NEWLY ACQUIRED BOOKS

*Traditional Chinese Medicine* by Sheilla McNamara & Dr Song Xuan Ke; 2012.

The principals of Traditional Chinese Medicine have been around for centuries and its practice is as relevant today as it has always been. Western medical professionals are now increasingly aware of the important role that Traditional Medicine takes. In the past, many people would only try Traditional Medicine when Western medicine failed them. Times have changed and Traditional Medicine can be found routinely used worldwide. One such example is in the UK with the NHS (National Health Service) using acupuncture during childbirth.

Treatment in Chinese Traditional Medicine works in very different ways to Western medicine. It concentrates more on the body as a whole rather than the condition. In Western medicine, if you have 10 people go into a doctor’s surgery with the same condition then more likely than not they will all come out with the same treatment. In Traditional Chinese Medicine, they could all come out with different forms of treatment depending upon the many different factors that are taken into account. The treatment can also change depending upon the stage of recovery.

*Clinical Handbook of Classical Chinese Herbalism* by Tim Rudowsky; Green Tea Apohecary Press, 2011.
This part-formulas text, part-clinical notebook approaches standard traditional Chinese herbal formulas in a unique and readily accessible format. With both the Chinese herbal medicine student and practicing clinician in mind, the Clinical Handbook concisely presents herbal formulas alphabetically with associated ingredients, dosages, source text quotations, specific preparation and decoction instructions, TCM anecdotes, and notes from master herbalists. In addition, all Shanghan Lun and Jingui Yaolue prescriptions are all paired with quotations from those texts along with fastidiously translated dosage information and preparation instructions penned by the hand of Zhang Zhongjing. The ultimate purpose of this text is to join the renaissance of classical herbalism in the US by empowering students and clinicians with the requisite tools for authentic and effective herbal prescription. This text somewhat disregards the typical TCM formula categories and, instead, simply lists herbal formulas alphabetically in a dense, yet highly readable, format. This book is the only one of it's kind in combining both clinical application with classical diligence and scholarship. As such, Clinical Handbook of Classical Chinese Herbalism is the perfect companion to the more comprehensive Bensky-Clavey-Stoger and Wiseman-Brand materia medicas.

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The 'Visual Materia Medica of Chinese Herbs' is a concise, organized, and beautiful photo identification guide for over 350 common Traditional Chinese Medicine (TCM) herbs.

Used by students, teachers, practitioners, and doctors in universities and clinics around the world, the 'Visual Materia Medica of Chinese Herbs' is the de facto standard for Chinese herb photo identification. Students use it to replace long hours in the herb room or having to carry herb samples. Doctors and practitioners can quickly cross reference Latin, English, and Pinyin names, as well as glance at the Chinese characters, properties, temperatures, and channels. The book has been used for everything from classroom lectures to USDA import inspection.

Each Chinese Herb Features:

Antibiotic-resistant infections are alarmingly on the rise, and many people are looking for sound information on herbal alternatives to standard antibiotics. In this indispensable reference, herbal expert Stephen Harrod Buhner explains the roots of antibiotic resistance, explores the value of herbal treatments, and provides in-depth profiles of 30 valuable herbs, noting for each one its antibiotic properties, methods for collection and preparation, dosages, potential side effects, contraindications, and alternatives.


This book takes a look at some of the most popular herbs that can help protect you from some of the side effects of aging. Inside you will find information on the health benefits of each herb as it relates to aging including any information from any published scientific studies that the author could dig up on each herb.
This book is for you if you want to learn how to:

- Have more energy than you ever have in your life
- Decrease fine lines and wrinkles and protect your skin against getting more
- Keep your mind sharp and clear for the rest of your life and improve your mood
- Improve your night vision and protect your eyes against macular degeneration
- Detox your liver and gallbladder by eating delicious salads
- Lessen the symptoms of menopause
- Decrease your risk of enlarged prostate and baldness
- Help your body fight off disease, heart problems and even cancer

Not only will you learn what herbs to take to avoid problems associated with aging, you'll also get delicious and easy to make recipes that use the herbs which are readily available as well as other anti-aging foods.


