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摘要(中)	服用抗精神分裂藥物的副作用會造成患者體重增加，進而嚴重影響病人的健康，造成精神分裂症患者罹患糖尿病及心臟血管疾病的危險性增加，然而抗精神分裂症藥物引起的體重增加的致病機轉仍不清楚。本研究想要瞭解運動介入是否可有效達到體重控制的目的，進而改善血糖、血脂之異常現象。篩選經 DSM-IV診斷為精神分裂症、服用抗精神病劑超

	過十週、BMI >24.9 之個案，共有 51 名住院受試者符合收案條件，且全程參與 12 週運動課程。受試者分為對照組 26 人與實驗組 25 人，其中實驗組給予 12 週的運動介入，對照組則僅維持常規的臨床照護。分析資料包括所有受試者研究期間第 0,4,8, 12 週的體位測量值，第 0,6,12 週的身體體組織成份、血液生化值分析，以及 2 天的飲食記錄。結果顯示運動介入後實驗組與對照組每日飲食熱量及營養素攝食改變沒有顯著差異（P>0.05），運動介入組比對照組能有效的降低因服用抗精神分裂藥物引起之體重增加(-0.86 ± 2.8 vs. +1.72 ± 3.0 kg, P <.0001;如果運動介入被建議用來管理抗精神分裂藥物引起的體重增加，適當運動強度是需要考量的；減重對精神分裂患者是相當困難但不是不可能的事，由於目前研究結果並無明確的結論，在不推薦使用藥物介入下，持續以行為調整計畫推動控制體重的飲食和運動是必要的。
摘要 (英)	One of the common side effects of antipsychotic medication is weight gain which has serious implications for a patient's health and well being. These patients are at increased risk for a variety of obesity-related medical conditions such as diabetes and cardiovascular disease. However, the pathophysiology of antipsychotic drug-induced weight gain remains unclear. The purpose of this study was to evaluate the effectiveness of exercise intervention on the weight loss and the improvement of hyperglycemia and/or hyperlipidemia in the schizophrenia patients. Fifty-one subjects with schizophrenia disorder (DSM- IV) treated with antipsychotic drug for at least 10 weeks and BMI >24.9 kg/m2 were recruited in this study. Subjects were assigned to the control group (26 out of 51) or the experimental group (25 out of 51). Twelve weeks of exercise intervention was given to the subjects of experimental group while the control group only maintained the regular clinical care. Anthropometric measurements were collected at the time point of the 0, 4th, 8th, 12th weeks. Body composition, blood biochemistry values as well as 2-day 24-hour dietary records were measured at the 0, 6th, 12th weeks. The results indicated that there were no significant difference of calorie and macronutrients intakes between the experimental group and the control group (P >0 .05). Compared with the control, the body weight loss (+1.72 ± 3.0 vs.-0.86 ± 2.8 kg, P
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參考文獻

