بسم الله الرحمن الرحيم

شبكة المعلومـــــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـــسـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

EFFECT OF LEAD POISONING ON SOME BIOCHEMICAL PARAMETERS IN HUMAN AND RAT ERYTHROCYTES AND THE PREVENTIVE AND CURATIVE EFFECT OF Fe AND VITAMIN C

Thesis

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University of Alexandria
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By

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To my Parents

and

My Family

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CONTENTS

ABBREVIATIONS

Pb: Lead

B Pb: Blood Lead

CNS: Centeral Nervous System

IV: Intravenous

Ca: Calcium

H_2O_2: Hydrogen peroxide

GSH: Reduced glutathione

GSSG: Oxidized glutathione

NADPH: Nicotin-amide adenine dinucleotide phosphate

NADP: Nicotin-amide adenine dinucleotide

ATP: adenasine triphosphate

ADP: adenasine diphosphate

PUFA: Polyunsaturated fatty acids

MDA: malonyldialdhyde

LCAT: Lecithin cholesterol acyl transferase

EDTA: ethylene diamine tetra acitic acid

BAL: Britich anti-lewisite

GST: glutathione transferase

Introduction

INTRODUCTION

Inorganic lead is an environmental and occupational contaminant which has been a persistent source of toxicological concern in the past and continues to be at the present time.(1)

Lead (Pb) has been used for thousands of years and its toxicity has been recognized for centuries. It was only in the nineteenth century when the hazard of lead to health become well recognized e.g. in printing and pottery industries.(2) Burton, in 1840 described "The Burtonian line", a blue line on the gums, as a sign of lead absorption, and chemical methods for the detection of lead in blood or urine were further developed.

Occupational exposure to lead:

The highest and most prolonged exposures to Pb have been found among workers who come into contact with lead during melting, refining and, manufacturing industries. Cable industries, chemical industry and the manufacture of electric storage batteries are responsible for the largest consumption of Pb. This industry uses both metallic Pb in the form of lead oxides and lead antimony alloy in about equal proportions.(3)

Concerning the general population, the major anthropogenic sources of Pb have been referred to canned food and auto emissions.