# affron®, a standardised extract from saffron (Crocus sativus L.) for the treatment of anxiety and depressive symptoms in youth: A randomised, double-blind, placebo-controlled study

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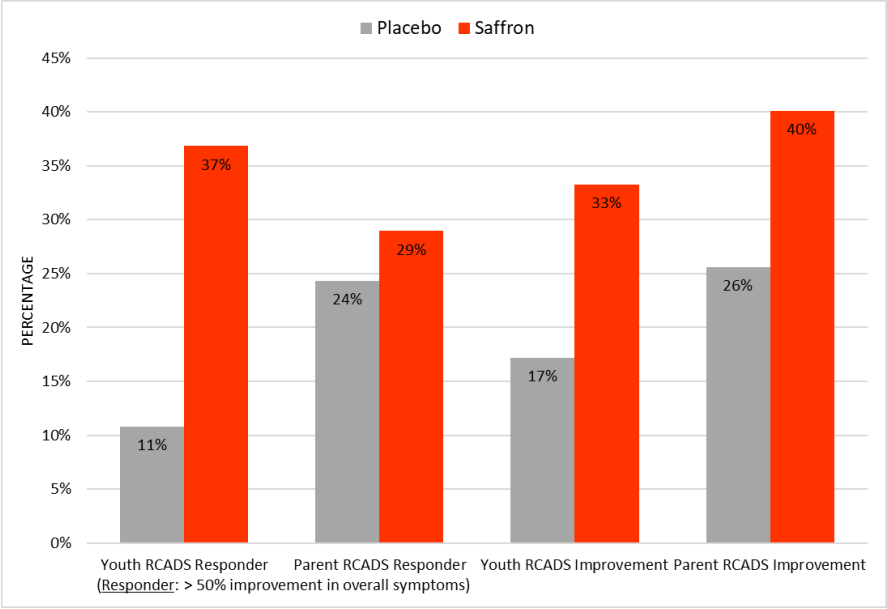
*Background:* Saffron has been shown through several randomised-controlled trials to be more effective than a placebo and to be of equivalent efficacy as some pharmaceutical antidepressants for the treatment of mild-to-moderate depression. However, these studies have all been conducted on adults, and to date, there has been no study examining the mood-enhancing efficacy of saffron in paediatric populations. Hence, the aim of this study was to examine the mood-lifting effects of saffron in teenagers

*Methods:* In this randomised, double-blind, placebo-controlled study, 80 physically healthy, male and female teenagers aged 12 to 16 years, were given either a placebo or saffron (affron®, 14mg b.i.d) tablets for 8 weeks. Participants were suffering from mild-to-moderate anxiety or depressive symptoms as measured by the Revised Child Anxiety and Depression Scale (RCADS), youth and adult versions.

*Results:* affron® was effective in reducing overall internalising symptoms (i.e., symptoms of anxiety, depression, and withdrawal) and exhibited greatest benefits on symptoms associated with separation anxiety, depression, and social phobia. Overall, from the adolescents' perspective, saffron treatment was associated with an average 33% reduction in total internalising symptoms, compared to a 17% improvement in the placebo condition. Thirty-seven percent of youth also responded to saffron treatment (defined as at least a 50% reduction in internalising symptoms), compared to only 11% of youth on placebo. From the parent's perspective, there was a statistically significant difference in overall internalising symptoms between the saffron and placebo conditions over time (average improvements of 40% and 26%, respectively); however, no difference in response rates and sub-scale scores were found. A summary of the findings is detailed in the figure below. Saffron administration was well-tolerated as there were no significant differences in reported adverse events over the 8-week intervention between saffron and placebo intake.




*Conclusions:* This is the first study examining the efficacy of saffron for the treatment of anxiety and depressive symptoms in youth. Findings suggest that saffron administration over an 8-week period was beneficial in improving anxiety and depressive symptoms in youth presenting with mild-to-moderate symptoms, at least from the perspective of the adolescent. However, these beneficial effects were inconsistently corroborated by parental observations. Future investigation into the mood-enhancing effects of saffron in youth is important to help substantiate these initial positive findings.