孔繁鐘、孔繁錦（2000）「精神疾病診斷準則手冊（第四版）」，合記書局，台北。 方進隆（1990）長跑訓練和運動強度對青年男子血清尿酸之影響。體育學報，20，115-143 頁。 方進隆(1997b) 健康體能的理論與實際，漢文書店，台北。 行政院衛生署 (1997) 台灣地區食品營養成分資料庫，食品工業發展研究所編印。 行政院衛生署 (1997) 台灣常見食品營養圖鑑。 行政院衛生署（1998）促進國民健康體能指引指導本．行政院衛生署，台北。 行政院衛生署（2000）促進國民健康體能指引．行政院衛生署，台北。 吳至行、梁忠君、張銘峰（2001）何謂減肥成功，基層醫學，16（3），61-66 頁。 吳武典（1989）青少?問題與對策，張?師出版社，台?市。 李正美、許秀桃、李寧遠（1992）水中有氧訓練對婦女體適能、身體組成及血液生化值之影響。體院論叢，3（1），139-150 頁。 李明濱（1999）「實用精神醫學（第二版）」，國立台灣大學醫學院，台北。 李信謙、林信男 （2001）抗精神病藥物引起之體重增加，當代醫學 28(12)：34－36 頁。 李彩華、方進隆 (1998) 十二週體能訓練對婦女健康體能與血脂肪之影響。體育學報，26，145-152 頁。 沈武典 (2002) 21 世紀臨床精神藥物學 修訂版，合記書局，台北。 周元華、蘇東平 (2005) 抗精神病藥物之最近發展，臨床醫學 55 : 247－252 頁。 林宗義 (1987) 精神分裂病可痊癒嗎？橘井文化出版(陳喬琪譯)，台北。 林信男 (1994) 物理與藥物治療，當代醫學，台北。 林淑芬 (2002) 不同運動頻率對國中過重學童健康體適能之影響。碩士論文，國立台灣師範大學碩士論文，台北市。 林淑惠 (2002）探討超級馬拉松賽跑與單次最大運動對選手生化差

異影響之個案研究。碩士論文，國立台灣師範大學，台北市。 林錫芳（1989）運動與高尿酸症之探討，中華體育季刊，9，56-60 頁。 邱皓政（2000）量化研究與統計分析：SPSS 中文視窗版資料分析範例解析，五南圖書出版股份有限公司，台北市。 姜慧嵐（民 87）運動指導。體適能指導手冊，中華民國有氧體能運動協會，168-181 頁。 胡海國（1999）精神分裂症一描述性精神病理，橘井文化事業有限公司出版(當代醫學雜誌社)。 胡海國（1999）精神醫學診斷手冊，台大醫學院出版委員會出版，健康世界雜誌社經銷，二版(二刷)。 胡海國，林信男(編譯)（1996） 精神與行為障礙之分類一臨床描述與診斷指引。世界衛生組織原著，中華民國精神醫學會出版。 胡海國、林信男編譯 （1996）「ICD-10 精神與行為障礙之分類、診斷指引」，World Health Organization 原著，中華民國精神醫學會，台北。 孫藝文、陳俊欽 (2001) 臨床精神藥物學，藝軒圖書出版社，台北縣。 張淑玲、彭鈺人（2003）大專女生性激素、骨代謝與血脂在 12 週體育教學與有氧運動前後的變化。92 年度體育學術研討會專刊，559-569 頁。 教育部（1995）中華民國國民體能測驗手冊．教育部編印，台北。 梁俊煌、盧浩貴（1996）中老年人的運動對於血脂肪的分析與調查。第 27 屆大專院校運動會體育國際體育學術研討會論文集（摘要），169。 郭玄隆、許壬榮（1999）有氧運動後對 LDL； HDL、LDL/HDL、HDL2 及 HDL3 之影響。國立台灣體院學報，4，435-460 頁。 陳正興（1996）校園中精神心理疾病與相關法令問題，學生輔導月刊，46 卷： 34-39 頁。 陳全壽 (民 84a) 二十一世紀的身體運動及運動科學研究。國民體育季刊，24 卷，4 期，4-12 頁。 陳俊忠（1999）老人體能檢測活動計畫．八十七年度行政院體育委員會委託研究計畫成果報告。 陳俊興、楊添圍（2000） 精神分裂症，市立療養院網站 http://www.tcpc.gov.tw。 陳政雄（1997） 兒童青少年之精神疾病-病房篇，北市衛生雙月刊，32 卷：18-19 頁。 陳鵬升（2000）運動員與非運動員肥胖程度、血脂肪、脂蛋白及尿酸的探討。碩士論文，國立體育學院，桃園縣。 陳麗玉 (2001）運動介入及飲食教育對肥胖兒童健康體能與血脂值影響之研究。體育學報，30，267－277 頁。 傅力、陳吉棣（1997）運動與脂代謝的研究進展，中國運動醫學雜誌，16（1），42-45 頁。 黃永任 (1998) 運動、體適能與疾病預防，國民體育季刊，27 卷，2 期，5 -13 頁。 黃政典（1987）先天遺傳性和後天運動量對血清尿酸、膽固醇、三酸甘油酯、脂蛋白新陳代謝之影響調查研究報告，台北市立和平醫院。 黃賢堅（1995）在無氧與有氧運動中探討乳酸與尿酸的關係，中華民國大專院校八十四學年度體育學術研討會，123-135 頁。 黃賢堅（1995）在無氧與有氧運動中探討乳酸與尿酸的關係，中華民國大專院校八十四學年度體育學術研討會，123-135 頁。 黃賢堅、藍彩謙、劉碧華 (1991) 有氧性與無氧性衰竭運動對血清 HDL-C 及 LDL-C 的影響。八十年度大專院校體育學術研討會，283-294 頁。 楊延光 (1999) 杜鵑窩的春天--精神疾病照顧手冊，張老師文化，台北。 楊連謙、郭葉珍編譯（1991）「家屬與精神病患」，合記書局，台北。 葉金川 (2002) 健保支出「全民健保傳奇」， 97-101，董氏基金會，台北。 葉英 (1992) 我國醫院-社區精神醫療服務的發展:回顧與展望，「中華精神醫學」，6(4)，1-2 頁。 潘文涵、章雅惠、陳正義、吳幸娟、曾明淑、高美丁（民 88），國民營養健康狀況

變遷調查（NAHSIT）1993-1996：以二十四小時飲食回顧法評估國人膳食營養狀況。中華民國營養學會雜誌，24（1），11-40。 鄭麗媛（1993）不同體脂肪及腰臀圍比與體能和血脂肪關係之探討。新竹師院學報，7，195-233 頁。 盧孟良 (2004) 抗精神病藥物導致之體重增加及代謝異常。生物精神醫學暨神經精神藥理學通訊 1(3)：專論 4。 http://www.biopsychi.org.tw/communicate/1-03/1-03-05.html 盧俊宏 (民 87） 從事體適能運動所帶來的 108 種利益。台灣省學校體育，8 卷， 17-21 頁。 蕭清月（2005）營養介入對使用第二代抗精神病藥物之精神分裂症合併肥胖病患之體重、體組成、血脂及血糖的影響。碩士論文，輔仁大學，台北縣。 鍾曉雲 (2002) 新式健身操對肥胖學童身體組成、健康體適能及血脂肪之影響。碩士論文，國立體育學院，桃園縣。 