A multifaceted integrative approach to heart, weight, and blood pressure normalization

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The case presented here represents three years' observation of heart, weight, and blood pressure normalization in an obese 47-year-old woman. Janet M. was treated with a combination of diet, light exercise, nutritional supplements and various alternative medical treatments. The observed results warrant communication to others with similar health concerns. The results include the healing of heart scarring, a weight drop of 135 pounds, and a blood pressure drop from 180/100 to 120/80. The following information can be adapted to each individual's needs and resources.

In September 2004, Janet M. approached a local gym to start a weight loss program. Her physical condition was too poor for traditional weight and cardiovascular training. A 47-year-old mother of four, Janet weighed 350 pounds and had an average blood pressure of 180/100 (normal reading 120/80). The gym recommended a regimen of Tai Chi as an alternative to the current methods the gym uses. Tai Chi is an ancient Chinese martial art and exercise regimen. Studies have suggested it to be of great benefit to those suffering from abnormally high blood pressure. 1,2,3

She began Tai Chi twice a week. Each class contained two 15-minute sessions with a 15-minute rest period in between. During this time, a general practitioner monitored Janet's physical condition at least once per month.

Chi Kung was incorporated into her routine after six months. Chi Kung is a Chinese system of breathing exercises, stances, and movements designed to help restore health. Many studies have concluded that breathing and blood pressure are linked and that Chi Kung is beneficial in remedying high blood pressure. 4,5,6

A Doctor of Chinese medicine examined Janet M. and began treating her with acupuncture once per week. Acupuncture has been shown to lower blood pressure. 7,8

Janet cut out all junk food and colas. She began eating a low-fat, low-carb diet and cut out sugar. She also switched from dairy products to soya milk.

Janet could not tolerate high blood pressure medication because of severe and debilitating side effects; she was seeking an alternative route to resolve her blood pressure problems. She was encouraged to speak to her physician about alternative medication and to consider taking it. Several supplements were chosen and introduced gradually to Janet. Each supplement add was checked for negative interactions by a naturopathic doctor as well as by pharmacists.

Table 1
Initial Nutritional Supplements

Supplement	Expected benefit	References	
Conjugated Linoleic Acid (CLA)	reduce body fat and reduce blood pressure	9,10,11	
Co-Enzyme Q10	reduce blood pressure	12,13,14,15,16	
Garlic	prevent hypertension	17,18	
Folic Acid	reduce blood pressure	19	
Whey Protein	reduce blood pressure	20	
Chlorophyll	reduce and stabilize blood pressure	32	
Parsley tea	diuretic		

During the first six months Janet practised Tai Chi and Chi Kung three times per week and went to one session of acupuncture every two weeks. She lost 20 pounds and her blood pressure lowered to 140/95. More natural products were added. Each product was added one week at a time in the following order. Janet related how she reacted to each one. Again the naturopathic doctor was consulted and possible contraindications were checked with pharmacists before administration. Only one product (chromium) was started and discontinued, when Janet complained it made her feel angry and aggressive.

Table 2 Additional Nutritional Supplements

Supplement	Expected benefit	References
Potassium	reduce blood pressure	21,22,23
Selenium	protects the heart	24
Magnesium	reduce blood pressure	25
Calcium	reduce blood pressure	26
Stevia	reduce blood pressure	27,28
Vitamin C	cardiovascular therapy	29
Alpha-Lipoic Acid (ALA)	prevents insulin resistance, supports heart function, and protects against aging	30,31
Apple cider vinegar	reduce body fat	35
Chromium (discontinued)	ameliorates sucrose-induced BP elevations and acts as an antioxidant	36

In the next stage an acupuncture blood pressure reduction machine was incorporated. This machine emits a small electrical current between a pericardium acupoint on the left arm and the two ears.³⁷

Janet initially would self-administer a treatment for 20 minutes every second day. Anecdotal information provided by Janet indicated a sustained, observable reduction in blood pressure when this machine was used.

