



DOES REIKI REALLY WORK? EXPERIMENTS ON RATS

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Towards an Integrated Understanding of
Scientific and Methodological Issues in
Biofield/Bioenergetic Therapies
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Does Reiki Really Work? Experiments on Rats



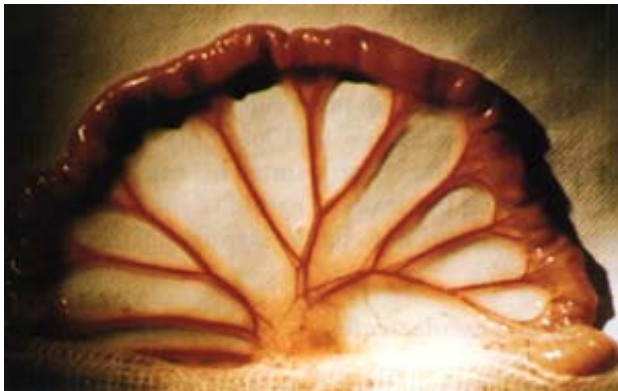
"I feel better today too, but around here
I've learned not to be too optimistic."

Noise in Animal Facilities

- Facilities for research animals are often very noisy.
- Noise in animal care facilities usually comes from three sources:
 - Fixtures and cleaning equipment
(air conditioners, cage-washers, etc.)
 - humans working in the facility
 - the animals themselves
- During periods of high personnel activity, noise levels can reach as high as 90 – 100 dB
- Unfortunately, acoustic levels in animal facilities continue to be less controlled than other environmental factors (lighting, temperature, humidity, etc.)

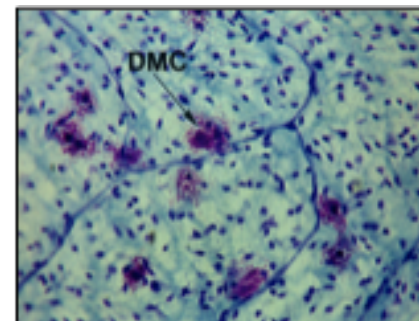
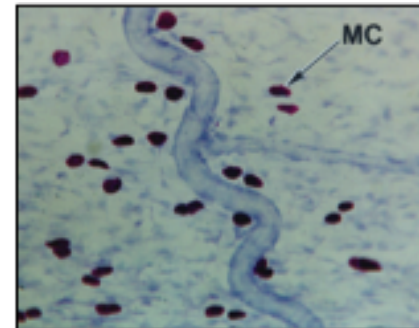
Noise Causes Stress in Research Rats

- Dr Baldwin has shown that environmental noise in animal facilities can cause rats so much stress that their small intestine and mesentery become inflamed.

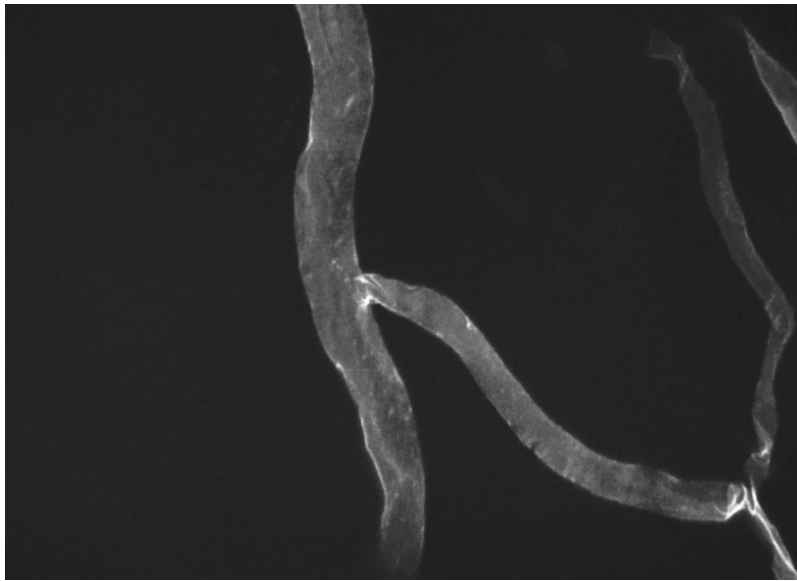


Baldwin AL and Bell IR. Effect of noise on microvascular integrity in laboratory rats. J. Amer. Assoc. for Laboratory Animal Science, 46(1):58-65, 2007.

