

Table S1. Summary of outcomes of studies examining human milk leptin.

Author	Samples size	Lactation stage	Outcomes/Effect
Houseknecht, et al. [1]	14	–	↑ Leptin concentration in whole milk vs skim milk + Correlation, HM leptin concentration and maternal plasma leptin, maternal body weight, BMI, and skinfold thickness
Uçar, et al. [2]	18	3-120 d	↑ Leptin in serum vs milk + Correlation, HM leptin, maternal and infant circulation leptin No correlation, HM leptin, maternal, infant adiposity
Bielicki, et al. [3]	33	2-3, 4-5 d, 4-6 wk	↑ Leptin in term vs preterm milk Moderate correlation, maternal and infant BMI, milk leptin + Correlation, maternal BMI, serum leptin HM leptin decreases over the course of lactation
Dundar, et al. [4]	47	15 d, 1, 2, 3 mo	HM leptin, ↑ in LGA, ↓ in SGA vs AGA + Correlation, HM leptin, birth weight – Correlation, WG in first 15 d and 1 mo, HM leptin No correlation, HM leptin, maternal BMI
Ilcol, et al. [5]	160	2, 8, 25 d	HM leptin decreases over the course of lactation + Correlation, HM leptin, maternal BMI
Bronsky, et al. [6]	59	1-2 d	↑ Leptin in term vs preterm milk + Correlation, HM leptin, maternal pre-pregnancy weight and BMI, delivery weight and BMI
Miralles, et al. [7]	28	1, 3, 6, 9 mo	+ Correlation of HM leptin, maternal plasma leptin and BMI – Correlation, HM leptin at 1 mo, infant BMI at 18 and 24 mo of age – Correlation, HM leptin at 1 and 3 mo, infant BMI from 12 to 24 mo of age
Weyermann, et al. [8]	766	6 wk, 6 mo	+ Correlation, HM leptin and adiponectin ↑ HM leptin in mothers of females vs mothers of males
Weyermann, et al. [9]	767	6 wk	+ Correlation, HM leptin and adiponectin + Correlation, HM leptin, pre-pregnancy BMI. ↑ HM leptin in mothers of females vs mothers of males
Aydin, et al. [10]	31	2, 25 d	↑ Leptin in serum vs milk + Correlation, leptin in milk and serum
Savino, et al. [11]	36	< 6mo	HM leptin ↓ than infant and maternal serum leptin
Bronsky, et al. [12]	72	1 d, 1, 3, 6, 12 mo	↑ HM leptin on d 1 than at 1, 3, 6, and 12 mo + Correlation between adiponectin, AFABP, and leptin throughout the lactation
Schuster, et al. [13]	23	1, 2, 3, 4 wk	↑ Leptin in serum vs milk + Correlation, serum, milk leptin

Author	Samples size	Lactation stage	Outcomes/Effect
		2, 3, 4, 5, 6 mo	+ Correlation, serum and milk leptin, maternal BMI – Correlation, milk leptin at 1wk, infant weight gain from end of 6wk
Eilers, et al. [14]	77	3 d, 28 d	No difference n leptin between preterm and term milk Term HM leptin decreases from day 3 to 28 + Correlation, HM leptin, maternal BMI
Fields and Demerath [15]	19	~ 1 mo	+ Correlation, maternal pre-pregnancy BMI, maternal BMI, HM leptin ↑ HM milk associated with lower infant BMI
Savino, et al. [16]	23	< 6 mo	+ Correlation, HM leptin and resistin
Schueler, et al. [17]	13	29-38 d	No difference leptin, pre- and post-feed + Correlation, HM leptin, maternal BMI and fat mass
Lönnerdal and Havel [18]	–	2-4 mo	Lipid in HM interfere with RIA
Chang, et al. [19]	–	3-4 mo	Leptin unaffected by the various handling procedures (fresh, frozen, pasteurized)
Ojeda, et al. [20]	–	2 mo	No difference in leptin concentration between ECI or ELISA
Kon, et al. [21]	103	1, 2, 3 mo	↑ HM leptin levels at 2 and 3 mo of lactation in infants with high weight gain (>1000 g/mo)
Brunner, et al. [22]	6 wk: 152 6 mo: 120	6 wk 6 mo	No relationship, HM leptin, infant anthropometrics up to 2 y
Khodabakhshi, et al. [23]	Ob: 40 NW: 40	2-5 mo	+ Correlation HM leptin, BMI of mother of infants with obesity – Correlation HM leptin, weight of infants with normal weight at 2 nd month
Cannon, et al. [24]	19	3-21 wk	Leptin significantly ↑ at night Leptin is not associated with the time between feeds
Quinn, et al. [25]	113	10 d – 36 mo	+ Correlation, maternal % fat mass, HM leptin HM leptin, predictor of infant WAZ, BMI z-score (< 1y) – Correlation, HM leptin, both WAZ and BMI for age z-score in female but not male infants
Andreas, et al. [26]	120	1 wk, 3 mo	Pre-feed leptin concentration relates to maternal BMI at 1 wk and 3 mo No difference in HM leptin pre- and post-feed
Gridneva, et al. [27]	27	2, 5 mo	No relationships, HM leptin concentration and dose with gastric emptying time or milk intake
Kuganathan, et al. [28]	61	2-12 mo	HM leptin ↑ in whole milk compared to skim milk
Resto, et al. [29]	29	1-4 wk	Birth gestational age, birth weight, and gender of the infant did not associate with HM leptin ↓ HM leptin with pasteurization
De Luca, et al. [30]	100	1 mo	↑ HM leptin concentration in mothers with obesity than in mothers with normal weight
Savino, et al. [31]	58	–	+ Correlation, circulation leptin, maternal BMI, HM leptin

