

Excerpt from “Reflexology Paths of the World”

by Elizabeth Marazita, L.Ac, MSOAM, MIA & Michael Spano, L.Ac., MSAOM.

What is Foot Reflexology?

Feet are understood to serve as mini-maps of the human body. The neurological theory behind reflexology states that reflex areas (nerve endings) in the hands and feet correspond to all the glands, organs and musculoskeletal systems in the human body.

Wearing shoes all day through the toils of work and day-to-day activity, stress, illness, lack of hydration and inactivity can cause muscle tissue to weaken and blood flow to stagnate. This blood stagnation culminates in waste matter collecting in the feet. This waste matter forms crystalline deposits formed by urate crystals and calcium deposits at key nerve endings located in the feet. Reflexology practitioners call these deposits grainy or sandy structures.

What do the presence of urate crystals and calcium deposits indicate? Just as a river that is clogged with sand and silt fails to flow smoothly and feed its many tributaries, the health and balance of your body and its organs are dependent on the nourishment provided by healthy circulation. Lack of the smooth flow of energy due to poor lifestyle habits, trauma, or genetics can result in urate crystals and calcium deposits accumulating at the neurological endings found in the foot. Thus, soreness in the reflex zones of the feet is understood to reflect imbalance in the corresponding organ, gland or structure of the body.

In ~2500 B.C.E., the Yellow Emperor’s physician, Qi Bo instructed his imperial patient in the world’s oldest medical textbook, The Yellow Emperor Classic of Internal Medicine. Dr. Qi Bo explained to his emperor that:

“Interruption in the flow of Qi results in pain.”

3000 years later, American Reflexology Pioneer and Physiotherapist, Eunice Ingham, who lived from 1889-1974 and founded the Ingham Method of Reflexology, echoed the great Chinese Doctor’s causal relationship of stagnation and disease:

“When congestion exists, disease will result...no one can deny the well-known fact that circulation is life; stagnation is death.”

GOAL OF REFLEXOLOGY: Dredge the River! Replenish the Well!

Foot reflexology works to dredge your energetic river. By applying pressure to specific neurological reflex zones of the foot using your hands (or preferably someone else's!) or walking a foot reflexology path, we can flush away the calcium deposits or urate crystals that collect around the foot’s nerve endings and cause pain. This pain is not diagnostic of disease; rather, the symptoms of pain are our allies to signal well-being imbalances and the potential for disease development (N.B.: diagnosis of disease is only obtained by your primary care physician and is not in the hands of a reflexology practitioner or by walking a reflexology path).

Scientific Research & Benefits of Reflexology

Medical systems vary from country to country. Denmark, Japan, China and the United Kingdom have integrated health care systems where medical primary care physicians and nurses work together with complimentary health care practitioners such as acupuncturists, homeopaths, massage therapists, and reflexologists to formulate patient treatment protocols. In 1998, a study published in the Journal of American Medical Association (Eisenberg, et al., JAMA 1998), noted that 4 out of 10 Americans use some form of alternative medicine. Between 1990 and 1997, visits to alternative medicine practitioners rose 47%, (from 427 million to 629 million) actually exceeding total visits to primary care physicians. In 1997, Americans spent \$27 billion out-of-pocket for alternative therapies, which equals their total out-of-pocket expense for physician services. It is clear that the use of alternative medicine is growing significantly in the United States.

What is the future direction of medical health care around the world? Bridges that span disease prevention and disease treatment continue to be forged in hospitals, in medical schools, and in medical literature in Europe, in Asia, and increasingly in the United States. Scientific research and clinical benefits of reflexology, acupuncture, and other complimentary therapies are the mortar that bind these bridges.

