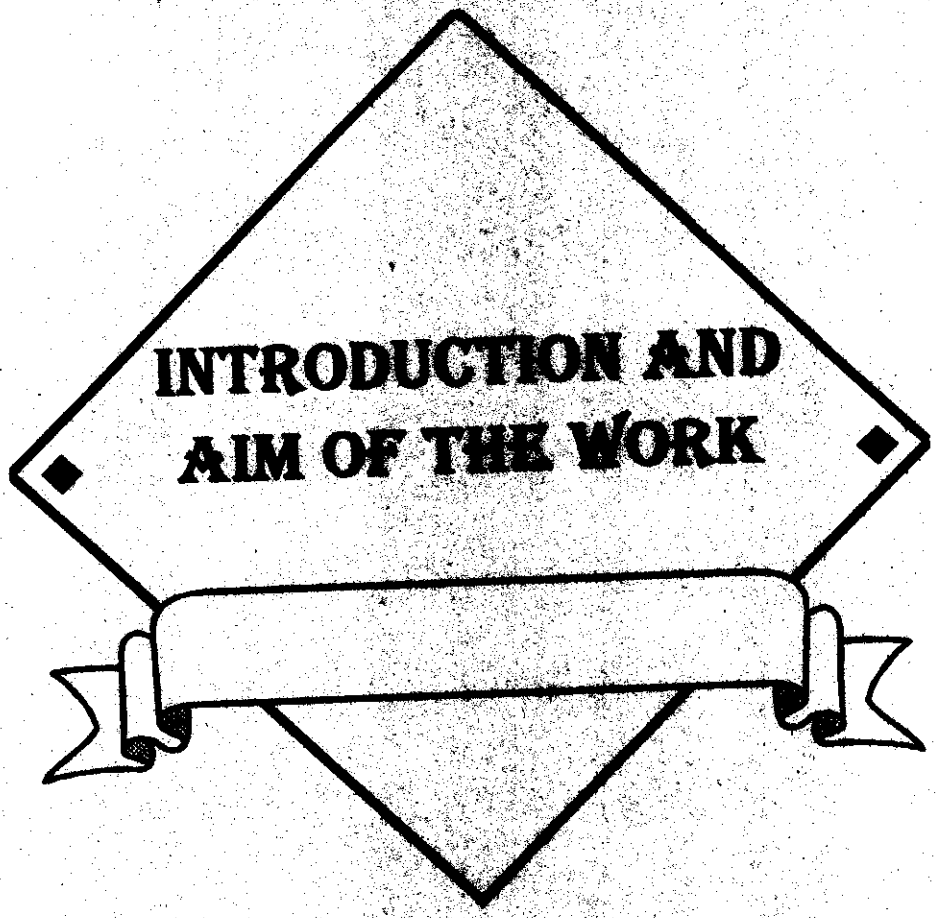
INTRODUCTION AND
AIM OF THE WORK

INTRODUCTION

Some lactating women report difficulty nursing their infants following exercise. These mothers note that their infants refuse to nurse or fuss during the post exercise feeding. In a survey of lactating women who exercise at a moderate intensity 7% reported that their infants "often" had difficulty nursing following maternal exercise ***(Brown and Wallace, 1990).***

It was postulated that there may be some byproduct of exercise that may affect the milk. In pervious studies it was found a significant increase in lactic acid concentration in breast milk following maximal exercise ***(Wallace and Rabin, 1991).***

Lactic acid produces a sour taste that may be detected by the infant ***Guyton (1981). Steiner (1977)*** documented a gustofacial response (puckering facial expression) to sour taste in infants as early as a few hours after birth it is described as a low level reflex not involving cortical structures.

Engen (1977) demonstrated a more rapid rate of suckling to a sweet taste than to a bitter taste.

Jonson and Salisbury (1977) observed changes in heart rate, respiratory rate and suckling pattern when infants were presented with unfamiliar milk.

Infants sense sweet and sour tastes. Taste buds, found to be at the biggest number in the 5 to 7 months old fetus and reach adult morphology at 13 to 15 weeks in utero and are complete before birth *(Farbman, 1971)*.

AIM OF THE WORK

The aim of this study is to compare infant acceptance of pre-exercise and post - exercise breast milk and to correlate the infant response to the concentration of lactic acid in the milk.