Aguilo A, Tauler P, Pilar Guix M, Villa G, Cordova A, Tur JA and Pons A (2003) Effect of exercise intensity and training on antioxidants and cholesterol profile in cyclists. J Nutr Biochem 14: 319-325. Allison DB, Fontaine KR and Heo M (1999) The distribution of body mass index among individuals with and without schizophrenia. J Clin Psychiatry 60: 215-220 Allison DB, Mentore JL, Heo M, Chandler LP, Cappelleri JC, Infante MC and Weiden PJ (1999) Antipsychotic-induced weight gain: a comprehensive res- earch synthesis. Am J Psychiatry 156:1686 – 1696. American College of Sports Medicine (1995) ACSM’ s Guidelines for Exercise Testing and Prescription.（5nd ed）Baltimore: Williams and Wilkins. American College of Sports Medicine (1998) A proven, Step-by-step Program Prescribed by the leading experts in health and fitness, ACSM Fitness Book.（2nd ed） Champaign Il: Human Kinetics Books. American College of Sports Medicine (2000) ACSM’ s Guidelines for Exercise Testing and Prescription.（6nd ed） Baltimore: Williams and Wilkins. American Diabetes Association, American Psychiatric Association, American Association of Clinical Endocrinologist, North American Association for the study of Obesity (2004a) Consensus development conference on antipsychotic drugs and obesity and diabetes. J Clin Psychiatry 65: 267-27 2. American Diabetes Association, American Psychiatric Association, American Association of Clinical Endocrinologist, North American Association for the study of Obesity (2004b) Consensus development conference on antipsychotic drugs and obesity and diabetes. Diabetes Care 27: 596-601. Andreasen NC and Olsen S (1982) Negative and positive schizophrenia : Definition and validation. Arch of General Psychiatry 39: 789-794. Anonymous (1998) Adverse effects of the atypical antipsychotics. Collaborative working group on clinical trial evaluations. J Clin Psychiatry 59(suppl 12): 17-22. Award AG (1992) Quality of the schizophrenic patients on medications and implications for new drug trials. Hospital and Community Psychiatry 43: 26 2-265. Ball MP, Coons VB and Buchanon RW (2001) A program for treating olanzapine -related weight gain. Psychiatr Serv 52: 967-969 Banz WJ, Maher MA, Thompson WG, Bassett DR, Moore W, Ashraf M, Keefer DJ and Zemel MB (2003) Effects of resistance versus aerobic training on coronary artery disease risk factors. Exp Biology and Med 228: 434-440. Baptista T, Kin NM and Beaulieu S (2004) Treatment of the metabolic disturbances caused by antipsychotic drugs: focus on potential drug interactions.

