## Decreased Concentration of Selenium in Whole Blood and Plasma in Acne Vulgaris

Sir.

In recent years decreased concentrations of selenium in the blood or low blood GSH-Px activity have been reported in several dermatological disorders. For exampel low GSH-Px has been found in psoriasis, atopic dermatitis, dermatitis herpetiformis (1) and in acne (2). Decreased selenium concentrations have been reported in psoriasis (3, 4), atopic dermatitis (3) and all stages of malignant melanoma (5).

The whole blood and plasma selenium in 37 young men (18–25 years old) with inflammatory acne was measured by the same method as was previously used in a study on selenium levels in psoriasis (4). As shown in Table I, the selenium concentration was significantly decreased in the acne patients. Four women (20–30 years old) with persistent inflammatory acne had mean values of 1.50  $\mu$ mol/l in whole blood and 1.10  $\mu$ mol/l in plasma, whereas the corresponding values in a group of healthy women were 1.93 and 1.34  $\mu$ mol/l, respectively.

Whether this decrease reflects a real deficiency-

Table I. Selenium in whole blood and plasma (µmol, mean SD) in young men with acne and in healthy men 20–49 years old

	No	Whole blood	Plasma
Acne vulgaris	37	$1.59 \pm 0.40^a$	1.22 ± 0.21
Healthy men	37	$1.80 \pm 0.23$	$1.36 \pm 0.23$

 $<sup>^{</sup>a}p < 0.005$ .

possibly resulting in a more inflammatory acne—is not known. Another explanation might be a redistribution from the blood to another tissue compartment as a result of the inflammatory process. The good effect of oral treatment with selenium on the pustules in some acne patients in an open pilot study indicates that the inflammatory process might be influenced by this means (2). Controlled studies are required, however, and even more necessary are good models permitting studies of the role of selenium in various inflammatory processes.

## REFERENCES

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## ANNOUNCEMENTS

3rd Annual Combined Winter Skin Seminar will be held in Sheraton Steamboat Resort and Conference Center Steamboat Springs, Colorado in February 11–16, 1990. For further information: Dr Wilma F. Bergfeld, Department of Meetings and Conventions, American Academy of Dermatology, P.O. Box 3116, Evanston, IL 60204-3116, USA. Telephone: (312)869-3954.

The Symposium on *Metabolic Disorders and Nutrition related to the skin* organized jointly by the European Society for Dermatological Research and the Netherlands Society of Dermatology and Venereology will be held in Utrecht, the Netherlands from 8–10 March, 1990. It will be a synthesis of basic facts and clinical data. Free communications are welcome. For further information: Willem A. van Vloten, MD,

Department of Dermatology, University Hospital Utrecht, Postbox 85500, 3508 GA Utrecht, the Netherlands.

XIIth World Congress on Occupational Safety and Health will be held in Hamburg on May 6–11, 1990. For further information: XIIth World Congress on Occupational Safety and Health, Hamburg Messe und Congress GmbH, Postfach 30 24 80, FRG, Telephone: 040/35 69 22 42.

Dermatopathology Foundation 17th Annual Course in Gross and Microscopic Pathology of the Skin will be held in The Hotel del Coronado (across bay from San Diego), California on June 11–15, 1990. For further information please contact: Dermatopathology Foundation, P.O. Box 377, Canton, MA 02021, USA. Telephone: 1-800-729-6136 or (617)821-0648.