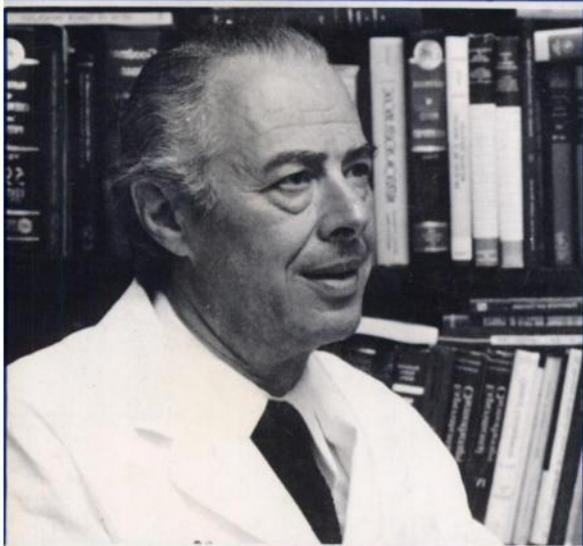


Cancer Research

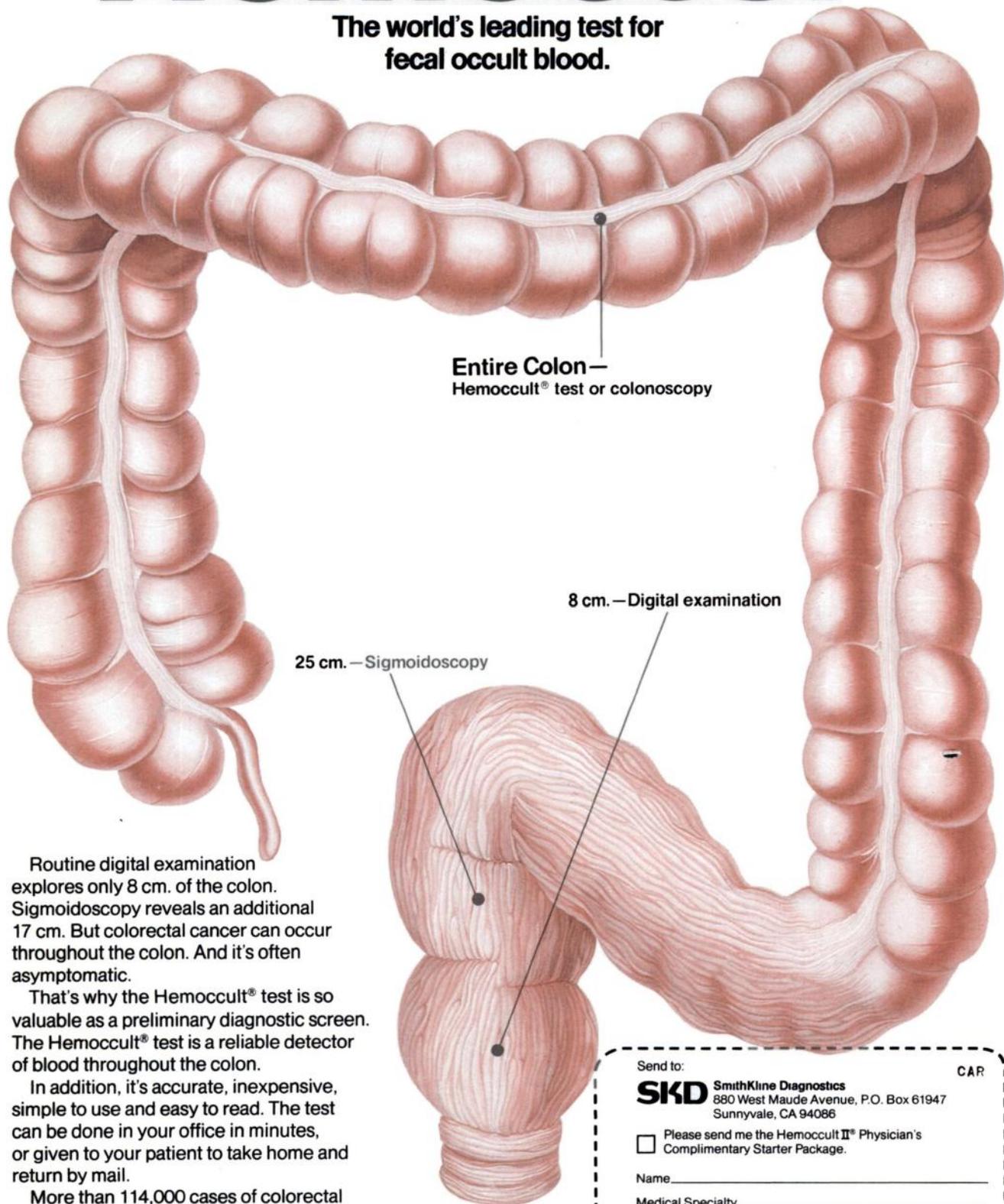
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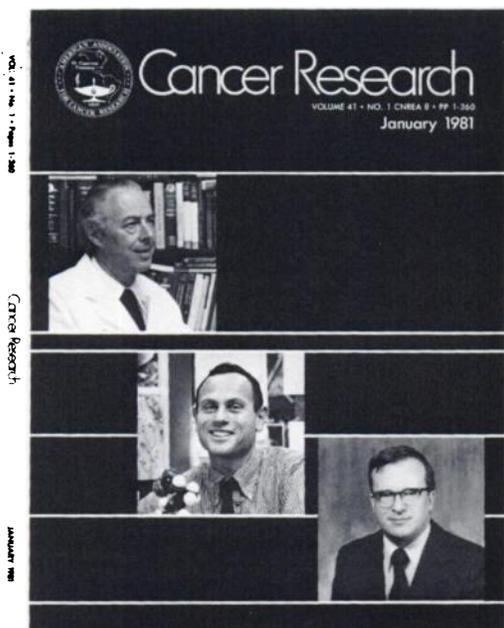
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COVER LEGEND



