

## (Postpartum Weight Retention)

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(Brewer, Bates & Vanny, 1989).

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(Schauberger, Rooney & Brimer, 1992; Kepel & Tefel, 1993).

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(Susser, Fine, Schupf & Stein, 1993).

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1990 Institute Of Medicine(IOM)

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(Ellison & Harris, 2000).

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(Strang & Sullivan, 1985; Waker, 1996).

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PubMed, Health Source Plus, MEDLINE, CINAHL, RICH

1988 2001

key words

key words

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'postpartum' 'puerperium' 'weight',  
'weight retention' 'weight gain'  
'maternal obesity'

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(Hubert et al., 198;

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Willett et al., 1995),

(Kumar et al., 1995)

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(weight consciousness

society)

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American J of Public Health 2 , International J of Obesity 2 , J of Family Practice 1 , Obstetrics & Gynecology 6 , J of Family Practice 1

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American J of Clinical nutrition 3 , J of American Dietetic Association 1 , British J of Nutrition 1 , British Nutrition Foundation Nutrition Bulletin 1 6

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(waker, 1996) , 4  
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(life style)(Schauberger

et al., 1992; Lederman, 1993; Susser et al., 1993; Boardley et al., 1995; Waker, 1996; Harris, Ellison & Harris, 2000), /

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<Table 1>

(Parker & Abrams, 1993; Ohlin &

Rossner, 1994 ), (Brewer et al.,

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1989; Waker & Freeland-Graves, 1998; Haiek, Kramer, Ciampi & Tirado, 2001)

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distress, (Waker, 1996;

1988-1990 (3 ), 1991-1995 (10

Waker & Freeland-Graves, 1998)

), 1996-2000 (6 ), 2001 (1 ) . 2001

(Keppel & Taffel, 1993; Susser

et al., 1993) (Brewer et al., 1989 )

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(Waker,

1996; Waker & Freeland-Graves, 1998)

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life-event stress, social

support, depressive symptom, body image

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(postpartum weight retention)  
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Greene, Smiciklas-Wright, Sholl Karp(1988)  
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(Brewer et al., 1989)  
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<Table 1 > Research on Postpartum Weight Retention

No	Year	Researcher	Research background	Journal	Research subject	Main concept	Independent variable	Dependent variable	Research design	Measurement	Analysis	Factor effect on postpartum-weight retention
1	1988	Greene, G. W. et al.	nutrition	Obstetrics & Gynecology	7116 women who had two pregnancies within 6 years	postpartum weight	-pregnancy weight gain -smoking -socio-demographic factor	weight-change	quasi-experimental study	-questionnaire -weight & skinfold -thickness check	analysis of covariance	pregnancy weight gain
2	1989	Bever, M. M., Bates, M. R., & Vany, L. P.	nutrition	American Journal of Clinical Nutrition	56 women from delivery to postpartum	postpartum maternal-weight -body fat deposits	feeding method -socio-demographic factor	-skinfold-thickness -postpartum weight	quasi-experimental study	-questionnaire -weight & skinfold -thickness check	analysis of covariance	-breastfeeding(+) -covariance: -age, parity, -pre-pregnancy weight gain(+)
3	1990	Parham, E. S., Astron, M. F., & King, S. H.	nutrition -public health	Journal of the American Dietetic Association	158 women in clinic for low-income population vs. 102 nonpregnant women	postpartum weight	pregnancy weight gain	postpartum weight	longitudinal prospective study	-medical- record -questionnaire -weight check	-chi-square -Pearson's correlation	pregnancy weight gain(+)
4	1992	Bradley, P. J.	medical	International Journal of Obesity		pregnancy-density	pregnancy	afterbirth obesity	literature review	-weight check -questionnaire -medical-record		pregnancy weight-gain(+)
5	1992	Schauberg, C. W., Rooney, B. L., & Briner, L. M.	-medical -nursing	Obstetrics & Gynecology	795 women delivered at hosp.	weight loss in the puerperium	-demographic factor -lifestyle factor	6month postpartum weight	prospective cohort study	-weight check -questionnaire -medical-record	-multivariate analysis -Pearson-correlation	-work(+), -parity(+) -smoking(+) -delivery route(+)
6	1993	Dowey, K. G., Henig, M. J., & Nommensen, L. A.	nutrition	American Journal of Clinical nutrition	85 postpartum women	maternal weight loss	feeding method	-triceps- skinfold thickness -postpartum weight retention	prospective matched cohort study	-questionnaire -weight & skinfold thickness check	-analysis of variance -paired t-test	breastfeeding(+)
7	1993	Keppel, K. G., & Taffel, S. M.	public- health	American Journal of Public Health	10-18 month postpartum women who delivered 1988 National Maternal and Infant Health Survey	pregnancy-related weight retention	pregnancy weight gain	postpartum weight retention	retrospective survey	-questionnaire -interview	descriptive study	-pregnancy weight-gain(+) -race(+)
8	1993	Lederman, S. A.	medical	Obstetrics & Gynecology		obesity	-demographic factor -lifestyle -pregnancy-weight gain -lactation	after birth obesity	literature review			-age(+) -pre-pregnancy weight(+)
9	1993	Parker, J. D., & Abrams, B.	medical	Obstetrics & Gynecology	women from 1988 National Maternal & Infant Health Survey, 990 Black & 1129 White	postpartum weight retention	-demographic factor -socioeconomic factor	postpartum weight retention	retrospective study	questionnaire	multiple logistic regression	-race(+) -socioeconomic status(+) -parity(+)
10	1993	Susser, M. et al.	public- health	American Journal of Public Health		postpartum weight retention	-prenatal weight gain -parity	postpartum weight retention	literature review			-pregnancy weight-gain(+) -age(+) -parity(+) -pre-pregnancy weight(+) -life style(+)

