

# Perception of Body Image During Pregnancy and Postpartum

Prathibha N J

Department of OBG Nursing, Kempegowda Institute of Nursing, Bangalore, Karnataka, India

DOI: <https://doi.org/10.52403/ijshr.20230253>

## ABSTRACT

Physiological changes during pregnancy occurs in all the systems of the body. All these changes will revert back to prepregnant state but not exactly. Breastfeeding is not only essential to the newborn but also useful to the mother. Through breastfeeding, mother and child bonding improves and helps to reduce the weight during postpartum. Eating behaviours and lifestyle modifications may be useful to reduce body weight with positive perception about body image. In this study, discussed about abdominal changes, breast enlargement, stretching effect of muscles, skin hyper pigmentation and also some of the home remedies to reduce hyper pigmentation, abdominal stretch marks.

**Keywords:** body image, pregnancy, breastfeeding, body changes.

## INTRODUCTION

Pregnancy is a happiest and joyful time during which mothers and family members are preparing for new arrival. But pregnancy is also the time of changes, both physically and emotionally. Pregnancy is associated with many changes in women's body. Body image is particular concern during pregnancy.

Body image is defined as the mind's picture of the personal body and accompanying thoughts, feelings and perceptions. Other

definitions of body image including, body esteem i.e. positive or negative feelings about one's body. Body satisfaction i.e. satisfaction with an aspect of one's body and body distortion i.e. size estimation accuracy. Pre occupation with body image is common during adolescence and young adulthood later it is declining.

### Body changes during pregnancy

#### Reproductive system:

The changes in the reproductive system are a temporary adaptation to meet the needs and demands of the fetus. The uterus turns to globular shape which helps to accommodate the growing fetus. The uterus reaches the level of the xiphisternum by 38 weeks.

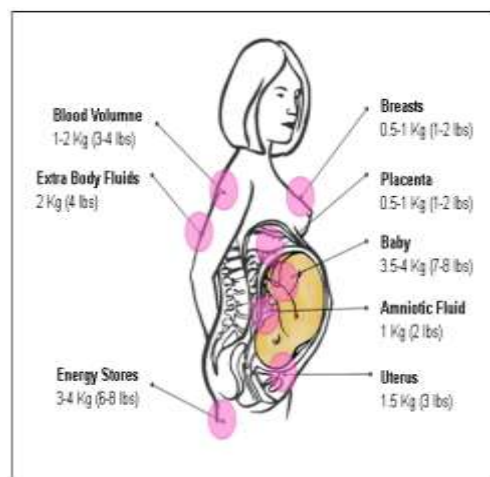
#### Cardiovascular system:

The enlargement of the uterus pushes the diaphragm and heart upwards and outwards with slight rotation to left. During pregnancy heart rate and stroke volume increases. Blood volume is markedly increases during pregnancy. Vascularity increases to the uterus, kidneys, breasts and skin during pregnancy.

#### Respiratory system:

The shape of the chest changes and chest circumference increases in pregnancy by 6cm. As the uterus enlarges diaphragm is

pushed upward as much as 4cm and the ribcage is displaced upwards.



**Weight gain (related to fetus):** 6 kgs (Fetus - 3.3 kg, placenta - 500grams and liquor - 0.8 kg)

### Gastrointestinal system:

In the mouth, the gums become oedematous, soft and spongy which can bleed when mildly traumatized as with a tooth brush because of increased vascularity. Increased salivation is a common complaint in pregnancy. Muscle tone and motility of the gastrointestinal system diminishes due to increased level of progesterone. Cardiac sphincter is relaxed and regurgitation is common in pregnancy.

**Changes in metabolism:** There is increased food intake during pregnancy (2500 kcal) which leads to gastrointestinal changes such as alteration in metabolism of carbohydrate, protein, fat. Basal metabolic rate increased around 30 percent when compared with non pregnancy state.

**Maternal weight changes:** weight increases in pregnancy is considered to be a favorable indicator for maternal adaptation and fetal growth. The expected weight gain during pregnancy: 4kg in first 20weeks and 8.5kg in second 20weeks.12.5kg approximate total.

