NASPGHAN
North American Society for Pediatric Gastroenterology, Hepatology and Nutrition

September 10, 2025

Martin A. Makary, M.D., M.P.H.
Commissioner
Food and Drug Administration
5630 Fishers Lane, Rm. 1061
Rockville, MD 20852

Submitted through regulations.gov

RE: FDA-2025-N-1134 for Infant Formula Nutrient Requirements; Request for Information

Dear Commissioner Makary:

The North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) is pleased to have the opportunity to respond to the Food and Drug Administration's (FDA) request for information as it initiates review of infant formula nutrient requirements.

NASPGHAN represents more than 3,000 pediatric gastroenterologists and pediatric registered dietitian nutritionists in the United States, Canada, and Mexico and is the only organization singularly dedicated to advocating for children with gastrointestinal, liver and nutrition-related diseases and disorders.

NASPGHAN and its physician leaders developed, at the request of the Biden Administration, the formula substitution list used by the FDA in 2022 following the recall of formulas manufactured by Abbott Nutrition's Sturgis facility and the formula shortage that ensued. More recently and again at the request of the FDA, NASPGHAN nutrition experts undertook a comprehensive review of formulas for premature and term infants and published in June 2025 an updated "Infant Formula Substitution Guide" which categorizes comparable formulas that are safe to substitute

for each other.[1] Consumers and health care professionals can link to this guide from the FDA's website.[2]

NASPGHAN and its members are dedicated to assuring that each child receives the best possible nutrition to optimize healthy development. We believe that human breast milk is the ideal food for healthy infants but recognize that commercial infant formula provides the safest alternative when breast milk is not achievable, available or contraindicated due to underlying medical conditions, or when exclusive breastfeeding cannot be maintained. We also agree that there has been considerable progress in the understanding of early human nutrition since the nutrient content of formula was last updated in 1998. An evolving understanding of the role of early nutrition to assure optimal growth, neurodevelopment, maturation of the immune system, programming of the metabolic system and of the complex interplay of nutrition with the developing microbiome has opened new opportunities to innovate and improve infant formula. Therefore, we strongly support the decision by the Department of Health and Human Services and the FDA to initiate a comprehensive review to "ensure the safety, reliability, and nutritional adequacy of infant formula for American families." We also encourage the FDA to support continued innovative advancements in infant formulas that promote optimal health outcomes.

NASPGHAN looks forward to collaboration with the FDA to support efforts to update the regulations regarding optimizing nutrient levels in infant formula and in other aspects for regulation of infant formula. Our comments below address some broad aspects that we suggest deserve consideration during this review process.

SAFETY OF INFANT FORMULA

NASPGHAN urges the FDA to continue to reinforce to the American public that infant formulas currently marketed in the United States are safe. We are very concerned that parents who do not trust the safety of infant formulas available in the United States will import products online or from third party distributors where supply chain integrity is uncertain, or they may use home-made formulations of questionable quality. It is important the public be reminded that the FDA already strictly regulates infant formula composition and manufacturing to assure that all marketed formula meet or exceed specific nutritional and safety standards. The current infant formula standards define required levels for 30 nutrients and mandate that manufacturers follow Good Manufacturing Practices (GMP) to prevent contamination with bacteria, viruses, and chemicals.

We concur and support the ongoing FDA efforts to reduce exposure of children to environmental contaminants in all foods through the "Closer to Zero" initiative. While it is true that in the

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[1] Infant Formula Substitution Guide; North American Society for Pediatric Gastroenterology, Hepatology and Nutrition, June 2025. https://naspghan.org/nutrition-obesity/infant-formula-substitution-guide/ Accessed Aug. 26, 2025.

[2] Infant Formula; Food and Drug Administration. https://www.fda.gov/food/resources-you-food/infant-formula Accessed Aug. 26, 2025.

United States there are no established maximum allowable levels set for any environmental contaminants in infant formula, we support the FDA's ongoing efforts to collaborate with formula manufacturers to standardize testing protocols, establish toxin exposure maximums to a level as low as is reasonably achievable, and to increase transparency on the full extent of monitoring and safety requirements to boost consumer confidence in the U.S. infant formula supply.

Furthermore, infants can also be exposed to environmental contaminants through the maternal environment and diet as well. As such, it is imperative the FDA collaborate with the Environmental Protection Agency to ensure that environmental regulations are in place to safeguard our food supply. It is also important for consumers to understand that water used to mix powdered infant formula is a separate source of toxins that deserves similar vigilance and education.

U.S. HARMONIZATION WITH EUROPEAN GUIDANCE

The European Union, Australia/New Zealand (FSANZ) and WHO Codex have well-established and ongoing processes to review scientific evidence and provide recommendations to ensure infant formula meets nutritional and safety standards. Revising the process in the United States such that reviews occur more frequently and incorporate new scientific data would be meaningful. The FDA might consider the European approach which leverages the expertise of the European Society of Pediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) to provide scientific advice regarding formula issues. The European Food Safety Authority (EFSA) crafts regulations after consulting with industry regarding changes in regulations for infant formula. NASPGHAN currently partners with ESPGHAN to establish guidelines in many areas of pediatric nutrition and health. We encourage the FDA to consider a similar joint panel of European and North American pediatric nutrition experts to provide scientific input to both EFSA and the FDA.

