

## Publications on broad spectrum micronutrient treatment of mental disorders

### Publications

Here is a list of clinical study papers using a version of EMP+ or DEN.

1. Darling KA, Eggleston MJF, Retallick-Brown H, Rucklidge JJ (2019). Mineral-Vitamin Treatment Associated with Remission in Attention-Deficit/Hyperactivity Disorder Symptoms and Related Problems: 1-Year Naturalistic Outcomes of a 10-Week Randomized Placebo-Controlled Trial. *Journal of Child and Adolescent Psychopharmacology* doi: 10.1089/cap.2019.0036. [Epub ahead of print]
2. Stevens AJ, Purcell RV, Darling A, Eggleston MJF, Kennedy MA, Rucklidge JJ (2019). Human gut microbiome changes during a 10 week Randomised Control trial for micronutrient supplementation in children with attention deficit hyperactivity disorder, *Scientific Reports* 9:10128 <https://doi.org/10.1038/s41598-019-46146-3>
3. Borlase N, Melzer TR, Eggleston MJ, Darling KA & Rucklidge JJ (2019). Resting-state networks and neurometabolites in children with ADHD after 10 weeks of treatment with micronutrients: results of a randomised placebo-controlled trial, *Nutritional Neuroscience*, DOI: [10.1080/1028415X.2019.1574329](https://doi.org/10.1080/1028415X.2019.1574329)
4. Rucklidge JJ, Eggleston MJ, Darling KA, Stevens AJ, Kennedy MA, & Frampton CM (2019). Can we predict treatment response in children with ADHD to a vitamin-mineral supplement? An investigation into pre-treatment nutrient serum levels, MTHFR status, clinical correlates and demographic variables. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 89, 181-192.
5. Stevens AJ, Rucklidge JJ, Darling KA, Eggleston MJ, Pearson JF, & Kennedy MA (2018). Methylomic changes in response to micronutrient supplementation and MTHFR genotype. *Epigenomics*, 10(09), 1201-1214.
6. Rucklidge JJ, Eggleston M, Johnstone JM, Darling K, Frampton CM (2018). Vitamin-mineral treatment improves aggression and emotional control in children with ADHD: A fully-blinded, randomized, placebo-controlled trial. *Journal of Child Psychology and Psychiatry*. 59(3), 232-246. doi: 10.1111/jcpp.12817.
7. Rucklidge JJ, Frampton C, Gorman B, & Boggis A (2017). Vitamin-mineral treatment of ADHD in adults: A 1-year naturalistic follow-up of a randomized controlled trial. *Journal of Attention Disorders*, 21(6), 522-532
8. Mehl-Madrona L, & Mainguy B (2017). Adjunctive treatment of psychotic disorders with micronutrients. *The Journal of Alternative and Complementary Medicine*. 23(7), 526-533.
9. Kaplan BJ, Isaranuwatjai W, Hoch JS (2017). Hospitalization cost of conventional psychiatric care compared to broad-spectrum micronutrient treatment: Literature review and case study of adult psychosis. *International Journal of Mental Health Systems*. 11:14. <http://rdcu.be/oVb9>
10. Sole E, Blampied N & Rucklidge JJ (2017). Anxiety and stress in children following an earthquake: Clinically beneficial effects of treatment with micronutrients. *Journal of Child and Family Studies*, 26(5), 1422-1431. doi:10.1007/s10826-016-0607-2
11. Gordon HA, Rucklidge JJ, Blampied NM, Johnstone JM (2016). Clinically significant symptom reduction in children with attention-deficit/hyperactivity disorder treated with micronutrients: an open-label reversal design study. *Journal of Child and Adolescent Psychopharmacology*. 25(10), 783-798.
12. Kaplan BJ, Leaney C, Tsatsko E (2016). Micronutrient treatment of emotional dyscontrol following traumatic brain injury: A case study. *Annals of Psychiatry and Mental Health*, 4(5): 1078.
13. Lothian J, Blampied NM, Rucklidge JJ (2016). Effect of micronutrients on insomnia in adults: A multiple-baseline design. *Clinical Psychological Science*, 4(6) 1112-1124., doi: 10.1177/2167702616631740

