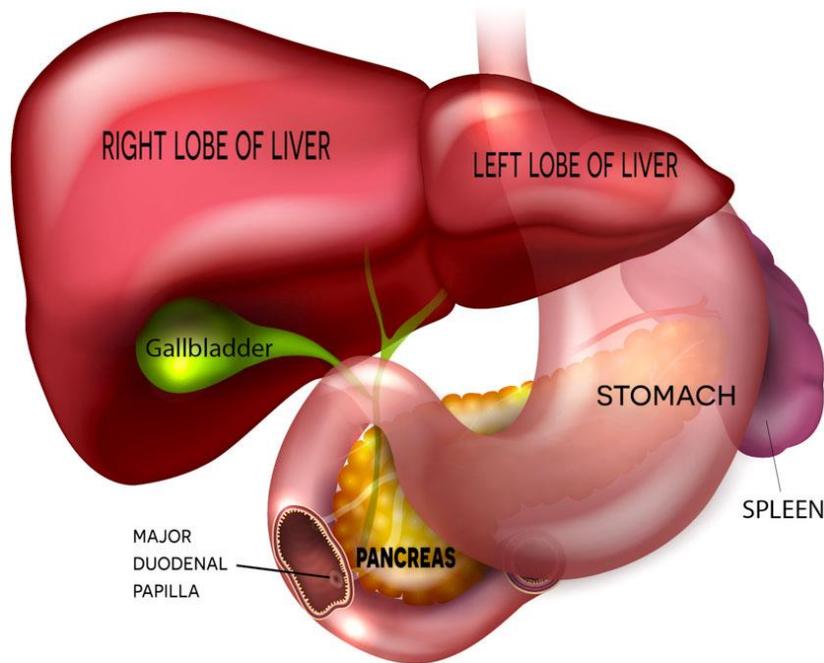


# Acupuncture Found Effective for Obesity Reduction

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Researchers find acupuncture effective for the treatment of obesity. Results were obtained by implementing a protocolized body acupuncture point prescription without a diet or exercise program. [1] In a five week clinical trial, patients receiving acupuncture achieved a 2.9 kg mean weight loss and the decrease in mean BMI (body mass index) was 1.43. The laboratory findings, including serum levels of insulin, leptin, ghrelin, and cholecystokinin are consistent with the results. The controlled study documents that sham acupuncture does not produce significant positive patient outcomes, only true

acupuncture achieves clinical results. Based on the evidence, the hospital researchers conclude that acupuncture treatment regulates weight for patients with obesity.

Obesity is an increasingly prevalent chronic condition that is associated with serious morbidity and mortality. [2] The risk of hypertension, heart disease, hypercholesterolemia, diabetes mellitus, cerebrovascular disease, gallbladder disease, and some types of cancer are higher for overweight (BMI>25) and obese (BMI>30) individuals. [3] Weight control treatments include diet therapy, behavioral treatment, pharmacotherapy, surgical procedures, and acupuncture. The downside to anti-obesity medications and surgery is the potential for iatrogenic illness. [4] In addition, a World Health Organization Report on acupuncture states that acupuncture demonstrates a therapeutic effect for the treatment of obesity. [5]

Laboratory data supports the conclusions of the researchers in this controlled clinical trial. After 5 weeks of acupuncture treatment, mean serum insulin and leptin levels decreased by 6.87  $\mu$ IU/ml (43%) and 3.32 ng/ml (25%) respectively. No significant change was seen in these variables after sham treatment. Differences between the two study groups in these parameters were documented. The mean serum insulin and leptin levels in the acupuncture group were lower than in the sham acupuncture group by 8.27  $\mu$ IU/ml and 6.17 ng/ml respectively. The true acupuncture group also demonstrated significant improvements in mean plasma ghrelin and CCK levels. The researchers note, “acupuncture treatment decreased insulin and leptin levels and induced weight loss, together with a decrease in BMI compared with sham acupuncture.”