Clin Pharmacokinet 43:1-15. Barondes SH (1990) Biological approach to psychiatry. J of neuroscience 4: 61-67. Bates GD, Lopes O, Woerkom AE, Klovrza L and Waring R (1999) Tardive dyskinesia: problem abnormal metabolism with promethazine. Acta Psych- iatrica Scandinavica 99: 294-299. Biner RL, and Levy R (1981) Extrapyramidal reaction in Asian. Am J Psychiatry 138: 1234-1244. Black KJ, Racette B and Perlmutter JS (1998) Preventing contractions in neuroleptic malignant syndrome and dystonia. Am J Psychiatry 155: 1298-1299. Boritz-Wintz CJ (1998) Nursing management of psychotropic drug reactions. Nursin -g Clinics of North America 3: 217-231. Brehm BA (1988) Elevation of metabolic rate following exercise. Sports Medicine 6:72-78. Cassens G, Inglis AK, Appelbaum PS and Gutheil TG (1990) Neuroleptics: effects on neuropsychological function in chronic schizophrenic patients. Schizo- phrenia Bulletin 16: 477-499. Centorrino F, Wurtzman JJ, Duca KK, Kelleher JP, Fellman VH, Berry JM, Guay DM, Romeling M, Tardivo J, Kidwell JE and Fogarty KV: Comprehensive weight loss program for overweight subjects treated with atypical antipsychotics. Poster presented at 155th American Psychiatric Association Annual Meeting, May 18-23, 2002, Philadelphia, PA Chan YY, Clifton DK and Steiner RA (1996) Role of NPY neurones in GH- dependent feedback signalling to the brain. Hormone Research 145: 12-14. Charles FL, Lora L. Armstrong, Morton P. Goldman and Leonard L (2002) Drug Information Handbook. 10th Ed: Lexi-Comp, pp. 654-656 Ohio, USA. Cohen SA, Ihrig K, Lott RS and Kerrick JM (1998) Risperidone for aggression and self-injurious behavior in adults with mental retardation. Journal Austism Development Disorder 28: 229-233. Considine RV, Carro E, Senaris R, Casanueva FF and Dieguez C (1997) Regulation of in vivo growth hormone secretion by leptin. Endocrinology 138: 2203- 2206. Czobor P, Volavka J, Sheitman B, Lindenmayer JP, Citrome L, McEvoy J, Cooper TB, Chakos M and Lieberman JA (2002) Antipsychotic-induced weight gain and therapeutic response: a differential association. J Clin Psycho- pharmacol 22: 244-251. Daniel DG and Whitcomb SR (1998) Treatment of the refractory schizophrenic patient. J Clin Psychiatry 59(suppl 1): 13-19. David AS (1990) Insight and psychosis. Br J of Psychiatry 156: 798-808. Davies A. Langley PC, Keks NA, Catts SV, Lambert T and Schweitzer I (1998) Risperidone versus haloperidol: II. cost-effectiveness. Clinical Therapeutics 20: 196-213. Dentzer S (1998) Mental illness as a brain disorder. Arch of Psychiatric nursing 12: 1-2. Dixon L, Weiden P and Delahanty J (2000) Prevalence and correlates of diabetes in national schizophrenia samples. Schizophr Bull 26: 903-912 Elliott R (1999) Receptor pharmacology of neuroleptics: relation to clinical effects. J Clin psychiatry 60 (suppl 10): 5-14. Epstein LH and Goldfield GS (1999) Physical activity in the treatment of childhood over-weight and obesity: current evidence and re-search issues. Medicine and Science in Sports and Exercise 31: 553-559. Findling RL, Maxwell K and Wiznitzer M (1997) An open clinical trial of risperidone monotherapy in young children with autistic disorder. Psycho- pharmacol Bull 33: 155-159 Finley PR, Sommer BR, Corbitt JL, Brunson GH and Lum BL (1998) Risperidone: clinical outcome predictors and cost-effectiveness in a naturalistic setting. Psychopharmacology Bulletin 34: 75-81. Friedman JM and

