



## An Internship Report On

**Studies on the changes dietary intake and body weight lactating women: prospective study  
in Dhaka diabetes hospital.**

### Submitted to

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## LETTER OF TRANSMITTAL

20th December 2018

Prof. Dr. Bellal Hossain

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Subject: **Submission of project report**

Dear sir,

I would like to take this opportunity to thank you for the guidance and support you have provided me during the course of this report. without your help this report would have been impossible to complete. Daffodil International University has many more respective person, for providing meal most supervision during my thesis in the organization.

to prepare the report I collected what I believe to be most relevant information to make my report as analytical and reliable as possible. I have concentrated my best effort to achieve the objective of the report and hope that my endeavor will serve the purpose. The practical knowledge and experience gathered during report preparation immeasurably help in my future professional life. I request you to excuse me for any mistake that may occur in that report despite of my best effort.

I would really appreciate it you enlighten me with your thoughts and views regarding the report. also if you wish to inquire about an aspect of my report, I would gladly answer your queries. Thank you again for your support patience.

Sincerely yours,

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## Abstract

Postnatal weight retention is a risk factor for the development of midlife obesity. Since dietary intake and breastfeeding practice could be promoters of weight loss during postpartum, the objective of this study was to investigate their influence on weight retention during six months postpartum. The study sample consisted of 83 lactating women who were examined at three measurement waves: at 1 month  $\pm$ 1 week, 3 months  $\pm$ 1 week and 6 months  $\pm$ 1 week postpartum. At each measurement wave, two consecutive 24-hour dietary recalls were collected, and body weight measurements were made. They had a daily energy intake lower by about 25% than recommended.

Although continuously decreased energy and macronutrient intake, they had energy intake higher by 205 kcal ( $p=0.048$ ) and 370 kcal ( $p<0.001$ ) after one and three months, respectively. At six months postpartum they had a higher intake of fat ( $p=0.036$ ) but a lower intake of protein ( $p=0.009$ ). After six months, those women retained 101.9% of pre-pregnancy weight. Multiple regression analysis showed that weight retention was predicted by: type of feeding ( $b=-0.281$ ;  $p<0.001$ ), and time since parturition ( $b=-0.151$ ;  $p<0.001$ ), while gestational weight gain ( $b=0.491$ ;  $p<0.001$ ), energy intake ( $b=0.157$ ;  $p<0.001$ ) and energy derived from fat ( $b=0.122$ ;  $p=0.035$ ) were positive predictors. We concluded that the dietary intake of these women and breastfeeding practice over six months significantly influence their weight loss.

## Introduction

Heaviness is a rising problem on a global scale with populations both in developing and developed countries being at risk. Additional weight and heaviness are also one of the public health issues in Bangladesh. The childbirth and the postnatal 1 years are an important life stage for women that may result in large weight gain leading to the development of obesity.

In the light of early avoidance of obesity, special concern should be taken in analysis women in the period after parturition since they are a very susceptible population, since the changes in breakdown and in lifestyle which have occurred. About weight change during postnatal, it was shown that pre-pregnancy BMI, gestational weight gain and diet could be considered as being one of its major elements. Weight gain before, during and after pregnancy not only affects the pregnancy but may also be a primary provider to the future development of obesity in women during midlife and beyond. Women are often told that breastfeeding will help them lose weight, but they may have concerns about diet and major weight loss and its effect either on their breast milk quality or supply or on the growth of their babies.

Although there are a limited and incompatible indications about whether women who breast feed their infant lose more weight than women who do not. From an evolutionary point of view, It seems that the adipose tissue statement during pregnancy would serve during breastfeeding as a nutritive reserve to ensure an acceptable energy supply for the fresh. Furthermore, proper dietary intake during postnatal is strongly determine the health status of mother and infant. Studies conducted on lactating women have shown that a mother's nutrition has a greater impact on her long term health than on the quality and quantity of her milk. However, the measure of consumed nutrients allocated for milk biosynthesis may depend on promotion nutrient stores. These stores may be prepared to contribute to the nutrient availability for milk bio synthesis, and it is likely that the extent of nutrient mobilization is injured by dietary intake.

The importance of various factors which could affect prenatal weight change and the purposes of this work were to explore how weight retaining of women was affected by:

- 1) Type of feeding
- 2) Time since parturition
- 3) Gestational weight gain
- ) Total energy intake and
- 5) Energy intake derived from fat.

