The current manuscript by Tomasik et al. reports that the secretion of orexigenic peptides is regulated by the source of milk fed to infants. Although the different feeding paradigms tested in this study had no significant effects on glucose levels, they observed significant changes in ghrelin and orexin-a circulating levels.

1) The study is well designed and provides novel information on the secretion of orexigenic peptides in response to breast feeding versus other enteral or parenteral feeding paradigm. The authors reported that plasma ghrelin levels were regulated by the different paradigms studied. It is well established that ghrelin circulates in two different forms: acylated and unacylated (desacyl). The acylated form (known as active ghrelin) is thought to be essential for binding to the growth hormone secretagogue receptor (GHSR). The authors need to measure the levels of acylated ghrelin in those samples. Measurements of growth hormone levels, stimulated upon ghrelin binding to its receptor, would also be essential to determine if the observed increase/decrease in total ghrelin has any relevant physiological effects.

2) The authors show for the first time that another orexigenic peptide, orexin-a, is differently regulated by feeding human milk versus infant formula. Were other neuroendocrine peptides, including CCK and GLP-1, also regulated? Please include the data in this manuscript or discuss.

3) What was the proportion of males and females for each group and were there any differences in orexigenic peptide secretion between genders? Please include the proportions in the methods and add the data in the results section.

4) The results presented in this form are difficult to understand. I would suggest to combine the fasting and postprandial graphs (figure 1 and 2) so the effects of fasting and feeding on glucose, ghrelin and orexin-a are easily appreciated. The legend to figures should be modified to reflect this change but also need to be more descriptive.

5) Several references to figures or tables are missing or erroneous in the result section.

6) This sentence needs to be fixed in the discussion. "The plasma levels of OXA one hour after the feeding were similar to these observed in the fasting state,"
except the breast-fed children showing INCREASE in its concentration." If "increase" is really intended, then the sentence needs to be reformulated because I do not agree with this conclusion.

7) The quality of the written English is for the most part acceptable but needs to be addressed, specially for the following:

- Background section: "The breast feeding of newborns and infants declines a risk of overweight since the second year, improves lipid profile and lowers blood pressure in the further life [25, 26, 27, 28]. Probably, way of feeding alters gut-brain axis and generates mentioned above short and long time differences in the development."

- Background section: "Presented in this paper determination of the fasting and postprandial levels of ghrelin and OXA in plasma in nursed infants, infants fed with milk formula, babies maintaining on a hypoallergic, highly hydrolyzed diet as well as in children on the total parenteral nutrition contributes to that problem."

- Discussion section: "They also received with nutrients similar energy (108 ± 20 kcal/kg/24h)."

- Discussion section: "Likely, the level of the hydrolysis of the proteins as well as carbohydrates and additive of ghrelin itself could play a certain role."

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests