The Silent Killer

There is a silent enemy that threatens our well-being, every day, without being noticed, without giving any obvious signs of its action.

Low-level chronic inflammation represents one of the most relevant challenges for the medicine of the 21st century, mainly due to our western lifestyle and is well-defined by researchers such as

Inflammation is one of the primary mechanisms developed by Nature to maintain health and immune homeostasis of our body against the aggressions we receive every day, 24 hours a day, every day. When this response is not properly regulated, the concentration of inflammatory markers rises and remains high in blood, a physiological status known as low-level chronic inflammation.

Chronic inflammation is known to be associated with age-related, metabolic and conditions such as cardiovascular diseases, diabetes and neurological disorders. Since there is no specific medication for this condition, the recommendation is to diet to stop it and thus it can last for years, if not decades, causing continual organ challenge.

The silent challenge virtually affects the entire span of our lives. It is not reasonable to expect to live it through the systematic and continuous use of allopathic medicines, not free from side effects, especially on the medium / long term.

But now there's a like long control strategy more compatible with our body's operating modes:

Long Term Life Maintenance

The big challenge for MERIVA® is that, thanks to its proven features, it can represent a reference model for a new type of relationship between turmeric and the personal project of Long Term Maintenance of our lives.

Nowadays, more than ever, the roots of our life seem to open up to new frontiers in which the maintenance of health, the quality of life and longevity are important roles, inducing the sciences to a great deal of reflection on products, processes and relationships.

The Life Guardian

MERIVA®

MERIVA® is able to help us in controlling, throughout our entire life, that the natural inflammatory response does not turn into low-level chronic inflammation.

Thanks to its patented Phytosome® technology - which entails the 3 fundamental components in a phospholipids formulation - the systematic curcumin MERIVA® is able to reach and maintain a healthy level of inflammation. This effect is validated by the most powerful set of clinical analysis conducted in vivo on human available on the market.

MERIVA® contains all 3 TURMERIC'S CURCUMINOIDS

CURCUMINOIDS	PDT (g/100)	Ebay (g/kg)	MPT (g/100)	Ebay (g/kg)	Average Ebay (g/kg)
Curcumin	20.1 ± 0.5	201 ± 5.0	40.1 ± 0.5	401 ± 5.0	301 ± 5.0
Demethoxycurcumin	39.7 ± 0.5	397 ± 5.0	39.9 ± 0.5	399 ± 5.0	398 ± 5.0
Bisdemethoxycurcumin	40.2 ± 0.5	402 ± 5.0	40.0 ± 0.5	400 ± 5.0	401 ± 5.0
TOTAL CURCUMINOIDS	100.0 ± 1.0	1000 ± 10.0	100.0 ± 1.0	1000 ± 10.0	1000 ± 10.0

Phytosome® technology

The Phytosome® technology on which MERIVA® has been formulated is based on **a biomimetic design concept.**

The Phytosome® technology

The Phytosome® technology draws the energy from the belief that mimicking Nature, remaining in the shadow of her secrets means to bring positive results, not just in the laboratory bench,

is aimed to achieve benefits in terms of rationalization, simplification, sustainability, **tolerability and security of people.** That is crucial in a Long Term Life Maintenance perspective.

PHYTOSOME®

MORE BIOAVAILABLE

The biomimetic approach for Indena is the way to nature and its secrets, the way to be inspired to explore the potential of the future and support partners and customers towards new futures.

Not a simple label capable of embellishing but a real scientific gem since 90 years!

Nature as Measure

Indena used for MERIVA®

The strength of the biomimicry concept is that Nature is seen as a model, measure and mentor by which to judge the appropriateness of our technological innovations.

Biomimicry is the art and science of observing the living world, distilling strategies that stand the test of time, and applying these deep principles to our human challenges.

- Nature's 4 billion-year-old R&D has offers a bottomless treasure trove of energy efficient, resilient and sustainable solutions.
- Biomimicry has become a widely recognized, comprehensive methodology for innovation in industries as diverse as agriculture, architecture, engineering, medicine, transportation, healthcare, software, materials and robotics.
- Nature-inspired solutions are everywhere and we can expect them to explode in the coming years.

What's in it for you

According to estimates from Nutrition Business Journal (NBJ), sales of turmeric reached $196 million in 2016, up 30% from the previous year and are projected to reach $433 million by 2020.

Turmeric was the top-selling ingredient in the functional food and beverage market in 2016 data, earning about $46.3 million in the natural channel, up 56.7% from 2015.

How would MERIVA® support your business

Imagine how the effectiveness of MERIVA® as Life Guardian™ is a life maintenance & longevity personal project should:

_Enlarge

Your prospect target to non-pathologic situation.

_Widen

The consumption window either in terms of consumer age (aging / longevity – prevention) or in occasions of consumption.

_Increase

The average consumption per capita.

_Strengthen

Your customers brand advocacy and fidelization. Indena will deploy a strong communication and divulgation program about MERIVA® Life Guardian™ properties.

Endorsement

MERIVA® was independently endorsed by the prestigious Cleveland Clinic in the US as the curcumin formulation of choice.

Scientific Evidence

The peer reviewed science on MERIVA®.

MERIVA® still stands as the most pre-clinically and clinically documented curcumin bioavailable formulation.