Halaas JL (1998) Leptin in the regulation of body weight in mammals. Nature 395:763-770. Green HJ and Fraser IG (1998) Differential effects of exercise intensity on serum uric acid concentration. Med and Sci in Sports and Exercise 20: 55-59 Green MF (1996) What are the functional consequences of neurocognitive deficits in schizophrenia ? Am J of Psychiatry 153: 321-330. Green MF, Marshall JR, Wirshing WC, Ames D, Marder SR, McGurk S, Kern RS and Mintz J (1997) Does risperidone improve verbal working memory in treatment-resistant schizophrenia? Am J of Psychiatry 154: 788-804. Haffner SM, Mykkanen LA, Gonzalez CC and Stern MP (1998) Leptin concentrations do not predict weight gain: The Mexico City Diabetes Study. Int J obes 22: 695-699. Hagan DR (1988) Benefits of aerobic conditioning and diet for overweight adults. Sports Medicine 5: 144-145. Hammond CM, Pierson JF, Grande TP, Munetz MR, Wilson SR and Pathak DS (1999) Economic evaluation of risperidone in an outpatient population. Annals of Pharmacotherapy 33: 1160-1166. Harmatz MG and Lapuc P (1968) Behavior modification of overeating in a psychi- atric population. J Consult Clin Pharmacol 32: 583-587 Hasan S and Buckley P (1998) Novel antipsychotics and the neuroleptic malignant syndrome: a review and critique. Am J of Psychiatry 155: 1113-1116. Herbert Y and Meltzer L (1998) Collaboration working group on clinical trail evaluation. Assessment of EPS and tardive dyskinesia in clinical trials. J Clin Psychiatry 59(suppl 12): 23-27. Homel P, Casey D and Allison DB (2002) Changes in body mass index for individuals with and without schizophrenia, 1987 – 1996. Schizophr Res 55:277 – 284 Jeste DV, Gladsjo JA and Lindamer LA (1996) Medical comorbidity in schizophren- ia. Schizophr Bull 22: 413 – 430 John B, Timothy RA and Bruce CE (1994) Applied Anatomy And Biomechanics in sport. Jonathan Q, Purnell L and Mary H (1999) Samuels Levels of Leptin during Hydrocortisone Infusions that Mimic Normal and Reversed Diurnal Cortisol Levels in Subjects with Adrenal Insufficiency. J Clin Endocrinol Metab 84: 3125-3128 Joukama M, Heliovaara M and Knekt P (2001) Mental disorders and cause-specific mortality. Br J Psychiatry 179: 498 – 502 Kaptanoglu B, Turgut G, Genc O, Enli Y, Karabulut I, Zencir M and Turgut S (2003) Effects of acute exercise on the levels of iron, magnesium, and uric acid in liver and spleen tissues. Biological Trace Element Res 91: 173-178. Kiens B, Jorgensen I and Lewis S (1980) Increased plasma HDL-cholesterol and apo A-1 in sedentary middle-aged men after conditioning. Scand J of Clin lab Invest 10: 203-209. Klebanoff R, Miller VT and Fernhall B (1998) Effect of exercise and estrogen therapy on lipid profiles of postmenopausal women. Medicine and Science in Sports and Exercise 30: 1028-1034. Knox JM (1980) A study of weight reducing diets im psychiatric inpatients. Br J Psychiatry 136:287-289 Lamberg L (1998) New medications aid cognition in schizophrenia. Am Med Assoc 289: 953-954. LeBlanc C (1992) Full Life Fitness. Champaign Il: Human Kinetics Books. Leslie DL and Rosenheck R（1999）Shifting to outpatient care? Mental health care use and cost under private insurance. Am J Psychiatry 156:1250-1257. Lieberman JA, Koreen AR, Chakos M, Sheitman B, Woerner M, Alvir JM and Bilder R (1996) Factors influencing treatment response and outcome of first-episorde schizophrenia: implications for