14. Kaplan BJ, Rucklidge JJ, Romijn AR, Dolph M (2015). A randomised trial of nutrient supplements to minimise psychiatric illness after a natural disaster. *Psychiatry Research*, 228:373-79.
15. Kaplan BJ, Hilbert P, Tsatsko E (2015). Micronutrient treatment for children with emotional and behavioural dysregulation: three cases. *Journal of Medical Case Reports*. 9:240 DOI 10.1186/s 13256-015-0735-0
16. Rucklidge JJ, Blampied N, Gorman B, Gordon H, & Sole, E (2014). Psychological functioning one year after a brief intervention using micronutrients to treat stress and anxiety related to the 2011 Christchurch earthquakes: A naturalistic follow-up. *Human Psychopharmacology: Clinical and Experimental*, 29(3), 230-243.
17. Rucklidge JJ, Frampton C, Gorman B, & Boggis A (2014). Vitamin-mineral treatment of ADHD in adults: A double-blind, randomized, placebo controlled trial. *British Journal of Psychiatry*, 204, 306-315.  
<http://bjp.rcpsych.org/cgi/pmidlookup?view=long&pmid=24482441>
18. Rucklidge JJ, Blampied N, Gorman B, Gordon H, & Sole E (2014). Psychological functioning one year after a brief intervention using micronutrients to treat stress and anxiety related to the 2011 Christchurch earthquakes: A naturalistic follow-up. *Human Psychopharmacology: Clinical and Experimental*, 29(3), 230-243.
19. Rucklidge JJ, Johnstone J, Gorman B, & Boggis A, & Frampton C (2014). Moderators of treatment response in adults with ADHD to micronutrients: demographics and biomarkers. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 50, 163–171.
20. Rucklidge JJ, Harris AL, Shaw IC (2014). Are the amounts of vitamins in commercially available dietary supplement formulations relevant for the management of psychiatric disorders in children? *N Z Med J*. 127(1392):73-85.
21. Frazier EA, Gracious B, Arnold LE, Failla M, Chitchumroonchokchai C, Habash D, et al. Nutritional and safety outcomes from an open-label micronutrient intervention for pediatric bipolar spectrum disorders. *J Child Adolesc Psychopharmacol* 2013; 23(8): 558-67.
22. Rucklidge JJ (2013). Could yeast infections impair recovery from mental illness? A case study using micronutrients and olive leaf extract for the treatment of ADHD and depression. *Advances in Mind-Body Medicine*, 27(3), 14-18.
23. Harrison R, Rucklidge JJ & Blampied N (2013). Use of micronutrients attenuates cannabis and nicotine abuse as evidenced from a reversal design: A case study. *Journal of Psychoactive Drugs*, 45(2), 1-11.
24. Rodway M, Vance A, Watters A, Lee H, Bos E, Kaplan BJ (2012). Efficacy and cost of micronutrient treatment of childhood psychosis. *BMJ Case Rep*. 2012 Nov 9;2012. pii: bcr2012007213. doi: 10.1136/bcr-2012-007213.
25. Rucklidge JJ, Andridge R, Gorman B, Blampied N, Gordon H & Boggis A (2012). Shaken but unstirred? Effects of micronutrients on stress and trauma after an earthquake: RCT evidence comparing formulas and doses. *Human Psychopharmacology: Clinical and Experimental*, 27(5), 440-454.
26. Frazier EA, Fristad MA & Arnold LE (2012). Feasibility of a nutritional supplement as treatment for pediatric bipolar spectrum disorders. *Journal of Complementary and Alternative Medicine*, 18:678-85.
27. Rucklidge JJ, & Blampied NM (2011). Post-earthquake functioning in adults with Attention-Deficit/Hyperactivity Disorder: Positive effects of micronutrients on resilience. *New Zealand Journal of Psychology*, 40(4), 51-57.
28. Rucklidge JJ, Johnstone J, Harrison R, & Boggis A (2011). Micronutrients reduce stress and anxiety following a 7.1 earthquake in adults with Attention-Deficit/Hyperactivity Disorder. *Psychiatry Research*, 189, 281-287. . [doi:10.1016/j.psychres.2011.06.016](https://doi.org/10.1016/j.psychres.2011.06.016)

