**AKANIMO EMEM**

**18/MHS02/026**

**NURSING SCIENCE**

**200L**

**PHS 212**

**Elucidate the physiological adaptations of the female to pregnancy.**

**\*Maternal physiological changes in pregnancy**

Are the adaptations during pregnancy that a woman's body undergoes to accomodate the growing embryo or fetus.these physiologic changes are entirely normal , and include behavioral (brain) , cardivascular(heart and blood vessle),haematologic(blood), mtabolic,renal(kidney), posture, and respiratory(breathing) changes. Increase in blood sugar , breathing ad cardiac output are all expected changes that allow a pregnant woma's body to facilitate the perfect growth and development of the embryo or fetus during the pregnancy . the pregnant woman and the placenta also produce many other hormones that have a broad range of effects duing the pregnancy . Thes physiological changes are;

* **HORMONAL**

pregnant women experience numerious adjustments in their endocrine system that help support the developing fetus.

* **BREAST SIZE**

A woman's breasts grow during pregnancy usually 1 to 2 cup sizes and potentially several cup sizes.

* **CARDIVASCULAR**

The heart adapts to the increased cardiac demand that occurs during pregnancy in many ways; cardiac output, stroke volume, heart rate. These adaptation can lead to palpitations, decreased exercise tolerance, and dizziness.

* **HEMATOLOGY**

During pregnancy the plasma volume increases by 40-50% and the red blood cell volume incrases only by 20-30% .

* **METABOLISM**

During pregnancy , both protein metabolism and carbohydrate metabolism are affected one kilogram of extra protein is deposited , with half going to the fetus and placenta, and proteins, breast glandular tissue, plasma protein,and haemoglobin.

An increased requirement for nutrient is given by fetal growth and fat deposition . Changes are caused by steriod hormones , lactogen , and cortisol.

There ould be an increase in weight during pregnacy and are encouraged to take prenatal vitamins to compensate for the increased nutritional requirements.

* **IMMUNE TOLERANCE**

The fetus inside the pregnant woman may be viewed as an unusually succesful allograft, since it genetically difers from the woman. in the same way many cases of spontaneous abortion may be described in the same way as maternal transplant rejection.