

To help with Relaxation, Mental and Physical Balance, and maintain a Positive Mood

### affron® and its benefits

affron® is a new generation extract obtained from saffron stigmas (Crocus sativus L.).



Genetically certified saffron extract



Highest content of active components by HPLC



More effective, with less daily intake

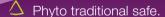


Unique and patent pending

PHARMACTIVE seal of quality. Total Control of the entire production chain.

#### Pharmactive's affron®

- 100% traceable Product from Spain.
- Premium Quality saffron (Crocus Sativus L.) stigmas.
- Active Components analyzed by HPLC (>3.5% Lepticrosalides®).
- Stable 3 years.
- Non-irradiated.
- Non GMO.
- Multiple galenic possibilities.





PATENT P.#P201630491





To help with Relaxation, Mental and Physical Balance, and maintain a Positive Mood

### affron® and its benefits

affron® is a new generation extract obtained from saffron stigmas (Crocus sativus L.).



Genetically certified saffron extract



Highest content of active components by HPLC



More effective, with less daily intake



Unique and patent pending

PHARMACTIVE seal of quality. Total Control of the entire production chain.

# affron® the way it works

One of the main causes of depression is the reduction of some neurotransmitters related to mood (Carr et al., 2011), mostly serotonin, norepinephrine and dopamine. Most of the antidepressants currently used are selective inhibitors of the reuptake of these neurotransmitters (Serretti et al., 2007), but these drugs have side effects associated.

Previous scientific studies have shown that saffron is effective against depression and related disorders.1-4 Safranal and crocins are responsible for the increase of neurotransmitters in the brain. 7-9

#### affron® clinical study by Pharmactive

A randomized double-blind placebo and parallel controlled Gold Standard clinical trial was performed with 128 participants during 4 weeks to determine the efficacy of affron® on mood. The clinical study was reviewed and approved by the Ethic Committee of Clinical Research of Queensland, collected by the "Australian New Zealand Clinical Trials Registry" (approbation number HREC2014002), following the current legislation (National Health and Medical Research Council in Australia).

#### affron® benefits

Natural alternative for the prevention of mood disorders related to depression

Diminish tension, stress, anxiety, depression, anger and tiredness

Increases vigor and positive mood

Improves sleep quality

## affron® Recommended dosage

affron® is free flowing soluble powder suitable for dietary supplements that can be formulated in any galenic forms.

Pharmactive recommends a daily dosage of 28 mg.



**PATENT P.#P201630491** 



## affron®'s Lepticrosalides®

affron® is a unique natural Saffron extract concentrated in Lepticrosalides<sup>®</sup>

**Lepticrosalides**® are the main bioactive components related to the prevention of depression disorders, and also responsible for the organoleptic properties of Saffron.

Lepticrosalides are analyzed by High Performance Liquid Chromatography (HPLC) which is an objective analytical technique to determine these bioactive compounds in affron®

affron<sup>®</sup> Lepticrosalides<sup>®</sup> by HPLC: most accurate, isomers differentiation, objective method, detection of possible fraud or plant foreign matter.

## Other scientific evidences with Saffron **Effectiveness treating mood disorders**

- $\Delta$  In a placebo-controlled trial in 40 patients suffering from depression, Saffron was found to be significantly superior over placebo.
- $\Delta$  In a clinical double-blind study, 30 patients with mild to moderate depression were either treated with Saffron (stigma's extract) or with 100 mg imipramin for 6 weeks: the effects were found to be equivalent, with a better tolerability of Saffron.
- $\Delta$  In a six week randomized, double-blind pilot study efficacy of Saffron extract was compared with that of

- fluoxetin in 40 out patients with mild to moderate depression: Saffron at this dose was found to be effective similar to fluoxetine.3
- $\Delta$  In a double-blind, randomised and placebo-controlled trial, 47 women aged 20-45 years with diagnosed PMS (Pre-menstrual syndrome) received saffron or placebo for two menstrual cycles: Saffron was clinically effective in relieving symptoms of PMS, including mood (anxiety, irritability, depression, nervous tension, mood swings and out of control).<sup>4</sup>

#### Scientific References

- 1. Akhondzadeh S, et al. (2005) Phytotherapy Research 19.
- 2. Akhondzadeh S, et al. (2004) BMC Complementary and Alternative Medicine (4).
- 3. Noorbala, A. A., et al. (2005) Journal of Ethnopharmacology. 97(2).
- 4. Agha-Hosseini M, et al. (2008) BJOG 115(4).
- 5. Carr et al., (2011). Psychophar-macology, 213.

- Serretti et al., (2007). Mol. Psy-chiatry, 12, 247–257.
- 7. Hosseinzadeh et al., (2004). Acta Hort, 650, 435–45.
- 8. Noorbala et al., (2005). JEth-nopharmacol 97, 281–284.
- 9. Ettehadi et al., (2013). BEHAV BRAIN SCI Journal, 3, 315-319



a natural difference

**HEADQUARTERS** 

Avda. del Doctor Severo Ochoa, 37 Local 4J Alcobendas 28108 Madrid (Spain)

**R&D LABORATORY** 

C/ Faraday 7 28049 Madrid (Spain)

USA BRANCH 1210 E.223rd St.Suite 322 Carson, CA 90745