supplement applications, food grade formulations suitable as a dietary ingredient, and capable of providing significant levels of plasma curcumin, are limited. The present contribution describes the safety and oral bioavailability of a novel water soluble formulation of curcumin, curcumagalactomannosides

(CGM), when used as a dietary ingredient in selected food items. CGM was prepared using a food grade hydrocolloid (galactomannans) derived from the kitchen spice fenugreek (*Trigonella foenum-graccum*), without using any synthetic excipients. The safety of the formulation was assessed through acute and subchronic toxicity studies on Wistar rats and genotoxicity studies. The efficacy of CGM as a bioavailable dietary ingredient was assessed by successfully preparing various food items and by measuring the post-blood plasma curcumin levels at various time intervals after the consumption of food items. High performance liquid chromatography coupled with a photodiode array detector (HPLC-PDA) and electrospray ionization tandem mass spectrometer (ESI-MS/MS) was employed for the quantification of plasma curcuminoids. It was observed that CGM is safe and suitable for further development and clinical studies, with a no observable adverse effect level (NOAEL) up to 2.0 g kg⁻¹ per day b.wt. CGM was found to offer seven to ten times higher bioavailability of curcumin in humans, when incorporated into various food/beverage items at 100 mg CGM per serving size, as compared to the standard unformulated curcumin.