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Manipulating serotonin function in depression

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References

- Agelink, M. W., Andrich, J., Boz, C., & Ullrich, H. (2002). Relationship between major depression and heart rate variability. Clinical consequences and implications for antidepressive treatment. *Psychiatry Research*, *113*, 139-149.
- Agelink, M. W., Postert, T., Klieser, E., Linka, T., Majewski, T., Wurthmann, C. et al. (2001). Autonomic neurocardiac function in patients with major depression and effects of antidepressive treatment with nefazodone. *Journal of Affective Disorders*, *62*, 187-198.
- Amado-Boccaro, I., Gougoulis, N., Poirier Littre, M. F., Galinowski, A., & Loo, H. (1995). Effects of antidepressants on cognitive functions: A review. *Neuroscience and Biobehavioral Reviews*, *19*, 479-493.
- American Heart Association (2006). *Heart Disease and Stroke Statistics-2006 Update*. Dallas, TX: American Heart Association.
- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders*. (Fourth ed.) Washington DC: American Psychiatric Association.
- Anda, R., Macera, C., Marks, J., Eaker, E., Williamson, D., Jones, D. et al. (1993). Depressed affect, hopelessness, and the risk of ischemic heart disease in a cohort of U.S. adults. *Epidemiology*, *4*, 285-294.
- Anderson, G. M., Mefford, I. N., Tolliver, T. J., Riddle, M. A., Ocame, D. M., Leckman, J. F. et al. (1990a). Serotonin in human lumbar cerebrospinal fluid: A reassessment. *Life Sciences*, *46*, 247-255.
- Anderson, I. M., Parry-Billings, M., Newsholme, E. A., Fairburn, C. G., & Cowen, P. J. (1990b). Dieting reduces plasma tryptophan and alters brain 5-HT function in women. *Psychological Medicine*, *20*, 785-791.
- Anderson, I. M., Richell, R. A., & Bradshaw, C. M. (2003). The effect of acute tryptophan depletion on probabilistic choice. *Journal of Psychopharmacology*, *17*, 3-7.
- Arango, V., Chen, J. S., Reis, D. J., Tierney, H., Ernsberger, P., Marzuk, P. M. et al. (1990). Autoradiographic demonstration of increased serotonin 5-HT₂ and beta-adrenergic receptor binding sites in the brain of suicide victims. *Archives of General Psychiatry*, *47*, 1038-1047.
- Argyropoulos, S. V., Hood, S. D., Adrover, M., Bell, C. J., Rich, A. S., Nash, J. R. et al. (2004). Tryptophan depletion reverses the therapeutic effect of selective serotonin reuptake inhibitors in social anxiety disorder. *Biological Psychiatry*, *56*, 503-509.
- Attenburrow, M. J., Williams, C., Odontiadis, J., Reed, A., Powell, J., Cowen, P. J. et al. (2003). Acute administration of nutritionally sourced tryptophan increases fear recognition. *Psychopharmacology (Berl)*, *169*, 104-107.
- Austin, M. P., Mitchell, P., & Goodwin, G. M. (2001). Cognitive deficits in depression. *The British Journal of Psychiatry*, *178*, 200-206.

- Bagdy, G., Graf, M., Anheuer, Z. E., Modos, E. A., & Kantor, S. (2001). Anxiety-like effects induced by acute fluoxetine, sertraline or m-CPP treatment are reversed by pretreatment with the 5-HT_{2C} receptor antagonist SB-242084 but not the 5-HT_{1A} receptor antagonist WAY-100635. *International Journal of Neuropsychopharmacology*, *4*, 399-408.
- Baghai, T. C., Schüle, C., Zwanzger, P., Minov, C., Holme, C., Padberg, F. et al. (2002). Evaluation of a salivary based combined dexamethasone/CRH test in patients with major depression. *Psychoneuroendocrinology*, *27*, 385-399.
- Ballesteros, J. & Callado, L. F. (2004). Effectiveness of pindolol plus serotonin uptake inhibitors in depression: a meta-analysis of early and late outcomes from randomised controlled trials. *Journal of Affective Disorders*, *79*, 137-147.
- Bär, K. J., Greiner, W., Jochum, T., Friedrich, M., Wagner, G., & Sauer, H. (2004). The influence of major depression and its treatment on heart rate variability and pupillary light reflex parameters. *Journal of Affective Disorders*, *82*, 245-252.
- Beauchaine, T. P., Snarr, J., Katkin, E. S., & Strassberg, Z. (2001). Disinhibitory psychopathology in male adolescents: discriminating conduct disorder from attention-deficit/hyperactivity disorder through concurrent assessment of multiple autonomic states. *Journal of Abnormal Psychology*, *110*, 610-624.
- Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. New York: International Universities Press.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory II*. San Antonio TX, USA: Psychological Corporation.
- Beevers, C. G., Miller, I. W., Keitner, G. I., & Ryan, C. E. (2003). Cognitive predictors of symptom return following depression treatment. *Journal of Abnormal Psychology*, *112*, 488-496.
- Bell, C., Abrams, J., & Nutt, D. J. (2001). Tryptophan depletion and its implications for psychiatry. *The British Journal of Psychiatry*, *178*, 399-405.
- Benkelfat, C., Palmour, R. M., Young, S. N., Ellenbogen, M. A., & Dean, P. (1994). Mood-lowering effect of tryptophan depletion. Enhanced susceptibility in young men at genetic risk for major affective disorders. *Archives of General Psychiatry*, *51*, 687-697.
- Benton, D. & Nabb, S. (2003). Carbohydrate, memory, and mood. *Nutrition Reviews*, *61*, S61-S67.
- Berman, R. M., Darnell, A. M., Miller, H. L., Anand, A., & Charney, D. S. (1997). Effect of pindolol in hastening response to fluoxetine in the treatment of major depression: a double-blind, placebo-controlled trial. *American Journal of Psychiatry*, *154*, 37-43.

- Berntson, G. G., Bigger, J. T., Jr., Eckberg, D. L., Grossman, P., Kaufmann, P. G., Malik, M. et al. (1997). Heart rate variability: origins, methods, and interpretive caveats. *Psychophysiology*, *34*, 623-648.
- Beulens, J. W. J., Bindels, J. G., De Graaf, C., Alles, M. S., & Wouters-Wesseling, W. (2004). Alpha-lactalbumin combined with a regular diet increases plasma Trp-LNAA ratio. *Physiology and Behavior*, *81*, 585-593.
- Bhagwagar, Z., Cowen, P. J., Goodwin, G. M., & Harmer, C. J. (2004). Normalization of enhanced fear recognition by acute SSRI treatment in subjects with a previous history of depression. *American Journal of Psychiatry*, *161*, 166-168.
- Bhagwagar, Z., Hafizi S, & Cowen, P. J. (2002a). Cortisol modulation of 5-HT-mediated growth hormone release in recovered depressed patients. *Journal of Affective Disorders*, *72*, 249-255.
- Bhagwagar, Z., Whale, R., & Cowen, P. J. (2002b). State and trait abnormalities in serotonin function in major depression. *The British Journal of Psychiatry*, *180*, 24-28.
- Bhagwagar, Z., Fancy, S., Cowen, P., Hinz, R., Taylor, M., & Grasby, P. (2006). Increased 5-HT_{2A} receptor binding in euthymic, medication-free patients recovered from depression: a positron emission study with [¹¹C]MDL 100,907. *American Journal of Psychiatry*, *163*, 1580-1587.
- Bhatti, T., Moore, P., Stahl, S., Clark, C., Gillin, J. C., Seifritz, E. et al. (1998). Effects of a tryptophan-free amino acid drink challenge on normal human sleep electroencephalogram and mood. *Biological Psychiatry*, *43*, 52-59.
- Biggio, G., Fadda, F., Fanni, P., Tagliamonte, A., & Gessa, G. L. (1974). Rapid depletion of serum tryptophan, brain tryptophan, serotonin and 5-hydroxyindoleacetic acid by a tryptophan-free diet. *Life Sciences*, *14*, 1321-1329.
- Blaney, P. H. (1986). Affect and memory. A review. *Psychological Bulletin*, *99*, 229-246.
- Blazer, D. G., Kessler, R. C., Mcgonagle, K. A., & Swartz, M. S. (1994). The prevalence and distribution of major depression in a national community sample: the National Comorbidity Survey. *American Journal of Psychiatry*, *151*, 979-986.
- Blier, P. & de Montigny, C. (1994). Current advances and trends in the treatment of depression. *Trends in Pharmacological Sciences*, *15*, 220-226.
- Blier, P. & de Montigny, C. (1998). Possible serotonergic mechanisms underlying the antidepressant and anti-obsessive-compulsive disorder response. *Biological Psychiatry*, *44*, 313-323.
- Booij, L. & Van der Does, A. J. W. (2007). Cognitive and serotonergic vulnerability to depression: convergent findings. *Journal of Abnormal Psychology*, *116*, 86-94.

