nutrients

MDPI

Reply

Reply to Mazela et al. Comment on "Jankiewicz et al. The Effect of Goat-Milk-Based Infant Formulas on Growth and Safety Parameters: A Systematic Review and Meta-Analysis. *Nutrients* 2023, *15*, 2110"

Mateusz Jankiewicz [1], Lucie van der Zee [2] and Hania Szajewska [1,*]

[1] Department of Paediatrics, The Medical University of Warsaw, 02-091 Warsaw, Poland
[2] Ausnutria B.V., 8025 BM Zwolle, The Netherlands
* Correspondence: hszajewska@wum.edu.pl

Thank you for carefully reading and commenting [1] on our review entitled "The effect of goat-milk-based infant formulas on growth and safety parameters: a systematic review and meta-analysis" [2].

As you indicated in your comment, the formula used by Grant et al. [3] and Zhou et al. [4] contains both proteins and fat from whole milk. However, this information is not specified in Grant et al. [3] and was therefore not mentioned in our review. We acknowledge that the formula evaluated by Xu et al. [5] and He et al. [6] is based on skim milk powder and whey protein powder enriched with a vegetable oil blend as a source of fat. However, according to our findings, these differences had no impact on the outcomes evaluated in our review. Neither anthropometric parameters nor stool frequency differences were statistically significant between the goat milk-based formulas that were evaluated and cow milk-based formulas [2]. Furthermore, when compared to human milk, both formulas tested by Zhou et al. [4] and He et al. [6] showed lower stool frequency in infants, with no significant differences between them.

We agree that the introduction should contain information about the lower αS1-casein level as linked with the lower aggregation of proteins instead of a higher αS2-casein level. The randomization process in Zhou et al.'s study [4] was assessed as "some concerns" according to the guidelines from the Cochrane Handbook for Systematic Reviews of Interventions [7] and using Cochrane Collaboration's tool [8] due to significant differences between the intervention groups in baseline. Table 1 in the original article [2] does not contain data from the study published by Tannock et al. [9], because that study did not meet the inclusion criteria for this review. We agree that Table 1 has an error about the intervention period in Zhou et al.'s work [4] (12 months versus 4–12 months). Furthermore, Grant et al.'s work [3] was marked as "no published study protocol available" due to the lack of information in the article about published protocol. It only contains a description of the protocol in the final article. Finally, we acknowledge that the company authors should be mentioned in the Conflicts of Interest section. However, the article does include the information that authors Linde van Lee and Lucie van der Zee are employees of Ausnutria B.V.

Apart from that, the conclusions from the metanalysis should be correct. Our systematic review showed that randomized controlled trials support goat milk-based formulas as a safe and well-tolerated alternative to cow milk-based formulas, irrespective of their compositional differences.

Author Contributions: Writing—first draft preparation: M.J.; Writing—review and editing: L.v.d.Z. and H.S. All authors have read and agreed to the published version of the manuscript.

check for updates

Citation: Jankiewicz, M.; van der Zee, L.; Szajewska, H. Reply to Mazela et al. Comment on "Jankiewicz et al. The Effect of Goat-Milk-Based Infant Formulas on Growth and Safety Parameters: A Systematic Review and Meta-Analysis. *Nutrients* 2023, *15*, 2110". *Nutrients* **2023**, *15*, 4559. https://doi.org/10.3390/nu15214559

Academic Editor: Maria Luz Fernandez

Received: 26 September 2023
Accepted: 24 October 2023
Published: 27 October 2023

Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

Conflicts of Interest: M.J. declares no conflicts of interest. L.v.d.Z. is an employee of Ausnutria B.V. H.S. has participated as a clinical investigator and/or advisory board member and/or consultant and/or speaker for Arla, BioGaia, Biocodex, Danone, Dicofarm, Nestlé, NNI, Nutricia, and Mead Johnson.

References

1. Mazela, J.; Bartnicka, A.; Gallier, S. Comment on Jankiewicz et al. The Effect of Goat-Milk-Based Infant Formulas on Growth and Safety Parameters: A Systematic Review and Meta-Analysis. *Nutrients* 2023, *15*, 2110. *Nutrients* **2023**, *15*, 4558. [CrossRef]
2. Jankiewicz, M.; van Lee, L.; Biesheuvel, M.; Brouwer-Brolsma, E.M.; van der Zee, L.; Szajewska, H. The Effect of Goat-Milk-Based Infant Formulas on Growth and Safety Parameters: A Systematic Review and Meta-Analysis. *Nutrients* **2023**, *15*, 2110. [CrossRef] [PubMed]
3. Grant, C.; Rotherham, B.; Sharpe, S.; Scragg, R.; Thompson, J.; Andrews, J.; Wall, C.; Murphy, J.; Lowry, D. Randomized, double-blind comparison of growth in infants receiving goat milk formula versus cow milk infant formula. *J. Paediatr. Child Health* **2005**, *41*, 564–568. [CrossRef] [PubMed]
4. Zhou, S.J.; Sullivan, T.; Gibson, R.A.; Lönnerdal, B.; Prosser, C.G.; Lowry, D.J.; Makrides, M. Nutritional adequacy of goat milk infant formulas for term infants: A double-blind randomised controlled trial. *Br. J. Nutr.* **2014**, *111*, 1641–1651. [CrossRef] [PubMed]
5. Xu, M.; Wang, Y.; Dai, Z.; Zhang, Y.; Li, Y.; Wang, J. Comparison of growth and nutritional status in infants receiving goat milk-based formula and cow milk-based formula: A randomized, double-blind study. *Food Nutr. Res.* **2015**, *59*, 28613. [CrossRef] [PubMed]
6. He, T.; Woudstra, F.; Panzer, F.; Haandrikman, A.; Verkade, H.J.; van Lee, L. Goat Milk Based Infant Formula in Newborns: A Double-Blind Randomized Controlled Trial on Growth and Safety. *J. Pediatr. Gastroenterol. Nutr.* **2022**, *75*, 215–220. [CrossRef] [PubMed]
7. Higgins, J.P.T.; Thomas, J.; Chandler, J.; Cumpston, M.; Li, T.; Page, M.J.; Welch, V.A. (Eds.) *Cochrane Handbook for Systematic Reviews of Interventions*; Version 6.3 (Updated February 2022); Cochrane: Chichester, UK, 2022. Available online: www.training.cochrane.org/handbook (accessed on 27 January 2023).
8. Sterne, J.A.C.; Savović, J.; Page, M.J.; Elbers, R.G.; Blencowe, N.S.; Boutron, I.; Cates, C.J.; Cheng, H.Y.; Corbett, M.S.; Eldridge, S.M.; et al. RoB 2: A revised tool for assessing risk of bias in randomised trials. *BMJ* **2019**, *366*, l4898. [CrossRef] [PubMed]
9. Tannock, G.W.; Lawley, B.; Munro, K.; Gowri Pathmanathan, S.; Zhou, S.J.; Makrides, M.; Gibson, R.A.; Sullivan, T.; Prosser, C.G.; Lowry, D.; et al. Comparison of the compositions of the stool microbiotas of infants fed goat milk formula, cow milk-based formula, or breast milk. *Appl. Environ. Microbiol.* **2013**, *79*, 3040–3048. [CrossRef] [PubMed]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.