

Results: With regard to infertility factors of subjects, seventeen had unknown factor, eleven had tubal or peritoneal factor, eight had uterine factor, and six had ovulation factor. Thirty subjects showed thermograms of lower abdominal coldness in accordance of two practitioners. Subjects with tubal or peritoneal factor of infertility shown lower abdominal coldness with most high frequency of 90.9% ($p=0.237$).

Conclusion: In cross analysis process, correlation of lower abdominal coldness and tubal or peritoneal factor of infertility was not statistically significant, however, this would suggest clinically significant clue for the treatment. Thermography turns out to be a useful tool for identification of lower abdominal coldness in infertile woman. Further study is supposed to investigate the physiopathological mechanism of lower abdominal coldness in infertile women with large sample size.

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P2.065

The analgesic effects and local response to microcirculation of acupuncture



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Purpose: Although the local response induced by acupuncture manipulation has been considered to be among the important factors that induce the effects of acupuncture, this connection has not yet been properly studied with standardized tools. The aims of this study are to examine the local changes in microcirculation that occur at different manipulation intensities and explore any associations of these changes with the analgesic effects of acupuncture.

Methods: Twelve healthy volunteers received three acupuncture interventions, only an insertion, a single manipulation, and repeated manipulations, at the right LI4 (Hegu or Hapgok) in a random order. Skin blood perfusion was measured within a 100 mm² area ellipse centered on LI4 using laser Doppler perfusion imaging (LDPI). Pressure pain thresholds were measured at ipsilateral areas, including acupoints ST25 (abdomen), LI5 (hand), LI10 (arm) and SP9 (leg). Heart rate variability as a biomarker for autonomic nervous system (ANS) were measured using an electrocardiogram amplifier.

Results: We found that repeated acupuncture manipulations enhanced microcirculatory perfusion compared to insertion only ($p<0.01$) and single manipulation ($p<0.05$) conditions. The analgesic effects of acupuncture manipulations at ST25 exhibited a pattern of changes that was similar to the pattern of changes in perfusion ($p<0.05$ vs. insertion) and were mildly correlated with the changes in perfusion ($r=0.393$, $p=0.018$). There was no correlation between the change in microcirculation and activity of ANS.

Conclusion: These results indicate that acupuncture induced local microcirculatory changes that were detected by LDPI, which may represent an index of proper acupuncture stimulation.

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Food As Medicine Everyday - Research (FAME-R): Evaluating physiological changes associated with a shift toward a whole-foods diet



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Purpose: Prediabetes, or impaired glucose tolerance without a formal diagnosis of diabetes, is increasingly prevalent in the United States. Without adequate prevention, individuals with prediabetes are likely to develop type II diabetes within 10 years. Diabetes is inextricably linked with heart disease, and a healthful diet is a key behavioral target for these serious public health problems. Numerous public and private agencies have adopted health promotion and nutrition education programs to foster healthy eating behaviors. Individuals at high risk for these behaviorally-mediated chronic diseases may benefit from structured education programs that are community-based. The purpose of this study is to assess the impact of a 12-week, community-based nutrition education course for adults with prediabetes and cardiovascular risk factors.

Methods: A naturopathic physician-led, 12-week nutrition education course has been offered at community-based locations in Portland, Oregon, for the past three years. The Food as Medicine Everyday (FAME) course curriculum emphasizes whole-grains and a predominately plant-based whole-foods diet. Fifty adults with or at risk for prediabetes will participate in the 12-week nutrition education program. Using a pretest-posttest design, we will assess changes in key markers of diabetes and CVD risk, including hemoglobin A1c, insulin, lipids, and c-reactive protein. Sustained impact will be evaluated through repeated measurement at three-month and nine-month follow-up visits.

Results: Data collection began in January 2015. Preliminary results will be presented, describing 12-week pre-post comparisons of biomarkers of diabetes and CVD risk.

Conclusion: The FAME curriculum includes a unique emphasis on whole-foods. The interactive design of the course, which includes family-style meal preparation and consumption, may promote learning and sustained adoption of healthy eating behaviors, including increased diversity of whole grains and vegetables. Community-based nutrition courses may improve access to education that will directly benefit individuals at high risk for behaviorally-mediated diseases such as diabetes and CVD.

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