- Booij, L., Van der Does, A. J. W., Benkelfat, C., Bremner, J. D., Cowen, P. J., Fava, M. et al. (2002). Predictors of mood response to acute tryptophan depletion: A reanalysis. *Neuropsychopharmacology*, *27*, 852-861.
- Booij, L., Van der Does, A. J. W., Haffmans, P. M. J., Riedel, W. J., Fekkes, D., & Blom, M. J. B. (2005a). The effects of high-dose and low-dose tryptophan depletion on mood and cognitive functions of remitted depressed patients. *Journal of Psychopharmacology*, *19*, 267-275.
- Booij, L., Van der Does, A. J. W., Haffmans, P. M. J., & Riedel, W. J. (2005b). Acute tryptophan depletion in depressed patients treated with a selective serotonin-noradrenalin reuptake inhibitor: Augmentation of antidepressant response? *Journal of Affective Disorders*, *86*, 305-311.
- Booij, L., Van der Does, A. J. W., & Riedel, W. J. (2003). Monoamine depletion in psychiatric and healthy populations: review. *Molecular Psychiatry*, *8*, 951-973.
- Booij, L., Van der Does, A. J. W., Spinhoven, P., & McNally, R. J. (2005c). Acute tryptophan depletion as a model of depressive relapse. Behavioural specificity and ethical considerations. *The British Journal of Psychiatry*, *187*, 148-154.
- Booij, L., Merens, W., Markus, C. R., & Van der Does, A. J. W. (2006a). Diet rich in alpha-lactalbumin improves memory in unmedicated recovered depressed patients and matched controls. *Journal of Psychopharmacology*, *20*, 526-535.
- Booij, L., Swenne, C. A., Brosschot, J. F., Haffmans, P. M. J., Thayer, J. F., & Van der Does, A. J. W. (2006b). Tryptophan depletion affects heart rate variability and impulsivity in remitted depressed patients with a history of suicidal ideation. *Biological Psychiatry*, *60*, 507-514.
- Bootsma, M., Chang, P. C., Cats, V. M., Swenne, C. A., Van Bolhuis, H. H., & Brusckhe, A. V. (1994). Heart rate and heart rate variability as indexes of sympathovagal balance. *American Journal of Physiology*, *266*, H1565-H1571.
- Bouhuys, A. L., Geerts, E., & Gordijn, M. (1999). Depressed patients' perceptions of facial emotions in depressed and remitted states are associated with relapse: A longitudinal study. *Journal of Nervous and Mental Disease*, *187*, 595-602.
- Bower, G. H. (1981). Mood and memory. *American Psychologist*, *36*, 129-148.
- Bradley, B. P., Mogg, K., & Lee, S. (1997). Attentional biases for negative information in induced and naturally occurring dysphoria. *Behaviour Research and Therapy*, *35*, 911-927.
- Brittlebank, A. D., Ferrier, I. N., Scott, J., & Williams, J. M. (1993). Autobiographical memory in depression: state or trait marker? *British Journal of Psychiatry*, *162*, 118-121.
- Brown, G. W., Bifulco, A., & Harris, T. O. (1987). Life events, vulnerability and onset of depression: some refinements. *The British Journal of Psychiatry*, *150*, 30-42.

- Burt, D. B., Zembar, M. J., & Niederehe, G. (1995). Depression and memory impairment: a meta-analysis of the association, its pattern, and specificity. *Psychological Bulletin*, *117*, 285-305.
- Carpenter, L. L., Anderson, G. M., Pelton, G. H., Gudin, J. A., Kirwin, P. D., Price, L. H. et al. (1998). Tryptophan depletion during continuous CSF sampling in healthy human subjects. *Neuropsychopharmacology*, *19*, 26-35.
- Chaouloff, F. (1993). Physio-pharmacological interactions between stress hormones and central serotonergic systems. *Brain Research Reviews*, *18*, 1-32.
- Chen, B., Dowlatsahi, D., MacQueen, G. M., Wang, J. F., & Young, L. T. (2001). Increased hippocampal BDNF immunoreactivity in subjects treated with antidepressant medication. *Biological Psychiatry*, *50*, 260-265.
- Chouinard, G., Young, S. N., & Annable, L. (1985). A controlled clinical trial of tryptophan in acute mania. *Biological Psychiatry*, *20*, 546-557.
- Christensen, L. (1997). The effect of carbohydrates on affect. *Nutrition*, *13*, 503-514.
- Cleare, A. J., Murray, R. M., & O'Keane, V. (1998). Assessment of serotonergic function in major depression using d-fenfluramine: relation to clinical variables and antidepressant response. *Biological Psychiatry*, *44*, 555-561.
- Consumer Reports (2004). *Consumer Reports readers rate mental-health care for depression. Drug vs. talk therapy; antidepressant effectiveness results and side effects.* [On-line]. Available: <http://www.infozine.com/news/stories/op/storiesView/sid/3699>
- Coull, J. T., Young, A. H., Cowen, P. J., Park, S. B., Sahakian, B. J., Middleton, H. C. et al. (1995). Differential effects of clonidine, haloperidol, diazepam and tryptophan depletion on focused attention and attentional search. *Psychopharmacology (Berl)*, *121*, 222-230.
- Cowen, P. J. (2002). Cortisol, serotonin and depression: all stressed out? *The British Journal of Psychiatry*, *180*, 99-100.
- Cowen, P. J., Harmer, C. J., & Goodwin, G. M. (2007). Reply to low-dose tryptophan depletion. *Biological Psychiatry*, *62*, 543-544.
- Cowen, P. J., Parry-Billings, M., & Newsholme, E. A. (1989). Decreased plasma tryptophan levels in major depression. *Journal of Affective Disorders*, *16*, 27-31.
- De Jong, P. J. (2002). Implicit self-esteem and social anxiety: differential self-favouring effects in high and low anxious individuals. *Behaviour Research and Therapy*, *40*, 501-508.
- Deijen, J. B. & Orlebeke, J. F. (1994). Effect of tyrosine on cognitive function and blood-pressure under stress. *Brain Research Bulletin*, *33*, 319-323.