This guide demystifies the ancient tradition of "zuo yuezi" (Chinese postpartum recovery) for the American Girl. It is the first and only comprehensive English language guide of its kind. "Lockdown" provides simple recipes, basic exercises, and the Lockdown Lifestyle and Diet Commandments - all with American Girl Alternatives that will help the American Girl achieve Lockdown. Leavened by the personal experiences of the half-Chinese, half-Caucasian author, this guide is entertaining, straightforward, and instructive. "Lockdown" is a must read for pregnant women interested in natural methods for reducing postpartum stress, losing baby weight, producing breast milk, and cleansing and replenishing their bodies. It is about 90 pages long with 35 illustrations.
Students and practitioners of Chinese herbal medicine must learn hundreds of commonly used herbs as the first step in studying Chinese herbal medicine. Additionally, junior practitioners lack the clinical experience required to ensure that they can skilfully select the appropriate herbs to use in the formulas. This presents them with a major challenge. This book presents a method of learning individual herbs through vivid and clear discussion of their characteristics and through a comparison with other herbs of their characteristics and strengths. This clear and logical approach makes it easy for the user to understand and memorize the functions of specific herbs. It also enables experienced practitioners to improve their therapeutic results through the use of proper herbs to make better formulas.

Key features of the new edition

- Retains the same easy to follow format as the first edition
- Presents detailed comparisons and discussions of commonly used Chinese herbs
- Provides a series of thought-provoking questions with very detailed answers
- Structured to help the reader to learn and memorize the content more easily
- The easy-to-use question-and-answer format is convenient to apply in the consulting room
- Includes discussion of clinical applications to help with the practical use of the information in clinical setting
- Presents detailed comparisons and discussions of commonly used Chinese herbs
- Revised and updated with particular emphasis on the safe use of Chinese herbal medicines
- Structured to help the reader to learn and memorize the content more easily
- New appendices provide information on safe dosages, commonly used herbal combinations and the meanings of Chinese words used in herbal names
- Provides a sound foundation for the study and practice of Chinese herbal medicine.

Chinese Herbal Medicines: Comparisons and Characteristics is already well known to students and practitioners of Chinese herbal medicine. This new, improved edition will continue to be of value to students and practitioners alike. It is now supported by a new companion volume by the same author entitled Chinese Herbal Formulas: Treatment Principles and Composition Strategies. Together these two books provide a sound foundation for the study and practice of Chinese herbal medicine.

Herbs have been the centerpiece of natural healthcare since before the dawn of medicine in ancient Greece. With more than 50,000 strains of herb from around the world currently catalogued by various botanical societies and a small percentage of those serving solid, universally recognized medical purposes, it is no wonder that many people have taken up the hobby of growing their own herbs at home to help with basic things like healing burns or relieving headaches. This book will guide you through the step-by-step process of learning about and growing your own healing herbs, starting with the basics of what each herb can do and proceeding to show you everything you need to cultivate them yourself. The first things you will learn in this guide are the basics of all healing herbs, starting with a complete breakdown of the numerous healing herbs known to be easily cultivated in temperate climates. Matching the right herbs to your region, you will then be able to start learning about how herbs grow, what they need from the soil, water, the weather, and feeding. You will learn which pests are most likely to appear with each herb plant and which planting conditions are best for your herbs, from indoor potting to outdoor containers, or in ground fields. You will learn which plants grow best together and which style of herbs are going to be best for selling and which are best for personal growing. Experts in the field of healing herbs have provided their insights into issues such as how to harvest the healing herbs best and how to dry or preserve them for use as healing materials. Learn how you can make a number of common treatments for various ailments with your herbs and how you can benefit best from your new found gardens. This book is a complete guide for anyone who has ever wanted to try something different and grow it themselves.


There is a world of health and healing all around you--in your spice rack, your backyard, and on the shelves of health food and grocery stores. This informative guide is a reference
you will keep at the ready, connecting 72 of the world's most common and useful medicinal herbs with the body systems they help and heal.

Eight chapters focus on body systems:
1. Mental Health & the Nervous System
2. Respiratory System
3. Heart & Circulation
4. Digestive System
5. Joints, Muscles & Skin
6. Urinary & Male Health
7. Female Health
8. Wellness & Perception

Each chapter begins with an overview of how plants can bring health to that part of the body, with stories about traditional herbal remedies from around the world and current scientific findings on herbal remedies for specific illnesses. Then each chapter highlights nine plants, combining botanical and medical information—therapeutic uses, effectiveness, preparations, cautions, and advice, including a round-up of current science about the active ingredients in the plant. Every chapter includes a photo gallery showing how one of its herbs is cultivated and processed commercially—the story behind the contents of that bottle you buy in the store. Special features include "Over the Kitchen Counter"—quick and easy ways to use herbs in your everyday life, and time lines for every herb, showing how today's use of herbal remedies collects wisdom from the centuries and around the world. A functional appendix includes an illustrated index to all the plants in the book, an ailment-by-ailment therapeutic index, a glossary, and an index.


