

180 mm

180 mm

180 mm

It can be concluded that curcuminoids treatment improved all biochemical parameters of oxidative stress and antioxidants².

Improve red cell survival

Eight children, aged 8–18 years, with transfusion independent β -thalassemia/HbE disease were treated with oral curcuminoids 500 mg daily in two divided doses for 16 weeks. Red cell survival, erythrocyte lipid peroxidation level, and a quality-of-life (QOL) questionnaire were assessed before treatment and between week 12 and 16 of treatment. It was found that treatment with curcuminoids reduced the overall oxidative stress as measured by MDA level from 2546 ± 1552 nmol/g Hb to 1639 ± 1214 nmol/g Hb at week 12. The half-life of red cells in patients was significantly increased, from 15.9 ± 4.1 days to 21.1 ± 4.4 days after 12 weeks of curcuminoids therapy. The improvement was most significant in 5 of 8 thalassemic children with shortest red cell survival (half-life 11–18 days) while no significant changes were observed in three milder cases. The overall QOL score improved after curcuminoids therapy in 4 of the 5 children who had increased red cell survival³.

Remove non-transferrin bound iron (NTBI) from thalassemic plasma.

Plasma from β -thalassemia patients was used for *in vitro* study. With equivalent concentration at $100 \mu\text{M}$, NTBI was removed by curcuminoids in a time-dependent manner as iron chelators, deferiprone (DFP) and desferrioxamine (DFO) (Fig.1). The rate of NTBI removal by curcuminoids plus $100 \mu\text{M}$ DFP was slightly increased when compared to $100 \mu\text{M}$ DFP alone (control) (Fig.2)⁴.

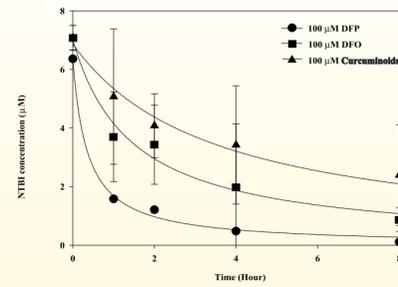


Fig. 1 Time-course removal of NTBI by DFP, DFO and curcuminoids.

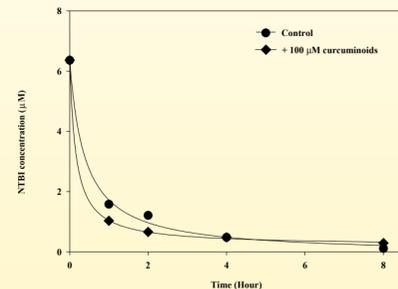


Fig. 2 Time-course effect of curcuminoids on NTBI removal by $100 \mu\text{M}$ DFP (control) for 1 hour.

References

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- 4) S. Srihairananakool, et al. Curcumin Contributes to In Vitro Removal of Non-Transferrin Bound Iron by Deferiprone and Desferrioxamine in Thalassemic Plasma. Medicinal Chemistry 2007; 3: 469-474



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Curcuminoids 250 mg



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Natural Antioxidant from Turmeric (*Curcuma longa* Linn.)

180 mm

180 mm

180 mm

Anti™
Curcuminoids 250 mg

Antiox™

60 capsules

COMPOSITION : Each capsule contains turmeric extract equivalent to curcuminoids 250 mg

INDICATION : Antioxidant

DOSAGE

Adults : 2 capsules daily

Children : as directed by the physician

PRECAUTIONS : Avoid using in pregnancy or nursing women and in bile duct obstruction patients

STORAGE : Store below 25°C

SHELF LIFE : 2 years

- Extracted from approved sources of turmeric (*Curcuma longa* Linn.)
- Excellent anti-oxidative performances
- Useful as adjunctive therapy for thalassemia patients
- Proved for safety