## Subjects and methods

In this forthcoming study, we joined and observed postpartum lactating women in Dhaka Diabetes hospital for six months. Data assembly six months, from June 2018 to November 2018. A total of 100 women were recruited on the basis of the following criteria: women who gave birth to healthy, full term infants with a birth weight >2500 g, with time forgotten since parturition of one month ( $\pm 1$  week). Women pain from any metabolic sicknesses, with problem in pregnancy, those which gave birth by Caesarean section and those which had history of early pregnancy loss were excepted. Women were helpers engaged in pediatric clinics via word of mouth, with the help of their health workers, as part of a larger study of changes in dietary intake and in the fatty acids structure of human milk. The favorite level of accuracy for the rates of women which will be included at one month postnatal was set at  $\pm 4\%$ . The vital sample size was designed using the equation  $n = \pi(1 - \pi) z^2 / D^2$ . In this equation,  $n$  = required sample size;  $\pi$  = likely populace proportion;  $z = 1.96$  ( $z$  =  $z$ -value associated with the desired sureness level of 95%);  $D$  = desired level of precision  $\pm 0.04$ . The sample consisted of 83 lactating women who were observed for six months postpartum. All women signed well-versed consent after being carefully informed of the purpose, requirements and procedure of the study.

## Study design and data collection

All women were studied at three times, referred to as three measurement waves: 1 month  $\pm 1$  week, 3 months  $\pm 1$  week and 6 months  $\pm 1$  weeks postpartum. The study sample included women for whom we had three waves of data for all the variables measured. At each visit, women were asked about their lactating status and were classified according to the WHO classification as full breast-feeding, mixed-feeding and formula feeding. Full breast-feeding and mixed-feeding were considering lactating, while formula-feeding women were classified as non-lactating. In each wave, a trained researcher collected data on dietary intake and took weight measurements with their own scale in the mothers' households. Additionally, during the first visit, women were asked to fill out the part of the questionnaire concerning their demographic and socioeconomic data, and also to provide some pregnancy-related data.

## Dietary evaluation

Dietary evaluation was based on two following 24 hour recalls (including one day of the weekend) from each woman for every quantity wave. With the aim of obtaining reliable data, the researcher conducted a multi-pass protocol for 24 hour recall. In this protocol first, respondents provides a list of all foods eaten on the previous day using any recall strategy they desired (i.e. not necessarily in chronological order). The assessor then obtains a more detailed list by probing for additions to these foods and by giving respondents an opening to recall food items initially omitted from the list. Finally, the interviewer reviews the occasions to be added if appropriate. Types and quantities of disbursed foods were entered into a computer program. Estimated energy requirements were calculated for each participant using the Dietary Reference Intake (DRI) equation for women and adding 330 kcal for fully breast-feeding and 165 kcal for mixed-



feeding. The requirement for protein was calculated for each participant using 1.05 g/kg/day for lactating women.

## Important foods for lactating mother:

Breastfeeding provides vital nutrients and vitamins to your baby. However, many mothers are muddled about what they should be eating in order to provide the safest, strongest breast milk. A mother's diet can affect her breastfeeding baby, making a healthy diet with satisfactory calories and plenty of fluids judgmentally important for lactating women.

## Balanced Diet:

In general, the ideal diet of a breastfeeding woman is not that dissimilar from a healthy diet at any stage of life. International recommends a balanced diet that includes fresh vegetables and fruits, whole grains, protein foods and small numbers of fat. These foods should be as usual as possible-- whole foods with few extracts or chemicals. the vast popular of lactating women do not follow a perfect diet at all times. Breastfeeding is still safe and healthy even when the mother's diet is less than ideal.

## Extra Calorie Needs:

While lactating, women do need more calories than they formerly would. Though actual calorie supplies depend upon body fat proportions and activity levels, in general, breastfeeding mothers are indorsed to increase indulging by almost 500 calories daily. However, this does not give women the green light to eat fast food and ice cream-- mothers should be aware to embrace these added calories complete nutrient-rich foods.

## Impact on Baby:

Just about all a breastfeeding mother eats is passed along to her child. Breast milk is equally loyal in terms of vital nutrients, but children may react otherwise to several foods the mother consumes. Dairy products and peanut butter may make some children vaporous; others may become ornate when their mother eats spicy foods. If you notice such changes in your child, look over your diet from the past 24 hours, and reflect confiscating or obstructive the answerable foods while breastfeeding.