*The Complementary Therapist's Guide to Conventional Medicine* is a unique textbook for students and practitioners of complementary medicine, offering a systematic comparative approach to Western and Eastern medicine. Practitioners of complementary medicine increasingly find themselves working alongside conventionally trained doctors and nurses and it is vital for them to develop a core understanding of conventional medical language and philosophy. The book is designed as a guide to understanding conventional medical diagnoses, symptoms and treatments, whilst also encouraging the reader to reflect on and translate how these diagnoses may be interpreted from a more holistic medical
perspective. Throughout the text the practitioner/student is encouraged to see that conventional and more holistic interpretations are not necessarily contradictory, but instead are simply two different approaches to interpreting the same truth, that truth being the patient's symptoms.

After introductory sections on physiology, pathology and pharmacology, there follow sections devoted to each of the physiological systems of the body. In these, the physiology of each system is explored together with the medical investigation, symptoms and treatments of the important diseases which might affect that system. As each disease is described, the reader is encouraged to consider the corresponding Chinese medical perspective.

**Stroke -- Help from Chinese Medicine** by Chi Hui-yan & Carl Stimson; People’s Medical Publishing House, 2011.

Introductory patient education book introduces Chinese Medicine (CM) theories and practice, specifically on how CM can help victims of stroke, through acupuncture, Chinese herbs, diet and exercise and at-home therapies. This book is written in simple, easy-to-understand language with many pictures and informative illustrations for people without knowledge of CM.

**ARTICLE ABSTRACTS**


Implementing clinical trials with large multicenter samples is an important way to scientifically evaluate and demonstrate the curative effect of moxibustion. At present, clinical trials on moxibustion with large multicenter samples are prospering in China. It is necessary for research units to have good research professionals and technical platforms as well as a highly standardized and scientifically feasible methodology of research. Taking tasks in the ongoing national 973 project and in the sci-tech support program of the "11th 5-year plan", for example, this research captures the characteristics of moxibustion, carries out deep analysis and introduces specific methods and the important
significance of clinical research tasks on moxibustion in designing multicenter plans, implementing experiments, supervising quality and strengthening compliance.


**OBJECTIVE:** H1N1 was a new and potentially serious infectious disease, in human, the severity of influenza can vary from mild to severe, thus to find an effective and safety way to control the influenza pandemic is of crucial importance. This retrospective study describes the duration of viral shedding in H1N1 patients that were hospitalized and treated in China.

**METHODS:** Clinical data were collected from May to July, 2009 in China for 963 patients with influenza A (H1N1) virus infection. Patients were treated based on the guidelines issued by the Chinese Ministry of Health. The primary outcome was duration of viral shedding and statistical comparisons were performed.

**RESULTS:** In the patients with body temperature greater than 38.0°C, there were no differences in virus shedding duration among the patients taking oseltamivir within two days, patients undergoing Traditional Chinese Medicine (TCM) therapy or those receiving no drug therapy. In patients with body temperature ≥38.1°C, TCM therapy reduced the viral shedding duration (P<0.05, vs. oseltamivir therapy). Furthermore, taking oseltamivir two days after onset of symptoms might prolong the virus shedding duration (P<0.05, vs. taking oseltamivir less than 2 days of onset).

**CONCLUSION:** TCM therapy is effective for reducing the length of virus shedding in patients with body temperature ≥38.0°C. Oseltamivir used for reducing virus shedding duration should be taken within two days of onset.


**OBJECTIVE:** To compare the long-term effectiveness of compound Ruanjianhugan(RJH)tablets and interventional therapy (IT) in patients after resection of small hepatocellular carcinoma (HCC).

