

ROLE OF SHIFT WORK ON SUPRA-RENAL CORTICAL
FUNCTION AND RESERVE IN BAKERS BY SYNACTHEN
STIMULATION

THESIS

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سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا
إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

صدق الله العظيم



TO

MY

WIFE

AND

SON

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INTRODUCTION

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It is well known that in man adrenal cortisol is regulated by the hypothalamic - pituitary - adrenal axes. This system allows for basal and circadian steroid production, regulation of plasma steroid levels in normal circumstances and increased or decreased steroid production in response to a number of several stimuli.

Some authors have found an impairment in adrenal cortical function. This impairment has been elicited by poor response to synthetic ACTH stimulation and by low plasma cortisol measures as compared with healthy control subjects.

Response of ACTH stimulation has not been studied in relation to occupations and work - related conditions, though it has been thoroughly investigated in a diversity of diseases.

Shift work is one of the problems of modern industrialization. Its impact on industrial workers is both social and medical. It has been aimed in this work to study the role of shifts on suprarenal function and reserve in bakers. Bakery has been chosen as a vital industry in

which workers are subject to shifts for most of their lives. In addition they work in very adverse conditions, stress, environmental pollution, changes of temperature, irregular meals and exposure to flour particles and contaminants.

Estimation of suprarenal cortical function and reserve has been estimated in this work by measuring both ACTH and cortisol levels both basal and after stimulation by Synacthen Ciba (B^{1-24} - corticotrophin = tetracosactid).