#### D'ARCY WELLNESS

## **Chinese Medicine and Fertility**



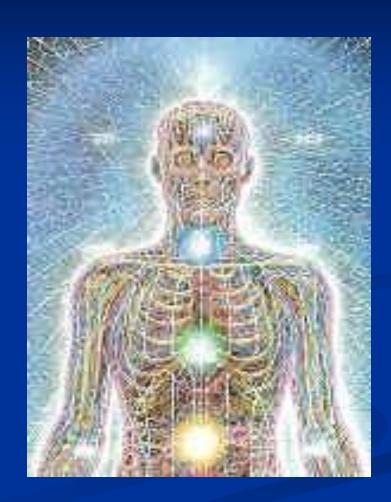
### What is Chinese Medicine?

"Chinese Medicine is a pre-scientific system of thought and practice developed over 3,000 years ago. It is a form of logic and rational thinking thoroughly alien to the West because it is deeply rooted in the Taoist philosophy that has its own perception of body, health and disease."

--Ted J. Kaptchuk- The Web That Has No Weaver

### "QI"

- Central to this system of medicine is the concept of "Qi". Qi is energy which flows through the body in pathways, called "meridians". The meridians connect to internal organs.
- When Qi is flowing smoothly the body is well. When Qi flow is blocked, the body becomes ill.



### What is Qi?

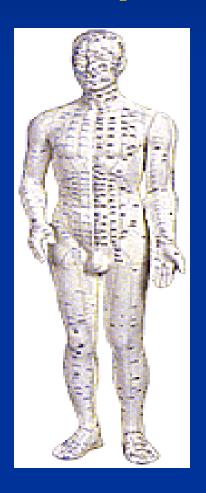
 Qi is energy on the verge of becoming matter and matter on the verge of becoming energy. One of the basic principles of Chinese medicine is that energy = matter. Einstein proved this theory to scientists through his equation E=mc2. In other words, energy or Qi is a subtle form of matter. Matter is a dense form of energy or Qi. Therefore, by stimulating energy or Qi, matter is effected. Or by stimulating the Qi of the body with acupuncture and herbs, one can affect the more dense physical body.

### Is Qi Visible?

Through a special type of technology, called Kirlian photography, we can see Qi or energetic bodies of living things. For example, this leaf has the top portion cut off. We can see that although the top portion is gone, the energetic body remains. The energetic body is composed of millions of electrons. These electrons of the energetic body serve as a template for the growth of the physical body of the leaf.



## How does Chinese Medicine manipulate energy to treat disease?

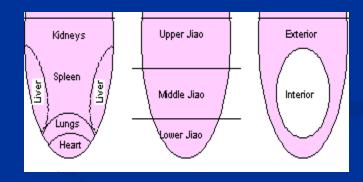


- Acupuncture balances Qi through the stimulation of points along meridian pathways. The points are stimulated with fine needles that are painless upon insertion. In children, tools are used to brush the meridians and balance the qi.
- Herbal Medicine balances Qi through the use of formulas. The formulas are recipes of a number of herbs that work synergistically. The use of herbal recipes prevents side effects and increase efficacy.

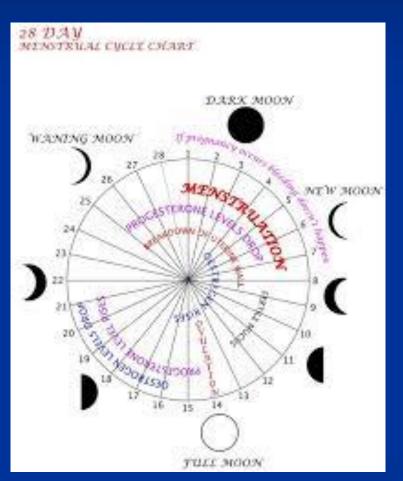
## How do practitioners diagnose an imbalance of Qi?