Author	Samples size	Lactation stage	Outcomes/Effect
Fields, et al. [32]	37	1, 6 mo	+ Correlation, HM leptin, maternal BMI, infant length, infant body fat ↓ HM leptin from 1 to 6 mo
Meyer, et al. [33]	147	6 wk, 4 mo	HM leptin unrelated to child anthropometric measures at 3, 4, and 5y
Quinn and Childs [34]	116	–	+ Association, maternal BMI, HM leptin
Nunes, et al. [35]	69	1, 2, 30 d	↓ Leptin overtime, significant in mothers with SGA infants + Correlation, HM leptin, maternal BMI No correlation, HM leptin, and infant WG at 1 month
Cannon, et al. [36]	20	–	No relationships, skim milk leptin concentration, dose with gastric emptying time and milk intake
Kugananthan, et al. [37]	59	2, 5, 9, 12 mo	+ Correlation, maternal % fat mass, HM leptin in whole and skim milk
Gridneva, et al. [38]	20	2, 5, 9, 12 mo	Intakes of HM leptin differentially influence development of infant BC in the first year of life
Chan, et al. [39]	430	4 mo	+ Correlation, HM leptin and maternal BMI + Correlation, HM leptin and infant WFL z-scores and BMI
Uysal, et al. [40]	50	1,2, 3 mo	+ Correlation of HM leptin, maternal BMI No correlation, HM leptin, infant BMI
Yu, et al. [41]	96	3, 42, 90 d	HM leptin difference between GDM and healthy groups at 3 rd d postpartum
Sadr Dadres, et al. [42]	135	1, 3 mo	↓ HM leptin from 1 to 3 mo + Correlation, pre-pregnancy BMI, HM leptin at 1 mo + Correlation, GWG, HM leptin – Correlation, postpartum WG loss , HM leptin at 1 mo
Zamanillo, et al. [43]	59	30, 60, 90 d	Maternal obesity disturbs the breast milk supply of miRNAs – Correlation between HM leptin and miRNAs in mothers with normal weight No correlation in mothers with overweight/obesity
Logan, et al. [44]	SPATZ: 1090 UBCS: 1006	6 wk, 6 mo	In SPATZ, – correlation HM leptin, infant BMI at 6wk In UBCS, not significant
Larrosa Haro, et al. [45]	131	8, 16 wk	↑ Leptin in pre-feed vs post-feed samples ↑ Leptin in serum than HM
Logan, et al. [64]	694	6 wk, 6 mo, 12 mo	Adiposity-related factors primarily determine HM leptin concentration; BMI, breastfeeding frequency, and HM fat concentration

Author	Samples size	Lactation stage	Outcomes/Effect
Kocaadam, et al. [47]	65	15-30 d	– Correlation, HM leptin, head circumference at birth in preterm infants, and the triceps skinfold thickness increment at 1 and 2 mo in term infants
Schneider-Worthington, et al. [48]	25	1 mo	+ Correlation, maternal circulation and HM leptin + Correlation, maternal fat mass, HM leptin
Galante, et al. [49]	501	2-3 mo	+ Correlation, HM leptin, maternal pre-pregnancy weight and BMI
Joung, et al. [50]	50	7, 14, 21, 28 d	↑ Leptin intake of preterm infants associate with ↑ WG, weight z-score, and height z-score at 36 weeks