Thanks to the 20th century renaissance of reflexology zone massage around the world, important scientific research is being conducted in integrated medical systems in Austria, Denmark, the United Kingdom, Japan, Korea, China and the United States; all attesting to the benefits of reflexology treatments. According to scientific research conducted around the world, the following conditions have been improved with the use of foot reflexology:

Chronic Pain ^{1,2}
Cancer ^{3,4,5}
Chest Pain ⁶
Childbirth Pain ⁷
Constipation ^{8,9}
Stress reduction ¹⁰
Headache ¹¹
Hypertension ¹²
Renal Blood Flow ¹³
Diabetes ¹⁴
Premenstrual Symptoms ¹⁵

With the renaissance of reflexology paths in Asia, Europe and the United States, research has also been conducted on the benefits of walking reflexology paths, also known as Healthy Stroll Paths, and Cobblestone Stroll Paths. In 1994, the Shiseido Beauty Science Laboratory conducted a comparison of 241 employees walking an employee stroll path versus walking on a flat surfaced floor. Changes in the skin's surface temperature, blood flow and speed of blood flow were measured. All 3 parameters increased significantly in the healthy stroll path group and remained

constant in the flat-floor walkers. The results presented at the 1997 Worldwide Rwo Shur Health Method Conference in Hong Kong revealed the following:

Study Parameters	Healthy Stroll Path Participants: results	Flat Floor Participants results (control group)
Skin Surface Temperature	After 10 minutes of walking the healthy stroll path, the skin surface temperature increased 1 degree Celsius (from 28.0 Celsius to 29.3 Celsius).	After 10 minutes of walking on a flat floor, the skin surface temperature remained the same.
Volume of Blood Flow	After 10 minutes of walking the healthy stroll path, the volume of blood flow increase 1 AU (from 1AU to 2 AU).	After 10 minutes of walking on a flat floor, the blood flow volume remained the same (1 AU).
Speed of Blood Flow	After 10 minutes of walking the healthy stroll path, the blood flow (m/min/100g) increased from 18 m/min/100g to 20 m/min/100g.	After 10 minutes of walking on a flat floor, the blood flow did not change (18 m/min/100g).

N.B.: Conditions (ambient temperature of 25 degrees Celsius and 50% humidity) did not change.

In 2005, researchers at the Oregon Research Institute in Eugene, Oregon, USA studied participants walking on indoor cobblestone mats for 30 minutes a day for 16 weeks. The results revealed that the study participants significantly lowered their blood pressure and improved their balance. (Journal of American Geriatrics, February 2005).

The main benefits of walking reflexology paths and why receiving reflexology treatments works can be summarized in 3 pillars: Pressure on the reflex zones of the foot has been found to:

- Improve blood and lymphatic circulation
- Increase energy (decrease fatigue)
- Maintain homeostasis

The goal of walking reflexology paths or receiving reflexology treatments is to treat the root of the imbalance and to assist the body's natural ability to heal by re-educating, re-patterning, and re-conditioning the nervous system.

Reflexology Paths and Reflexology: The Chicken or the Egg?

The Egyptians, Chinese, Native Americans, Europeans, Indians, Japanese, Australians, Malaysians, Thai and North and South Americas have all re-discovered the benefits of reflexology foot massage over the last 90 years. Reflexology clinics and

reflexology paths are as ubiquitous in Asian urban centers as coffee houses in the United States and Europe. But what is the history of reflexology paths?

History of Reflexology Paths

Throughout time, we can chart the Asian progression of man fashioning bamboo sticks with which to eat, the first use of the knife and fork in the Middle Ages in Europe, but what of the first shoe worn or first reflexology path built? From our extensive research in Asia, walking without shoes, walking on pebbled paths, cobbled stoned streets, sand dunes, and hard cement are not new phenomena. Primates continue to practice reflexology walking barefoot and allowing the earth and gravity to massage away areas of stagnation. In the human realm, universal adornment for protection and fashion can be charted back a few centuries.