Another machine was incorporated. Resperate is a biofeedback machine similar in form to a CD player. It helps the patient reduce her blood pressure by regulating breathing. This machine incorporates music in this process.³⁸

A great deal of study has produced evidence that paced, relaxed breathing can lower blood pressure. The Resperate machine helps in that it provides coaching to the patient using its patented Interactive Respiratory Pacing technology.

Janet used a blood pressure monitor and discovered that Resperate worked almost immediately in lowering her blood pressure. When we started her on this machine she used it for two 15 minute periods per day.

In September 2005 Chinese Massotherapy was incorporated into the program. Chinese Massotherapy combines acupressure (finger pressure on acupuncture points) and effleurage (massage strokes). Studies have shown that both massage and acupressure are helpful in reducing blood pressure. 33,34

Results

Janet's physicians have monitored her progress with regular appointments over the last three years and have been very happy with her progress. They have been surprised that someone with her profile could recover a normal blood pressure of 120/80. Janet has lost 135 pounds and is now 215 pounds.

She has been looked after by three different cardiologists in the last three years. One of her cardiologists said that her heart has been healed because the scarring on her heart had completely disappeared. After administering a stress test, another of her cardiologists said that she had the heart of a 25-year-old. Janet has been working out on a regular basis at the gym, doing cardio exercises and light weights since May of 2005.

In this case, where conventional methods could not or would not be used, a multifaceted, integrative approach has proven highly effective. It appears that dramatic heart, weight and blood pressure normalization can be achieved using Tai Chi, Chi Kung, diet change, dietary supplements, Chinese Massotherapy, acupuncture and an exercise program of cardio and weight training. More studies using the above program are warranted based on Janet M.'s remarkable success.

The following tables indicate the frequency of each treatment:

Table 3 **The Beginning of Treatment (September 2004)**

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
	Tai Chi		Tai Chi			
	2x 15 min		2x 15 min			

Table 4
Midway (September 2005)

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Supplements (Tables 1, 2)	Supplements (Tables 1, 2)	Supplements (Tables 1, 2)	Supplements (Tables 1, 2)	Supplements (Tables 1, 2)	Supplements (Tables 1, 2)	Supplements (Tables 1, 2)
Tai Chi 15-20 min	Tai Chi 15-20 min	Tai Chi 15-20 min	Tai Chi 15-20 min	Tai Chi 15-20 min	Tai Chi 15-20 min	Tai Chi 15-20 min
Chi Kung 20-30 min	Chi Kung 20-30 min	Chi Kung 20-30 min		Chi Kung 20-30 min	Chi Kung 20-30 min	Chi Kung 20-30 min
		Acupuncture (once per month)	Acupuncture (twice per week at beginning)			
Treadmill 30 min	Chinese Massage 60 min	Treadmill 30 min	Chinese Massage 60 min	Treadmill 30 min		_