**METHODS:** A retrospective study was conducted in 399 patients after resection of small HCC who were admitted between January 1987 and December 2008 in the Department of
Hepatobiliary Surgery and Center of Minimally Invasive Surgery, First Affiliated Hospital of Guangxi Medical University. Four groups were based on different therapy modes: a TCM-only (TCMO) group, a TCM combined with interventional therapy (TCM-IT) group, an interventional therapy-only (ITO) group, and a simple operation (SO) group. Prognostic factors were correlated with overall survival (OS) and OS rates were calculated with the Kaplan-Meier method, and multivariate analyses for factors affecting survival were evaluated by the Cox proportional hazard model.

RESULTS: The median OS was 151.20 months in the TCM-IT group, 43.87 months in the ITO group, and 20.77 months in the SO group. All survival rates of the TCMO group were higher than those of the other three groups (>50%). The 5-, 10-, and 15-year OS in the TCMO and ITO patients were 83.94%, 45.50%, and 71.22% and 33.34%, 55.58%, and 9.26%, respectively (risk ratio, 0.209; 95% confidence interval, 0.126-0.347; P=0.000). Multivariate analysis revealed that the independent risk factors were therapy mode (P=0.000), sex (P=0.005), family history (P=0.011), TNM Classification of Malignant Tumor staging (P=0.000), medical care-seeking behavior (P=0.021), and maximum diameter (P=0.030).

CONCLUSION: Long-term oral use of compound RJH tablets may improve OS for small HCC after resection compared with IT.


OBJECTIVE: To confirm the long-term outcomes of stroke patients and determine predicting factors for death, recurrence of vascular events and poor outcome (either recurrence or death) after the use of combined TCM therapy.

METHODS: This was a retrospective hospital-based cohort study and was performed in the First Affiliated Hospital of Tianjin University of Traditional Chinese Medicine in Tianjin. All subjects with stroke consecutively admitted to an inpatient ward of the Acupuncture Department from January 1, 2008, to December 31, 2008 were retrospectively followed through one year. The main outcomes were either a recurrence of vascular events, mortality or both. Risk factors were recorded from medical records. Multivariate regression models were used to analyze predictors. The following independent variables were used: age, gender, hypertension, ischemic heart disease, atrial fibrillation, diabetes mellitus, carotid arterial lesions and history of stroke.

RESULTS: Four-hundred and five patients were included. The 1-year mortality rate was 11.11%. 23.70% of the patients had a recurrent vascular event, and 30.86% suffered a poor outcome. Multiple logistic regression analysis found that previous stroke, and advanced age were predictors of death within one year. Recurrence of vascular events was
associated with carotid arterial lesions, history of diabetes and previous stroke. Long-term poor outcome was predicted by advanced age, history of diabetes, and previous stroke.

CONCLUSION: Age, previous stroke, carotid arterial lesions and diabetes history seem to have different impacts on the three outcomes within one year. Our findings provide important data for planning future hospital register studies of stroke patients in TCM hospitals.


OBJECTIVE: To identify prognostic factors in middle-aged and elderly patients with community-acquired pneumonia (CAP) who underwent integrated interventions involving traditional Chinese medicine (TCM) and modern medicine.

METHODS: Patients aged >45 years and diagnosed with CAP were divided into a middle-aged cohort (45-59 years) and an elderly cohort (>60 years), and clinical data comprising 75 predictor variables in seven classes were collected. After replacing missing data, calibrating multicenter differences and classifying quantitative data, univariate and multivariate analysis were performed.

RESULTS: On multivariate analysis, eight independent risk factors – respiration rate, C reactive protein (CRP), cost of hospitalization, anemia, gasping, confusion, moist rales and pneumonia severity index (PSI) – were correlated with the outcome “not cured” in the elderly cohort. Nine factors – neutrophil percentage (Neu%), blood urea nitrogen (BUN), time to clinical stability, appetite, anemia, confusion, being retired or unemployed, Gram-negative bacterial infection and educational level – were correlated with not cured in the middle-aged cohort.

CONCLUSION: Independent predictive risk factors correlated with adverse outcomes in elderly patients were higher respiration rate, CRP>four times the mean or median for the patient's center, cost of hospitalization>11,323 RMB and PSI>II, plus anemia, gasping, confusion and moist rales; those in middle-aged patients were higher Neu%, BUN>; mean or median, loss of appetite, anemia, confusion, being retired or unemployed and lower educational level. Gram-negative bacterial infection and time to clinical stability>9 days were protective factors.