The building of community reflexology paths in China began with the communist revolution and the communist policy of affordable health care with a focus on prevention. The advent of Mao's communist revolution resulted in the building of communes and the organization of *Danwei*, communist party organizational units simulating the ancient feudal courthouse structure. The courthouse structure afforded a centralized region in the middle of a housing project/apartment complex for organization and planning, daily activities, socialization and community exercise.

In order to provide a system of affordable health care, esoteric practices of preventive health care, such as Tai Qi, Qi Gong, and Chinese Herbal decoctions, were mandated to be shared with all comrades. The success of China's open-door medicine policy included the integration of Chinese and Western medicine as well as public education of preventive health care. Today, any visitor to Taiwan, Hong Kong or the People's Republic of China will be greeted at every public park between 5-7 a.m. with curious stares but welcoming smiles as literally millions of retired and middle-aged citizens practice various forms of Qi Gong, dance, Tai Qi, and walk reflexology paths.

Thanks to international tourism and business and China's open-door policy, the world has benefited from the integration and development of preventive health care, carefully developed over the last 50 years in China. Whether you travel to the Swiss Alps, the Pacific Northwest, or the imperial gardens in Beijing, reflexology paths can be walked and enjoyed. It may now be time for you to participate in this growing global health-care tradition.

References:

¹ Wang HL, Keck JF. Foot and hand massage as an intervention for postoperative pain. *Pain Manag Nurs.* 2004 Jun;5(2):59-65.

² Degan M, Fabris F, Vanin F, Bevilacqua M, Genova V, Mazzucco M, Negrisola A. [The effectiveness of foot reflexotherapy on chronic pain associated with a herniated disk] (article in Italian). *Prof Inferm.* 2000 Apr-Jun;53(2):80-7.

³ Stephenson N, Dalton JA, Carlson J. The effect of foot reflexology on pain in patients with metastatic cancer. *Appl Nurs Res.* 2003 Nov;16(4):284-6.

- ⁴ Grealish L, Lomasney A, Whiteman B. Foot massage. A nursing intervention to modify the distressing symptoms of pain and nausea in patients hospitalized with cancer. *Cancer Nurs.* 2000 Jun;23(3):237-43.
- ⁵ Stephenson NL, Weinrich SP, Tavakoli AS. The effects of foot reflexology on anxiety and pain in patients with breast and lung cancer. *Oncol Nurs Forum.* 2000 Jan-Feb;27(1):67-72.
- ⁶ Hattan J, King L, Griffiths P. The impact of foot massage and guided relaxation following cardiac surgery: a randomized controlled trial. *J Adv Nurs.* 2002 Jan;37(2):199-207.
- ⁷ Chang MY, Wang SY, Chen CH. Effects of massage on pain and anxiety during labour: a randomized controlled trial in Taiwan. *J Adv Nurs.* 2002 Apr;38(1):68-73.
- ⁸ Bishop E, McKinnon E, Weir E, Brown DW. Reflexology in the management of encopresis and chronic constipation. *Paediatr Nurs.* 2003 Apr;15(3):20-1.
- ⁹ Kesselring A, Spichiger E, Muller M. [Foot reflexology: an intervention study] (article in German). *Pflege.* 1998 Aug;11(4):213-8.
- ¹⁰ Hayes J, Cox C. Immediate effects of a five-minute foot massage on patients in critical care. *Intensive Crit Care Nurs.* 1999 Apr;15(2):77-82.
- ¹¹ Launso L, Brendstrup E, Arnberg S. An exploratory study of reflexological treatment for headache. *Altern Ther Health Med.* 1999 May;5(3):57-65.
- ¹² Park HS, Cho GY. [Effects of foot reflexology on essential hypertension patients]. *Taehan Kanho Hakhoe Chi.* 2004 Aug;34(5):739-50.
- ¹³ Sudmeier I, Bodner G, Egger I, Mur E, Ulmer H, Herold M. [Changes of renal blood flow during organ-associated foot reflexology measured by color Doppler sonography] (article in German). *Forsch Komplementarmed.* 1999 Jun;6(3):129-34.