The study evaluated the relationship between volume of formula fed in early infancy and risk of overweight in later infancy. Using a prospective design, infants' milk records were collected at 3 months of age and body weight and length were measured at 5 time points from birth to 12 month of age. Compared to breastfed infants, infants who received high volumes of formula had significantly higher weight and lengths from 3 month to 12 months of age. The study concluded that feeding young infants high volumes of formula is associated with greater body weight and overweight in later infancy. The study addresses an important and interesting question; however, there are many issues that limit the paper's interoperability and impact.

Abstract

The abbreviation WLZ needs to be defined in line 39 instead of line 43. The abbreviation BAZ needs to be defined in the abstract.

Introduction

Line 53: Change "growth and development of infants in infancy" to "growth and development in infancy"

Line 54: Please define and/or provide an example of feeding patterns. It seems that the manuscript looks at intake (volume and type of milk) not feeding patterns. Consider changing the terminology throughout the manuscript.

Lines 60-62: The citation for the systematic review is missing.

Lines 60-73: This paragraph is a good summary of the literature; however, a topic (introductory) sentence and concluding sentence are needed to summarize and synthesize this information and connect it to the present study.

Lines 74-75: This sentence is associated with the previous paragraph and should be moved. Please see suggestions for Lines 60-73.
Line 76: Please clarify which infant formula is a major public health problem in China.

Lines 74-81: This paragraph infers that the results of the study will only apply to the Chinese population. However, research on portion size (directly related to volume) has been shown to be consistent across various populations in both children and adults. I would reconsider how you connect the various ideas within this paragraph. Also, the information presented in Lines 74-77 to not obviously lead to the aim of the study presented in Lines 77-81. Overall, I would consider rewriting this paragraph and/or splitting it into 2 paragraphs.

Materials and Methods

Lines 85-88: This sentence could be clarified to say "Using a population-based, prospective, observational study design, TMCHC collected detailed information on pregnant women and their infants to investigate the influence of nutrition intervention during pregnancy and infancy." Please provide a sentence about the nutrition intervention.

Lines: 88-92: There seems to be a typo on Line 91 and thus this section should be two sentences.

Lines 93-108: The relationship between the sample selection methods used in the present study (Lines 93-108) and the overarching study (Lines 84-92). The description TMCHC study said that pregnant women (and therefore their infants) were enrolled in this study, but infants were screened for enrollment in the present study suggesting that the infants were not previously enrolled/connected to the study (Line 94).

Lines 96-97: Also, why was 6.7% used as the estimated rate of overweight and obesity at 1 year of age? Please provide a rational and/or citation for this percentage.

Line 116-117: How was it determined that caregivers prepared the formula milk according to the instruction of manufacturers?

Lines 117-119: Why were the volumes of formula consumption recorded by the community physician at their home visit with the intake reported by the caregivers in 100 formula-fed infants at age of 3 months? Were the 100 formula-fed infants in this study or a different study? If they were in this study, please describe how you selected these 100 infants? If they were in a different study, please provide a reference.

Lines 119-120: Does "the quantities" refer to the quantities consumed by the 100 formula fed infants (Line 119) or all the infants in the study? Please clarify this point. Also, please cite the two independent reports.

Lines: 120-121: Do "the two independent reports" refer to the Chinese infant feeding recommendations and references to the dietary intake of Chinese residents? I would not call
these two sources reports as feeding recommendations typically provide guidance not
information on what is actually being consumed.

Lines 120-124: The cut-off point of 840 mL seems to be based on three different sources of
information: Chinese infant feeding recommendations, references to the dietary intake of
Chinese residents, and the average formula consumption of the infants in this study. It seems odd
that all of these sources of information aligned exactly at 840 mL as a cut-off point. Please
clarify and provide more discussion on how this cut-off point was determined.

Line 129: Please define mixed feeding and artificial feeding.