## Drink up:

A breastfeeding mother should drink at least enough to satisfy her thirst, a minimum 13 cups per day. Water is the best choice for hydration, though milk and juice are also options. Because they could maybe impact the baby, it may be best to limit caffeinated drinks and provoked drinks while breastfeeding. Moreover, alcohol serving may slow production of breast milk.



## Objective of Dietary:

1. To acquire skill of calorie calculation for adults, pregnancy/GDM ,children, Location.
2. To understand role of dietary modification in diabetes management.
- 3 .To acquire skill of meal planning
- 4.Identity the goal of the dietary and lifestyle management
- 5.Conceptualize the Medical Nutrition Therapy(MNT)

## Goal of dietary modification:

1. Eat a balance meal
2. Take meals regularly
3. Attain & maintain desirable body weight
- 4 . Maintain blood glucose, lipid profile in the normal range.
- 5 .Maintain blood pressure in target level
6. Produce adequate energy to ensure normal growth and development for children.
7. Change eating habits that will reduce insulin resistance in type 2DM
8. Provide nutritional support for older patients

9. Prevent hypoglycemia in individual treated with antidiabetic
10. Prevent and treat chronic complications of diabetes

**Management of dietary:**

1. Achieve normoglycemia
2. Provide adequate weight gain
3. Prevent ketosis
4. Contribute to fetal wellbeing



Target Glucose levels for Normoglycemia

Fasting and 2hrs after meal is recommended

Timing	mmol/l
fasting	<5.3
2hrs after meal	<7.0
To avoid hypoglycemia (i.e. blood glucose should not be <4.0mmol/l)	

Dietary management for lactation:

- 1 .Add an additional 200-400 kcal recommend up to 6mn of lactation
2. Water:>3 liters/day. Fluid as much as can
- 3 .Food should be balanced in all require macro & micronutrient
4. Dedect 200 kcal/day for every 6mn (up to 2years of baby age)
5. After that require caloric for the basis of BMI
6. Encourage early initiation &ex.BF up to 6mn of baby
7. Advise achieve the normal weight end of lactation.



## Anthropometric measurements

Measurements of body weight (kg) were taken using Body Composition Monitor Omron BF500 (Omron, Medizintechnik, Mannheim, Germany), according to the procedure described by Bosy-Westphal and co-workers.

Women's height was self-reported at each visit. Body mass index (BMI) was calculated as  $\text{weight}/\text{height}^2$ . Postpartum weight retention was derived by subtracting the pre-pregnancy weight from the measured postpartum weight at each measurement wave. Data on gestational weight gain and pre-pregnancy body weight were taken from the pregnancy card at first visit. For each woman, the recommended weight gain according to the Recommendations of the Institute

of Medicine (IOM) was calculated, and women were categorized as having »inadequate « gestational weight gain if they gained less than the IOM recommendations, »appropriate« gestational weight gain if they gained within the IOM recommendations, and »excessive« gestational weight gain if they gained more than the IOM recommendations.

## Statistical analysis

To survey the dissimilarities within lactating group over postpartum time (time dimension), one-way analysis of alteration (ANOVA) was shown followed by *post hoc* Schaffer test. We fitted a multivariate longitudinal linear lapse model to assess vital analysts of postnatal weight retaining. Eligible variables for incoming the model were: type of feeding, time since parturition, gestational weight gain, average energy intake, and average energy from fat, protein and carbohydrate. For statistical analysis we used the software Statistical8.1 (Stat Soft., Inc. Tulsa, OK, USA). Testing for variables was reported to be statistically significant by using  $p < 0.05$ .

## Results

### Participant characteristics:

Physical features and some pregnancy-related appearances of the study sample are short in Table 1. There were no statistically significant variances in the expressions of women from the two groups included in this study. The fact that for the popular of members this was their first child, could clarify the greater interest they showed in taking part in this kind of research (Table 1). According to the pre-pregnancy BMI, the majority of contributors were of normal weight (70%), while 20% were overweight and 10% were obese.