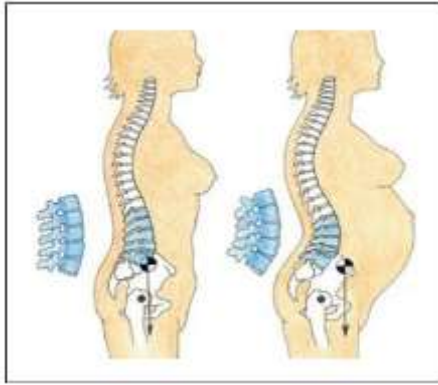
**Maternal weight gain:** Increase in blood volume is around 1.3 kg and increase in extracellular fluid is 1.2 kg. Accumulation of fat and protein in abdomen, thighs and breasts is 4kgs.

### Importance of weight checking during pregnancy:

Rapid weight gain: more than 2 kg per month indicates pregnancy complications like pre eclampsia, eclampsia, polyhydramnios, multiple pregnancy etc. Stationary or falling weight: may indicate intrauterine death or intra uterine growth restriction.

### Skeletal changes:

Posture of the pregnant mother alters to compensate for the enlarged uterus anteriorly. The woman leans backwards exaggerating the normal lumbar curve and causing a progressive lordosis which shifts her centre of gravity back over her legs which leads for back pain, shoulder pain, unsteadiness of gait and tendency to fall.



**Skin changes:**

The increased activity of melanin stimulating hormone from the pituitary causes varying degrees of pigmentation in pregnant women from the end of second month until term. On the breasts darkening of the nipple, primary areola and secondary areola are seen. In face, the irregular dark pigmentation on forehead, nose and cheeks known as pregnancy mask or cholasma usually it appears in 50-70% of woman.



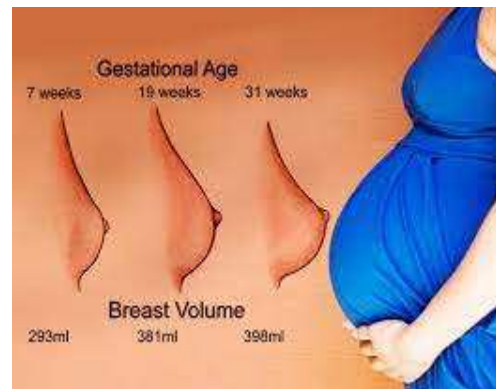
In most of the women, a linear dark skin pigmentation appears in the midline of the abdomen from the symphysis pubis to the xiphisternum called as linea nigra.

As abdominal size increases, stretching occurs in the collagen layer of the skin, breasts, abdomen, thighs and buttocks. These stretch marks on the abdomen are known as striae gravidarum. Massaging the skin by lubricants like olive oil, neem oil may be helpful in reducing the stretch marks.



**Breast changes:**

The breast increase in size and bluish discoloration under the skin appears in the form of streaks. Montgomery's tubercles present in the primary areola and secondary areola. After first trimester, a little clear, sticky fluid may be expressed from the nipples, which later becomes yellowish in colour is known as colostrum.



**Endocrine system:** Estrogen and progesterone levels are increasing during

pregnancy and these are responsible for breast changes, skin pigmentation and uterus enlargement.

**Thyroid function:** In pregnancy, thyroid gland enlarges by 13% due to hyperplasia of glandular tissue and increased vascularity.

Thyroid Function Test	Non-Pregnant	1 <sup>st</sup> Trimester	2 <sup>nd</sup> Trimester	3 <sup>rd</sup> Trimester
FT4 pmol/l	9-26	10-16	9-15.5	8-14.5
FT3 pmol/l	2.6-5.7	3-7	3-5.5	2.5-5.5
TSH mu/l	0.3-4.2	0-5.5	0.5-3.5	0.5-4

**Nervous system:** The nervous system is in a more excitable condition in pregnant women. Mood changes and symptoms of psychosis are common in those with a family history. Guidelines to be followed for improving Body Image during pregnancy

**Focus on baby.** Remember that body is changing to help your baby growth and that is the most important thing. Take balanced diet about 2500 kcal per day. That nourishes your child.

**Take support.** Tell to partner, friends, or family members if you are feeling down about yourself. They can give you the psychological boost.

**Exercise.** Try to do some enjoyable exercise. A light walk may help you clear your mind and get the focus off your body.