This month *Cancer Research* cites the emergence of a promising area of cancer research designated "Chemoprevention." The contributions of three investigators have been of particular importance in stimulating activity in this area of research. Inhibition of neoplasia by phenolic antioxidants, such as butylated hydroxyanisole or toluene (BHA or BHT), administered prior to and/or simultaneously with exposure to chemical carcinogens, has been studied extensively by Wattenberg (*Cancer Res.*, 26: 1520, 1966; *J. Natl. Cancer Inst.*, 48: 1425, 1972). These inhibitors are called "blocking agents" since, in general, they prevent carcinogens from reaching or reacting with critical target sites. A wide variety of such inhibitors exists, many occurring in foods consumed by humans and animals. This class of inhibitors is of interest because of its current consumption by human populations as well as for its potential use in protecting individuals at high risk to carcinogen-induced neoplasia.

Investigations aimed at inhibition or suppression of

cellular responses to carcinogenic agents are another important component of the field of Chemoprevention. Research of this nature has been carried out by Sporn *et al.*, using vitamin A isomers such as α - and β -retinyl acetate, the retinoids. These compounds have been shown to inhibit the promotion phase of neoplasia. In addition, retinoids can suppress the occurrence of cancer when given subsequent to the administration of carcinogenic agents (*Nature (Lond.)*, 250, 64, 1974; *Fed. Proc.*, 35: 1332, 1976). Thus, the potential exists for preventing cancer even in individuals already subjected to full carcinogenic exposures.

Finally, the investigations of Shamberger into inhibition of carcinogenesis by selenium selenide are given recognition (*J. Natl. Cancer Inst.*, 44: 931, 1970; *CRC Crit. Rev. Clin. Lab. Sci.*, 2: 211, 1971). Selenium can inhibit at multiple points in the carcinogenic process. The studies of Shamberger have focused attention on the possibility that selenium levels in food and water may have an impact on the response of human populations to oncogenic agents.

Lee W. Wattenberg was born in 1921 and received his doctorate from the University of Minnesota School of Medicine in 1950. He has been on the faculty of his alma mater since 1956, as professor of pathology from 1966.

Michael B. Sporn was born in 1933 and received his doctorate from the University of Rochester School of Medicine in 1959. He has been with the NIH since 1960 and in 1978 made chief of the Laboratory of Chemoprevention.

Raymond J. Shamberger was born in 1934 and received his doctorate in biochemistry from the University of Miami in 1963. He has been on the research staff of the Cleveland Clinic Foundation since 1969 and is a clinical professor at the Cleveland State University.

Pictured are, *left to right*, Wattenberg, Sporn, and Shamberger. We are indebted to Dr. Wattenberg for the information and to the investigators for their portraits.

M. B. S.