



## **Neonatal Eating Assessment Tool – Breastfeeding (NeoEAT – Breastfeeding)**

Intended Use: The NeoEAT - Breastfeeding is intended to assess observable symptoms of problematic feeding in infants less than 7 months old who are breastfeeding. The NeoEAT – Breastfeeding is intended to be completed by a caregiver that is familiar with the child’s typical eating. This is most often a parent, but may be another primary caregiver.

Disclosure: The NeoEAT – Breastfeeding does not replace a healthcare provider’s clinical assessment. The NeoEAT – Breastfeeding is also not intended to provide a diagnosis, but instead may provide the healthcare provider with an objective assessment of the infant’s feeding in order to facilitate diagnosis and treatment decisions.

### Referencing Information:

Please give appropriate credit to the authors when presenting, publishing, or otherwise referencing the Neonatal Eating Assessment Tool – Breastfeeding (NeoEAT – Breastfeeding).

Pados, B., Estrem, H., Thoyre, S., Park, J., & McComish, C. (2017). The Neonatal Eating Assessment Tool (NeoEAT): Development and content validation. *Neonatal Network: The Journal of Neonatal Nursing*, 36(6), 359-367. doi: 10.1891/0730-0832.36.6.359

Pados, B., Thoyre S., Estrem, H., Park, J., & McComish, C. (2018). The Neonatal Eating Assessment Tool – Breastfeeding (NeoEAT-Breastfeeding): Factor structure and psychometric properties. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 47, 396-414. doi: 10.1016/j.jogn.2018.02.014

Pados, B.F., Park, J., & Thoyre, S. (In Press). The Neonatal Eating Assessment Tool – Breastfeeding: Norm-reference values for infants less than 7 months old. *Journal of Human Lactation*, 36(2), 236-244. doi: 10.1177/0890334419869598.

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Child's Name: \_\_\_\_\_

Child's Date of Birth: \_\_\_\_\_

Today's Date: \_\_\_\_\_



## Neonatal Eating Assessment Tool - Breastfeeding (NeoEAT-Breastfeeding)

Directions: We are interested in learning about your baby's eating and behavior. When filling this out, think about what is typical for your baby at this time (in the past week). This version of the NeoEAT is intended for babies who have fed at the breast in the past week.

### Infant Regulation

My baby...	5	4	3	2	1	0	Score
	Never	Almost Never	Sometimes	Often	Almost Always	Always	
1. enjoys eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. opens mouth to accept the breast.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. eats enough to have at least 5 wet diapers per day (24 hours).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. sucks strong enough to get milk from the breast.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. stays latched on to the breast (with or without a nipple shield).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. is satisfied after eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. lets me know when he/she is hungry or thirsty.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. is calm and relaxed when eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. roots when hungry (for example, sucks on fist, smacks lips, looks for breast/bottle)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. is easy to console when upset (for example, stops crying when held or offered a pacifier).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. lets me know when he/she is done eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. stools/poops at least once per day (24 hours).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. sleeps well lying flat on his/her back.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. likes to put fingers and/or toys in mouth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Infant Regulation Subscale Score</b>							

**Energy & Physiologic Stability**

My baby...	0	1	2	3	4	5	Score
	Never	Almost Never	Sometimes	Often	Almost Always	Always	
15. gets exhausted during eating and is not able to finish.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16. is exhausted after eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. needs to be encouraged to keep eating (such as, by touching or talking).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18. takes more than 30 minutes to eat (including rest/burping periods).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
19. can only suck a few times before needing to take a break.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
20. refuses the breast before having eaten enough (such as, turns head, pushes breast away, pushes nipple out of mouth with tongue).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
21. needs help latching on to the breast (for example, needs a nipple shield or positioning help).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
22. needs to rest during eating to catch his/her breath.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
23. tilts head back during or after eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
24. breathes faster or harder when eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Energy &amp; Physiologic Stability Subscale Score</b>							