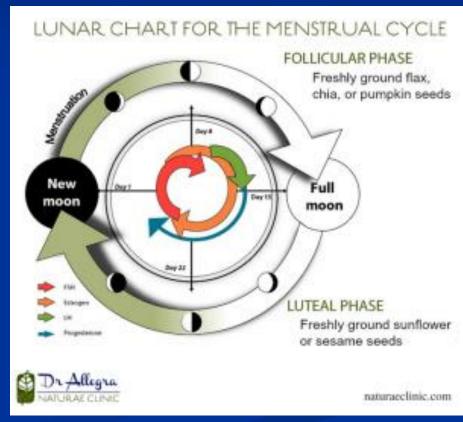
#### **Methods of Diagnosis:**

- Asking: Medical evaluation of all organ systems of body
- Looking: Observe facial colors, posture, sound of voice, behavior, spirit, tongue
- Tongue: Color, shape, coating
- Feeling: Palpate areas of body, feel pulse
- Pulse: 28 qualities, 3 levels, 12 organ/meridian positions can be assessed through the pulse.

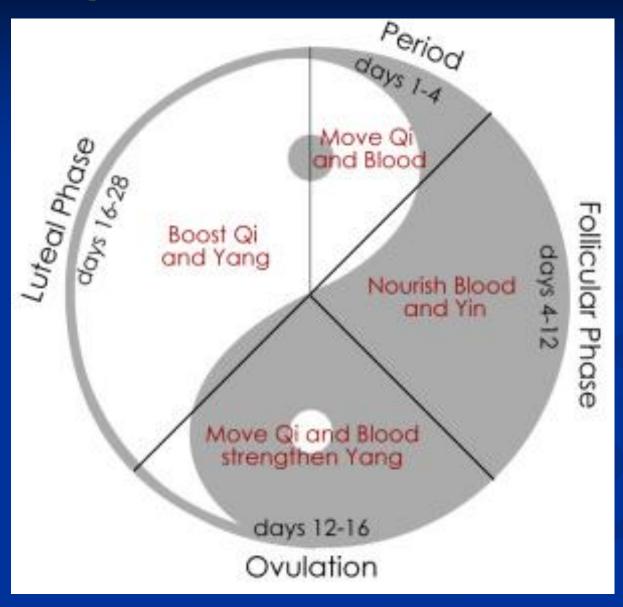


## **Menstrual Cycle**



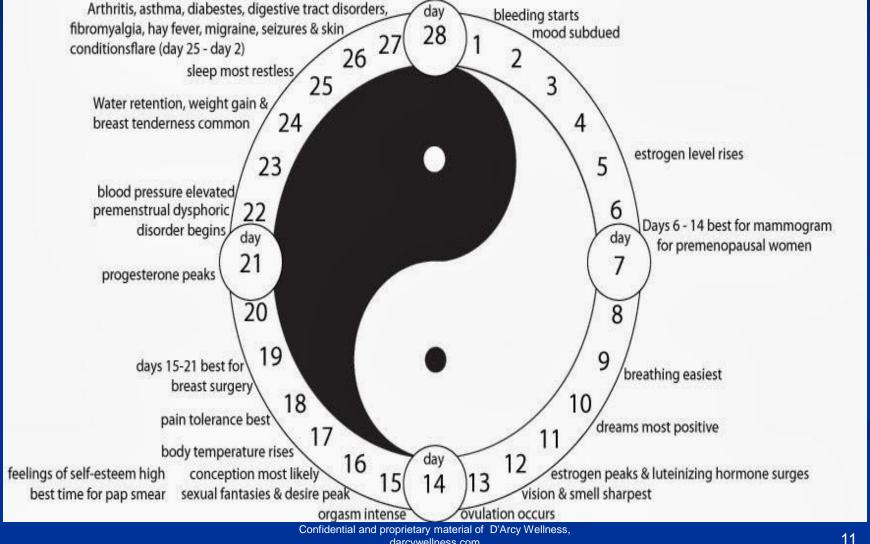


### **Principles of Treatment in TCM**



### Cycles of Flow

- Our Planet, Human and animal physiology are subject to seasonal, lunar, and circadian rhythms.
- The lunar cycle has an impact on human reproduction, in particular fertility, menstruation, and birth rate.
- Admittance to hospitals and emergency units because of various causes (cardiovascular and acute coronary events, variceal hemorrhage, diarrhea, urinary retention) correlated with moon phases.
- In addition, other events associated with human behavior, such as traffic accidents, crimes, and suicides, appeared to be influenced by the lunar cycle.
- Our creative biological and psychological cycle parallels the phases of the moon; recent research has found that the immune system of the reproductive tract is cyclic as well, reaching its peak at ovulation, and then beginning to wane. From ancient times, in many cultures, have referred to women having their menstrual periods as being "on their moon."