Animal pharmacokinetics studies	**4**
Pre-clinical and veterinary studies	**7**
Total human published clinical trials	**29**
Human pharmacokinetic study	1
Sports nutrition and muscular preservation	3
Supportive care	8
Eye health	2
Joint health	4
Pain relief	3
Diabetes related challenges	6
Skin challenges	1
BPH	1
Liver health	1
Bone health	3
Total subjects enrolled in controlled trials	**2038**

Safety

ICH 90 days toxicological trial - available **(MERIVA® is safe)**
ICH 90 + acute safety study

Human Study: clinical ophthalmological trial (104 patients), MERIVA® tested additional a daily dosage of 1 g (drug for up to 18 months) and no side effects were reported (no side effects and 0 drop out (Allergi et al. manuscript in preparation)

Human Study Evidence

Joint health human validation in an 8-month period

WOMAC score: TA-65 (4.5 ± 3.5) ↓ 34% decrease
SF-36v2 & Clinical Global Index: + 9-fold improvement
TRAUMMA: + 4-fold increase (p<0.05)
CRP (C-Reactive Protein): 16-fold decrease (p<0.05)

	MERIVA®	Controls
Decrease in use of medicines/painkillers	**42%**	**12%**
Decrease in gastrointestinal challenges	**68%**	**10%**
Decrease in use of other medicines	**46%**	**14%**
Global management costs	**44%**	**3%**
Global satisfaction scores	**44%**	**8%**
Hospital admissions, consultations and tests decrease	**58%**	**6%**
Specific recommendation of drug treatment (i.e. Phytosome®curcumin) was not a different recommendation for MERIVA® and controls	**44%**	**8%**

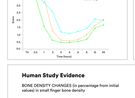
	Treatment	Controls
Inclusion	148 (100.0%) n= 71	175 (56.2)
8 Month	10.2 (50.3) 5.107	132 (56.2)

*p<0.05 (Mann Whitney) SOURCE: A1 NEG 901-200-16, 201-200

Human Study Evidence

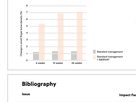
MERIVA® AND JOINT CHALLENGE: product evaluation registry study 2

CRP variations



Human Study Evidence

MERIVA® ONGET



Human Study Evidence

Liver metabolic challenge

Supplementation with MERIVA® was associated with a reduction in serum levels of:

Total cholesterol (p<0.05)	**-8%**
LDL-C (p<0.05)	**-10%**
Triglycerides (p<0.05)	**-18%**
Non-HDL-C (p<0.05)	**-12%**
Uric acid (p<0.05)	**-8%**

Serum levels of HDL-C and general parameters remained unaltered, suggesting that the observed effects were not due to a general effect on lipid concentrations in subjects with NAFLD. MERIVA® was safe and well tolerated in the study population.
SOURCE: J. CORNEVALI, PHARMEDICO, 2016, 60:245-253

Human Study Evidence

BONE DENSITY CHANGES (in percentage from initial value) in small finger bone density

Source
European Review for Medical and Pharmacological Sciences

Effects of a curcumin-based supplementation in asymptomatic subjects with low bone density: a preliminary 24 week supplement study

A. Rizzo, S. Tagliaferri, F. Fiorentini, G. Guglielmotti, A. Chiapale, G. Bosco, M. Cicero, V. Pino, M. Cinque

Bibliography

Issue	Impact factor 2016	Age of Subjects	M°/w°/C°Treated with MERIVA®
J. Nat. Prod. 2011; 74(1), p. 890-9	3,291	18 ± 10	0 M/ 0
Altern. Med. Rev. 2010; 15(1), p. 127-34	2,34	49.5 ± 12.5	22 (22,00%)
Nutritional Res. 2010; 30 (Suppl. 1), p. 20-22	1,889	50.0 ± 10.7	22 (22,00%)
Eur. Rev. Med. Pharmacol. Sci. 2014; Suppl. 2, 2014-101	1,779	49.4 ± 11.7	42 (42,00%)
Eur. Rev. Med. Pharmacol. Sci. 2017; 21(7): 1684-1689	1,779	71.0 ± 5.0	28 (53,96)
Clin. Gastroenterol. 2015; 4, p. 463-5	N.A.	37.0 ± 1.0	1 M/0 W/0 C
Clin. Gastroenterol. 2015; 4, p. 463-5	N.A.	range 19-68	12 (50%)
Clin. Gastroenterol. 2015; 4, p. 463-5	N.A.	range 19-68	12 (50%)
Alimentar Pharmacol. 2016; 44, p. 1-12	N.A.	range 19-68	12 (50%)
J. Nat. Prod. 2011; 74(1), p. 890-9	3,291	50.67 ± 10.67	10 (70)
J. Nat. Prod. 2011; 74(1), p. 890-9	3,291	range 50-70	10
Sci. Rep. 2016; 6, p. 1-10	5,578	57.5 ± 10.4	8 (40%)
Curr. Med. Chem. 2011; 18(1), p. 1-12	4,466	55.0 ± 7.0	7 (40%)
Curcumin Revisited, 2011, Nova Sci. Publ.	1,779	70.1 ± 15.1	21 (71%), 2/21(10)
Bioflavonoids Conference, 2011, Kyoto 10-12/05/11	2,475	37 (18-62)	22 (44,7)
J. Alzheimer Parkinson. 2016; 06:1000256	2,400	69.90 ± 10.90	70 (40,00)
Drug Res. 2017; 67:344-351	2,270	64.90 ± 13.30	44 (39,00)
Allergy Rhinitis Proc. 2015; 37, p.e1	2,705	10 ± 1.0	10 (100%)

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