understanding the pathophy- siology of chizophrenia. J Clin Psychiatry 57(Suppl 9): 5-9. Londeree BR (1995） %V02 man Versus % HR max regression for six modes of exercise. Medicine and Science in Spoots and Exercise 27: 458-461. Marchlewski MB (1994) Anticholinergic syndrome avoiding misdiagnosis. J Psych Nursing 32: 22-24. Marder SR (1998) Facilitating compliance with antipsychotics medication. J Clin Psychiatry 59 (suppl 3): 21-25. Marken PA and Stanislav SW (2001) Schizophrenia. In: Koda-Kimble, M.A., Young, L.Y. et al. editors. Applied therapeutics: the clinical use of drugs, 7th eds, Lippincott Williams and Wilkins. pp. 76-135. USA. Marshall SJ, Sarkin JA, Ssllis JF and Mckenzie TL (1998) Tracking of health-related fitness components in youth ages 9 to 12. Medicine and Science in Sports and Exercise 30: 910-916. McArdle WD (1991) Exercise Physiology, Energy, Nutrition, and Human Performa- nce. 3ed. Lea and Febiger. McDougle CJ, Holmes JP, Bronson MR, Anderson GM, Volkmar FR, Price LH and Cohen DJ (1997) Risperidone treatment of children and adolescents with pervasive developmental disorders: a prospective open-label study. J Am Acad Child Adolesc Psychiatry 36: 685-693 McGrath J, Saari K, Hakko H, Jokelainen J, Jones P, Chant P and Isohanni M (2004) Vitamin D supplementation during the first year of life and risk of schizophrenia: a Finnish birth cohort study. Schizophrenia Research 67:237-245. Mechanic D, McAlpine DD and Olfson M (1998) Changing patterns of psychiatric inpatient care in the United States, 1988-1994. Archives of General Psychi- atry 55: 785-791. Melkersson K and Dahl ML (2004) Adverse metabolic effects associated with atypical antipsychotics: literature review and clinical implications. Drugs 64:701-723. Menza M, Vreeland B, Minsky S, Gara M, Radler DR and Sakowitz M (2004) Managing atypical antipsychotic-associated weight gain: 12-month data on a multimodal weight control program. J Clin Psychiatry 65: 471-477. Micromedex? Healthcare series, 2003; Vol.116 Nasrallah HA (2002) Pharmacoeconomic implications of adverse effects during antipsychotic drug therapy. AJHP 59(suppl 8): S16-S21 National Institute of Health (1998) Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults-the evidence report. Obes Res 6(suppl 2): 51S-209S Osby U, Correia N and Brandt L (2000) Time trends in schizophrenia mortality in Stockholm County, Sweden: cohort study. BMJ 321:483 – 484 Paffenbarger RS, Kampert JB, Lee IM, Hyde RT, Leung RW and Wing AL (1994) Chronic disease in former college student：Changes in physical activity and other lifeway pattern influencing longevity. Med and Sci in Sports and Exercise 26: 857- 865. Park DH and Ransone JW (2003) Effects of submaximal exercise on high-density lipoprotein-cholesterol subfractions. Int J of Sports Med 24: 245-251. Park SK, Park JH, Kwon YC, Kim HS, Yoon MS and Park HT (2003) The effect of combined aerobic and resistance exercise training on abdominal fat in obese middle-aged women. J of Physiol Anthr and Applied Human Sci 22: 129-135. Pavlou KN, Steffee WP, Lerman RH and Burrows BA (1985) Effect of dieting and exercise on lean body mass, oxygen uptake and strength. Medicine and Science in Sports and Exercise 17: 466-471. Pay HE, Hardman AE, Jones JW and Hudson A (1992) The acute effects of low-intensity

exercise on plasma lipids in endurance – trained young adults. Eur J of Applied Physiology 64: 182-186. Perkins DO (1999) Adherence to antipsychotic medications. J Clin Psychiatry 60(suppl 21): 25-30 Poyurovs.ky M, Isaacs I, Fuchs C, Schneidman M, Faragian S, Weizman R and Weizman A (2003) Attenuation of olanzapine-induced weight gain with reboxetine in patients with schizophrenia: a double-blind, placebo-controll- ed study. Am J Psychiatry 160: 297-302. Purdon SE (1999) Cognitive improvement in schizophrenia with novel antipsychotic medications. Schizo Res 35: S51-60. Rippe JM, Crossley S and Ringer R (1998) Obesity as a chronic disease: Modern medical and lifestyle management. J Am Diet Assoc 98(suppl 2): S9-15 Robert DC and Wayde C (1996) The Ultimate Reference Manual For Sports People. Australian Institute of Sport. Rotatori AF, Fox R and Wicks A (1980) Weight loss with psychiatric residents in a behavioral