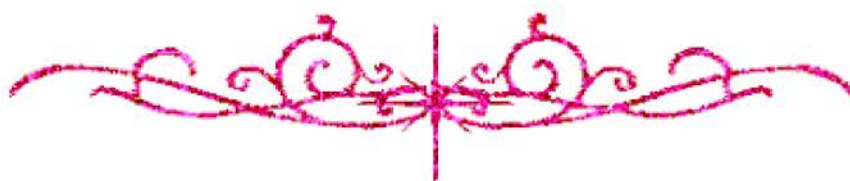


سامية محمد مصطفى



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



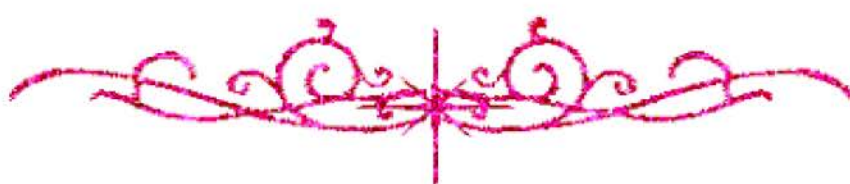
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شبكة المعلومات الجامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



سامية محمد مصطفى



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

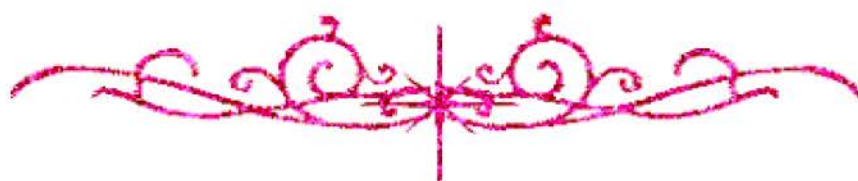
قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



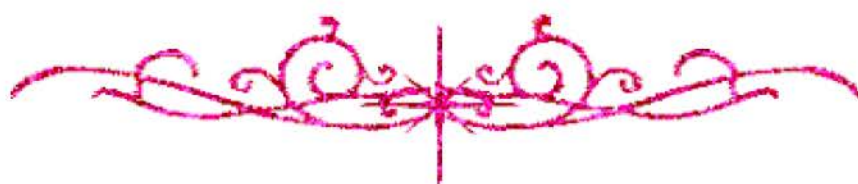
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بعض الوثائق الأصلية تالفة



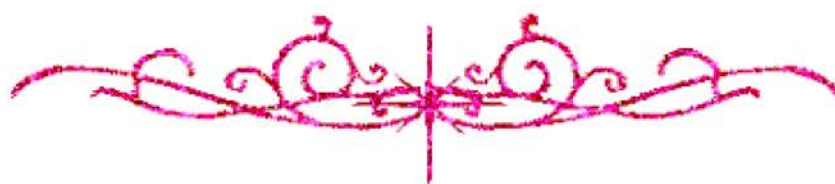
سامية محمد مصطفى



شبكة المعلومات الجامعية



بالرسالة صفحات لم ترد بالأصل



**TASTE PERCEPTION AMONG PATIENTS
SUFFERING FROM
IRON DEFICIENCY ANEMIA**

د. د. خالد الجبل
مستشار

Thesis

Submitted in Partial Fulfillment for the
Requirement Of The Master degree
In Oral Medicine and Periodontology

Presented by :

Dalia Mohey El-Deen Ghalwash
B.CH (Alexandria University)

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INTRODUCTION

INTRODUCTION

Anemia is a major world health problem characterized by tissue hypoxia , as a result of low oxygen carrying capacity of the blood . Anemia was classified according to different parameters ,as the pathophysiologic classification which was based on red cell mass , the morphologic classification which describes anemia as macrocytic , normocytic or microcytic hypochromic and finally comes the classification of anemia according to the associated red cell changes (*Weatherall et al., 1996; Beutler et al.,2001 ; Warrell et al.,2003*).

According to the WHO , iron deficiency is the most common nutritional disorder in the world . Iron deficiency and the related anemia affect more than 3.5 billion people in the developing world ; well over two persons out of every three (*Baltussen et al., 2004*).

Iron deficiency is the state in which the content of iron in the body is less than normal . It occurs in varying degrees of severity that merge imperceptibly into one another . Iron deficiency anemia may occur as a result of various factors such as chronic blood loss , inadequate dietary iron intake , malabsorption of iron , diversion of iron to fetal and infant erythropoiesis in the periods of pregnancy and lactation, intravascular hemolysis with hemoglobinuria , or a combination of these factors (*Beutler et al., 2001*).

In iron deficiency anemia not only tissue delivery of oxygen is compromised, but proliferation, growth, differentiation, myelogenesis, immunofunction, energy metabolism, absorption and biotransformation are compromised leading to abnormal growth and behaviour, mental retardation, reduced cardiac performance and work efficiency (**Ghosh, 2006**).

Among the common clinical features in iron deficiency anemia are weakness, palpitation, fatigue, pallor, koilonychia, pica, glossitis, angular stomatitis and esophageal webs. Histological changes were also observed in various organs, the most important of which is atrophy of lingual papillae (**Lee et al., 1999; Ledingham and Warrell, 2000; Kushner and Shanta, 2005**).

The sense of taste plays a major role in determining the flavor of foods and serves to protect the organism from ingesting harmful substances. Human taste buds contain thousands of chemoreceptors which are designed to perceive sweet, salty, bitter, sour and umami taste signals (**Hebhardt et al., 1999; Herliby and Maebius, 2003**).

Considering the major role of iron in cellular functions and the effects that iron deficiency anemia has on tissue epithelium, the present study was thus designed to explore the effect of iron deficiency anemia on taste perception.

REVIEW
OF
LITERATURE

REVIEW OF LITERATURE

Anemia

The main function of red blood cells is oxygen transport. Hence a functional definition of anemia is a state in which the circulating red cell mass is insufficient to meet the oxygen requirements of the tissues. This leads to tissue hypoxia, the consequence of a low-oxygen carrying capacity of the blood (*Beutler et al., 2001*).

Various classifications have been advocated for anemia (*Beutler et al., 2001; Warrell et al., 2003*).

Beutler et al. (2001) presented pathophysiologic and morphologic classifications for anemia which were based on the determination of red cell mass. Thus, differentiation was done between relative and absolute anemia.

Relative anemia was described to be characterized by a normal total red cell mass. Such conditions are usually not thought of as hematologic disorders but rather as disturbances in the regulation of the plasma volume such as macro globulinemia, pregnancy, athletes and post flight astronauts (*Weatherall et al., 1996*).