**Practice yoga.** Yoga will help to develop a connection between your body and mind.  
**Practice self massaging.** Self massage helps to familiar with body, which is the first step

to accepting it. Educate yourself. Read about pregnancy to feel more comfortable.

### Importance of breast milk

Breast milk is the natural food for babies. It provides energy and all the nutrients that the infant needs for the first six months of life. Qualities of breastfeeding such as higher IQ levels in breastfed babies, lower risk of obesity in adulthood, immune system boosting, and better recovery time after birth.



In relation to breastfeeding, body image disturbance may influence a woman's initial decision to breastfeed, as well as possibly promote discomfort within the breastfeeding relationship, causing early cessation and may opt for bottle-feeding.

### To enable mothers, exclusive breastfeeding for 6 months established by WHO and UNICEF

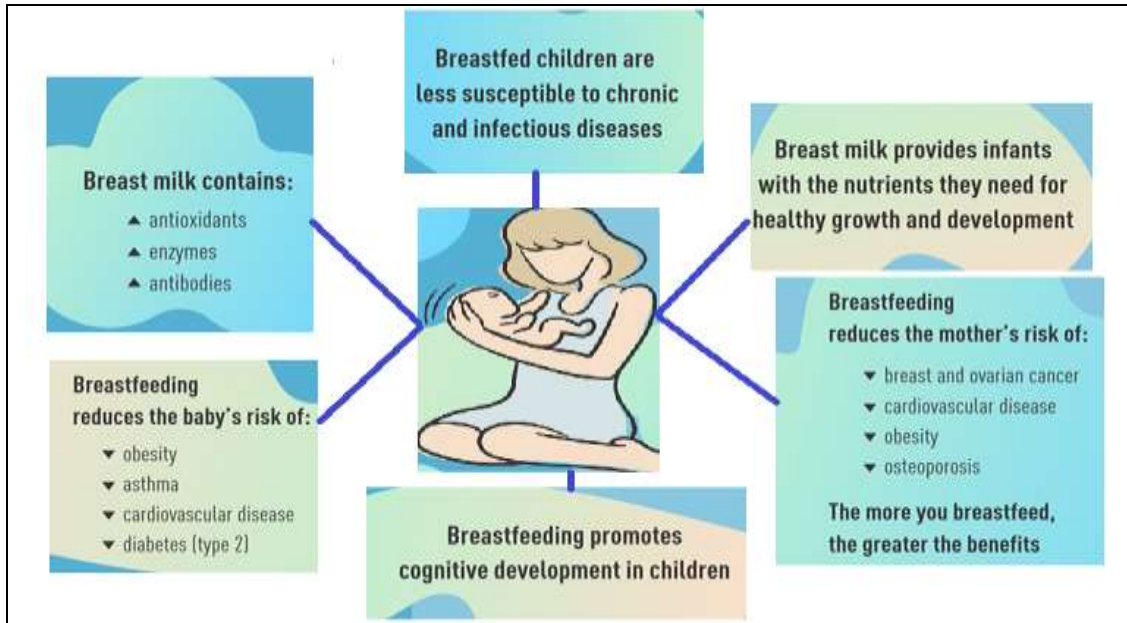
The recommendations are: Initiate breastfeeding to newborn within one hour after birth.

**Exclusive breastfeeding** is the infant feeding only breast milk without giving any additional food or drink.

**Breastfeeding on demand** is as often as the child wants, day and night, without using bottles, teats or pacifiers

### **Breastfeeding Benefits: For Mother**

WHO recommends exclusive breastfeeding for the first six months, with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond. WHO says, the more you breastfeed the greater the benefits you have.



1. Breastfeeding saves time. Feed the baby without any preparation.
2. Breastfeeding is convenient and easy. Feed the baby without any special equipment or supplies.
3. Long term breastfeeding helps to protect against breast cancer and ovarian cancer
4. Breastfeeding is the natural process and it is good for the environment as well as the baby.
5. Breast-milk is readily available and costs nothing.
6. Breastfeeding allows the mother to get rest and helps to establish healthy mother child relationship.
7. Breastfeeding helps mothers to lose weight which has gained during pregnancy
8. Breastfeeding acting as a natural contraceptive.
9. Breast feeding helps in involution of uterus.

