Journal of CHRONIC DISEASES

VOLUME & NUMBER .

Lipid Metabolism

FURTHER STUDIES ON CHOLESTEROL LEVELS IN THE JOHNS HOPKINS MEDICAL STUDENTS: THE EFFECT OF STRESS AT EXAMINATIONS

CAROLINE BEDELL THOMAS, M.D., AND EDMOND A. MURPHY, M.D., BALTIMORE, MD.

From the Department of Medicine, The Johns Hopkins University School of Medicine, Baltimore, Md.

(Received for publication Sept. 5, 1958)

THE variability of serum cholesterol levels found in healthy subjects on repeated determinations depends on many factors. When the method has been carefully standardized and the technical error of measurement is small, there are still wide variations in the cholesterol level of a given individual, occurring both from week to week and from year to year, which cannot be attributed entirely to age or to diet. The influence of various forms of stress on the cholesterol level is of increasing interest and importance. A number of investigators have found that cholesterol levels are appreciably higher during periods of stress than at other times. While the exact significance of this finding is not yet clear, the possibility exists that such elevations of cholesterol level may contribute to the early onset of coronary artery disease in some persons.

As part of a long-term study on possible precursors of hypertension and coronary disease, we have made continuing studies of the cholesterol levels of successive classes of the Johns Hopkins medical students. The class of 1961, entering in the fall of 1957, was the fourteenth class registered in the study. It was decided to obtain cholesterol determinations on that class during the final anatomy examination period to compare with other levels obtained during the

This study was supported in part by Research Grant H-1891, National Score Institute, and in part by the Tobacco Industry Research Committee.

-68-

PUBLICATIONS

039086