**TABLE 1**

#### PHYSICAL AND PREGNANCY-RELATED CHARACTERISTICS OF STUDY PARTICIPANTS

	participants(N=83)	p*
Age (years)	31.82±4.60	0.074
Height (cm)	31.82±4.60	0.582
Education (years)	13.54±2.10	0.060
Number of livebirths	1.49±0.72	0.796
Gestational weight gain (kg)	16.17±5.34	0.406
Pre-pregnant body weight (kg)	65.20±11.28	0.173
Pre-pregnant BMI (kg/m <sup>2</sup> )	22.97±3 .58	0.097

\*t-test

## Dietary intake

During six months postnatal, those women incessantly reduced their overall liveliness intake, and their total daily energy intake was lower by about 25% in assessment with approvals. Over the study period, the women reduced the share of protein in their total vitality intake, so after six months postnatal their protein intake was pointedly lower. On the other hand, they always increased the portion of fat intake which was higher after three months and after six months.

## Postpartum weight changes

Table 2 shows changes in anthropometric limits among the women during the follow up and important weight loss arose in the period of three to six months per ( $p=0.047$ ). When weight damage was supervised with the factor of weight holding, which presents the difference between weight stately at certain amount waves and pre-pregnancy weight, it could be seen that at three months postnatal, lactating women retained normal . Conversely,at six months postpartum ,lactating women retained 1.33 kg compared with their pre-pregnancy weight, which is provocatively lower in assessment with 4.10 kg. A major meeting to pre-pregnancy weight in the group of lactating women occurred in the period of three to six months after parturition ( $p=0.001$ ). When weight retaining was spoken as a percentage of pre-pregnancy weight, it was substantial that after six months lactating women retained  $101.95\pm 8.21\%$  of their pre-pregnancy weight.

During six months after parturition, the proportion of weight retention connected with pre-pregnancy weight for lactating women was in the range of 80.81–130.73%. The relationship between weight retention at postnatal and daily energy intake resolute with two24-hour eating recalls is presented in Figure 1. When weight retaining was detailed in relation to the proportion of calmness of daily energy needs (% DRI), it could be seen that in both groups of regular energy intake, after six months postnatal those women who breastfed their babiesretained meaningfully less weight.

**TABLE 2**

ANTHROPOMETRIC PARAMETERS AND WEIGHT RETENTION (MEAN $\pm$ SD) OF LACTATING WOMEN DURING SIX MONTHS POSTPARTUM

Para meter	Time since parturition			p-value in time dimension'a			p-value in group dimension'b		
	1 month	3 months	6 months	1 month vs. 3 months	1 month vs. 6 months	3 month Vs 6 month	1 month	3 months	6 Months
Bod	72.12 $\pm$ 12.	71.68 $\pm$ 1	66.54 $\pm$ 1	0.978	0.028	0.047	0.240	0.485	0.047

y wei ght (kg) Lact atin g (N= 83)	56	3.35	4.08							
BMI (kg/ m <sup>2</sup> ) La ct ati ng (N =8 3)	25.39±3.9 5	25.23±4 .24	23.43±4 .52	0.983	0.025	0.013	0.250	0.048	0.040	
Wei ght rete ntio n (kg) La ct ati ng (N =8 3)	6.91±4.8 5	6.48±5 .05	1.33±5 .45	0.324	<0.001	0.001	0.721	0.001	0.001	
Per cen tag e of pre- pre gna ncy wei ght (%) La ct ati ng	110.79± 7.39	109.92 ±7.47	101.95 ±8.21	0.324	<0.001	<0.001	0.721	0.009	0.014	

## Regression analysis

In order to attain vision into the level to which specific factors funded to weight retaining during postpartum, we directed multiple lapse examination, the results of which are presented in Table 3. Based on our earlier presented comments, in this multivariate relapse analysis, we have chosen the following independent variables: type of feeding, time since parturition, gestational weight gain, average energy intake, and energy intake introducing from macronutrients. The multiple relapse analysis established that gestational weight gain could be careful the firm estanalyst of weight retention ( $b=0.491$ ;  $p<0.001$ ). Additionally, the type of feeding knowingly funded to weight retention since lactating women in conclusion with non-lactating accompaniments expressively retained less weight ( $b=-0.281$ ;  $p<0.001$ ). Those women who breastfeed longer taken expressively less weight ( $b=-0.151$ ;  $p<0.001$ ). Average daily energy intake and energy derived from fat were also traditional as statistically substantial analysts of weight retention. The contributions of the intakes of the other two macronutrients (carbohydrate and protein) were statistically unimportant. All independent factors included in many decline analysis clarified 26.23% ( $p<0.05$ ) of the changeability in weight retention during six months postpartum.