AFABP, adipocyte fatty acid-binding protein; AGA, appropriate for gestational age; BC, body composition; BMI, body mass index; d, day; ECI, electrochemical immunosensor; EDTA, ethylenediaminetetraacetic acid; ELISA, enzyme-linked immunosorbent assay; GWG, gestational weight gain; HM, human milk; LGA, large for gestational age; mo, month; Non-Ob, without obesity; NW, with normal weight; Ob, with obesity; weight gain; RIA, radioimmunoassay; SGA, small for gestational age; SPATZ, ULM SPARTZ health study; UBCS, Ulm birth cohort study; WAZ, weight-for-age z score; WG, weight gain; wk, week; y, year; ↑, higher; ↓, lower; –, negative; +, positive.

Table S2. Summary of outcomes of studies examining human milk adiponectin.

Author	Sample size	Lactation stage	Outcomes/Effect
Bronsky, et al. [6]	59	1-2 d	+ Correlation, HM adiponectin, maternal body weight before delivery
Weyermann, et al. [8]	766	6 wk, 6 mo	No correlation, maternal serum, HM adiponectin + Correlation, HM leptin and adiponectin
Weyermann, et al. [9]	674	33-71 d	+ Correlation, HM leptin and adiponectin
Martin, et al. [51]	158	1 d - 12 mo	– Correlation, duration of lactation, HM adiponectin. + Correlation, maternal post-pregnancy BMI, HM adiponectin HM adiponectin of Mexican mothers ↓ than in Hispanic mothers
Woo, et al. [52]	322	1wk - 6 mo	HM adiponectin associated with lower WAZ and WLZ but not LAZ
Dündar, et al. [53]	25	–	No relationship, HM adiponectin, BMI or birth weight of infants or BMI of mothers No differences in adiponectin of colostrum, cord blood, maternal serum
Bronsky, et al. [12]	72	1 d, 1, 3, 6, 12 mo	↑ Adiponectin at 12 mo, compared with 3 and 6 mo + Correlation, adiponectin, AFABP, leptin
Luoto, et al. [54]	30	0 - 3 d	↑ Adiponectin in HM of mothers of children with normal weight vs overweight at 10 y of age – Correlation, HM adiponectin, child BMI at 10 y No correlation, HM adiponectin, pre-pregnancy BMI
Ley, et al. [55]	34	1-6 mo	No difference, whole vs skim milk adiponectin Pasteurization reduces HM adiponectin by 32.8%
Cesur, et al. [56]	25	1, 4 mo	+ Correlation, HM adiponectin, infant serum adiponectin, infant weight gain

