

LONGITUDINAL STUDIES TO DETERMINE THE EFFECT OF BODY FAT RATE REDUCTION ON BLOOD PRESSURE

Takashi Wada and Yoshio Ikeda

Department of Preventive Medicine, The Jikei University School of Medicine, Tokyo

First printed in the Journal of Medical Systems, Vol 22, No. 1, 1998

Research reprinted by permission. ©1997 S.T. Wada

Practical Implications:

- Decreased percent body fat is related to decreased blood pressure, even when no weight change occurs.
- Weight alone may be an inadequate indicator of hypertensive risk and improvement, indicating the importance of monitoring percent body fat.

ABSTRACT

Objective: Body constitution is estimated by weight as a quantity index and percent body fat (%BF) as a quality index. Obesity is one of the risk factors in hypertension. High blood pressure drops by body weight reduction. The relationship between %BF change and blood pressure change during 1 year, and whether blood pressure changed in subjects whose %BF decreased without body weight reduction, were investigated.

Design: %BF was measured with bioelectrical impedance analysis. The changes of body weight, %BF, and blood pressure in the decreased %BF group that decreased more than 2 points of %BF, and in the no body weight change group which body weight had not changed in the decreased %BF group, were studied.

Results: In the decreased %BF group, average blood pressures fell significantly from 149/92 to 141/86 mm Hg in the subjects in hypertensive state at baseline. In the no weight change group, average blood pressures also fell significantly from 151/93 to 140/87 mm Hg. Even if the body weight had not changed, blood pressure had decreased significantly when %BF had decreased significantly.

TANITA®

TANITA Corporation of America, Inc.

2625 S. Clearbrook Dr.,
Arlington Heights, IL 60005 U.S.A.
Toll Free: 1-800-TANITA-8
Phone: +1-847-640-9241
Fax: +1-847-640-9261
Web: <http://www.tanita.com>
E-mail: 4health@interaccess.com

54579811

TANITA Corporation of Japan

14-2, 1-Chome, Maeno-Cho,
Itabashi-Ku Tokyo, Japan 174-8630
Phone: +81-3-3968-2123 Fax: +81-3-3967-3766
Web: <http://www.tanita.co.jp>

TANITA Health Equipment H.K. LTD.

Unit 301-303, Wing On Plaza, 3/F, 62 Mody Rd.,
Tsimshatsui East, Kowloon, Hong Kong
Phone: +852-2838-7111 Fax: +852-2838-8667

TANITA France

Villa Labrouste, 68 Boulevard Bourdon,
92200 Neuilly-Sur-Seine, France
Phone: +33-1-55-24-99-99 Fax: +33-1-55-24-98-68

TANITA Europe GmbH

Dresdener Strasse 25,
71065 Sindelfingen, Germany
Phone: +49-7031-6189-6 Fax: +49-7031-6189-71

TANITA UK LTD.

The Barn, Philpots Close, Yiewsley,
West Drayton, Middlesex, Great Britain, UB7 7RY
Phone: +44-1895-438577 Fax: +44-1895-438511

TANITA International

The Barn, Philpots Close, Yiewsley,
West Drayton, Middlesex, Great Britain, UB7 7RY
Phone: +44-1895-438588 Fax: +44-1895-438522