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# Recent Results in Cancer Research

# 66

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# *Carcinogenic Hormones*

Edited by C. H. Lingeman

With 156 Figures and 24 Tables



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# Foreword

Either deficient or excessive hormone production has been observed with respect to some rather bizarre clinical manifestations. Starting with the synthesis or isolation of pure hormones in the early 30s, estrogens (the female sex hormones) and androgens (the male sex hormones) have become readily available for clinical and other uses and their physiologic activity has been intensively studied. The relationship between hormones and cancer was perhaps one of the earliest research areas in cancer. In the early work of the 20s it was clearly shown in experimental animals that under certain conditions both endogenous and exogenous hormones could induce certain cancers and tumors.

More recently, attention has been focused on the use of androgenic anabolic steroids by athletes as body builders and the widescale multiple use of estrogens in terms of carcinogenic hazard. Most striking in recent years are the potential adverse effects of estrogens relevant to sterility, gall bladder disease, and neoplasia. The pervasive environmental hazard contributed by estrogens may arise from variant sources. Such sources may be: (a) endogenous hormones, (b) estrogenic compounds occurring naturally in foods or as fungal contaminants in food stuffs, (c) estrogens added to livestock feed, (d) estrogenic additives to cosmetics, (e) oral contraceptives, and (f) estrogens used clinically for threatened abortions, lactation suppression, menstrual anomalies, and therapeutic treatment of certain forms of cancer.

The revelation of the potential carcinogenic risk from estrogens used as feed supplements and the most recent discovery of the latent effects of some of the above delineated medical uses have been cause for much concern. Because of this extensive concern, a two-day symposium was conducted under the auspices of the Interagency Collaborative Group on Environmental Carcinogenesis, an interagency group sponsored by the National Cancer Institute. It was deemed appropriate that the proceedings of this symposium be made available to a larger audience than those participating, hence the publication of this monograph.

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# Contents

- C. H. Lingeman  
Hormones and Hormonomimetic Compounds in the  
Etiology of Cancer     *1*
- G. D. Hilliard and H. J. Norris  
Pathologic Effects of Oral Contraceptives     *49*
- K. G. Ishak  
Hepatic Neoplasms Associated with Contraceptive and  
Anabolic Steroids     *73*
- H. W. Casey, R. C. Giles, and R. P. Kwapien  
Mammary Neoplasia in Animals: Pathologic Aspects  
and the Effects of Contraceptive Steroids     *129*
- R. J. Kurman  
Abnormalities of the Genital Tract Following  
Stilbestrol Exposure in Utero     *161*
- T. B. Dunn  
Cancer and Other Lesions in Mice Receiving  
Estrogens     *175*
- Subject Index     *193*

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