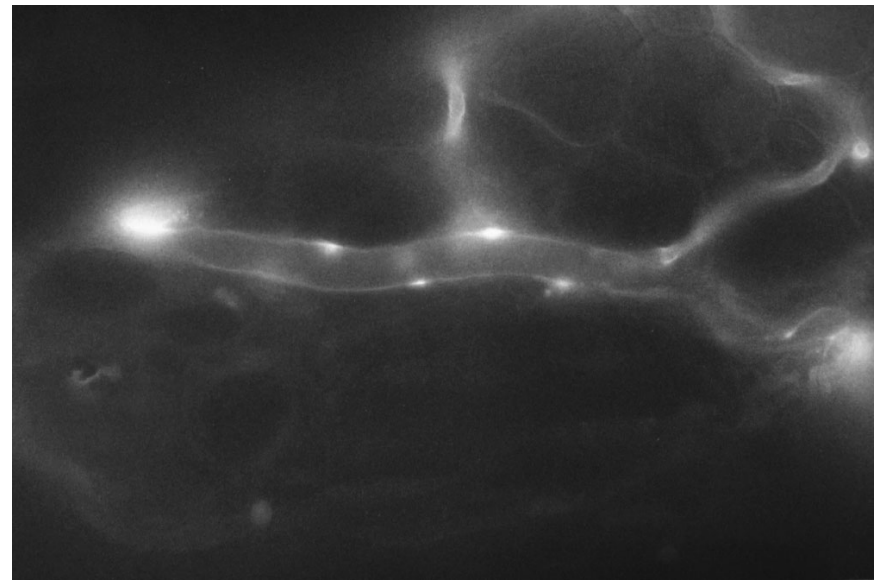
Mesenteric mast cells degranulate, releasing cytokines that damage tissue