Line 135-137: From what I understand, you calculated the z score of the difference between
WLZ and BAZ from birth to 1 mo, 1 to 3 mo, 3 to 6 mo, and 6 to 12 mo. Why was a z score of
the difference between the z scores calculated? Why wasn't the difference/change between the z
scores used? Please explain more and clarify this point.

Line 138: Why was greater body weight included? Was it meant to represent "at-risk for
overweight"? Also, I suggest changing "nutritional status" to "weight status" and continue this
change throughout the paper. As an obesity researcher, I have never seen weight-for-length or
BMI-for-age z scores called nutritional status within the obesity literature.

Other questions about methods: Why was formula intake (mL) not analyzed as a continuous
variable? How was the volume of breastmilk determined? Also, I do not think the 1 month time
point is important for this study and should be excluded from methods and results.

Results

Lines 163-164: Should this exclusion criteria be included with the other exclusion criteria
presented in an earlier paragraph in the paper (Paragraph in Lines 93-108).

Line 164: I did not see a clear list of inclusion criteria. Please clarify the exclusion criteria in
your methods section.

Lines: 167-169: P values are missing for these results. Please add.

Line 171: Why was the % of breastfed female infants presented? What about the formula-fed
infants?

Lines 173-175: P values are missing for these results. Please add.

Line 177: Does "continued until 12 mo of age" mean that differences in body weight and length
between the HFM and BM infants was significantly difference at both 6 and 12 months of age?
If this is true, this point needs to be clarified.
From what I understand, WLZ and BAZ changes did not change in the LFM and HFM groups; whereas, WLZ and BAZ decreased in the BM group. However, these differences were not statistically significant. Is this correct? Also, please add the p values to this result.

These confounders were listed in the Statistical Methods section and thus do not need to be listed again.

P values are missing for these results. Please add.

General comment: Birth height and weight were only used as control variables and thus the relationship between volume of formula and growth measures at baseline should not be reported in results, tables, or figures.

Discussion

General comment: Overall, there are issues with word usage, verb tense, and sentence structure throughout this section. I suggest closely editing this section to resolve these issues and improve clarity. This applies to the conclusion too. Also, the results section evaluates the primary aim of the study in three ways; however, there is no discussion about why the results of each analysis differed slightly. Please add this in the discussion.

Add that this result I the comparison of lower-volume formula feeding and breastmilk.

This sentence could be clarified. For example, "These findings are consistent with previous studies that demonstrated that growth in infancy may be affected by the type and volume of milk fed." As previously mentioned, I do not think "feeding patterns" is the correct terminology for this study.

Instead of "decrease their ability to self-regulation of milk intake", I think "lose their ability to self-regulate intake" is clearer. Also, children do not develop a satiety response and appetite regulation, they are born with these abilities. Thus, "delay in development" is not appropriate.

As previously mentioned, how was the volume of breastmilk determined? Please provide these details in the methods section.

How was the energy content of the formula determined and how did you determine if formulas were prepared correctly by mothers/parents in the study? If you are confident in the energy content of both the breastmilk and formulas, why was the relationship between energy and weight not determined in this study?

This paragraph needs to be split into multiple paragraphs. There are currently too many ideas that are not discussed enough.
Line 227-230: This sentence would be clearer and less wordy if rewritten as two sentences.

Line 244: Please define "modern formula."

Line 252-253: It is inferred that a prospective study is longitudinal; thus, you do not need both descriptors.

Conclusions

Lines: 276-278: I am not sure how the study concluded that "these findings provide evidence-based guidelines of reasonable feeding" Also, I do not know what "reasonable feeding" means.

Tables 3 and 4: It would be helpful if P values were provided in the tables for all results. Also, I am not sure why heights and weights are included in the tables as the relationship between milk intake and growth measures was only looked at after 3 months of age. I would remove these (i.e., time points less than 3 months) from the tables as you don't know the infants' intake before 3 months of age.

Figure 2: Also, I am not sure why WLZ and BAZ birth and 1 month as the primary aim of the study could not be evaluated until after 3 months of age. I would remove these (i.e., time points less than 3 months) from the tables as you don't know the infants' intake before 3 months of age.

Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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