References

- Asako Tanabe, A Surprise in Slow Motion, Tai Chi can help victims of high blood pressure, 2001, Asiaweek.com.
- 2. Channer KS, Barrow D, Barrow R, Osborne M, Ives G, Changes in hemodynamic parameters following Tai Chi Chuan and aerobic exercise in patients recovering from acute myocardial infarction, 1996, 72:349-351, *Postgraduate Medical Journal*.
- 3. Young D, Appel L, Jee S, and Miller E, Tai Chi lowers blood pressure, 1999, 47:277-284, *Journal of the American Geriatrics Society*.
- 4. Lee MS, Lee MS, Kim HJ, Moon SR, Chi Kung reduced blood pressure and catecholamine levels of patients with essential hypertension, 2003 Dec, 113(12):1691-701, *International Journal of Neuroscience*.
- 5. Sancier Kenneth M, Chi Kung effective in treatment of many illnesses, Vol. 2, No. 1, January 1996, pp. 40-46, Medical applications of Chi Kung, *Alternative Therapies*.
- 6. Grossman E, Grossman A, Schein MH, Zimlichman R, Gavish B, Breathing control lowers blood pressure, April 2001, Volume 15, Number 4, pp. 263-269, *Journal of Human Hypertension*.
- 7. Crisostomo, Melissa M, Li Peng, Stephanie C, Tjen-A-Looi and Longhurst John C, Nociceptin in rVLM mediates electroacupuncture inhibition of cardiovascular reflex excitatory response in rats, June 2005, 98:2056-2063, *J Appl Physiol*.
- 8. Braverman, Major Steven E. MD, Essential Vascular Hypertension, Spring/Summer 1998, Volume 10, Number 1, *Medical Acupuncture, A Journal For Physicians By Physicians*.
- 9. Basu S et al, Conjugated linoleic acid induces lipid peroxidation in men with abdominal obesity, 2000, 99:511–516, *Clinical Science*.
- 10. Gaullier Jean-Michel, Halse Johan, Høye Kjetil, Kristiansen Knut, Fagertun Hans, Vik Hogne and Gudmundsen Ola, Conjugated Linoleic Acid Supplementation Reduces Body Fat Mass, 2004, 79:1118-1125, *American Journal of Clinical Nutrition*.
- 11. Nagao K, Inoue N, Wang YM, Yanagita T, Conjugated linoleic acid enhances plasma adiponectin level and alleviates hyperinsulinemia and hypertension in Zucker diabetic fatty (fa/fa) rats, 2003 Oct 17, 310(2):562-6, *Biochem Biophys Res Commun*.
- 12. Singh RB, Niaz MA, Rastogi SS, et al, Effect of hydrosoluble coenzyme Q10 on blood pressures and insulin resistance in hypertensive patients with coronary artery disease, 1999, 13:203–208, *J Human Hypertens*.
- 13. Burke BE, Neuenschwander R, Olson RD, Randomized, double-blind, placebo-controlled trial of coenzyme Q10 in isolated systolic hypertension, 2001, 94:1112–1117, $South\ Med\ J$.
- 14. Hodgson JM, Watts GF, Playford G et al, Coenzyme Q10 improves blood pressure and glycaemic control: A controlled trial in subjects with type 2 diabetes, 2002, 56:1137-1142, *Eur J Clin Nutr*.
- 15. Digiesi V, Cantini F, Brodbeck B, Effect of coenzyme Q10 on essential arterial hypertension, 1990, 47:841–845, *Curr Ther Res.*