<Table 1> Research on Postpartum Weight Retention (continued)

No	Year	Researcher	Research background	Journal	Research subject	Main concept	Independent variable	Dependent variable	Research design	Measurement	Analysis	Factor effect on postpartum weight retention
11	1994	Othin, A., & Rosner, S.	nutrition	British Journal of Nutrition	423 pregnant women from pregnancy until 1 year postpartum	postpartum weight retention postpartum body weight	-eating patterns -physical-activity -socio-demographic factors -race -diet -activity -life style -gestational weight gain -pregnancy-outcome (infant birth weight)	postpartum body weight postpartum weight retention	prospective study	-pregnancy- record -questionnaire -weight check questionnaire	multiple stepwise regression -multivariate analysis -t-test -Chi-square -univariate-analysis	-energy intake(+) -physical activity(+)
12	1995	Boardley, D. J. et al.	medical	Obstetrics & Gynecology	121 white & 224 black participating in the Special Supplemental feeding Program	postpartum weight retention	-life style -gestational weight gain -pregnancy-outcome (infant birth weight)	postpartum weight retention	retrospective study	questionnaire	-multivariate analysis -t-test -Chi-square -univariate-analysis	-gestational weight-gain(+) -infant birth-weight(+)
13	1995	Scholl, T. O. et al.	medical	Obstetrics & Gynecology	274 teenage & mature women minority (12-29 years old)	postpartum weight retention	-life style -gestational weight gain -pregnancy-outcome (infant birth weight)	postpartum weight retention	prospective cohort study	-weight & skinfold check -interview -medical- record	-multiple-linear regression -univariate-analysis	-gestational weight-gain(+) -infant birth-weight(+)
14	1996	Walker, L. O	nursing	Journal of Holistic Nursing	88 postpartum 6month & 75 postpartum 18 month	weight after child birth	-socio-demographic factor -life style stress	postpartum weight gain	longitudinal study	questionnaire	multiple regression one-way analysis of variance	-maternal race(+) -gestational weight gain(+) -life style factor(-) -stress(-)
15	1998	Stein, T. P. et al.	medical	American Journal of Clinical nutrition	103 women aged 13-29 with normal BM	postpartum weight retention	plasma leptin level	postpartum weight retention	longitudinal study	-plasma leptin level -skinfold thickness	-descriptive study -Person's - correlation	leptin concentration(+)
16	1998	Walker, L. O., & Freedland-Graves, J.	-nursing -nutrition	Journal of Obstetric, Gynecology and Neonatal Nursing	101 bottle feeding & 106 breast feeding women	postpartum weight gain	-feeding method -lifestyle-factor	-postpartum weight gain -body image	cross-sectional survey	-questionnaire (mail survey)	-Spearman correlation -Mann-Whitney U test	-feeding method(-) -exercise patter(+) -fat intake(+)
17	1999	Harris, H. E., Ellison, G. T. H., & Clement, S.	medical	Journal of Epidemiol & Community Health	74 women of low antepartal risk	maternal obesity	-heritable characteristics -lifestyle	maternal weight gain	longitudinal study	-questionnaire -antenatal care database	-t-test -ANOVA -ANCOVA	
18	2000	Ellison, G. T. H., & Harris, H. E.	nutrition	British Nutrition Foundation	gestational weight gain	-gestational weight gain	-maternal obesity	overweight after pregnancy	longitudinal cohort study	questionnaire	-t-test -chi-square -logistic regression -bivariate-analysis	-age(+)-parity(-) -pregnancy weight gain(+) -birth interval(+) -smoking(-) -marital status(-)
19	2000	Gundersen, E. P., Ahrans, B., & Selvin, S.	public-health	International Journal of Obesity	1300 women aged 18-4 years	overweight after pregnancy	-gestational- gain -maternal- characteristics	overweight after pregnancy	longitudinal cohort study	-questionnaire -medical record -weight check	-t-test -chi-square -logistic regression -bivariate-analysis	-age(+)-parity(-) -pregnancy weight gain(+) -birth interval(+) -smoking(-) -marital status(-)
20	2001	Haeck, L. N. et al.	public-health	Journal of Family Practice	236 women in 2 health clinic	postpartum loss	feeding method	postpartum weight loss	longitudinal cohort study	-weight check -questionnaire (telephone) -medical record	-linear- regression -multivariate- regression	-breastfeeding (-) -pregnancy weight gain(+) -smoking (+) -working(+)