- Delgado, P. L. (2000). Depression: The case for a monoamine deficiency. *Journal of Clinical Psychiatry*, *61*, 7-11.
- Delgado, P. L., Charney, D. S., Price, L. H., Aghajanian, G. K., Landis, H., & Heninger, G. R. (1990). Serotonin function and the mechanism of antidepressant action. *Archives of General Psychiatry*, *47*, 411-418.
- Delgado, P. L., Miller, H. L., Salomon, R. M., Licinio, J., Krystal, J. H., Moreno, F. A. et al. (1999). Tryptophan-depletion challenge in depressed patients treated with desipramine or fluoxetine: Implications for the role of serotonin in the mechanism of antidepressant action. *Biological Psychiatry*, *46*, 212-220.
- Delgado, P. L., Price, L. H., Miller, H. L., Salomon, R. M., Aghajanian, G. K., Heninger, G. R. et al. (1994). Serotonin and the neurobiology of depression. *Archives of General Psychiatry*, *51*, 865-874.
- DeRubeis, R. J., Evans, M. D., Hollon, S. D., Garvey, M. J., Grove, W. M., & Tuason, V. B. (1990). How does cognitive therapy work? Cognitive change and symptom change in cognitive therapy and pharmacotherapy for depression. *Journal of Consulting and Clinical Psychology*, *58*, 862-869.
- Deuschle, M., Kniest, A., Niemann, H., Erb-Bies, N., Colla, M., Harman, B. et al. (2004). Impaired declarative memory in depressed patients is slow to recover: clinical experience. *Pharmacopsychiatry*, *37*, 147-151.
- Dickerson, S. S. & Kemeny, M. E. (2004). Acute stressors and cortisol responses: A theoretical integration and synthesis of laboratory research. *Psychological Bulletin*, *130*, 355-391.
- Duman, R. S. (2004). Depression: a case of neuronal life and death? *Biological Psychiatry*, *56*, 140-145.
- Dye, L., Luch, A., & Blundell, J. E. (2000). Macronutrients and mental performance. *Nutrition*, *16*, 1021-1034.
- Egloff, B. & Schmukle, S. (2002). Predictive validity of an Implicit Association Test for assessing anxiety. *Journal of Personality and Social Psychology*, *83*, 1441-1455.
- Ekman, P. & Friesen, W. (1976). *Pictures of facial affect [slides]*. Palo Alto, CA: Consulting Psychologists Press.
- Ellenbogen, M. A., Young, S. N., Dean, P., Palmour, R. M., & Benkelfat, C. (1996). Mood response to acute tryptophan depletion in healthy volunteers: Sex differences and temporal stability. *Neuropsychopharmacology*, *15*, 465-474.
- Ellenbogen, M. A., Young, S. N., Dean, P., Palmour, R. M., & Benkelfat, C. (1999). Acute tryptophan depletion in healthy young women with a family history of major affective disorder. *Psychological Medicine*, *29*, 35-46.

- Elliott, R. (1998). The neuropsychological profile in unipolar depression. *Trends in Cognitive Sciences*, 2, 447-453.
- Evers, E. A. T., Tillie, D. E., Van der Veen, F. M., Lieben, C. K., Jolles, J., Deutz, N. E. P. et al. (2005). Effects of a novel method of acute tryptophan depletion on plasma tryptophan and cognitive performance in healthy volunteers. *Psychopharmacology (Berl)*, 178, 92.
- Evers, E. A. T., Van der Veen, F. M., Jolles, J., Deutz, N. E. P., & Schmitt, J. A. J. (2006). Acute tryptophan depletion improves performance and modulates the BOLD response during a Stroop task in healthy females. *NeuroImage*, 32, 248-255.
- Eysenck, H. J. & Eysenck, S. G. B. (1991). *Manual of the Eysenck Personality Scales*. London: Hodder & Stoughton.
- Eysenck, S., Eysenck, H., & Barrett, P. (1985). A revised version of the psychoticism scale. *Personality and Individual Differences*, 6, 21-29.
- Fava, M. (2000). Management of nonresponse and intolerance: switching strategies. *Journal of Clinical Psychiatry*, 61, 10-12.
- Fava, M., Pava, J. A., Rosenbaum, J. F., Bless, E., & Otto, M. W. (1994). Dysfunctional attitudes in major depression. Changes with pharmacotherapy. *Journal of Nervous and Mental Disease*, 182, 45-49.
- Fekkes, D., Van Dalen, A., Edelman, M., & Voskuilen, A. (1995). Validation of the determination of amino acids in plasma by high-performance liquid chromatography using automated pre-column derivatization with o-phthalaldehyde. *Journal of Chromatography B: Biomedical Applications*, 669, 177-186.
- Fernstrom, J. D. & Wurtman, R. J. (1971). Brain serotonin content: increase following ingestion of carbohydrate diet. *Science*, 174, 1023-1025.
- Fernstrom, J. D. & Wurtman, R. J. (1972). Brain serotonin content: physiological regulation by plasma neutral amino-acids. *Science*, 178, 414-416.
- Field, A. (2005). *Discovering statistics using SPSS*. (Second ed.) London: Sage Publications.
- First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. W. (1995). *Structured Clinical Interview for DSM-IV Axis I Disorders. Patient edition (SCID-I/P)*. New York: Biometrics Research Department, NYSPI.
- Fischer, K., Colombani, P. C., Langhans, W., & Wenk, C. (2003). Carbohydrate to protein ratio in food and cognitive performance in the morning. *Physiology & Behavior*, 75, 411-423.
- Flory, J., Mann, J., Manuck, S., & Muldoon, M. (1998). Recovery from major depression is not associated with normalization of serotonergic function. *Biological Psychiatry*, 43, 320-326.

- Frank, E., Prien, R. F., Jarrett, R. B., Keller, M. B., Kupfer, D. J., Lavori, P. W. et al. (1991). Conceptualization and rationale for consensus definitions of terms in major depressive disorder. Remission, recovery, relapse, and recurrence. *Archives of General Psychiatry*, *48*, 851-855.
- Gallagher, D. (1990). Extraversion, neuroticism and appraisal of stressful academic events. *Personality and Individual Differences*, *11*, 1053-1057.
- Gehi, A., Browner, W. S., Whooley, M. A., Mangano, D., & Pipkin, S. (2005). Depression and heart rate variability in patients with stable coronary heart disease: findings from the Heart and Soul Study. *Archives of General Psychiatry*, *62*, 661-666.
- Gemar, M., Segal, Z. V., Sagrati, S., & Kennedy, S. (2001). Mood-induced changes on the Implicit Association Test in recovered depressed patients. *Journal of Abnormal Psychology*, *110*, 282-289.
- Gibson, E. L. & Green, M. W. (2002). Nutritional influences on cognitive function: mechanisms of susceptibility. *Nutrition Research Reviews*, *15*, 169-206.
- Glassman, A. H., Rodriguez, A. I., & Shapiro, P. A. (1998). The use of antidepressant drugs in patients with heart disease. *Journal of Clinical Psychiatry*, *59*, 16-21.
- Goekoop, J. G., Knoppertvanderklein, E. A. M., Hoeksema, T., Klinkhamer, R. A., Vangaalen, H. A. E., & Vandervelde, E. A. (1991). The interrater reliability of a dutch version of the Comprehensive Psychopathological Rating Scale. *Acta Psychiatrica Scandinavica*, *83*, 202-205.
- Gonul, A. S., Akdeniz, F., Taneli, F., Donat, O., Eker, C., & Vahip, S. (2005). Effect of treatment on serum brain-derived neurotrophic factor levels in depressed patients. *European Archives of Psychiatry and Clinical Neuroscience*, *255*, 381-386.
- Gorenstein, C., de Carvalho, S., Artes, R., Moreno, R., & Marcourakis, T. (2006). Cognitive performance in depressed patients after chronic use of antidepressants. *Psychopharmacology (Berl)*, *185*, 84-92.
- Gorman, J. M. & Sloan, R. P. (2000). Heart rate variability in depressive and anxiety disorders. *American Heart Journal*, *140*, 77-83.
- Gotlib, I., Kasch, K., Traill, S., Joormann, J., Arnow, B. A., & Johnson, S. (2004). Coherence and specificity of information-processing biases in depression and social phobia. *Journal of Abnormal Psychology*, *113*, 386-398.
- Graeff, F. G., Guimaraes, F. S., De Andrade, T. G. C. S., & Deakin, J. F. W. (1996). Role of 5-HT in stress, anxiety, and depression. *Pharmacology Biochemistry and Behavior*, *54*, 129-141.
- Greenwald, A. G. & Banaji, M. R. (1995). Implicit social cognition: attitudes, self-esteem, and stereotypes. *Psychological Review*, *102*, 4-27.

- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: the implicit association test. *J Pers Soc Psychol*, *74*, 1464-1480.
- Grippto, A. J. & Johnson, A. K. (2002). Biological mechanisms in the relationship between depression and heart disease. *Neuroscience and Biobehavioral Reviews*, *26*, 941-962.
- Groenewegen, H. J., Wright, C. I., & Uylings, H. B. (1997). The anatomical relationships of the prefrontal cortex with limbic structures and the basal ganglia. *Journal of Psychopharmacology*, *11*, 99-106.
- Gur, R. C., Erwin, R. J., Gur, R. E., Zvil, A. S., Heimberg, C., & Kraemer, H. C. (1992). Facial emotion discrimination II. Behavioral findings in depression. *Psychiatry Research*, *42*, 241-251.
- Hamilton, M. (1967). Development of a rating scale for primary depressive illness. *British Journal of Social and Clinical Psychology*, *6*, 278-296.
- Hammen, C. (1997). *Depression*. Hove: Psychology Press.
- Hansen, A. L., Johnsen, B. H., & Thayer, J. E. (2003). Vagal influence on working memory and attention. *International Journal of Psychophysiology*, *48*, 263-274.
- Hansen, A. L., Johnsen, B. H., Sollers, J. J., Stenvik, K., & Thayer, J. F. (2004). Heart rate variability and its relation to prefrontal cognitive function: the effects of training and detraining. *European Journal of Applied Physiology*, *93*, 263-272.
- Harmer, C. J., Bhagwagar, Z., Cowen, P. J., & Goodwin, G. M. (2002). Acute administration of citalopram facilitates memory consolidation in healthy volunteers. *Psychopharmacology (Berl)*, *163*, 106-110.
- Harmer, C. J., Bhagwagar, Z., Perrett, D. I., Völlm, B. A., Cowen, P. J., & Goodwin, G. M. (2003a). Acute SSRI administration affects the processing of social cues in healthy volunteers. *Neuropsychopharmacology*, *28*, 148-152.
- Harmer, C. J., Hill, S. A., Taylor, M. J., Cowen, P. J., & Goodwin, G. M. (2003b). Toward a neuropsychological theory of antidepressant drug action: increase in positive emotional bias after potentiation of norepinephrine activity. *American Journal of Psychiatry*, *160*, 990-992.
- Harmer, C. J., Mackay, C. E., Reid, C. B., Cowen, P. J., & Goodwin, G. M. (2006a). Antidepressant drug treatment modifies the neural processing of nonconscious threat cues. *Biological Psychiatry*, *59*, 816-820.
- Harmer, C. J., Reid, C. B., Ray, M. K., Goodwin, G. M., & Cowen, P. J. (2006b). 5HT₃ antagonism abolishes the emotion potentiated startle effect in humans. *Psychopharmacology (Berl)*, *186*, 18-24.

- Harmer, C. J., Rogers, R. D., Tunbridge, E., Cowen, P. J., & Goodwin, G. M. (2003c). Tryptophan depletion decreases the recognition of fear in female volunteers. *Psychopharmacology (Berl)*, *167*, 411-417.
- Harmer, C. J., Shelley, N. C., Cowen, P. J., & Goodwin, G. M. (2004). Increased positive versus negative affective perception and memory in healthy volunteers following selective serotonin and norepinephrine reuptake inhibition. *American Journal of Psychiatry*, *161*, 1256-1263.
- Harrison, B. J., Olver, J. S., Norman, T. R., Burrows, G. D., Wesnes, K. A., & Nathan, P. J. (2004). Selective effects of acute serotonin and catecholamine depletion on memory in healthy women. *Journal of Psychopharmacology*, *18*, 32-40.
- Hayward, C. (1995). Psychiatric illness and cardiovascular disease risk. *Epidemiologic Reviews*, *17*, 129-138.
- Hayward, G., Goodwin, G., Cowen, P. J., & Harmer, C. J. (2005). Low-dose tryptophan depletion in recovered depressed patients induces changes in cognitive processing without depressive symptoms. *Biological Psychiatry*, *57*, 517-524.
- Hedden, T. & Gabrieli, J. D. E. (2004). Insights into the ageing mind: A view from cognitive neuroscience. *Nature Reviews Neuroscience*, *5*, 87-U12.
- Heine, W., Radke, M., Wutzke, K., Peters, E., & Kundt, G. (1996). Alphalactalbumin-enriched low-protein infant formulas: a comparison to breast milk feeding. *Acta Paediatrica*, *85*, 1024-1028.
- Hjortskov, N., Rissen, D., Blangsted, A. K., Fallentin, N., Lundberg, U., & Sogaard, K. (2004). The effect of mental stress on heart rate variability and blood pressure during computer work. *European Journal of Applied Physiology*, *92*, 84-89.
- Hollon, S. D., DeRubeis, R., Shelton, R. C., Amsterdam, J. D., Salomon, R. M., O'Reardon, J. et al. (2005). Prevention of relapse following cognitive therapy vs. medications in moderate to severe depression. *Archives of General Psychiatry*, *62*, 417-422.
- Hotchkiss, A. J. & Gibb, J. W. (1980). Long-term effects of multiple doses of methamphetamine on tryptophan hydroxylase and tyrosine hydroxylase activity in rat brain. *The Journal of Pharmacology and Experimental Therapeutics*, *214*, 257-262.
- Hrdina, P. D., Stnyi, P., Palkovits, M., Demeter, E., & Vu, T. B. (1993). 5-HT uptake sites and 5-HT₂ receptors in brain of antidepressant-free suicide victims/depressives: increase in 5-HT₂ sites in cortex and amygdala. *Brain Research*, *614*, 37-44.
- Humble, M. & Wistedt, B. (1992). Serotonin, panic disorder and agoraphobia: short-term and long-term efficacy of citalopram in panic disorders. *International Clinical Psychopharmacology*, *6 Suppl 5*, 21-39.

- Ingjaldsson, J. T., Laberg, J. C., & Thayer, J. F. (2003). Reduced heart rate variability in chronic alcohol abuse: Relationship with negative mood, chronic thought suppression, and compulsive drinking. *Biological Psychiatry*, *54*, 1427-1436.
- Ingram, R., Miranda, J., & Segal, Z. V. (1998). *Cognitive vulnerability to depression*. New York, NY: The Guilford Press.
- Jans, L. A. W., Riedel, W. J., Markus, C. R., & Blokland, A. (2007). Serotonergic vulnerability and depression: assumptions, experimental evidence and implications. *Molecular Psychiatry*, *12*, 522-543.
- Johnsen, B. H., Thayer, J. F., Laberg, J. C., Wormnes, B., Raadal, M., Skaret, E. et al. (2003). Attentional and physiological characteristics of patients with dental anxiety. *Journal of Anxiety Disorders*, *17*, 75-87.
- Judd, L. L. (1997). The clinical course of unipolar major depressive disorders. *Archives of General Psychiatry*, *54*, 989-991.
- Kaye, W. H., Gwirtsman, H. E., Brewerton, T. D., George, D. T., & Wurtman, R. J. (1988). Bingeing behavior and plasma amino-acids: a possible involvement of brain serotonin in bulimia nervosa. *Psychiatry Research*, *23*, 31-43.
- Kellett, D. O., Stanford, S. C., Machado, B. H., Jordan, D., & Ramage, A. G. (2005). Effect of 5-HT depletion on cardiovascular vagal reflex sensitivity in awake and anesthetized rats. *Brain Research*, *1054*, 61-72.
- Kemp, A. H., Gray, M. A., Silberstein, R. B., Armstrong, S. M., & Nathan, P. J. (2004). Augmentation of serotonin enhances pleasant and suppresses unpleasant cortical electrophysiological responses to visual emotional stimuli in humans. *NeuroImage*, *22*, 1084-1096.
- Kendler, K. S., Gatz, M., Gardner, C. O., & Pedersen, N. L. (2006). Personality and major depression. A Swedish longitudinal, population-based twin study. *Archives of General Psychiatry*, *63*, 1113-1120.
- Kendler, K. S., Karkowski, L. M., & Prescott, C. A. (1999). Causal relationship between stressful life events and the onset of major depression. *American Journal of Psychiatry*, *156*, 837-841.
- Kendler, K. S., Kuhn, J., & Prescott, C. A. (2004). The interrelationship of neuroticism, sex, and stressful life events in the prediction of episodes of major depression. *American Journal of Psychiatry*, *161*, 161-164.
- Kessing, L. V. (1998). Cognitive impairment in the euthymic phase of affective disorder. *Psychological Medicine*, *28*, 1027-1038.

