# LEVELS OF LITHIUM IN SERUM AND IN SCALP HAIR OF CRIMINALS AND PERSONS WITH VIOLENT BEHAVIOUR

#### THESIS

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## TO:...

To every one taught me a letter...
To my parents ..



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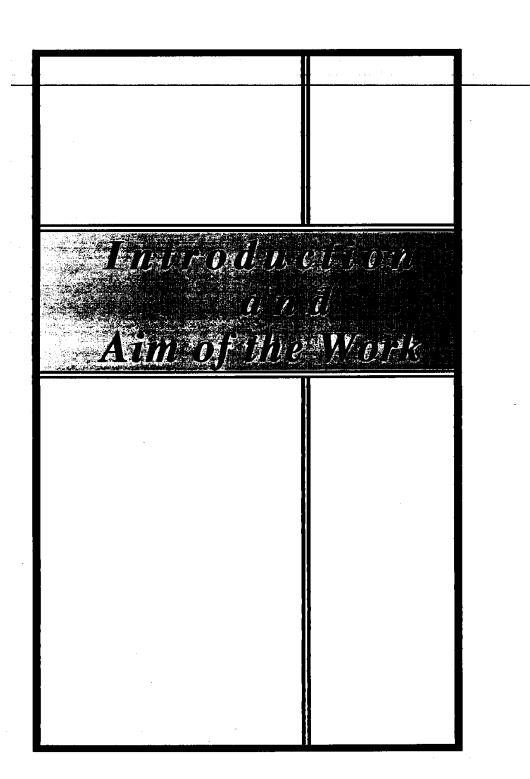
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#### INTRODUCTION AND AIM OF WORK

Lithium is a trace element and is metabolically active in many tissues especially those of the neuroendocrine system (Smith, 1988).

Lithium deficiency may cause varieties of clinical illness. Lithium has been found to be low in dental caries (Schamshula et al., 1978) and in mental retardation (Bruhle et al., 1987).

Hair lithium levels are also low in certain pathological conditions like heart disease, in learning disabled subjects and in incarcerated violent criminals (Schrauzer, et al., 1992).

In the opposite side Autistic population has significantly higher levels of lithium in hair compared to matched control of the same sex and age (Wecher, et al., 1985).

The aims of this thesis are:

- 1-Determination of serum lithium and lithium store in scalp hair of Egyptian criminals and those with violent behaviour.
- 2-Correlation between lithium in serum and hair in criminals with the violent behaviour.