### Traditional Chinese Medicine

- Increase blood flow to the reproductive areas
- Balance hormones
- Reduce stress & anxiety
- Improve implantation
- Reduce inflammation from Endometriosis
- Decrease adhesions & fascial restrictions
- Decrease incidence of miscarriage
- Increase sperm count
- Improve sperm motility and morphology



### How Does Acupuncture Work?

- •Acupuncture reduces anxiety, de-stresses and calms
- This is because of endorphin release
- Endorphins cause uterine artery widening which causes increased blood flow to the uterus and to the ovaries
- More blood flow means greater delivery of hormones, nutrients, oxygen and electrolytes and greater excretion of dead cell waste matter This means improved egg quality

### Your Endometrial Lining

- Just because you have a "perfect 10mm lining" does not mean that there is enough blood flow to ensure a successful implantation
- Acupuncture & herbs frequently help increase blood flow to your lining, increasing implantation rates

### **Individualized Treatment Plan**



#### Acupuncture:

EA for follicle phase MA for Luteal phase

- Herbal formulas
- Stress Relief
- Exercise
- Nutrition
- Massage

# The Causations of Infertility in Traditional Chinese Medicine

- Male-
- 1. Kidney yin deficiency
- Kidney yang deficiency
- 3. Liver qi stagnation
- 4. Spleen qi deficiency
- Blood stagnation

- Female-
- 1. Kidney deficiency
- 2. Cold uterus
- 3. Blood deficiency
- 4. Liver depression
- Stagnant heat
- 6. Phlegm dampness

# Kidney Yin deficiency signs & symptoms

- Scanty, dark discharge at the end of the period or amenorrhea
- Severe lumbago, dizziness, tinnitus
- Cold sensation in the lower abdomen, loose stools, copious, clear urine
- Dark facial complexion
- Tongue is pale with thin white coating
- Pulse is deep, thread and weak

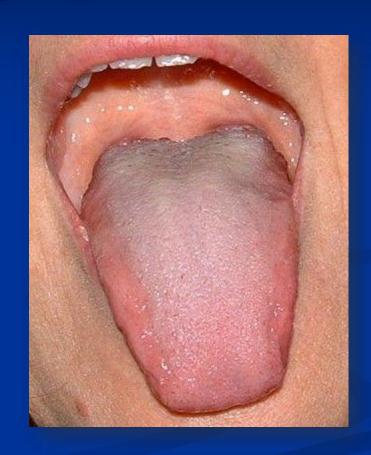
### **Cold Uterus**



- Prolonged menstrual discharge but scanty in volume and mixed with dark clots
- Cold lower abdominal pain relieved by warmth
- The tongue coating is thin and white
- The pulse is deep and slow

# Blood deficiency signs & symptoms

- Withered, sallow complexion
- Scanty menstrual discharge during the last days of the period but light in color, dizziness, blurred vision, dry skin, constipation
- Insidious pain after menstruation.
- Tongue is pale
- Pulse is thready and weak



# Liver depression signs & symptoms



- Early or late menstruation, scanty in volume and dark in color
- Abdominal distention
- Premenstrual breast distention
- Mental depression, eructation and sighing
- Tongue is red with a thin coating
- Pulse is wiry and rapid

# Stagnant Heat signs & symptoms

- Scanty menstrual volume, red purplish in color and mixed with clots.
- Distention and pain in the lower abdomen, especially along the sides, which refuses palpation.
- History of lumbar soreness
- Distension & pain of the chest and hypochondrias
- Tongue is red with a thin coating
- Pulse is wiry and rapid



# Phlegm dampness signs & symptoms



- An obese constitution
- History of excessive phlegm
- Pallor or puffiness
- Delayed menstruation or amenorrhea and excessive leucorrhea
- Tongue has a thin, white coating
- Pulse is wiry and slippery

# Classic Herbal Formulas Benefits Fertility

- 1. Yu Lin Zhu- kidney deficiency
- 2. You Gui Wan- kidney deficiency
- **3. Wu Zi Yan Zong Wan-***kidney deficiency*
- 4. Ai Fu Nuan Gong Wan-cold uterus
- 5. Ren Shen Yang Rong Tang-Blood deficiency
- **6. Yang Jing Zhong Yu Tang-***Blood deficiency*
- 7. Chai Hu Shu Gan San-liver depression
- **8. Kai Yu Zhong Yu Tang-***liver depression*
- 9. Qi Re Xiao Yu Tang- Stagnant heat
- 10. Xiao Zhi Mo Dao Tan Tang-Phlegm dampness
- 11. Qi Gong Wan-Stagnant heat