- 16. Langsjoen P, Langsjoen P, Willis R, Treatment of essential hypertension with coenzyme Q10, 1994, 15(suppl):S265–S272, *Mol Aspects Med*.
- 17. Pedraza-Chaverri J, Tapia E, Medina-Campos ON, de los Angeles Granados M, Franco M, Garlic prevents hypertension induced by chronic inhibition of nitric oxide synthesis, 1998, 62(6):PL 71-7, *Life Sci.*
- 18. Ku, Dr. David D, Ingredient in garlic protects against severe chronic pulmonary hypertension in rats, 2005, *Primary Pulmonary Hypertension News*.
- 19. John P. Forman, MD, Eric B. Rimm, ScD, Meir J. Stampfer, MD, DrPH, Gary C. Curhan, MD, ScD, Folate Intake and the Risk of Incident Hypertension Among US Women, 2005, 293:320-329, *JAMA*.
- 20. Pins Joel J, Keenan M. Joseph, The Effects of Hydrolyzed Whey Supplement on ACE activity and Bradykinin, University of Minnesota Medical School, *Presented at the 64th Annual Scientific Sessions of the American Diabetes Association*, 2004, Orlando, Florida, U.S.A.
- 21. Brancati FL, Appel LJ, Seidler AJ, and Whelton PK, Effect of potassium supplementation on blood pressure in African Americans on a low-potassium diet: A randomized, double-blind, placebo-controlled trial, Vol. 156 No. 1, January 8, 1996, *Archives of Internal Medicine, JAMA*.
- 22. Brands, Michael, PhD, Daniels, Stephen, MD, PhD, Karanja, Njeri, PhD, Elmer, Patricia, PhD, and Sacks, Frank, MD, Healthy lifestyle could significantly reduce high blood pressure, 01/24/2006, *American Heart Association Journal Report.*
- 23. Li NY et al, A Low Sodium, High Potassium Salt Substitute Substantially Lowers Blood Pressure Levels Among High-Risk Individuals in Rural Northern China, Abstract 418-10, presented March 12, *American College of Cardiology 2006 Annual Meeting*.
- 24. Koehler H, Peters HJ, Pankau H, Duck HJ, Selenium in cardiology and angiology, 1988 Jan-Apr, 15:157-66, *Biol Trace Elem Res.*
- 25. Sanjuliani AF, de Abreu Fagundes VG, Francischetti EA, Effects of magnesium on blood pressure and intracellular ion levels of Brazilian hypertensive patients, 1996 Oct 11, 56(2):177-83, *Int J Cardiol.*
- 26. Repke JT, Villar J, Anderson C, Pareja G, Dubin N, Belizan JM, Biochemical changes associated with blood pressure reduction induced by calcium supplementation during pregnancy, 1989 Mar, 160(3):684-90, *Am J Obstet Gynecol*.
- 27. Chan P, Tomlinson B, Chen YJ, et al, A double-blind placebo-controlled study of the effectiveness and tolerability of oral stevioside in human hypertension, 2000, 50:215-220, **Br J Clin Pharmacol**.
- 28. Hsieh MH, Chan P, Sue YM, et al, Efficacy and tolerability of oral stevioside in patients with mild essential hypertension: a two-year, randomized, placebo-controlled study, 2003, 25:2797-808, *Clin Ther.*
- 29. Wilkinson IB, Megson IL, MacCallum H, Sogo N, Cockcroft JR, Webb DJ, Oral Vitamin C Reduces Arterial Stiffness and Platelet Aggregation in Humans, November 1999, 34(5):690-693, *Journal of Cardiovascular Pharmacology*.
- 30. El Midaoui A, de Champlain J, Prevention of hypertension, insulin resistance, and oxidative stress by alpha-lipoic acid, 2002 Feb, 39(2):303-7, *Hypertension*.

- 31. Koufaki M, et al, Novel potent inhibitors of lipid peroxidation with protective effects against reperfusion arrhythmias, Nov 22, 44(24):4300-3, *J Med Chem 2001*.
- 32. Merchant Randall E, Dr., Andre Cynthia A, MA, A, Sica Domenic, MD, Nutritional Supplementation with Chlorella pyrenoidosa for Mild to Moderate Hypertension, Sept 2002, Vol. 5, No. 3: 141-152, *Journal of Medicinal Food*.
- 33. Smith David, Touch Research Institute, January 2000, Vol. 4, No. 1, Journal of Bodywork and Movement Therapies.
- 34. Devitt Michael, Acupressure Significantly Influences the Cardiovascular System, May 2000, Volume 01, Issue 05, *Acupuncture Today*.
- 35. Fontenot Beth, The sour truth about apple cider vinegar evaluation of therapeutic use, Nov-Dec, 1997, *Nutrition Forum*.
- 36. Preuss HG, Grojec PL, Lieberman S, Anderson RA, Effects of different chromium compounds on blood pressure and lipid peroxidation in spontaneously hypertensive rats, 1997 May, 47(5):325-30, *Clin Nephrol.*
- 37. http://www.tcmhospital.com/products/pressure/BPmonitor_index.html
- 38. Elliot, William. The Power of Breathing. 2004 Sept. Johns Hopkins Heart Bulletin Fall Issue.