- Kirschbaum, C., Kudielka, B., Gaab, J., Schommer, N., & Hellhammer, D. (1999). Impact of gender, menstrual cycle phase and oral contraceptives on the activity of the hypothalamus-pituitary-adrenal axis. *Psychosomatic Medicine*, *61*, 154-162.
- Klaassen, T., Klumperbeek, J., Deutz, N. E., Van Praag, H. M., & Griez, E. (1998). Effects of tryptophan depletion on anxiety and on panic provoked by carbon dioxide challenge. *Psychiatry Research*, *77*, 167-174.
- Klaassen, T., Riedel, W. J., Deutz, N. E. P., & Van Praag, H. M. (2002). Mood congruent memory bias induced by tryptophan depletion. *Psychological Medicine*, *32*, 167-172.
- Klaassen, T., Riedel, W. J., Van Someren, A., Deutz, N. E. P., Honig A, & Van Praag, H. M. (1999). Mood effects of 24-hour tryptophan depletion in healthy first-degree relatives of patients with affective disorders. *Biological Psychiatry*, *46*, 489-497.
- Klaver, C. H. A. M., De Geus, E. J. C., & de Vries, J. (1994). Ambulatory Monitoring System. In: F. J. Maarse, L. J. Mulder, A. E. Akkerman, A. N. Brand, & M. J. Van der Selt (Eds.), *Computers in Psychology: Applications, Methods and Instrumentation* (pp. 254-268). Lisse: Swets & Zeitlinger.
- Krahn, L., Lu, P., Klee, G., Delgado, P., Lin, S., & Zimmermann, R. (1996). Examining serotonin function: A modified technique for rapid tryptophan depletion. *Neuropsychopharmacology*, *15*, 325-328.
- Krantz, D. S. & McCeney, M. K. (2002). Effects of psychological and social factors on organic disease: a critical assessment of research on coronary heart disease. *Annual Review of Psychology*, *53*, 341-369.
- Kuyken, W. & Dalgleish, T. (1995). Autobiographical memory and depression. *British Journal of Clinical Psychology*, *34* (Pt 1), 89-92.
- Lam, R. & Yatham, L. (2003). Reply (untitled). *Psychological Medicine*, *33*, 1134-1135.
- Lam, R., Zis, A., Grewal, A., Delgado, P. L., Charney, D. S., & Krystal, J. H. (1996). Effects of rapid tryptophan depletion in patients with seasonal affective disorder in remission after light therapy. *Archives of General Psychiatry*, *53*, 41-44.
- Lau, M. A., Segal, Z. V., & Williams, J. M. (2004). Teasdale's differential activation hypothesis: implications for mechanisms of depressive relapse and suicidal behaviour. *Behaviour Research and Therapy*, *42*, 1001-1017.
- Lavy, E., Van den Hout, M. A., & Arntz, A. (1993). Attentional bias and spider phobia: Conceptual and clinical issues. *Behaviour Research and Therapy*, *31*, 17-24.
- Leppänen, J. M. (2006). Emotional information processing in mood disorders: a review of behavioral and neuroimaging findings. *Current Opinion in Psychiatry*, *19*, 34-39.

- Lieben, C. K. J., Blokland, A., Westerink, B., & Deutz, N. E. P. (2004). Acute tryptophan and serotonin depletion using an optimized tryptophan-free protein-carbohydrate mixture in the adult rat. *Neurochemistry International*, *44*, 9-16.
- Luciana, M., Burgund, E. D., Berman, M., & Hanson, K. (2001). Effects of tryptophan loading on verbal, spatial and affective working memory functions in healthy adults. *Journal of Psychopharmacology*, *15*, 219-230.
- MacLeod, C., Mathews, A., & Tata, P. (1986). Attentional bias in emotional disorders. *Journal of Abnormal Psychology*, *95*, 15-20.
- Maes, M. & Meltzer, H. Y. (1995). The serotonin hypothesis of major depression. In: F. E. Bloom & D. J. Kupfer (Eds.), *Psychopharmacology: The Fourth Generation of Progress* (pp. 933-944). New York: Raven Press.
- Marcos, T., Salamero, M., Gutierrez, F., Catalan, R., Gasto, C., & Lazaro, L. (1994). Cognitive dysfunctions in recovered melancholic patients. *Journal of Affective Disorders*, *32*, 133-137.
- Markus, C. R. (2003). Interactions between stress, food and mood. In: D. H. Watson (Ed.), *Performance Functional Foods* (pp. 5-20). Cambridge: Woodhead Publishing Limited.
- Markus, C. R., Jonkman, L. M., Lammers, J. H. C. M., Deutz, N. E. P., Messer, M. H., & Rigtering, N. H. (2005). Evening intake of alpha-lactalbumin increases plasma tryptophan availability and improves morning alertness and brain measures of attention. *American Journal of Clinical Nutrition*, *81*, 1026-1033.
- Markus, C. R., Olivier, B., Panhuysen, G., Van der Gugten, J., Alles, M. S., Tuiten, A. et al. (2000). The bovine protein alphas-lactalbumin increases the plasma ratio of tryptophan to the other large neutral amino acids, and in vulnerable subjects raises brain serotonin activity, reduces cortisol concentration and improves mood under stress. *American Journal of Clinical Nutrition*, *71*, 1536-1544.
- Markus, C. R., Olivier, B., & de Haan, E. H. F. (2002). Whey protein rich in alphas-lactalbumin increases the ratio of plasma tryptophan to the sum of the other large neutral amino acids and improves cognitive performance in stress-vulnerable subjects. *American Journal of Clinical Nutrition*, *75*, 1051-1056.
- Markus, C. R., Panhuysen, G., Jonkman, L., & Bachman, M. (1999). Carbohydrate intake improves cognitive performance of stress-prone individuals under controllable laboratory stress. *British Journal of Nutrition*, *82*, 457-467.
- Markus, C. R., Panhuysen, G., Tuiten, A., Koppeschaar, H., Fekkes, D., & Peters, M. L. (1998). Does carbohydrate-rich, protein-poor food prevent a deterioration of mood and cognitive performance of stress-prone subjects when subjected to a stressful task? *Appetite*, *31*, 49-65.

- Marsh, D., Dougherty, D., Moeller, F., Swann, A., & Spiga, R. (2002). Laboratory-measured aggressive behavior of women: acute tryptophan depletion and augmentation. *Neuropsychopharmacology*, *26*, 660-671.
- Masurier, M. L. E., Cowen, P. J., & Harmer, C. J. (2007). Emotional bias and waking salivary cortisol in relatives of patients with major depression. *Psychological Medicine*, *37*, 403-410.
- Mathews, A., Ridgeway, V., & Williamson, D. A. (1996). Evidence for attention to threatening stimuli in depression. *Behaviour Research and Therapy*, *34*, 695-705.
- Matt, G. E., Vazquez, C., & Campbell, W. K. (1992). Mood-congruent recall of affectively toned stimuli: A meta-analytic review. *Clinical Psychology Review*, *12*, 227-255.
- McCabe, S. B., Gotlib, I. H., & Martin, R. A. (2000). Cognitive vulnerability for depression: Deployment of attention as a function of history of depression and current mood state. *Cognitive Therapy and Research*, *24*, 427-444.
- McEntee, W. J. & Crook, T. H. (1991). Serotonin, memory, and the aging brain. *Psychopharmacology*, *103*, 143-149.
- McNair, D. M., Lorr, M., & Droppelman, L. F. (1971). *Manual for the Profile of Mood States*. San Diego, CA: Educational and Industrial Testing Service.
- Meltzer, H. Y. & Lowy, M. (1987). The serotonin hypothesis of depression. In: H. Y. Meltzer (Ed.), *Psychopharmacology: The Third Generation of Progress* (pp. 513-526). New York, NY: Raven Press.
- Merens, W., Booij, L., Haffmans, P. M. J., & Van der Does, A. J. W. (in press). The effects of experimentally lowered serotonin function on emotional information processing and memory in remitted depressed patients. *Journal of Psychopharmacology*.
- Merens, W., Booij, L., Markus, C. R., Zitman, F. G., Onkenhout, W., & Van der Does, A. J. W. (2005). The effects of a diet enriched with alpha-lactalbumin on mood and cortisol response in unmedicated recovered depressed subjects and controls. *British Journal of Nutrition*, *94*, 415-422.
- Merens, W. & Van der Does, A. J. W. (2007). Low-dose tryptophan depletion. *Biological Psychiatry*, *62*, 542-543.
- Meyer, J. H., Ginovart, N., Boovariwala, A., Sagrati, S., Hussey, D., Garcia, A. et al. (2006). Elevated monoamine oxidase A levels in the brain. An explanation for the monoamine imbalance of major depression. *Archives of General Psychiatry*, *63*, 1209-1216.
- Meyer, J. H., McMain, S., Kennedy, S., Korman, L., Brown, G. M., DaSilva, J. et al. (2003). Dysfunctional attitudes and 5-HT₂ receptors during depression and self-harm. *American Journal of Psychiatry*, *160*, 90-99.