**Oral-Pharyngo-Esophageal Function**

My baby...	0	1	2	3	4	5	Score
	Never	Almost Never	Sometimes	Often	Almost Always	Always	
25. has a hard time handling how fast milk comes out of the breast (for example, chokes, coughs, gags, or pulls off the breast).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
26. chokes or coughs during eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
27. coughs in between feedings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
28. arches back during or after eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
29. becomes stiff/rigid during or after eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
30. gulps when eating (swallows loudly).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
31. coughs or chokes on saliva/spit when not eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

32. becomes upset during feeding (whines, cries, gets fussy).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
33. sounds gurgly or like they need to cough or clear their throat during or after eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
34. gets a stuffy nose when eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Oral-Pharyngo-Esophageal Function Subscale Score</b>							

**Gastroesophageal Function**

My baby...	0	1	2	3	4	5	Score
	Never	Almost Never	Sometimes	Often	Almost Always	Always	
35. spits up during feeding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
36. throws up during feeding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
37. spits up in between feedings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
38. throws up in between feedings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
39. is uncomfortable if laid flat after eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40. needs to be burped more than once before the end of feeding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Gastroesophageal Function Subscale Score</b>							

**Gastrointestinal Function**

My baby...	0	1	2	3	4	5	Score
	Never	Almost Never	Sometimes	Often	Almost Always	Always	
41. turns red in face, may cry with stooling/pooping.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
42. gets a bloated (big or hard) tummy after eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
43. has hard stools/poop.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
44. is very gassy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
45. has diarrhea.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
46. seems uncomfortable after feeding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
47. gets the hiccups.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Gastrointestinal Function Subscale Score</b>							

**Feeding Efficiency & Sensory Responsiveness**

My baby...	0	1	2	3	4	5	Score
	Never	Almost Never	Sometimes	Often	Almost Always	Always	
48. wants to eat again within an hour after feeding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
49. eats more than 12 times per day (24 hours).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
50. gags in between feedings when there is nothing in his/her mouth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
51. gets upset when something touches his/her face or mouth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
52. gags on a pacifier or toys put in mouth.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
53. gags on the breast.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
54. drools milk out of the side of the mouth when feeding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
55. holds breath when eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Feeding Efficiency &amp; Sensory Responsiveness Subscale Score</b>							

**Compelling Symptoms of Problematic Feeding**

My baby...	0	1	2	3	4	5	Score
	Never	Almost Never	Sometimes	Often	Almost Always	Always	
56. needs tube feedings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
57. has blood or mucous in stool/poop.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
58. gets pale or blue color around lips when eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
59. has milk come out of nose when eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
60. gets watery eyes when eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
61. sweats/gets clammy when eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
62. gets red color around eyes or face when eating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Compelling Symptoms of Problematic Feeding Subscale Score</b>							



## Neonatal Eating Assessment Tool - Breastfeeding (NeoEAT-Breastfeeding)

### SCORING SUMMARY

Scores are assigned to the NeoEAT items with low scores indicating no problems and high scores indicating more problematic behaviors. In each subscale, there are numbers at the top of the response options, which indicate the score assigned to each response in that subscale. Note that the scores assigned to the responses in the Infant Regulation subscale go from 5 to 0, while the scores assigned to responses in all other subscales go from 0 to 5.

To calculate the subscale score, sum the score from each item in that subscale. Copy the subscale scores to the table below. To calculate the total score, sum all the subscale scores. Please refer to the age-based reference values to determine whether a score should be considered "No Concern," "Concern," or "High Concern."

Subscale	Score	Level of Concern (circle)		
Infant Regulation		No Concern	Concern	High Concern
Energy & Physiologic Stability		No Concern	Concern	High Concern
Oro-Pharyngo-Esophageal Function		No Concern	Concern	High Concern
Gastroesophageal Function		No Concern	Concern	High Concern
Gastrointestinal Function		No Concern	Concern	High Concern
Feeding Efficiency & Sensory Responsiveness		No Concern	Concern	High Concern
Compelling Symptoms of Problematic Feeding		No Concern	Concern	High Concern
<b>Total Score</b>		No Concern	Concern	High Concern

Notes:

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## NeoEAT - Breastfeeding

### Reference Values for Infants 0 - 2 months old

The following reference values are for infants between 0 months 0 days and 2 months 0 days old. If the child was born prior to 37 weeks post-menstrual age, please use the child's corrected age when determining which reference values to use.