29. Rucklidge JJ, Johnstone J, Harrison R (2011). Effect of micronutrients on neurocognitive functioning in adults with ADHD and Severe Mood Dysregulation: A pilot study. *Journal of Complementary and Alternative Medicine*, 17(12), 1-7.
30. Rucklidge JJ, Taylor MR, Whitehead KA (2011). Effect of micronutrients on behaviour and mood in adults with ADHD: Evidence from an 8-week open label trial with natural extension. *Journal of Attention Disorders*, 15(1), 79-91.
31. Rucklidge JJ, Gately, D & Kaplan BJ (2010). Database Analysis of Children and Adolescents with Bipolar Disorder Consuming a Micronutrient Formula. *BMC Psychiatry*, 10, 17. <http://www.biomedcentral.com/1471-244X/10/74>
32. Rucklidge JJ & Harrison R (2010). Successful treatment of Bipolar Disorder II and ADHD with a micronutrient formula: A case study. *CNS Spectrums*, 15(5):289-295.
33. Mehl-Madrona L, Leung B, Kennedy C, Paul S & Kaplan BJ (2010). A naturalistic case-control study of micronutrients versus standard medication management in autism. *Journal of Child and Adolescent Psychopharmacology*, 20(2):95-103.
34. Rucklidge JJ (2009). Successful treatment of OCD with a micronutrient formula following partial response to CBT: A case study. *Journal of Anxiety Disorders*, 23: 836–840.
35. Gately D & Kaplan BJ (2009). Database analysis of adults with bipolar disorder consuming a micronutrient formula. *Clinical Medicine: Psychiatry*. [http://la-press.com/article.php?article\\_id=1384](http://la-press.com/article.php?article_id=1384)
36. Frazier EA, Fristad M, Arnold LE (2009). Multinutrient Supplement as Treatment: Literature Review and Case Report of a 12-year-old Boy with Bipolar Disorder. *Journal of Child and Adolescent Psychopharmacology*, 19:453-460.
37. Kaplan BJ, Fisher JE, Crawford SG, Field CJ, & Kolb B (2004). Improved mood and behavior during treatment with a mineral-vitamin supplement: an open-label case series of children. *Journal of Child and Adolescent Psychopharmacology*, 14(1), 115-122.
38. Kaplan BJ, Crawford SG, Gardner B, & Farrelly G (2002). Treatment of mood lability and explosive rage with minerals and vitamins: two case studies in children. *Journal of Child and Adolescent Psychopharmacology*, 12(3), 205-219.
39. Popper CW (2001). Do vitamins or minerals (apart from lithium) have mood-stabilizing effects? *Journal of Clinical Psychiatry*, 62(12), 933-935.
40. Kaplan BJ, Simpson JSA, Ferre RC, Gorman CP, McMullen DM, & Crawford SG (2001). Effective mood stabilization with a chelated mineral supplement: An open-label trial in bipolar disorder. *Journal of Clinical Psychiatry*, 62(12), 936-944.
41. Rucklidge JJ, Eggleston MJF, Ealam B, Beaglehole B, Mulder RT (2019 in press). An Observational Preliminary Study on the Safety of Long-Term Consumption of Micronutrients for the Treatment of Psychiatric Symptoms. *Journal of Alternative & Complementary Medicine*. In press.

### **Investigating safety and toxicity**

A systematic review showed that the EMP+ product has not produced any serious adverse effects:

- Simpson JSA, Crawford SG, Goldstein ET, Field C, Burgess E, & Kaplan BJ (2011). Systematic review of safety and tolerability of a complex micronutrient formula used in mental health. *BMC Psychiatry*, 11(62). <http://www.biomedcentral.com/1471-244X/11/62>

### **Related reviews, invited articles, letters to editors, and general nutrition papers**

1. Kimball SM, Mirhosseini N, & Rucklidge J (2018). Database analysis of depression and anxiety in a community sample—response to a micronutrient intervention. *Nutrients*, 10(2), 152.
2. Rucklidge JJ, Taylor M, Johnstone JM (2018). Do diet and nutrition affect ADHD? Facts and clinical considerations for psychiatrists. *Psychiatric Times, Special Reports on*