- Meyer, J. H., Carella, A., Cheok, A., Hussey, D., Ginovart, N., Wilson, A. A. et al. (2004). Serotonin transporter occupancy of five selective serotonin reuptake inhibitors at different doses: an [¹¹C]DASB positron emission tomography study. *American Journal of Psychiatry*, *161*, 826-835.
- Miller, F. G. & Rosenstein, D. L. (1997). Psychiatric symptom-provoking studies: An ethical appraisal. *Biological Psychiatry*, *42*, 403-409.
- Miller, H. E. J., Deakin, J. F. W., & Anderson, I. M. (2000). Effect of acute tryptophan depletion on CO₂-induced anxiety in patients with panic disorder and normal volunteers. *British Journal of Psychiatry*, *176*, 182-188.
- Minet-Ringuet, J., Le Ruyet, P. M., Tome, D., & Even, P. C. (2004). A tryptophan-rich protein diet efficiently restores sleep after food deprivation in the rat. *Behavioural Brain Research*, *152*, 335-340.
- Miranda, J., Persons, J. B., & Byers, C. N. (1990). Endorsement of dysfunctional beliefs depends on current mood state. *Journal of Abnormal Psychology*, *99*, 237-241.
- Mogg, K., Bradley, B. P., & Williams, R. (1995). Attentional bias in anxiety and depression. The role of awareness. *British Journal of Clinical Psychology*, *34*, 17-36.
- Montgomery, S. & Asberg, M. (1979). A new depression scale designed to be sensitive to change. *The British Journal of Psychiatry*, *134*, 382-389.
- Moreno, F. A., Gelenberg, A. J., Bachar, K., & Delgado, P. L. (1997). Pindolol augmentation of treatment-resistant depressed patients. *Journal of Clinical Psychiatry*, *58*, 437-439.
- Moskowitz, D., Pinard, G., Zuroff, D., Annable, L., & Young, S. N. (2001). The effect of tryptophan on social interaction in everyday life: A placebo-controlled study. *Neuropsychopharmacology*, *25*, 277-289.
- Mueller, T., Lean, A., Keller, M., Solomon, D., Endicott, J., Cryell, W. et al. (1999). Recurrence after recovery from major depressive disorder during 15 years of observational follow-up. *American Journal of Psychiatry*, *156*, 1000-1006.
- Mulder, L. J. (1992). Measurement and analysis methods of heart rate and respiration for use in applied environments. *Biological Psychology*, *34*, 205-236.
- Munafò, M. R., Harmer, C. J., & Hayward, G. (2006). Selective processing of social threat cues following acute tryptophan depletion. *Journal of Psychopharmacology*, *20*, 33-39.
- Murphy, F. C., Michael, A., Paykel, E. S., Rogers, R. D., Sahakian, B. J., Rubinsztein, J. S. et al. (1999). Emotional bias and inhibitory control processes in mania and depression. *Psychological Medicine*, *29*, 1307-1321.

- Murphy, F. C., Rubinsztein, J. S., Michael, A., Rogers, R. D., Robbins, T. W., Paykel, E. S. et al. (2001). Decision-making cognition in mania and depression. *Psychological Medicine*, *31*, 679-693.
- Murphy, F. C., Smith, K., Cowen, P. J., Robbins, T. W., & Sahakian, B. J. (2002). The effects of tryptophan depletion on cognitive and affective processing in healthy volunteers. *Psychopharmacology (Berl)*, *163*, 42-53.
- Murphy, S. E., Longhitano, C., Ayres, R., Cowen, P. J., & Harmer, C. J. (2006). Tryptophan supplementation induces a positive bias in the processing of emotional material in healthy female volunteers. *Psychopharmacology (Berl)*, *187*, 121-130.
- Musselman, D. L., Evans, D. L., & Nemeroff, C. B. (1998). The relationship of depression to cardiovascular disease: epidemiology, biology, and treatment. *Archives of General Psychiatry*, *55*, 580-592.
- Nishizawa, S., Benkelfat, C., Young, S. N., Leyton, M., Mzengeza, S., de Montigny, C. et al. (1997). Differences between males and females in rates of serotonin synthesis in human brain. *Proceedings of the National Academy of Sciences of the United States of America*, *94*, 5308-5313.
- Nutt, D. J., Forshall, S., Bell, C., Rich, A., Sandford, J., Nash, J. et al. (1999). Mechanisms of action of selective serotonin reuptake inhibitors in the treatment of psychiatric disorders. *European Neuropsychopharmacology*, *9*, S81-S86.
- Ormel, J., Oldehinkel, A. J., & Brilman, E. L. (2001). The interplay and etiological continuity of neuroticism, difficulties, and life events in the etiology of major and subsyndromal first and recurrent depressive episodes in later life. *American Journal of Psychiatry*, *158*, 885-891.
- Orosco, M., Rouch, C., Beslot, F., Feurte, S., Regnault, A., & Dauge, V. (2004). Alpha-lactalbumin-enriched diets enhance serotonin release and induce anxiolytic and rewarding effects in the rat. *Behavioural Brain Research*, *148*, 1-10.
- Owen, A. M., Sahakian, B. J., Hodges, J. R., Summers, M. A., Polkey, C. E., & Robbins, T. W. (1995a). Dopamine-dependent frontostriatal planning deficits in early Parkinson's disease. *Neuropsychology*, *9*, 126-140.
- Owen, A. M., Sahakian, B. J., Semple, J., Polkey, C. E., & Robbins, T. W. (1995b). Visuo-spatial short-term recognition memory and learning after temporal-lobe excisions, frontal-lobe excisions or amygdalo-hippocampectomy in man. *Neuropsychologia*, *33*, 1-24.
- Paelecke-Habermann, Y., Pohl, J., & Lepow, B. (2005). Attention and executive functions in remitted major depression patients. *Journal of Affective Disorders*, *89*, 125-135.

- Paradiso, S., Lamberty, G. J., Garvey, M. J., & Robinson, R. G. (1997). Cognitive impairment in the euthymic phase of chronic unipolar depression. *Journal of Nervous and Mental Disease, 185*, 748-754.
- Park, S. B., Coull, J. T., McShane, R. H., Young, A. H., Sahakian, B. J., Robbins, T. W. et al. (1994). Tryptophan depletion in normal volunteers produces selective impairments in learning and memory. *Neuropharmacology, 33*, 575-588.
- Peeters, F., Boon-Vermeeren, M., Wessel, I., & Merckelbach, H. (2002). Autobiographical memory specificity and the course of major depressive disorder. *Comprehensive Psychiatry, 43*, 344-350.
- Perez, V., Gilaberte, I., Faries, D., Alvarez, E., & Artigas, F. (1997). Randomised, double-blind, placebo-controlled trial of pindolol in combination with fluoxetine antidepressant treatment. *The Lancet, 349*, 1594-1597.
- Persad, S. M. & Polivy, J. (1993). Differences between depressed and nondepressed individuals in the recognition of and response to facial emotional cues. *Journal of Abnormal Psychology, 102*, 358-368.
- Peselow, E. D., Corwin, J., Fieve, R. R., Rotrosen, J., & Cooper, T. B. (1991). Disappearance of memory deficits in outpatient depressives responding to imipramine. *Journal of Affective Disorders, 21*, 173-183.
- Peselow, E. D., Robins, C., Block, P., Barouche, F., & Fieve, R. R. (1990). Dysfunctional attitudes in depressed patients before and after clinical treatment and in normal control subjects. *American Journal of Psychiatry, 147*, 439-444.
- Peters, M., Godaert, G., Ballieux, R. E., Vliet, M. v., Willemsen, J., Sweep, F. et al. (1998). Cardiovascular and endocrine responses to experimental stress; effects of mental effort and controllability. *Psychoneuroendocrinology, 23*, 1-7.
- Petersen, T., Dording, C., Neault, N. B., Kornbluh, R., Alpert, J. E., Nierenberg, A. A. et al. (2002). A survey of prescribing practices in the treatment of depression. *Progress in Neuro-Psychopharmacology and Biological Psychiatry, 26*, 177-187.
- Pollack, I. & Norman, D. A. (1964). A non-parametric analysis of recognition experiments. *Psychonomic Science, 1*, 125-126.
- Porter, R. J., Gallagher, P., & O'Brien, J. T. (2007). Effects of rapid tryptophan depletion on salivary cortisol in older people recovered from depression, and the healthy elderly. *Journal of Psychopharmacology, 21*, 71-75.
- Rechlin, T., Weis, M., Spitzer, A., & Kaschka, W. P. (1994). Are affective disorders associated with alterations of heart rate variability? *Journal of Affective Disorders, 32*, 271-275.