OBJECTIVE: To test the influence of acupuncture on cognitive function and a marker of oxidative DNA damage in patients with vascular dementia (VD).

METHODS: Sixteen VD patients were evaluated before and after acupuncture, using the Folstein Mini-Mental State Examination-Revised (MMSE-R) to assess cognitive function, and the ADL-R scale to assess independence in activities of daily living (ADL). Life quality was evaluated using the DEMQOL (Dementia quality of life questionnaire) questionnaire, and syndromes and expression of vascular dementia were evaluated with the Scale for the Differentiation of Syndromes of Vascular Dementia (SDSVD). In addition, the urine concentration of 8-hydroxy-2'-deoxyguanosine (8-OHdG)—a marker of oxidative damage—was quantified with enzyme-linked immunosorbent assay.

RESULTS: The MMSE-R and DEMQOL scores were higher after acupuncture than before (P<0.05), while there were no obvious differences in the ADL-R or SDSVD scores (P>0.05). The 8-OHdG content in urine significantly decreased after acupuncture (P<0.05).

CONCLUSION: Acupuncture reduces the levels of 8-OHdG and improves cognitive function and quality of life in VD patients, suggesting that acupuncture is beneficial at least in part by preventing oxidative damage.


Western integrative oncology (IO) combines conventional mainstream medicine with complementary and alternative medicine (CAM) for the care of cancer patients. Since it includes patient orientation and the holistic approach of many CAM options, IO offers not only preventive measures, but also a wide spectrum of treatment modalities for all stages of illness, from the acute phases through the rehabilitation period. Many therapeutic methods of IO are supported by scientific evidence, for example, dietary and nutritional counseling, exercise, and mind-body medicine, among others. IO also includes therapeutic interventions of traditional Chinese medicine (TCM). At present acupuncture, qigong, and foot massage play an important role in the Western care of cancer patients. However, unlike in China, in Western countries herbal remedies are usually only used during those periods in which chemotherapy is not applied in order to avoid herb-drug interactions. Instead, acupuncture is widely used to manage the side-effects that often accompany chemotherapy. This paper focuses on the role of Chinese medicine in Western
IO and reviews the scope and limitations of IO in the care of cancer patients today. The future challenges of IO will also be discussed in this paper.


As cancer rates rise globally, standard care is being questioned; new approaches involving immune therapies are emerging. With this shift comes a corresponding shift in the use and potential of herbal medicines and extracts. The focus of this article, which has evolved from a presentation at the Second Beijing International Symposium on Integrative Medicine (BISIM May 19-20, 2012), is particularly on Chinese medicine, but is generalizable to Eastern medicine more broadly and to other herbal traditions. Until recently, herbal and related treatments have been used as adjuvants to conventional care - for reducing side-effects, enhancing cytotoxicity, and sometimes, undesirably counteracting the efficacy of chemotherapy and radiation. Now, in the context of a new class of immune-based cancer therapies, herbal and other complementary modalities are looked at as enhancers of the body's immunity.