10. Breastfeeding gives more opportunities in nurturing baby.

### **Breastfeeding Benefits: For Baby**

Breast-milk contains antioxidants, enzymes and antibodies which helps to prevent neonatal infections. Breast-milk helps to reduce sudden infant death syndrome.

1. Breast milk has no danger of allergies, eczema and asthma, It lessen their severity and also helps to prevent them.
2. Breastfeeding protects infant from infection and deficiency states. Breast milk contains macrophages helps to engulf and destroy harmful bacteria.
3. Breast milk is easier to digest so it prevents stomach discomfort, constipation and diarrhea in infants.
4. Breastfeeding gives warmth and closeness that helps the baby to develop a sense of comfort and trust.



1. Breastfeeding reduces the incidence of scurvy and rickets in children.
2. Breast milk is available at body temperature and in the right quantity so, there is no possibility of overfeeding through breastfeeding.
3. Breast milk contains minerals and vitamins.
4. Breast fed babies will be having less chance of overweight.
5. Breastfeeding helps to bulid mother and child bonding.
6. Breast milk is perfect in its composition.

#### The factors which cause sagging of breasts:



- Ageing process
- history of (>50 lbs) weight loss
- higher body mass index
- number of pregnancies

- history of smoking

#### Non contributing factors for sagging of breasts:

- breastfeeding
- lack of upper body exercises

#### Guidelines to be followed for improving body image after childbirth:

During postnatal period the stretch marks are found on the abdomen below the umbilicus, over the thighs and breasts. After delivery the stretch marks become glistening white in appearance. Massaging with olive oil, neem oil may be helpful in reducing the stretch marks.

Application of turmeric and neem leaves paste before bath will help to reduce the stretch marks over the abdomen. Nursing bras for lactating mothers helps to reduce the sagging of breast. Tying of compressive abdominal binders helps in reducing the tummy size. Increased intake of protein and calcium during lactation, improves breast milk production.

Breastfeeding decreases the incidence of breast engorgement and increases milk supply. To relieve the discomfort of breast fullness, take warm showers. Eating healthy food and exercising is very essential during postpartum period. Exercise will help to

get pre-pregnancy body back, and increase

sense of well being.



Breastfeeding help to reduce pregnancy weight and helps strengthens the mother and child bonding. Practicing Yoga will help to develop a connection between body and mind.



Postnatal exercises help to improve the muscle tone which stretched during pregnancy. Postnatal exercises strengthen the abdominal and pelvic muscles.

## CONCLUSION

There are many ways in which body image, weight gain, and mental health are interconnected, along with this there is increasing body weight in pregnancy and postnatal weight retention causing postpartum depression. Postpartum depression is common in mothers with unrealistic expectations of body changes during pregnancy and postpartum. So it is important to educate the women about the course of postpartum weight loss and body changes. Find the ways to enhance mother's body image and self esteem after delivery.

## Declaration by Authors

**Acknowledgement:** None

**Source of Funding:** None

**Conflict of Interest:** The authors declare no conflict of interest.

## REFERENCES

1. Body image during pregnancy. March 2007. Available from: <http://www.americanpregnancy.org/pregnancyhealth/bodyimage.html>
2. Diane M.Margaret A, Fraser, Copper. Myles textbook for midwives, 14<sup>th</sup> ed. Churchill Livingstone:2003. P.185-209
3. Battersby S. Understanding the social and cultural influences on breast-feeding today. J Fam Health Care. 2010;20(4):128-31. PMID: 21053661.
4. Body image during pregnancy. 2009.available from: <http://www.pregnancy-info.net/pregnancy-rash-stretch-marks.html>.
5. Changing body image during pregnancy. Available from: <http://www.womenshealthcaretopics.com/about-us.html>.
6. Bobak, Lowdermilk, Jenson. Text book of Maternity Nursing, 5<sup>th</sup> ed. Mosby\ publications, Missouri. P.99-106.
7. Dutta DC, Text book of obstetrics, 5<sup>th</sup> edition, New central book agency(P)Ltd: Calcutta;2001.P. 46-57.

How to cite this article: Prathibha NJ. Perception of body image during pregnancy and postpartum. *International Journal of Science & Healthcare Research*. 2023; 8(2): 423-429. DOI: <https://doi.org/10.52403/ijshr.20230253>

\*\*\*\*\*