## Massage Works to Relieve Stress

- Stress is reduced by activation of the parasympathetic nervous system
- Relaxation response is activated
- Increased levels of dopamine and serotonin are linked to decreased stress levels
- Reduction in cortisol, norepinephrine and epinephrine levels
- Release of endorphins

#### **Diet and Food Choices**

- Fertility Enhancing Foods
- Fresh vegetables and fruit
- Beans and non hormonally treated meats
- Whole foods such as brown rice, whole grains oats and spelt
- Natural sweeteners such as agave nectar

- Foods to reduce or avoid
- Refined Carbohydrates
- Coffee and alcohol
- Artificial sweeteners
- Wheat gluten
- Heavy Creams and Cheeses

### **Dietary Supplements:**

- High Quality Multi-Vitamin and Mineral
- Fish Oil or Flax Seed Oil (EFAs) decreases inflammation, calms reactivity, increases uterine lining quality, overall support for hormonal balance, moderates NK cell activity

#### **Dietary Supplements**

- OPC (powder)

   decreases inflammation and increases circulation; helps to protect body's cells from free radical damage;
- CoQ-10 increases egg quality by supporting mitochondrial function & energy production; supports cellular energy production to improve motility
- Wobenzym enzymes to help decrease autoimmune reactivity
- PABA indicated for MTHFR, stimulates production of folic acid
- Wheat Grass improves egg quality by lowering FSH levels
- Royal Jelly improves egg quality by adding essential nutrients

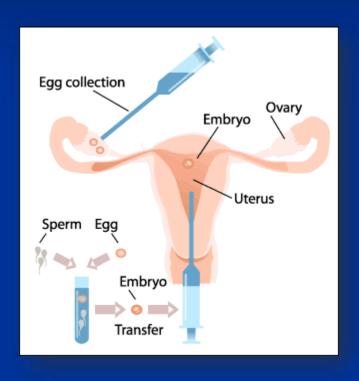
## When should I get acupuncture?



- For best results start acupuncture90 days before IVF cycles
- At the beginning of a cycle for improving blood flow to the uterus (uterine lining)
- Before ovulation to help follicles mature
- 5-10 days after ovulation for improved implantation
- Weekly when pregnant to prevent miscarriage during the first trimester

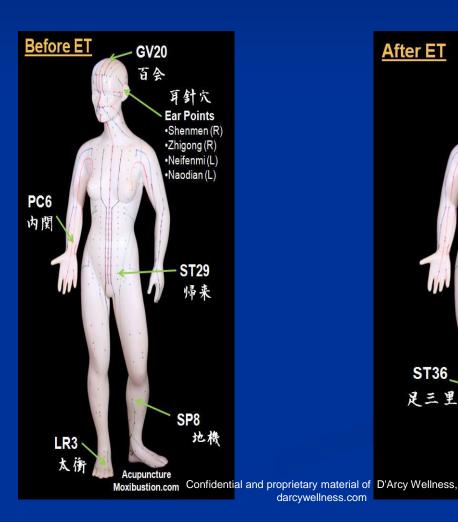
## **Acupuncture & IVF procedures**

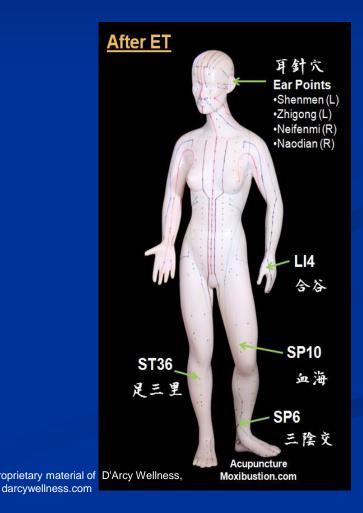
## -Research in Christian Lairize Institute in Germany



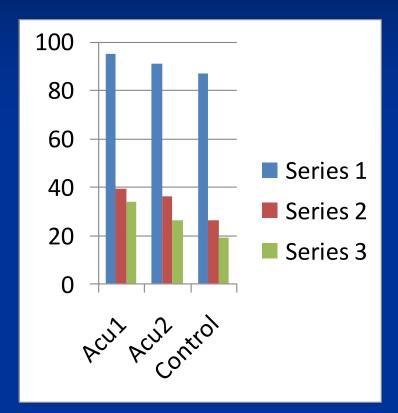
- 160 women getting IVF
- Acupuncture before & after the embryo transfer
- 50% of the patients increased successful implantation.
- IVF group= 26.3 %
- IVF plus acupuncture= 42.5 %
- AAI successful rate is 64.9 % of integrative IVF patients at December, 2007.