Author	Sample size	Lactation stage	Outcomes/Effect
			No difference HM adiponectin at 1 and 4 mo No relationship, HM adiponectin, maternal and infant circulation adiponectin
Luoto, et al. [57]	256	0 - 3 d	Dietary intervention (diet and probiotics) ↑ HM adiponectin – Correlation, HM adiponectin, maternal weight gain during pregnancy No correlation, HM adiponectin, GDM
Ley, et al. [58]	170	2 d, 3 mo	↑ Adiponectin in colostrum than mature milk No relationship, pre-pregnancy BMI, HM adiponectin
Liu, et al. [59]	48	3 d	↑ HM adiponectin in women with preeclampsia (PE) had than women without PE
Ozarda, et al. [60]	157	1 – 180 d	Skim milk most suitable for HM adiponectin analysis using RIA HM adiponectin increase over lactation period + Correlation, HM adiponectin, infant serum adiponectin
Savino, et al. [61]	60	< 6 mo	+ Correlation, maternal serum adiponectin, HM adiponectin – Correlation, infant age, HM adiponectin
Woo, et al. [62]	277	1wk, 1, 2, 5, 6 mo	+ Correlation, maternal serum adiponectin, HM adiponectin ↑ HM adiponectin - ↑ infant WAZ and WLZ between age 1 and 2 y
Kon, et al. [21]	103	1, 2, 3 mo	No difference in HM adiponectin concentration between groups (LWG, NWG, HWG), yet adiponectin CDI intake of adiponectin is higher in HWG than LWG group
Brunner, et al. [22]	6 wk: 152 6 mo: 120	6 wk, 6 mo	– Correlation, HM adiponectin and early infant anthropometrics up to 4 mo, then + correlation with infant weight gain and the sum of skinfolds up to 2 y of age ↑ Adiponectin at 4 wk than 6 mo
Khodabakhshi, et al. [23]	Ob: 40 NW: 40	2-5 mo	No difference in HM adiponectin between mothers of infants with obesity and normal weight ↑ HM adiponectin – lower infant weight at 4 th month in infants with obesity only (-0.354, p<0.05; provided by author on request)
Gridneva, et al. [27]	27	2 and 5 mo	↑ HM adiponectin concentration and dose – longer gastric emptying time in term infants
Anderson, et al. [63]	117	9 d - 24 mo	No difference, maternal body composition, HM adiponectin + Correlation, HM adiponectin, infant WAZ and WLZ
Nunes, et al. [35]	69	1, 2, 30 d	No relationships, maternal BMI, HM adiponectin
Quinn and Childs [34]	116	–	No relationships, HM adiponectin, maternal BMI – Correlation, HM adiponectin, infant WAZ ↓ HM adiponectin in the Tibetans (lower altitude) than in Nepal (higher altitude) population
Kuganathan, et al. [37]	59	2, 5, 9, 12 mo	No relationships, HM adiponectin, maternal % fat mass No significant difference in HM adiponectin over the first year of lactation
Gridneva, et al. [38]	20	2, 5, 9, 12 mo	↑ Calculated daily intakes of HM adiponectin – lower infant fat-free mass and fat-free-mass index, higher infant fat mass, % fat mass and fat mass index
Chan, et al. [39]	430	4 mo	No relationship, HM adiponectin, maternal BMI, infant body composition

Author	Sample size	Lactation stage	Outcomes/Effect
Yu, et al. [41]	96	3, 42, 90 d	– Correlation, GDM, HM adiponectin – Correlation, HM adiponectin, infants WLZ, head circumference in both groups (with and without GDM)
Young, et al. [64]	41	2 wk, 1,2, 3, 4 mo	+ Correlation, maternal circulation adiponectin, HM adiponectin at 2wk, 4 mo HM adiponectin decreases over the lactation period No difference in HM adiponectin, between groups with normal weight and overweight/obesity
Mohamad, et al. [65]	155	1d, 2mo	– Correlation, HM adiponectin, infant weight, BMI-for-age Z scores, abdominal circumference
Sadr Dadres, et al. [42]	135	1, 3 mo	– Correlation, pre-pregnancy BMI, HM adiponectin, “the relationship decreased over time, close to zero at 3 months”
Zamanillo, et al. [43]	59	30, 60, 90 d	Adiponectin decreases over lactation period in mothers with normal weight, but not in mothers with obesity – Correlation, miRNAs and HM adiponectin in mothers with normal weight, but not in mothers with obesity
Grunewald, et al. [66]	367	16, 163 d	+ Correlation, adiponectin with HM protein Adiponectin decreases over lactation period
Kocaadam, et al. [47]	65	15-30 d	– Correlation, HM adiponectin, term infant anthropometrics + Correlation, HM adiponectin, preterm BMI in 2 and 3 mo – Correlation, HM adiponectin and preterm infant length
Schneider-Worthington, et al. [48]	25	1 mo	+ Correlation, maternal circulation and HM adiponectin
Galante, et al. [49]	501	2-3 mo	No correlation, maternal factors, HM adiponectin + Correlation, HM adiponectin, infant birth weight and giving birth to twins
Joung, et al. [50]	50	7, 14, 21, 28 d	+ Correlation of HM adiponectin, length z-score at 36 weeks; correlation confounded by total protein and calorie intake + Correlation HM adiponectin with head circumference

AFABF, adipocyte fatty acid-binding protein; BMI, body mass index; GDM, gestational diabetes; HM, human milk; HWG, high weight gain; LAZ, Length-for-age z score; LWG, low weight gain; mo, month; NW, normal weight; NWG, normal weight gain; Ob, with obesity; RIA, radioimmunoassay; WAZ, weight-for-age z score; WG, weight gain.; wk, Week; WLZ, weight-for-length z score; ↑, higher; ↓, lower; –, negative; +, positive.

Table S3. Summary of outcomes of studies examining human milk ghrelin.