### **Group Selection Process**

The subject selection process was as follows. An acupuncture study was announced in a university hospital (Etlik Zubeyde Hanim Obstetrics and Gynecology Training and Research Hospital) for employees and people attending routine wellness examinations. Female obese volunteers who wanted to be involved in this study underwent the selection process and 40 of these with BMI>30 were accepted after routine medical examinations. Subjects selected for inclusion had normal physical examination findings and did not have hypertension, diabetes, nephropathy, heart failure, and were not receiving any medications.

The statistical breakdown for each randomized group was as follows. The mean age of participants was 34.6 ±6.3 years for the sham acupuncture group and 36.8 ±7.8 years for the acupuncture group. Pre-sham and pre-acupuncture groups showed no significant differences in weight, BMI, serum insulin and leptin levels. All participants successfully completed specified treatments without any dropouts or unintended outcomes.

### **True vs. Sham Acupuncture**

The acupuncture group received traditional Chinese type general body acupuncture at the following acupoints bilaterally:

- LI4 (Hegu)
- HT7 (Shenmen)
- ST36 (Zusanli)
- ST44 (Neiting)
- SP6 (Sanyinjiao)

Treatment commenced with patients in a supine position. After disinfection of the acupoint sites, a disposable stainless steel needle (25 mm length, 0.25 mm diameter, Kingli brand) was inserted into each acupoint, reaching a depth of 5–10 mm. Twisting, lifting, and thrusting manual acupuncture techniques were applied to elicit deqi.

Patients in the other group were treated with sham acupuncture. The needles were not inserted but were applied under a tape at the same points. Both groups received two sessions per week for a total of 10 sessions. Duration of each session was 20 minutes. Both treatments were performed by a certified acupuncturist. All patients were asked not to follow dietary treatments, not to undergo heavy physical exercise, and not to take supplementary medications.

### **Auricular Points**

Sun et al. conclude that acupuncture combined with auricular acupressure achieves an average weight loss of 5.04 kg after three months of treatment, The sample size was 110 obese female patients. [6] One study group received body acupuncture plus auricular acupressure (every 3–5 days for 3 months) and another received Capsulae Olei Oenothera Erythrosepala, a weight control substance. Body weight of the acupuncture group reduced by an average 5.04 kg while that of the control group by an average of 2.08 kg. The differences between the two groups and between values of the same group before and after treatment were statistically significant. The primary body acupoints used in the study were the following:

- ST25 (Tianshu)
- SP6 (Sanyinjiao)
- P6 (Neiguan)
- ST40 (Fenglong)

- ST36 (Zusanli)

Rapid needle insertion was performed. Twisting, lifting, and thrusting manual acupuncture techniques were applied to elicit deqi. After the arrival of deqi, the needle retention time was 15 minutes. The needling was administered every 3–5 days, 30 days as one course of treatment, for a total of three courses. For auricular acupressure, the researchers used the following ear acupoints:

- Mouth
- Esophagus
- Stomach
- Abdomen
- Hunger
- Shenmen
- Lung
- Endocrine

A grain of *Vaccariae* seed was affixed to each otoacupoint with a 5×5 mm piece of adhesive tape. The two auricles were used in alternation, and the patients were advised to apply digital pressure on the seed pellets three times daily at home, every 3 – 5 days, for a total of 3 months. The study was a single-blinded, randomized investigation comparing acupuncture and auricular acupressure with a weight control substance. The researchers conclude, “Acupuncture and auricular acupressure produced superior patient outcomes for obese patients including decreasing body weight, appetite, blood triple cholesterol (TC), and triglycerides (TG).”

Acupuncture demonstrates clinical efficacy for the treatment of obesity in two controlled investigations. Based on the data, additional research is warranted. Larger sample sizes will help to confirm these preliminary findings.

Common to both studies reviewed in this article are acupoints SP6 (Sanyinjiao) and ST36 (Zusanli). According to Traditional Chinese Medicine (TCM) principles, both acupoints are indicated for the treatment of digestion related disorders and stimulate the body’s transforming and transporting functions of the digestive system. In this respect, these acupoints are choices consistent with the goals of the research.

## ***References***

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