**Table 3**

**FACTORS AFFECTING WEIGHT RETENTION IN WOMEN DURING SIX MONTHS POSTPARTUM**

Variable	Regression coefficient	SE	P
Type of feeding*	-0.281	0.040	<0.001
Time since parturition	-0.151	0.041	<0.001
Gestational weight gain	0.491	0.038	<0.001
Average energy intake	0.157	0.051	<0.001
Average energy from fats	0.122	0.074	0.035
Average energy from proteins	0.033	0.161	0.425
Average energy from carbohydrates	0.058	0.349	0.721



## Discussion

The results of this study established that the weight taken in a group of women from assumption to six months postnatal has been meaningfully unfair by breastfeeding practice, nutritive intake and weight increased in pregnancy. While gestational weight gain was known as the strongest analyst of weight retaining during postpartum, it was shown that breast feeding practice for six months knowingly contributes to weight loss. Six months after delivery, lactating women retained suggestively less weight. Postpartum weight keeps, which terms the average weight change from notion to the first year postnatal, includes weight gain during growth (preconception through gestation), early postnatal weightless (delivery to six weeks postpartum), and later postpartum weight change (after six weeks postpartum). Postpartum weight is significant for research since it is common, and it can negatively affect the next pregnancy, increase the risk of metabolic diseases and significantly pay to the prevalence of obesity among women later in life.

Our study has shown that the average weight retention decreased incessantly and, after six months among all members, amounted to 2.28 kg, which signifies about 1.92 BMI. A decrease in weight retaining was confirmed with a value of 2.42 BMI after 6 weeks and 1.14 BMI after 6 months postpartum. According to the results of pregnancy cohort studies, average postpartum weight retention from preconception to 6–18 months postpartum was 0.5 to 1.5 kg<sup>4</sup>.

Among our participants at six months after parturition, 11% of lactating retained five kilograms compared with their pre-pregnancy weight. Additionally, in our sample, about 25% of lactating and 19% of non-lactating postpartum mothers returned to their pre-pregnancy weight at six months after delivery. Women who returned to their pre-pregnancy weight by six months postpartum gained the least amount of weight over time. Similar to other authors, we have confirmed that this weight retention is as much linked with adjustable lifestyle factors, counting diet and breastfeeding, as with features such as gestational weight gain.

Few recent publications have documented the relationship between energy intake and weight changes of postpartum women. In the present study, although both groups of postpartum mothers significantly decreased their daily energy intake during the observed period, lactating women had a higher energy intake in one and three months postpartum. References for energy intake during lactation are improved and they are based on the statement that mothers' diets are adequate if the results ideal growth and development of their children. Most of the recommended intakes are based on knowledge of the amount of milk formed during lactation, its energy and nutrient contents, and the amounts of nurturing energy and nutrient reserves. The recommended energy requirement during the first six months of lactation for exclusive breastfeeding women is an additional 500 kcal, assuming that 170 kcal/day will be mobilized from energy stores accrued in pregnancy<sup>21</sup>. Among the group of lactating women, at one month postpartum, 19.32% of contributors had an energy intake greater than 100% DRI, while at six months postpartum, due to the continuous decrease of overall food intake, only 4.85% of participants had a higher energy intake than recommended. Although lactating women had an energy intake lower by about 25% than optional throughout the entire study time, there is no reason to concern. Today's specialists agree that references for energy intake during lactation are set too high, and that women who follow these recommendations lose less weight in postpartum<sup>34</sup>. Moreover, it was shown that women, due to the adaptive device, could successfully breastfeed their infants under moderate hypo caloric intake<sup>35</sup>. It can be assumed that hypo caloric intake among our study sample did not have an adverse effect on breastfeeding,

but at the same time, it positively donated to weightless. As we have seen that dietary intake declined as lactation continual, it is reasonable to expect that this allowed the pregnancy fat stores for care of milk manufacture to decline. During protracted lactation the need to keep body fat for help in milk making would be lessened and assembling the fat would be consistent with maintaining maternal health<sup>36</sup>. The percentages of energy obtained from macronutrient sources were in agreement with the Acceptable Macronutrient Supply Range (AMDR) for protein and starches and were higher than the AMDR of 20–35% kcal for fats<sup>37</sup>. While higher fat intake among populace of postpartum women has been confirmed in the results of other research<sup>38–40</sup>, care should be taken since we have shown that energy derived from fat meaningfully affects weight retention. It has been shown that high intake of *trans* fatty acids<sup>32</sup> and high intake of flooded fatty acids<sup>30</sup> in the first year postnatal are linked with a higher risk of significant weight retention.