Author	Sample size	Lactation stage	Outcomes/Effect
Aydin, et al. [67]	17	1, 7, 15 d	HM Gh concentration increases over lactation HM Gh increases as maternal plasma ghrelin increases after delivery
Kiersen, et al. [68]	10	7-21 d	↑ HM Gh than in maternal serum + Correlation, whole HM Gh, HM fat ↑ Gh in whole than skim milk
Aydin, et al. [69]	29	2, 15 d	dGh 24-fold ↑ than aGh using HPLC Mothers with GDM have 2-fold ↓ HM and serum aGh than mothers without GDM at 2 d postpartum
Ilcol and Hizli [70]	159	1-3, 4-14, 15-30 30-90, 91-180 d	aGh and tGh increase over lactation period
Aydin, et al. [10]	31	2, 25 d	– Correlation HM Gh, maternal BMI + Correlation, HM Gh, maternal serum Gh
Aydin [71]	20	NA	dGh forms most of the HM Gh – Correlation, maternal BMI, HM Gh
Dündar, et al. [53]	25	–	No differences, tGh levels in colostrum, cord blood, maternal serum – Correlation, tGh and infant BMI, birth weight + Correlation, aGh, tGh and maternal serum Gh
Yis, et al. [72]	47	3-4 mo	↑ HM Gh - ↑ infant growth rate during the first 3 mo of age
Karatas, et al. [73]	46	1-3 mo, 4-6 mo	↓ tGh and aGh in the pre- than post-feed sample Pre-feed sample: ↓ tGh and ↑ aGh at 4-6 mo compared with 1-3 mo
Savino, et al. [74]	20	1-5 mo	↑ Gh in formula vs HM + Correlation, milk Gh, infant serum Gh ↑ Gh in serum of formula fed infants than breastfed infants
Cesur, et al. [56]	25	1, 4 mo	↑ HM and infant serum aGh at 4mo vs 1mo ↑ HM aGh vs infant and maternal serum
Savino, et al. [75]	40	2-3 mo	+ Correlation, maternal serum Gh and HM Gh, maternal and breastfed infants serum Gh, HM Gh and breastfed infants serum Gh
Kon, et al. [21]	103	1, 2, 3 mo	+ Correlation, HM Gh and infant serum Gh ↑ Gh at 1 and 2 mo in serum of infants with high weight gain
Khodabakhshi, et al. [23]	Ob: 40 NW: 40	2-5 mo	HM Gh ↑ in mothers of infant with normal weight vs mothers of infants with obesity
Andreas, et al. [26]	120	1 wk, 3 mo	HM Gh decreases over feed HM Gh decreases over lactation period, significant for post-feed HM Gh not related to maternal BMI

Author	Sample size	Lactation stage	Outcomes/Effect
Slupecka-Ziemilska, et al. [76]	40	3 d	↓ HM Gh in milk vs maternal plasma Mammary gland is a source of HM Gh
Young, et al. [77]	48	2 wk, 1, 2, 3, 4 mo	HM Gh decreases over lactation No difference of HM Gh between mothers of infant with normal weight and mothers of infants with overweight/obesity
Yu, et al. [41]	96	3, 42, 90 d	↓ HM Gh in mothers with GDM – Correlation, maternal BMI, HM Gh No correlation, HM Gh, infant head circumference and WHZ
Larrosa Haro, et al. [45]	131	8, 16 wk	↑ HM Gh in post-feed sample vs pre-feed sample ↑ Gh in maternal serum than in pre-feed sample

aGh, acylated-ghrelin; BMI, body mass index; dGh, deacylated-ghrelin; GDM, gestational diabetes mellitus; Gh, ghrelin; HM, human milk; HPLC, high pressure liquid chromatography; mo, month; NW, with normal weight; Ob, with obesity; tGh, total ghrelin; WHZ, weight-for-height z-score; wk, week; ↑, higher; ↓, lower; –, negative; +, positive.

Table S4. Summary of outcomes of studies examining human milk insulin.