self-control program. Psychol Rep 46:483-486 Rowland TW, Martel L, Vanderburgh P, Manos T and Charkoudian N (1996) The influence of short-term aerobic training on blood lipids in healthy 10-12 years old children. International Journal of Sports Medicine 17: 487-492. Russell JM and Mackell JA (2001) Bodyweight gain associated with atypical antipsychotics. Epidemiology and therapeutic implications. CNS Drugs 15:537-551. Seals DR, Hagberg JM, Hurley BF, Ehsani AA and Holloszy JO (1984) Effects of endurance training on glucose tolerance and plasma lipid levels in older men and women. J Am Med Assoc 252: 645-649. Sedgwick AW (1980) Long-term effects of physical training on risk factors for coronary heart disease in otherwise sedentary men. Br J Med 281: 7-10. Sernyak M, Leslie D and Alarcon R (2002) Association of diabetes mellitus with use of atypical neuroleptics in the treatment of schizophrenia. Am J Psychiatry 159: 561-566 Sledge WH, Tebes J, Rakfeldt J, Davidson L, Lyons L and Druss B (1993) Day hospital/crisis respite care versus inpatient care, Part I: Clinical outcomes. Am J Psychiatry 153:1065-1073. Sletten IW, Ognjanov V, Menendez S, Sundland D and ElToumi A (1967) Weight reduction with chlorphenetermine and phenmetrazine in obese psychiatric patients during chlorpromazine therapy. Curr Ther Res Clin Exp 9: 570-575 Suzuki I, Yamada H, Sugiura T, Kawakami N and Shimizu H (1998) Cardiovascular fitness, phsyical activity and selected coronary heart risk factors in adults. The Journal of Sports Medicine and Physical Fitness 38: 149-157. Tipton CM (1991) Exercise, training, and hypertension: An update. Exercise and Sports Sci Rev 19: 447- 506. Tolfrey K, Campbell IG, and Batterham AM (1998) Eexercise training induced alterations in prepubertal children's lipid-lipoprotein proflie. Medicine and Science in Sports Exercise 30: 1684-1692. Tran ZV (1983) The effects of exercise on blood lipids and lipoproteins: a meta-analysis of study. Medicine and Science in Sports and Exercise 15: 393-402. Tuomilehto J, Lindstrom J, Eriksson JG, Valle TT, Hamalainen H, Ilanne-Parikka P, Keinanen-Kivkaanniemi S, Laakso M, Louheranta A, Raslas M, Salminen V and Unsitupa M (2001) Prevention of type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance. N Engl J Med 344: 1343-1350. Vestergaard P, Amidsen A and Schou M (1980) Clinical significant side-effects of lithium treatment: a survey of 237 patients in long-term treatment. Acta Psychiatry

	Scand 62: 193-200. Vreeland B, Roemhelf-Hamm B, Menza M Stern R, Touger-Decker R, Minsky S and Radler DR (2002) Managing atypical antipsychotic-associated weight gain: The Healthy Living Program. Poster presented at 155th American Psychiatric Association Annual Meeting, May 18-23, Philadelphia, PA. Weltman A, Despres JP, Clasey JL, Weltman JY, Wideman L and Kanaley J (2003) Impact of abdominal visceral fat, growth hormone, fitness, and insulin on lipids and lipoproteins in older adults. Metabolism 52: 73-80. Wetterling T and Mussigbrodt HE (1999) Weight gain: side effect of atypical neuroleptics? J Clin Psychopharmacology 19: 316-321. Wilfley DE and Brownell KD (1994) Physical activity and diet in weight loss. Advances in exercise adherence 361- 394. Wirshing DA, Wirshing WC, Kysar L, Berisford MA, Goldstein D, Pashdag J, Mintz J and Marder SM (1999) Novel antipsychotics: Comparison of weight gain liabilities. J Clin Psychiatry 60: 358- 363. Zimmermann U, Kraus T, Himmerich H, Schuld A and Pollmacher T (2003) Epidemiology, implications and mechanisms underlying drug-induced weight gain in psychiatric patients. J Psychiatry Res 37: 193- 220.
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