Noise-Induced Stress Causes Damage to Mesenteric Blood Vessels



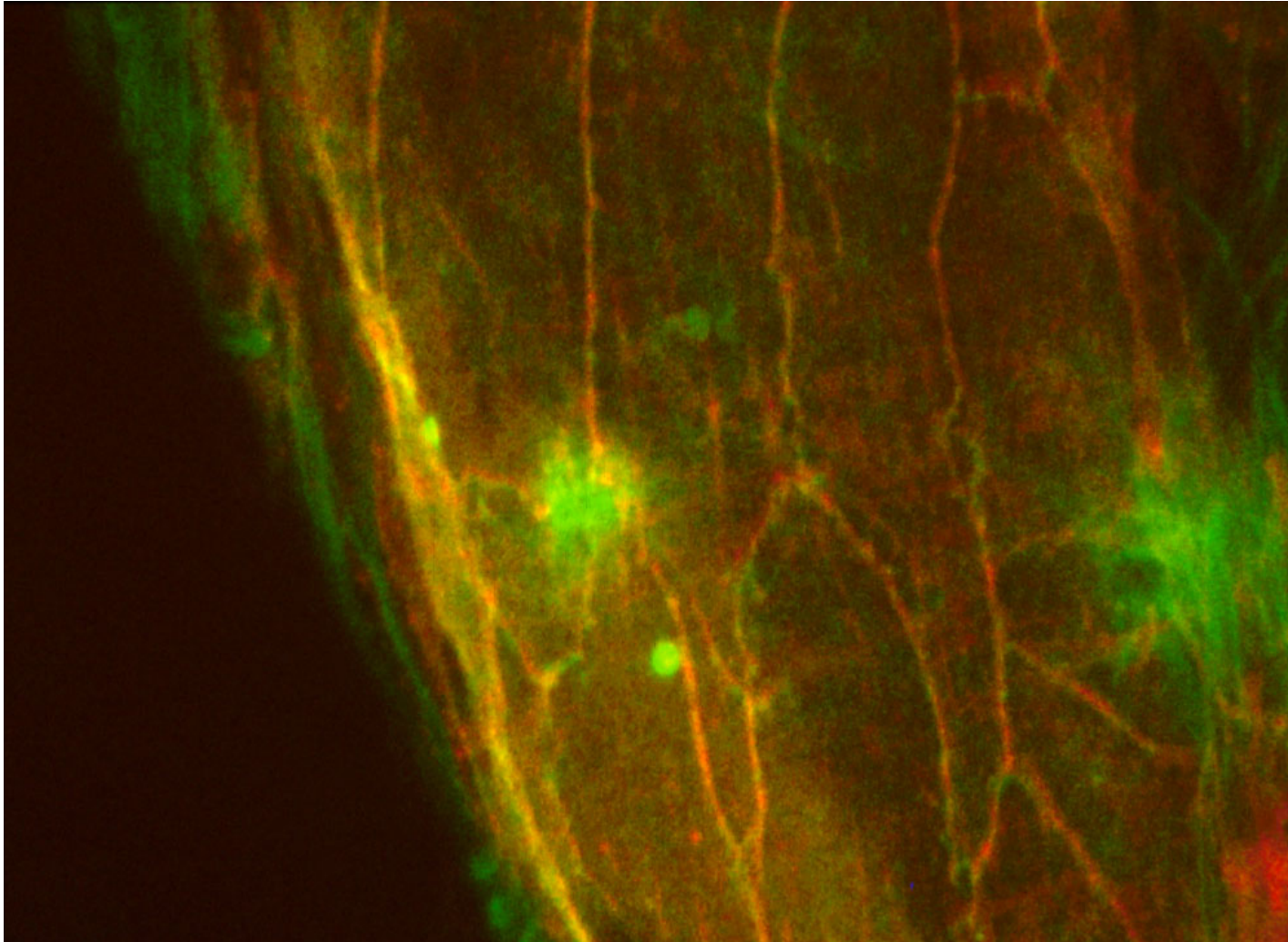
Quiet Room



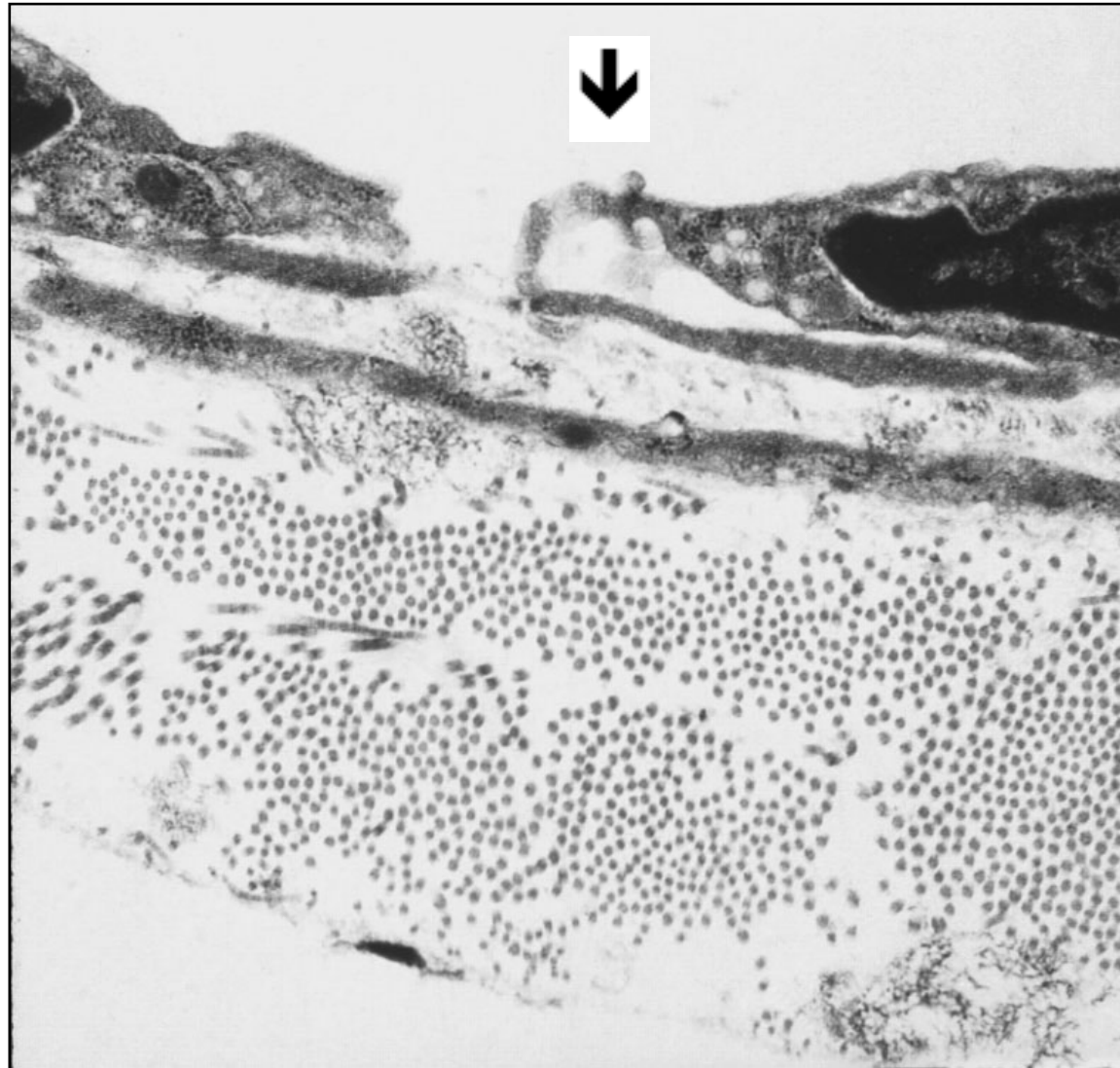
Noisy Room

Fluorescent albumin leaks out of mesenteric blood vessels