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 50% 0.9Kg, Smith (1994) 가  
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 (Gunderson, Abrams & Selvin, 2000),  
 6 가 1.4kg(Schauberger et 2)  
 al., 1992) 3-12 25%가 5kg  
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 1-2 1995), (postpartum weight retention)  
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 (1992) 2 , 6 , 6 Graves, 1998), (overweight after  
 , 6 18 pregnancy)(Gunderson et al., 2000),  
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 4-6 6 (pregnancy-related weight gain)  
 가 (Keppel & Taffel, 1993)  
 Hediger, Schall, Ances & Smith, 1995). (postpartum weight loss, weight loss in  
 puerperium, maternal weight loss)(Haiek et al.,  
 2001; Schauberger et al., 1992; Dewey, Heinig  
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self esteem, body  
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- Abstract -

## An Analysis of Research on Postpartum Weight Retention

Lee, Seoung Eun<sup>1)</sup> · Yoo, Eun Kwang<sup>2)</sup>

**Purpose:** To explain the concept of postpartum weight retention and to analyze factor effect on it. **Method:** A total of 20 studies related postpartum weight retention were selected in the year of 1988-2001 and analysis was done. **Result:** A demographic factor like parity, age, social and economic level and life style such as exercise, diet, breast feeding are influential factor on postpartum retention weight. But parts of them don't agree the same results. Meanwhile, in some studies, psychological factor like women's self esteem related to postpartum retention weight, body image change, depressing is found to be very related. As a result, postpartum overweight gain could be a bad factor of physical and mental health. In Korea, we have few studies related to them. **Conclusion:** It is required to do many-sided and deep studies about aspects of postpartum retention weight and the factor that effect on it. Postpartum retention weight should be approached by controlling weight from the period of pregnancy. And it would rather be researched through individual approach considered women's various demographic, social-cultural and physical level than be required standardized level of weight gain.

Key words : Postpartum, Puerperium, Weight, Research, Analysis

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