Though decline study has established that women with higher energy intake reserved more weight, typically speaking, dietary factors were weaker analysts of weight field than was the type of feeding. The fact that breastfeeding practice overrides the effect of energy intake was reputable by the opinion that in both classes of dietary intake lactating women continually lost more weight. Lactating women started to lose weight after three months postnatal and, in the period of three to six months postnatal, their weight decreased substantially, despite their higher caloric intake. These results approve that in the early postpartum period, well-nourished lactating women increase energy intake to meet the energy demands of lactation, whereas beyond three months, they are more likely to mobilize fat stores. By contrast, the weight of non-lactating women endured stable after three months postpartum. Weightless among lactating women is related to fat enlistment which looks to increase after three months postpartum, and it reflects changes in the endocrine effects of lactation on parental appetite as the frequency of infant feeding decreases. Namely, high prolactin levels in early postpartum increases parental intake if infants' demands are high. Later in lactation, when prolactin levels have lowered, high-energy demand will promote fat enlistment. Thus, it could be expected that lactation might promote parental weight loss only if it is lengthy beyond several months. In our study, we have established that this effect is obvious even after three months. Certainly, among our members, fat armament and weight loss were faster by the beforeargued decrease in energy intake. The positive effect of breast-feeding on weight loss has recently been established in a large sample of American women at six months postpartum, but without any effects at three months postpartum. Generally speaking, previous findings about the effect of breastfeeding on postpartum weight retention have been contrary at best. Although breastfeeding has numerous positive physiological and physical effects on mothers and children, most studies have inveterate greater weight loss in breastfeeding women while in other studies the rapport between breastfeeding and weight loss has not been traditional. The identification in this study of gestational weight gain as the strongest predictor of weight holding is steady with data which has been reported by other authors. Gestational weight gain is the net effect of fetal growth, nurturing organ change and energy balance during pregnancy. The optional weight gain during pregnancy is 10 to 16 kg, contingent on the BMI before pregnancy. Experts strongly advice pregnant women to take care about weight gain during pregnancy, since excess weight gain in this period of life knowingly increases the risk of early birth, macrodome and congenital defects, and it could also be a primary contributor to the future development of obesity. Some studies have established that women who gain more weight in pregnancy also retain more weight after delivery. Gunderson and classmates reported

that gestational gain above the suggested levels was related with a threefold higher risk of becoming heavy after pregnancy among women who were half-starved or of average weight before pregnancy in a large cohort. In addition to gestational weight gain, the most independent risk factors for excessive weight retention during postpartum are maternal overweight or obesity before pregnancy. Obese women during pregnancy mobilize less body fat and consequently they retain more weight after delivery. In our previous work we have confirmed that among the same study sample those women who were already overweight before pregnancy tended to retain and gain more weight after pregnancy compared with average weight women.

In this potential study, dietary intakes were chronicled and weight extents were shown without disturbing in the members 'lives. We also had a low rate in losing follow-ups. Since the obtainable results are part of inclusive studying which we also determined the fatty acid composition of breast milk and providing mothers with this information, we accept that that is the reason why women were highly interested to participate in the study. However, our study has a few confines. One possible limitations that members had a thin delivery of socio-economic status, maybe because the study used a helper public in which those who were of lowersocio-economic status had no willingness to participate. The general of our participants were puritanical parous, which is to be expected, because these women have more attention to donate in this kind of study. However, prim parity is very linked with postnatal weight holding, so this could be a source of bias in this research. Finally, we have joint data of fully-breastfeeding and mixed breastfeeding women into one type for type of feeding. This strategy did not allow looking into the importance of limited breastfeeding on weight change.

## Conclusion

Irrespective of the declared methodology issue, in this study we have obtainable experimental indication that breast feeding must be continued for six months postnatal for an important impact on weight loss. Though lactating women incessantly lost weight during postpartum, after three months lactating women were normally lost weight but at six months after delivery reserved knowingly less weight. Moreover, gestational weight gain and dietary intake were also analysts of weight retention. Within this context, pregnant women should be advised to control their weight gain in pregnancy, breastfeed their infants for at least six months, and reduction vigor and fat intake during postpartum in order to reduce extreme postnatal weight. Further examination is needed to confirm the link between exclusive breastfeeding and weight retaining during postnatal.

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