Gaps form Between Endothelial Cells Lining the Blood Vessels



Gap between two endothelial cells



Giving Reiki to the Rats

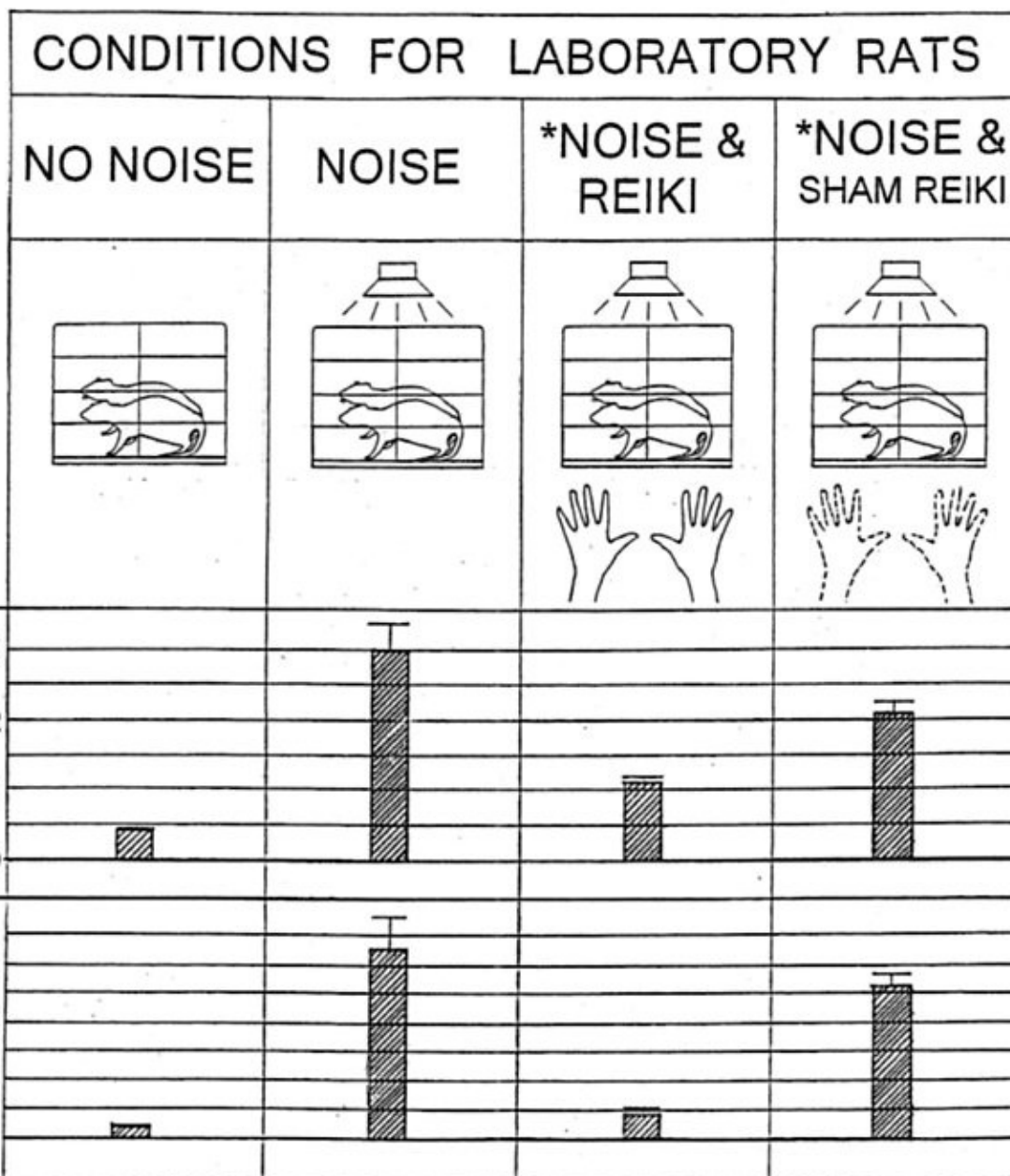


Results

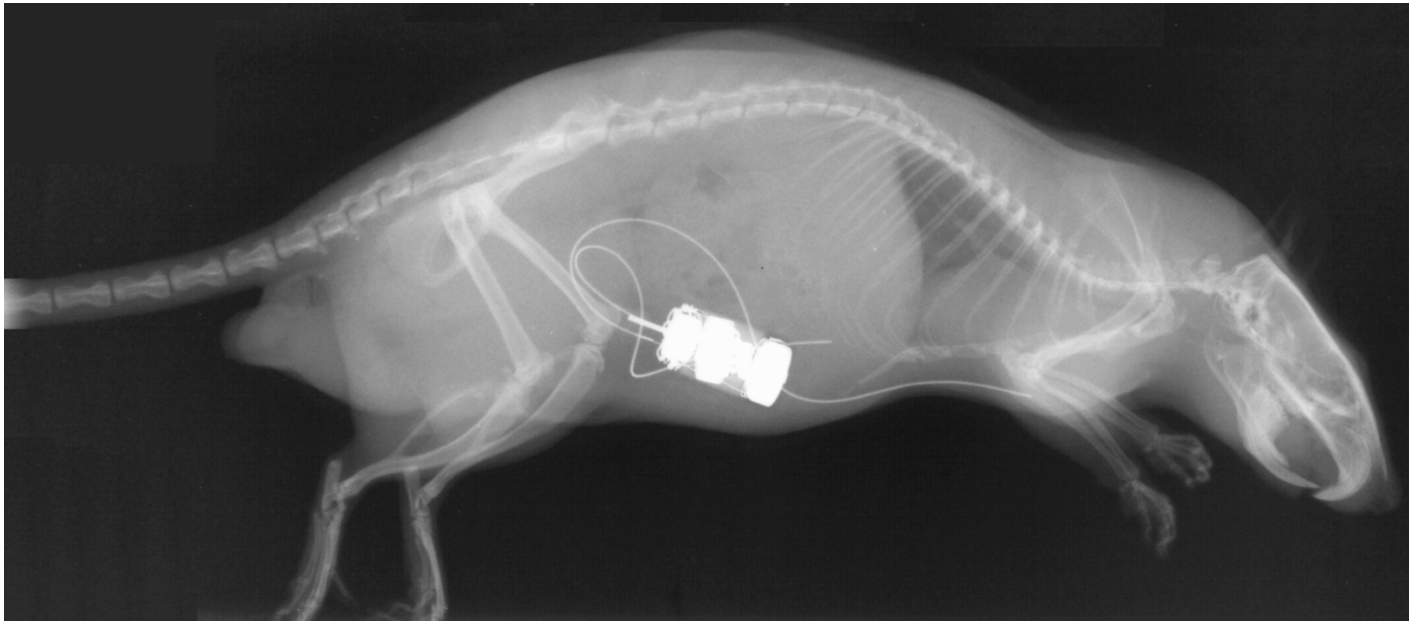
In rats, fifteen minutes of Reiki per day significantly reduced leaks in blood vessels caused by noise-induced stress

Baldwin AL and GE Schwartz. Personal interaction with a Reiki practitioner decreases noise-induced microvascular damage in an animal model. *The Journal of Alternative and Complementary Medicine*, 12(1): 15-22, 2006.