- Reilly, J. G., McTavish, S. F., & Young, A. H. (1997). Rapid depletion of plasma tryptophan: a review of studies and experimental methodology. *Journal of Psychopharmacology*, *11*, 381-392.
- Renaud, P. & Blondin, J. P. (1997). The stress of Stroop performance: Physiological and emotional responses to color-word interference, task pacing, and pacing speed. *International-Journal-of-Psychophysiology*, *27*, 87-97.
- Riedel, W. J., Klaassen, T., Griez, E., Honig, A., Menheere, P. P. C. A., & Van Praag, H. M. (2002). Dissociable hormonal, cognitive and mood responses to neuroendocrine challenge: Evidence for receptor-specific serotonergic dysregulation in depressed mood. *Neuropsychopharmacology*, *26*, 358-367.
- Riedel, W. J., Van Someren, A., Van Praag, H. M., Klaassen, T., & Deutz, N. E. P. (1999). Tryptophan depletion in normal volunteers produces selective impairment in memory consolidation. *Psychopharmacology (Berl)*, *141*, 362-369.
- Rogers, R. D., Drevets, W. C., Sahakian, B. J., Tunbridge, E. M., Bhagwagar, Z., & Carter, C. S. (2003). Tryptophan depletion alters the decision-making of healthy volunteers through altered processing of reward cues. *Neuropsychopharmacology*, *28*, 153-162.
- Rogers, R. D., Everitt, B. J., Baldacchino, A., Blackshaw, A. J., Swainson, R., Wynne, K. et al. (1999a). Dissociable deficits in the decision-making cognition of chronic amphetamine abusers, opiate abusers, patients with focal damage to prefrontal cortex, and tryptophan-depleted normal volunteers: evidence for monoaminergic mechanisms. *Neuropsychopharmacology*, *20*, 322-339.
- Rogers, R. D., Matthews, K., Hopwood, A., Hawtin, K., Blackshaw, A. J., Middleton, H. C. et al. (1999b). Tryptophan depletion impairs stimulus-reward learning while methylphenidate disrupts attentional control in healthy young adults: implications for the monoaminergic basis of impulsive behaviour. *Psychopharmacology (Berl)*, *146*, 482-491.
- Roiser, J. P., Müller, U., Clark, L., & Sahakian, B. J. (2007). The effects of acute tryptophan depletion and serotonin transporter polymorphism on emotional processing in memory and attention. *International Journal of Neuropsychopharmacology*, *10*, 449-461.
- Rubinow, D. R. & Post, R. M. (1992). Impaired recognition of affect in facial expression in depressed patients. *Biological Psychiatry*, *31*, 947-953.
- Rubinsztein, J. S., Mehta, M. A., Robbins, T. W., Rogers, R. D., Riedel, W. J., & Sahakian, B. J. (2001). Acute dietary tryptophan depletion impairs maintenance of "affective set" and delayed visual recognition in healthy volunteers. *Psychopharmacology (Berl)*, *154*, 319-326.
- Rugulies, R. (2002). Depression as a predictor for coronary heart disease: a review and meta-analysis. *American Journal of Preventive Medicine*, *23*, 51-61.

- Rush, A. J., Kovacs, M., Beck, A. T., Weissenburger, J., & Hollon, S. D. (1981). Differential effects of cognitive therapy and pharmacotherapy on depressive symptoms. *Journal of Affective Disorders*, 3, 221-229.
- Saan, R. & Deelman, B. (1986). *De 15-woordentest A en B (een voorlopige handleiding)*. Groningen: Afdeling Neuropsychologie, AZG.
- Sanderman, R., Arrindell, W. A., Ranchor, A., Eysenck, H., & Eysenck, S. (1995). *Het meten van persoonlijkheidskenmerken met de Eysenck Personality Questionnaire (EPQ). Een handleiding*. Groningen: Noordelijk Centrum voor Gezondheidsvraagstukken, Rijksuniversiteit Groningen.
- Schmitt, J. A. J., Jorissen, B., Sobczak, S., Van Boxtel, M. P. J., Hogervorst, E., Deutz, N. E. P. et al. (2000). Tryptophan depletion impairs memory consolidation but improves focussed attention in healthy young volunteers. *Journal of Psychopharmacology*, 14, 21-29.
- Schmitt, J. A. J., Markus, C. R., Dye, L., Deutz, N. E. P., Jorissen, B. L., & Riedel, W. J. (2005). Memory function in women with premenstrual complaints and the effect of serotonergic stimulation by acute administration of an alpha-lactalbumin protein. *Journal of Psychopharmacology*, 19, 375-384.
- Segal, Z. V., Kennedy, S., Gemar, M., Hood, K., Pedersen, R., & Buis, T. (2006). Cognitive reactivity to sad mood provocation and the prediction of depressive relapse. *Archives of General Psychiatry*, 63, 749-755.
- Sheline, Y. I., Ollinger, J. M., Snyder, A. Z., Barch, D. M., Donnelly, J. M., & Mintun, M. A. (2001). Increased amygdala response to masked emotional faces in depressed subjects resolves with antidepressant treatment: an fMRI study. *Biological Psychiatry*, 50, 651-658.
- Sheline, Y. I., Sanghavi, M., Mintun, M. A., & Gado, M. H. (1999). Depression duration but not age predicts hippocampal volume loss in medically healthy women with recurrent major depression. *Journal of Neuroscience*, 19, 5034-5043.
- Simons, A. D., Garfield, S. L., & Murphy, G. E. (1984). The process of change in cognitive therapy and pharmacotherapy for depression. Changes in mood and cognition. *Archives of General Psychiatry*, 41, 45-51.
- Sirviö, J., Riekkinen, P., Jäkälä, P., & Riekkinen, P. J. (1995). Experimental studies on the role of serotonin in cognition. *Progress in Neurobiology*, 43, 363-379.
- Sobczak, S., Honig, A., Schmitt, J. A. J., & Riedel, W. J. (2003). Pronounced cognitive deficits following an intravenous L-tryptophan challenge in first-degree relatives of bipolar patients compared to healthy controls. *Neuropsychopharmacology*, 28, 711-719.
- Spillman, M., Van der Does, A. J. W., Rankin, M., Vuolo, R., Alpert, J. E., Nierenberg, A. et al. (2001). Tryptophan depletion in SSRI-recovered depressed outpatients. *Psychopharmacology (Berl)*, 155, 123-127.