## The German protocol (Paulus) "gold standard" acupuncture protocol during IVF cycle.





## Acupuncture on the day of Embryo Transfer



Acu1= 95, on the day 36%/34% Acu2 =91, on the day and 2 days after 36%/26% Control=87, no acupuncture. 26%/22%

#### **Conclusion:**

1. Acupuncture on the day of ET significantly improves the reproductive outcome of IVF/ ICSI. Compare to no acupuncture.

2. Repeating acupuncture on ET day and 2 days after provided no additional benefit

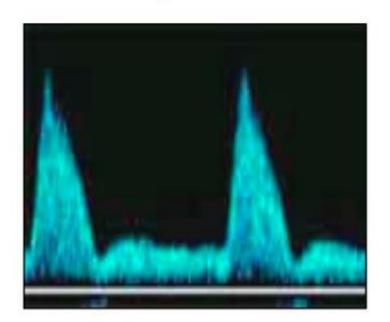
Westergaard LG, Mao Q, Krogslund M, Sandrini S, Lenz S, Grinsted J. Fertility Clinic Tranglen, Hellerup, Denmark. Fertil Steril. 2006 May;85(5):1341-6. Epub 2006 Apr 5.

## Recent medical studies prove acupuncture can:

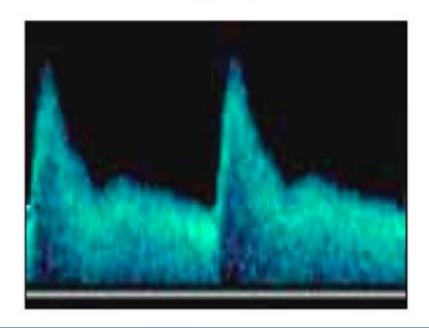
- Improve IUI/IVF rates 50%, the acupuncture 25 minutes before and after embryo transfer
- Increase the thickness of the uterine lining prior to ovulation
- Reduce the effects of PCOS with Electro- acupuncture
- Enhance the management of sub- fertility, ovulation induction, blood flow, increased sperm motility and stress reduction

## Endometrial Blood Flow Pre & Post Acupuncture Treatment

Pre acupuncture



Post acupuncture





## ACUPUNCTURE AND HERBAL MEDICINE OFFERS A SAFE, COST EFFECTIVE AND NONINVASIVE APPROACH TO CONCEPTION

For every 10 women receiving acupuncture, there would be one extra successful embryo transfer.

- IT IS STRONGLY SUGGESTED THAT COUPLES TRY ORIENTAL MEDICINE FIRST before attempting assisted reproductive therapies.
- Not only is it a fraction of the cost, but also the body will be more receptive to fertility medications if assisted therapies are needed. However, if you are already beginning an IVF cycle acupuncture and herbs can greatly enhance the outcome and success of that cycle.
- Acupuncture has been used for centuries in China to regulate female fertility, and in recent years, scientists have been looking at whether it could boost IVF chances. The latest research, from the VU University in Amsterdam and the University of Maryland School of Medicine, combined the results of seven trials involving 1,366 women in an attempt to provide a clearer picture of the benefits. They found that, looking at all the research together, women who underwent acupuncture were for every 10 women receiving acupuncture, there would be one extra successful embryo transfer.

# Study\* shows that Acupuncture Increases Success Rates Significantly....

42.5 % became pregnant as opposed to 26.3%

In this **study** patients receiving Assisted Reproductive Therapy were divided into two groups. The first group received an acupuncture treatment 25 minutes before and after embryo transfer. The second group did not receive acupuncture before or after embryo transfer. In the group that received the acupuncture, **42.5** % **became pregnant** as opposed to 26.3% of the women who did not receive acupuncture.

By having regular acupuncture treatments three months prior to embryo transfer, pregnancy rates can increase up to 60% according to Dr. Lifang Liang O.M.D., Ph. D., L.Ac. in her book "Acupuncture & IVF"

Influence of acupuncture on the pregnancy rate in patients who undergo assisted reproduction therapy

Wolfgang E. Paulus, M.D.,[a] Mingmin Zhang, M.D.,[b] Erwin Strehler, M.D.,[a) Imam El-Danasouri, Ph.D.,[a] and Karl Sterzik, M.D.,[a] Christian-Lauritzen-Institut, Ulm, Germany

## General Infertility Acupuncture Research

- Reduction of blood flow impedance in the uterine arteries of infertile women with electroacupuncture - Elisabet Stener-Victorin, Urban Waldenstrom, Sven A. Andersson and Matts Wikland
- Acupuncture Normalizes Dysfunction of Hypothalamic-Pituitary-Ovarian Axis Bo-Ying Chen M.D., Professor of Neurobiology
- Effects of Electro-Acupuncture on Nerve Growth Factor and Ovarian Morphology in Rats with Experimentally Induced Polycystic Ovaries - Elisabet Stener-Victorin, Thomas Lundeberg, Urban Waldenstrom, Luigi Manni, Luigi Aloe, Stefan Gunnarsson, and Per Olof Janson
- Substitution of Acupuncture for HCG in Ovulation Induction Cai Xuefen, Obstetrical & Gynecological Hospital, Zhejiang Medical University, Zhejiang Province
- Relationship Between Blood Radioimmunoreactive Beta-Endorphin and Hand Skin Temperature During The Electro-Acupuncture Induction of Ovulation - Chen Bo Ying M.D. Lecturer of Neurobiology, Institute of Acupuncture Research, and Yu Jin, MD., Prof of Gynecology, Obstetricus and Gynecology Hospital Shanghai Medical University, Shanghai, People's Republic of China
- Role of acupucture in the treatment of female infertility Raymond Chang, M.D., The Institute of East-West Medicine, The Department of Internal Medicine, Weill Medical College of Cornell University. Pak H. Chung, M.D., The Department of Internal Medicine, Weill Medical College of Cornell University. Zev Rosenwaks, M.D., The Center for Reproductive Medicine and Infertility

## In Vitro Fertilization Acupuncture Research

- Influence of acupuncture on the pregnancy rate in patients who undergo assisted reproduction therapy Wolfgang E. Paulus, M.D., Department of Reproductive Medicine, Christian-Lauritzen-Institut. Mingmin Zhang, M.D., Department of Traditional Chinese Medicine, Tongji Hospital, Tongji Medical University, Wuhan, People's Republic of China. Erwin Strehler, M.D., Department of Reproductive Medicine, Christian-Lauritzen-Institut. Imam El-Danasouri, Ph.D., Department of Reproductive Medicine, Christian-Lauritzen-Institut. and Karl Sterzik, M.D. Department of Reproductive Medicine, Christian-Lauritzen-Institut
- Acupuncture Treatment For Infertile Women Undergoing Intracytoplasmic Sperm injection -Sandra L. Emmons, MD, Phillip Patton, MD
- Acupuncture on the day of embryo transfer significantly improves the reproductive outcome in infertile women: a prospective, randomized trial Lars G. Westergaard, M.D., Ph.D., Qunhui Mao, M.D., Marianne Krogslund, Steen Sandrini, Suzan Lenz, M.D., Ph.D., and Jørgen Grinsted, M.D., Ph.D.
- Influence of acupuncture stimulation on pregnancy rates for women undergoing embryo transfer Caroline Smith, Ph.D., Meaghan Coyle, B.Hlth.Sc. (Acup.), and Robert J. Norman, M.D.
- Effect of acupuncture on the outcome of in vitro fertilization and intracytoplasmic sperm injection: a randomized, prospective, controlled clinical study - Stefan Dieterle, M.D., Gao Ying, M.D., Wolfgang Hatzmann, M.D., and Andreas Neuer, M.D.

### Recommended Reading

- The Infertility Cure by Randine Lewis, P.HD.
- Inconceivable by Julia Indichova
- Healing with Whole Foods by Paul Pitchford
- Research Papers
- http://www.thefertilityclinic.com/researchon-acupuncture-for-fertility.html