ADHD <http://www.psychiatrytimes.com/special-reports/do-diet-and-nutrition-affect-adhd-facts-and-clinical-considerations>. 35 (9)

3. Holton, KF, Johnstone JM, Brandley, ET, Nigg JT (2018). Evaluation of dietary intake in children and college students with and without Attention-Deficit/Hyperactivity Disorder. *Nutritional Neuroscience*.1-14. <https://doi.org/10.1080/1028415X.2018.1427661>
4. Rucklidge JJ & Johnstone JM (2016). The role of diet and nutrient supplementation in the treatment of ADHD. *The ADHD Report*, 24(8), 1-8. doi: 10.1521/adhd.2016.24.8.1
5. Retallick-Brown H, Rucklidge JJ, & Blampied N (2016). Study protocol for a randomised double blind, treatment control trial comparing the efficacy of a micronutrient formula to a single vitamin supplement in the treatment of premenstrual syndrome. *Medicines*, 3, 32. <http://www.mdpi.com/2305-6320/3/4/32>
6. Kaplan BJ, Rucklidge JJ, McLeod K, & Romijn A (2015). The Emerging Field of Nutritional Mental Health: Inflammation, the Microbiome, Oxidative Stress, and Mitochondrial Function. *Clinical Psychological Science*, 3(6), 964-980. DOI: 10.1177/2167702614555413
7. Sarris J, Logan AC, Amminger GP, Balanzá-Martínez V, Freeman MP, Hibbeln J, Matsuoka Y, Mischoulon D, Mizoue T, Nanri A, Nishi D, Ramsey D Rucklidge JJ, Sanchez-Villegas, A, Scholey A, Su KP, Jacka FN (2015). Nutritional Medicine as Mainstream in Psychiatry: A Consensus Position Statement from The International Society for Nutritional Psychiatry Research (ISNPR). *Lancet Psychiatry*, 2, 271-274.
8. Rucklidge JJ, Kaplan BJ, & Mulder R (2015). What if nutrients could treat mental illness? (Debate). *Australia and New Zealand Journal of Psychiatry*, 49(5), 407-408. DOI: 10.1177/0004867414565482 <http://anp.sagepub.com/content/49/5/407.full.pdf+html>
9. Sarris J, Logan AC, Akbaraly TN, Amminger, GP, Balanzá-Martínez V, Freeman MP, Hibbeln J, Matsuoka Y, Mischoulon D, Mizoue T, Nanri A, Nishi D, Parletta N, Ramsey D, Rucklidge JJ, Sanchez-Villegas A, Scholey A, Su C, Jacka FN (2014). The International Society for Nutritional Psychiatry Research (ISNPR) Consensus Position Statement: Nutritional Medicine in Modern Psychiatry (letter to editor). *World Psychiatry*.
10. Popper CW (2014). Single-Micronutrient and Broad-Spectrum Micronutrient Approaches for Treating Mood Disorders in Youth and Adults. *Child and Adolescent Psychiatric Clinics of North America*, 23(3), 591-672. doi: 10.1016/j.chc.2014.04.001
11. Rucklidge JJ, & Kaplan BJ (2013). Broad-spectrum micronutrient formulas for the treatment psychiatric symptoms: A systematic review. *Expert Review of Neurotherapeutics*, 13(1), 49-73.
12. Rucklidge JJ, Johnstone J, & Kaplan BJ (2013). Single bullet madness - why do we continue to perpetuate this fallacy? (letter). *British Journal of Psychiatry*, 203, 154-155. [http://bjp.rcpsych.org/content/202/6/398/reply#bjprcpsych\\_el\\_54588](http://bjp.rcpsych.org/content/202/6/398/reply#bjprcpsych_el_54588)
13. Gardner A, Kaplan BJ, Rucklidge JJ, Jonsson BH, & Humble MB (2010). The potential of nutritional therapy. *Science (letter)*, 327, 268.
14. Rucklidge JJ, Johnstone J, & Kaplan BJ (2009). Nutrient supplementation approaches in the treatment of ADHD. *Expert Review of Neurotherapeutics*, 9(4), 461-476.
15. Simmons M (2003). Nutritional approach to bipolar disorder. *Journal of Clinical Psychiatry (letter)*, 64(3), 338.