Author	Sample size	Lactation stage	Outcomes/Effect
Shehadeh, et al. [78]	90	3, 10 d	HM insulin not related to gestational age, preterm birth
Ley, et al. [55]	34	1-6 mo	Pasteurization reduces HM insulin concentration by 46.1%
Ley, et al. [58]	170	2 d, 3 mo	High HM leptin in colostrum vs mature milk ↑ Pre-pregnancy BMI, gestational weight gain associated with ↑ insulin in mature milk, but not in colostrum No correlation between GDM and HM insulin (in colostrum and mature milk)
Fields and Demerath [15]	19	1 mo	↑ HM insulin associated with lower infant weight, relative weight, and lean mass
Whitmore, et al. [79]	14	1-6 mo	No variation in HM insulin concentration over 24-hours No significant difference in HM insulin concentration between pre- and post-sample
Andreas, et al. [26]	120	1 wk, 3 mo	+ Correlation, maternal BMI and pre-feed insulin at 3 mo HM insulin concentration decreases from pre to post-feed
Nunes, et al. [35]	69	1, 2, 30 d	– Correlation between HM insulin and infant weight gain at 1 mo + Correlation between mature HM insulin and maternal BMI Insulin concentration decreases over lactation period
Young, et al. [77]	48	2 wk, 1, 2, 3, 4 mo	HM insulin is ↑ in mothers with overweight/obesity compared to mothers with normal weight HM insulin ↑ than maternal plasma insulin + Correlation between maternal fasting plasma insulin and HM insulin
Fields, et al. [32]	37	1, 6 mo	HM insulin ↑ in mothers with obesity than in mothers with normal weight

Author	Sample size	Lactation stage	Outcomes/Effect
			229% higher HM insulin in mothers with obesity nursing female infants vs mothers with normal weight nursing female infants, and 179% higher than in mothers with obesity nursing male infants
Chan, et al. [39]	430	4 mo	+ Correlation, pre-pregnancy BMI and HM insulin Ethnicity, Asian mothers have lower HM insulin compared to Caucasian mothers
Young, et al. [64]	41	2 wk, 1, 2, 3, 4 mo	– Correlation between HM insulin and WLZ trajectory among infants of mothers with normal weight
Yu, et al. [41]	96	3, 42, 90 d	↑ HM insulin in mothers with GDM + Correlation, maternal BMI and HM insulin
Sadr Dadres, et al. [42]	135	1, 3 mo	+ Correlation, pre-pregnancy BMI and HM insulin at 1 st and 3 rd mo
Grunewald, et al. [66]	367	16-163 d	+ Correlation, pre-pregnancy BMI and HM insulin
Schneider-Worthington, et al. [48]	25	1 mo	+ Correlation, maternal circulation and HM insulin + Correlation, maternal fat mass and HM insulin
Ellsworth, et al. [80]	32	2 wk	↑ HM insulin concentrations in mothers with overweight and obesity + Correlation, HM insulin and infant WFA from 2 wk to 6 mo and HCA z-score change from 2 wk to 2 mo

BMI, body mass index; GDM, gestational diabetes mellitus; HCA, head circumference-for-age; HM, human milk; mo, month; WFA: weight-for-age; wk, Week; WLZ, weight for length z-score; ↑, higher; ↓, lower; –, negative; +, positive.

Table S5. Summary of outcomes of studies examining human milk resistin.

Author	Sample size	Lactation stage	Outcomes/Effect
Ilcol, et al. [81]	160	1-3, 4-14, 15-30 30-90, 91-180 d	HM and maternal serum resistin concentrations decrease gradually from 1 to 3 d until 180 d postpartum + Correlation, maternal serum and HM resistin
Savino, et al. [16]	23	< 6 mo	+ Correlation, HM resistin and breastfed infants' serum resistin
Andreas, et al. [26]	120	1 wk, 3 mo	Resistin concentration shows no difference over a feed but decreases over lactation period

HM, human milk; mo, month; wk, week; d, day; +, positive.

Table S6. Summary of outcomes of studies examining human milk obestatin.

Ref.	Sample size	Lactation stage	Outcomes/Effect
Aydin, et al. [10]	31	2, 25 day	↑ HM obestatin than maternal circulation obestatin No correlation between maternal BMI and HM obestatin
Savino, et al. [75]	40	2-3 mo	+ Correlation, HM obestatin and infants' age, HM obestatin and maternal serum obestatin

HM, human milk; mo, month; BMI, body mass index; ↑, higher; +, positive.

Table S7. Summary of outcomes of studies examining human milk apelin.

Author	Sample size	Lactation stage	Outcomes/effect
Aydin [71]	20	1 – 4 mo	↓ HM apelin in women with GDM than in mothers without GDM + Correlations, colostrum and mature milk apelin concentrations, and mature milk and maternal serum

HM, human milk; mo, month; GDM, gestational diabetes mellitus; ↓, lower, +, positive.

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