- Spinhoven, P., Bockting, C. L. H., Schene, A. H., Koeter, M. W. J., Wekking, E. M., & Williams, J. M. (2006). Autobiographical memory in the euthymic phase of recurrent depression. *Journal of Abnormal Psychology, 115*, 590-600.
- Spring, B., Chiodo, J., & Bowen, D. J. (1987). Carbohydrates, tryptophan and behavior: A methodological review. *Psychological Bulletin, 102*, 234-256.
- Stein, P. K. & Kleiger, R. E. (1999). Insights from the study of heart rate variability. *Annual Review of Medicine, 50*, 249-261.
- Sternberg, S. (1969). Memory-scanning: mental processes revealed by reaction-time experiments. *American Scientist, 57*, 421-457.
- Stevens, J. (1996). *Applied multivariate statistics for the social sciences*. (Third ed.) Hillsdale, NJ: Lawrence Erlbaum.
- Stewart, M., Deary, I., & Ebmeier, KP. (2002). Neuroticism as a predictor of mood change: the effects of tryptophan depletion. *The British Journal of Psychiatry, 181*, 242-247.
- Surguladze, S. A., Young, A. W., Senior, C., Brebion, G., Travis, M. J., & Phillips, M. L. (2004). Recognition accuracy and response bias to happy and sad facial expressions in patients with major depression. *Neuropsychology, 18*, 212-218.
- Swenne, C. A., Bootsma, M., & Van Bolhuis, H. H. (1995). Different autonomic responses to orthostatic and to mental stress in young normals. *Homeostasis in Health and Disease, 36*, 287-292.
- Talbot, P. S., Cooper, S. J., Barret, S. L., & Watson, D. R. (2006). Rapid tryptophan depletion improves decision-making cognition in healthy humans without affecting reversal learning or set shifting. *Neuropsychopharmacology, 31*, 1519-1525.
- Taylor, M. J., Freemantle, N., Geddes, J. R., & Bhagwagar, Z. (2006). Early onset of selective serotonin reuptake inhibitor antidepressant action. Systematic review and meta-analysis. *Archives of General Psychiatry, 63*, 1217-1223.
- Teasdale, J. D. (1983). Negative thinking in depression: Cause, effect, or reciprocal relationship? *Advances in Behavior Research and Therapy, 5*, 3-25.
- Teasdale, J. D. & Cox, S. G. (2001). Dysphoria: self-devaluative and affective components in recovered depressed patients and never depressed controls. *Psychological Medicine, 31*, 1311-1316.
- Thayer, J. F. & Lane, R. D. (2000). A model of neurovisceral integration in emotion regulation and dysregulation. *Journal of Affective Disorders, 61*, 201-216.
- Thayer, J. & Brosschot, J. F. (2005). Psychosomatics and psychopathology: looking up and down from the brain. *Psychoneuroendocrinology, 30*, 1050-1058.

- Thompson, P. J. (1991). Antidepressants and memory: A review. *Human Psychopharmacology Clinical and Experimental*, *6*, 79-90.
- Trichard, C., Martinot, J., Alagille, M., Masure, M., Hardy, P., Ginestet, D. et al. (1995). Time course of prefrontal lobe dysfunction in severely depressed in-patients: A longitudinal neuropsychological study. *Psychological Medicine*, *25*, 79-86.
- Tsankova, N. M., Kumar, A., Neve, R. L., Berton, O., Renthal, W., & Nestler, E. J. (2006). Sustained hippocampal chromatin regulation in a mouse model of depression and antidepressant action. *Nature Neuroscience*, *9*, 519-525.
- Tyrer, P., Owen, R. T., & Cicchetti, D. V. (1984). The Brief Scale for Anxiety. A subdivision of the Comprehensive Psychopathological Rating Scale. *Journal of Neurology, Neurosurgery, and Psychiatry*, *47*, 970-975.
- Üstün, T. B., Ayuso-Mateos, J. L., Chatterji, S., Mathers, C., & Murray, C. J. L. (2004). Global burden of depressive disorders in the year 2000. *The British Journal of Psychiatry*, *184*, 386-392.
- Van der Does, A. J. W. (2001a). The effects of tryptophan depletion on mood and psychiatric symptoms. *Journal of Affective Disorders*, *64*, 107-119.
- Van der Does, A. J. W. (2001b). The mood-lowering effect of tryptophan depletion: Possible explanation for discrepant findings. *Archives of General Psychiatry*, *58*, 200-201.
- Van der Does, A. J. W. (2002a). Cognitive reactivity to sad mood: structure and validity of a new measure. *Behaviour Research and Therapy*, *40*, 105-120.
- Van der Does, A. J. W. (2002b). *Manual of the Dutch version of the BDI-II [Handleiding bij de Nederlandse bewerking van de BDI-II]*. San Antonio TX/ Lisse NL: The Psychological Corporation/ Swets Test Publishers.
- Van der Does, A. J. W. (2005). Thought suppression and cognitive vulnerability to depression. *British Journal of Clinical Psychology*, *44*, 1-15.
- Van der Does, A. J. W. & Booij, L. (2005). Cognitive therapy does not prevent a response to tryptophan depletion in patients also treated with antidepressants. *Biological Psychiatry*, *58*, 913-915.
- Van der Kooy, K. G., de Haan, M., Stehouwer, C. D. A., Van Hout, H. P. J., Van Marwijk, H. W. J., & Beekman, A. T. F. (2006). Differences in heart rate variability between depressed and non-depressed elderly. *International Journal of Geriatric Psychiatry*, *21*, 147-150.
- Van der Veen, F. M., Evers, E. A. T., Deutz, N. E. P., & Schmitt, J. A. J. (2007). Effects of acute tryptophan depletion on mood and facial emotion perception related brain activation and performance in healthy women with and without a family history of depression. *Neuropsychopharmacology*, *32*, 216-224.

- Van Minnen, A., Wessel, I., Verhaak C, & Smeenk, J. (2005). The relationship between autobiographical memory specificity and depressed mood following a stressful life event: a prospective study. *British Journal of Clinical Psychology, 44*, 405-415.
- Van Praag, H. M. (2004). Can stress cause depression? *Progress in Neuro-Psychopharmacology and Biological Psychiatry, 28*, 891.
- Van Roon, A. M., Mulder, L. J., Althaus, M., & Mulder, G. (2004). Introducing a baroreflex model for studying cardiovascular effects of mental workload. *Psychophysiology, 41*, 961-981.
- Vaswani, M., Linda, F. K., & Ramesh, S. (2003). Role of selective serotonin reuptake inhibitors in psychiatric disorders: a comprehensive review. *Progress in Neuro-Psychopharmacology and Biological Psychiatry, 27*, 85-102.
- Wald, F. D. M. & Mellenbergh, G. J. (1990). De verkorte versie van de Nederlandse vertaling van de Profile of Mood States (POMS). *Nederlands Tijdschrift voor de Psychologie, 45*, 86-90.
- Weiland-Fiedler, P., Erickson, K., Waldeck, T., Luckenbaugh, D. A., Pike, D., Bonne, O. et al. (2004). Evidence for continuing neuropsychological impairments in depression. *Journal of Affective Disorders, 82*, 253-258.
- Weissman, A. (1979). The Dysfunctional Attitude Scale: A validation study. *Dissertation Abstracts International, 40*, 1389-1390.
- Williams, J. M. G., Mathews, A., & MacLeod, C. (1996). The emotional Stroop task and psychopathology. *Psychological Bulletin, 120*, 3-24.
- Williams, J. M. G. & Scott, J. (1988). Autobiographical memory in depression. *Psychological Medicine, 18*, 689-695.
- Yokogoshi, H. & Wurtman, R. J. (1986). Meal composition and plasma amino acid ratios: effect of various proteins or carbohydrates, and of various protein concentrations. *Metabolism, 35*, 837-842.
- Young, S. N. (1986). The effect on aggression and mood of altering tryptophan levels. *Nutrition Reviews, 5*, 112-122.
- Young, S. N. (1996). Behavioral effects of dietary neurotransmitter precursors: basic and clinical aspects. *Neuroscience and Biobehavioral Reviews, 20*, 313-323.
- Young, S. N., Ervin, F. R., Pihl, R. O., & Finn, P. (1989). Biochemical aspects of tryptophan depletion in primates. *Psychopharmacology (Berl), 98*, 508-511.
- Young, S. N. & Leyton, M. (2002). The role of serotonin in human mood and social interaction. Insight from altered tryptophan levels. *Pharmacology, Biochemistry and Behavior, 71*, 857-865.

Young, S. N., Smith, S. E., Pihl, R. O., & Ervin, F. R. (1985). Tryptophan depletion causes a rapid lowering of mood in normal males. *Psychopharmacology (Berl)*, *87*, 173-177.