	< 90th %	90th - 95th %	> 95th %
	No Concern	Concern	High Concern
<b>Infant Regulation</b>	< 24	24 - 30	31 - 70
<b>Energy &amp; Physiologic Stability</b>	< 21	21 - 22	23 - 50
<b>Oro-Pharyngo-Esophageal Function</b>	< 20	20	21 - 50
<b>Gastroesophageal Function</b>	< 15	15	16 - 30
<b>Gastrointestinal Function</b>	< 14	14 - 15	16 - 35
<b>Feeding Efficiency &amp; Sensory Responsiveness</b>	< 15	15 - 16	17 - 40
<b>Compelling Symptoms of Problematic Feeding</b>	< 5	5	6 - 35
<b>Total Score</b>	< 97	97 - 105	106 - 310





## NeoEAT - Breastfeeding

### Reference Values for Infants 2 - 4 months old

The following reference values are for infants between 2 months 1 days and 4 months 0 days old. If the child was born prior to 37 weeks post-menstrual age, please use the child's corrected age when determining which reference values to use.

	< 90th %	90th - 95th %	> 95th %
	No Concern	Concern	High Concern
<b>Infant Regulation</b>	< 27	27 - 30	31 - 70
<b>Energy &amp; Physiologic Stability</b>	< 18	18 - 20	21 - 50
<b>Oro-Pharyngo-Esophageal Function</b>	< 20	20 - 21	22 - 50
<b>Gastroesophageal Function</b>	< 13	13	14 - 30
<b>Gastrointestinal Function</b>	< 14	14	15 - 35
<b>Feeding Efficiency &amp; Sensory Responsiveness</b>	< 13	13 - 16	17 - 40
<b>Compelling Symptoms of Problematic Feeding</b>	< 4	4 - 5	6 - 35
<b>Total Score</b>	< 93	93 -96	97 - 310



## NeoEAT - Breastfeeding

### Reference Values for Infants 4 - 6 months old

The following reference values are for infants between 4 months 1 days and 6 months 0 days old. If the child was born prior to 37 weeks post-menstrual age, please use the child's corrected age when determining which reference values to use.

	< 90th %	90th - 95th %	> 95th %
	No Concern	Concern	High Concern
<b>Infant Regulation</b>	< 27	27 - 29	30 - 70
<b>Energy &amp; Physiologic Stability</b>	< 13	13 - 14	15 - 50
<b>Oro-Pharyngo-Esophageal Function</b>	< 16	16 - 17	18 - 50
<b>Gastroesophageal Function</b>	< 11	11 - 12	13 - 30
<b>Gastrointestinal Function</b>	< 12	12 - 13	14 - 35
<b>Feeding Efficiency &amp; Sensory Responsiveness</b>	< 13	13 - 14	15 - 40
<b>Compelling Symptoms of Problematic Feeding</b>	< 5	5	6 - 35
<b>Total Score</b>	< 80	80 - 84	85 - 310



## NeoEAT - Breastfeeding

### Reference Values for Infants 6 - 7 months old

The following reference values are for infants between 6 months 1 days and 7 months 0 days old. If the child was born prior to 37 weeks post-menstrual age, please use the child's corrected age when determining which reference values to use.

	< 90th %	90th - 95th %	> 95th %
	No Concern	Concern	High Concern
<b>Infant Regulation</b>	< 28	28 - 31	32 - 70
<b>Energy &amp; Physiologic Stability</b>	< 13	13 - 14	15 - 50
<b>Oro-Pharyngo-Esophageal Function</b>	< 15	15 - 18	19 - 50
<b>Gastroesophageal Function</b>	< 10	10	11 - 30
<b>Gastrointestinal Function</b>	< 12	12	13 - 35
<b>Feeding Efficiency &amp; Sensory Responsiveness</b>	< 11	11	12 - 40
<b>Compelling Symptoms of Problematic Feeding</b>	< 5	5	6 - 35
<b>Total Score</b>	< 79	79 - 86	87 - 310