Diabetes is a major medical problem that imperils public health. Over two thousand years ago, Traditional Chinese Medicine (TCM) called diabetes-related symptoms "Xiaoke" disease. In ancient China, TCM and Chinese herbal medicines were used widely in treating Xiaoke and abundant experience has been accumulated. This article discusses the TCM theory on diabetes and its achievements in the prevention and treatment of diabetes in the past. Using Chinese herbal medicine, recent progress in diabetes therapeutics, including data from clinical trials, are presented. Mechanistic studies from basic research are discussed. Yin-yang balance and a holistic approach of TCM may complement diabetes treatment in Western medicine. With continuous efforts, TCM could play a more important role in fighting this disease.
Herbal medicines have been used clinically in Eastern Asia, and traditional Japanese herbal (Kampo) formulas are approved as ethical drugs. The Kampo formulas are mixtures of the crude extracts of several herbs, each of which contains multiple components. Numerous investigators have reported that some herbal medicines are efficacious for treating several human diseases. We reviewed the literature on traditional herbal medicines and treatment of ocular diseases. Oral Orengedoku-to and Kakkon-to inhibit postoperative uveitis in humans. Oral Goshajinki-gan improved ocular surface disorders in patients with type 1 diabetes mellitus. Oral Hachimijio-gan increased retinal blood flow. Keishi-bukuryo-gan Sho might be associated with vitreoretinopathy in patients with type 2 diabetes mellitus. Oral Hachimijio-gan and Goshajinki-gan delayed lens opacification in rats and mice. Oral Sairei-to, Orengedoku-to, Senkanmeimoku-to, Scutellariae radix extract, Gardeniae fructus extract, topical Ligusticium wallichii rhizoma extract, and intravenous injection of tetramethylpyrazine, baicalin, baicalein, wogonin, and crocetin inhibited some forms of experimental uveitis in rabbits. Topical glycyrrhizinate improved allergic conjunctivitis in humans and rats. Oral crocetin improved eyestrain in humans. Oral berberine diminished experimental uveitis in rats. Baicalein, wogonin, berberine, and berberrubine inhibited in vitro expression of several cytokines in cultured retinal pigment epithelial cells. Some Kampo formulas are efficacious for treating several ocular diseases in humans and animals. Some herbal extracts and their components inhibit some forms of experimental uveitis.
VAS and PPT measurements in precisely the same locations as at T1. Final analysis were conducted with 21 patients with CNP and 18 patients with CLBP. The study groups were equally distributed with regard to randomization. Patients in both the CNP and the CLBP treatment groups reported pain reduction (p < 0.05) and improved health status from their one Gua Sha treatment, as compared to the waiting list group. Pain sensitivity improved in the TG in CNP, but not in CLBP patients, possibly due to higher pressure sensitivity in the neck area. No adverse events were reported. These results suggest that Gua Sha may be an effective treatment for patients with chronic neck and low back pain. Further study of Gua Sha is warranted.


Background: Overweight and obesity are increasing globally. Poor eating habits contribute to its development and affect its treatment. This is an increased risk for cardiovascular diseases, diabetes, musculoskeletal diseases, pulmonary and gastrointestinal disorders, and some cancers.

Chinese Differential Diagnosis and Disharmonies: The specific diagnosis system in Traditional Chinese Medicine (TCM) distinguishes obesity in terms of emptiness, fullness, and full-heat types. Primary overweight is due to a weakness in the middle burner of Spleen and Stomach.

Acupuncture Treatment: Medical acupuncture enables an individual treatment as part of an integrative concept. Specific acupuncture points influence Spleen Qi Deficiency with Phlegm-Damp-Blockage, Spleen and Kidney Yang Deficiency, Liver Qi Stagnation with Spleen Qi Deficiency, or Phlegm-Fire in the Stomach.

Western Nutritional Assessment and Dietary Recommendations: Obesity is classified according to the WHO. The disease risk depends on body mass index and waist circumference. Nutritional lab parameters should be measured. The main goals are the reduction of abdominal fat and obesity-associated health risks and comorbidities, increased exercise, and behavior therapy. Low-fat and low-carb diets are recommended, as well as some other nutritional therapies.

Principles of Chinese Nutrition: The guidelines are based on the qualitative aspects of food in TCM. The most important effects are due to temperature and flavor. Depending on the different syndrome patterns, practical counseling selects hot, warm, neutral, cool, or cold food with salty, sour, bitter, sweet, or pungent flavors.

Conclusions: The prevalence of obesity means that a new medical treatment strategy is required. Modern Western therapies should include medical acupuncture and Chinese nutrition as an integrative concept for the benefit of patients.
Recent research indicates that electroacupuncture could help patients suffering from Alzheimer's disease. Indeed, certain acupoints, when stimulated by electric pulses, activate particular parts of the brain, the details of which have been revealed by magnetic resonance imaging and positron emission tomography. Observed stimulated regions of the brain of Alzheimer's patients can be compared with the images obtained by fluorescence technique with a proper dye in Alzheimer's brain sections. This article provides support based on Western medical science for the treatment of Alzheimer's with electroacupuncture. Electroacupuncture acts in different and efficient ways. First, the positive charge of the electric pulses helps to detach from the neuron or the neuron membranes β amyloid peptides, which have been associated with the pathogenesis of the disease. In addition to this, the presence of the carboxyl group of β amyloids suffers a torque in the presence of an electric field and creates a serious deformation. Lastly, the moderate shaking originating from the electric pulses facilitates the partial disintegration of the β sheet, a frequent conformational change of the β amyloid peptide.