

AIM

ASEC

Enhanced CD34⁺ Hematopoietic stem cells mobilization by curcuminoids in healthy subjects.

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PROTOCOL

CD34 levels (peripheral blood)	 ✓ O day 	→ Placebo (patients without taking any active product from plants
	< 0 day	 Controls (Basal levels in patient before taking any nutritional supplementation).
	2 days	
	2 days	from <i>Curcuma longa</i> , 857 mg/day plus Pipperine (4 mg/day)
s ood)		Cur48h (48 hours of supplementation with liquid curcuminoides 2000 mg/day of Curcuma longa extract = 120 mg of curcuminoids Encapsulated with Vitamin C and E

CD34+ levels were quantified byflow cytometry CD34 is a marker of Hematopoietic stem cells (HSC)

To study whether short-term urcumnin supplementation enhance CD34⁺- mobilization in healthy patients.

RESULTS (AFA algae consumption over 48 hours)

AFA algaecomsumption over 48 hours enhanced HSC-CD34+ mobilization



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MDPI

The short-term supplementation over 48 hours with curcuminoids (powder or liquid form) fail to increase CD34 levels



Long-term curcumin supplementation

The long-term supplementation with "liquid" curcumin (7 or 38 consecutuve days) increased CD34+ levels in peripheral bloos from healthy patients



CONCLUSIONS

The AFA algae consumption over 48 hours enhances Hematopoietic stem cell (HSC) mobilization

-The curcumin, sulforaphane plus AFA algae consumption over 7 or 38 consecutive days increased CD34 levels in peripheral blood from healthy patients

* p < 0,05 vs control (before taking any)
 @ p < 0,05 vs placebo
 # p < 0,05 vs Cur 48 h (liquid form)

7 days 38 days

José Joaquín Merino et al. The Bluegreen Algae (AFA) Consumption over 48 h Increases the Total Number of Peripheral CD34+ Cells in Healthy Patients: Effect of Short-Term and Long-Term Nutritional Supplementation (Curcumin/AFA) on CD34+ Levels (Blood). J Personalized Medicine. 2020Jun; 10(2):49.