STRESS-INDUCED MICROVASCULAR LEAKAGE



Implanted Transmitter to Measure Effects of Reiki on Heart Rate

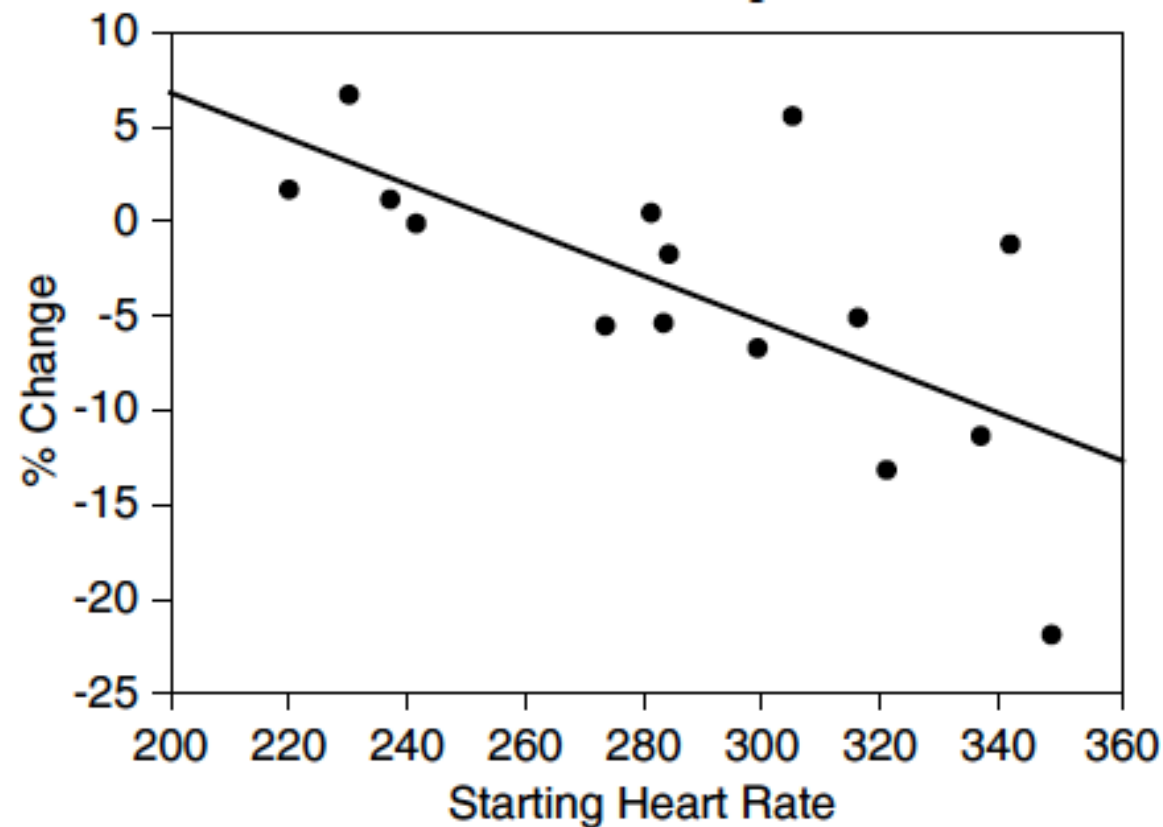


- Transmitter sits in rat abdominal cavity
- Pressure catheter inserted into the abdominal aorta in a direction opposing blood flow
- Two electrocardiogram (ECG) leads sutured subcutaneously over the chest muscles in a Lead II position

Results

- When rats experienced 30 min. noise, HR significantly increased on average by $9\% \pm 2\%$
- When rats experienced 15 min. pre-treatment with Reiki and another 15 min. of Reiki during 30 min. noise, HR did not significantly change
- Sham Reiki made no difference to the noise-induced increase in HR

Baldwin AL, Wagers C and Schwartz GE. Reiki improves heart rate homeostasis in laboratory rats. *The Journal of Alternative and Complementary Medicine*, 14(4): 417-422, 2008.



Correlation coefficient = -0.68

- Reiki, but not Sham Reiki, significantly reduced HR in resting rats (no noise) by 5.8% (from 293 ± 31 (SD) to 276 ± 27)
- The percent change in HR after Reiki depended on initial HR

Conclusion

- Double blind controlled experiments on rats show that Reiki significantly reduces:
 - Noise-induced intestinal inflammation
 - Noise-induced increases in HR
- Reiki also significantly reduces HR in rats not exposed to noise, the percent decrease being dependent on initial HR, suggesting that Reiki promotes homeostasis

Hot off the Press

- The rat studies and others on humans indicate that *receiving* Reiki reduces stress. Do energy healing practitioners enter a relaxed state when they are *giving* energy healing to themselves?
- No – we recently measured heart rate and heart rate variability (HRV) in Reiki practitioners and Reconnective Healers before and during self-practice. Neither group showed a significant decrease in heart rate or an increase in HRV during self-practice.
- These results indicate that neither Reiki practitioners nor Reconnective Healers relax during self-practice. In fact Reconnective Healers enter a highly focused state (increased HRV).