Infant nutritional needs change with age. The largest change occurs when infants begin to consume complementary foods. In recognition of these changes, formula regulations in most of the world utilize a "staging" approach that requires different nutrient levels at different ages. Stage 1 formula is for infants from birth to 6 months of age. Stage 2 formula (also known as "follow-on" formula) is for infants that are consuming complementary foods, generally those 6-to-12 months of age. Even more age-specific staging may be preferred, but consideration of some flexibility to allow staging, or to apply the approach used in the rest of the world, deserves consideration. We recognize this would represent a marked change in the U.S. marketplace that would require timely collaboration with the formula manufacturers and greater effort to inform U.S. consumers. This change, however, would promote a more scientifically valid approach to infant nutrient requirements and would expand the resiliency of formula supplies in the United States if shortages emerge in the future.

Review of Specific Formula Nutrients and Key Ingredients

As FDA undertakes a review of individual nutrients in infant formula, we re-emphasize that it would be extraordinarily beneficial to convene a joint panel of European and North American pediatric nutrition experts to provide scientific input to the EFSA and FDA in an effort toward greater harmonization of nutritional standards.

While NASPGHAN supports a comprehensive review, we want to draw attention to a few priority areas:

Iron

Currently, infant formula marketed in the United States contain 10-12 mg/L iron as recommended by the American Academy of Pediatrics (AAP) which endorsed these levels and also endorsed removal of all low-iron formula from the U.S. marketplace based upon the evidence available in 1999.[3] Early human milk contains 0.5 mg/L of iron and then declines slightly to 0.2-0.4 mg/L in mature milk. In Europe, ESPGHAN recommends iron levels of 4-8 mg/L. There is no clear consensus regarding the optimal iron levels in infant formula but newer data suggest the higher levels of iron present in U.S. formula compared with human breast milk may have adverse effects and exceed levels required to prevent iron deficiency.[4]

Iron requirements for infants differ across the first year of life. Infants born at or near term (38-40 weeks gestational age) have substantial iron stores that ensure iron sufficiency until at least 4 months of age, and usually past 6 months of age. Despite the low iron levels in breast milk, iron deficiency or anemia is rarely problematic in breast-fed infants before four months of age given current policies promoting delayed cord clamping in the United States.[5] Iron deficiency is rarely problematic in the first 6 months of life and at the iron levels contained in current European formula (4 to 8 ug/L). A recent well-controlled study demonstrated that iron fortification of 2 mg/L is adequate during the first half of infancy for healthy term infants in a well-nourished population.[6]

An emerging recognition of potential adverse effects of higher iron ingestion by infants warrants reconsideration of the high levels previously recommended. Iron supplementation appears to have an adverse effect on the developing enteric microbiome by reducing the concentration of

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[3] American Academy of Pediatrics Committee on Nutrition. Iron fortification of infant formulas. Pediatrics 1999;104:119-23

[4] Gahagan S, Delker E, Blanco E, Burrows R, Lozoff B. Randomized Controlled Trial of Iron-Fortified versus Low-Iron Infant Formula: Developmental Outcomes at 16 Years. J Pediatr. 2019 Sep;212:124-130.e1.

[5] Delayed umbilical cord clamping after birth. ACOG Committee Opinion No. 814. American College of Obstetricians and Gynecologists, Obst Gynecol 2020;136:e100-6

[6] Bjormsjo M et al. Reducing iron content in infant formula from 8 to 2 mg/L does not increase the risk of iron deficiency at 4 or 6 months of age: A Randomized Controlled Trial. Nutrients 2020;13:3

bifidobacteria.[7,8] A well-designed, randomized controlled study of iron supplementation in infants showed that at 16 years of age the iron supplemented group had poorer visual-motor integration, quantitative reasoning skills, and incurred more errors on neurocognitive tasks.[9] Consuming larger amounts of iron-fortified formula in infancy was also associated with lower arithmetic achievement.[10] These observations challenge the previous belief that iron supplementation of infant formula was without risk and benefited a sub-group of infants with iron deficiency.

A panel of experts with relevant expertise in infant nutrition recommended a staged approach to iron supplementation in formula.[11] In view of this evolving understanding of the potential adverse effects of iron, NASPGHAN recommends that new regulations consider lowering required iron levels in infant formula, reducing the upper iron levels and age-appropriate staging of infant formula iron content throughout the first year of life. Infant formula with soy and other protein sources that may impact iron absorption require separate consideration. Preterm infants and those infants requiring specialized formula also require separate consideration of iron requirements.

If ranges of iron levels are changed, the definition of iron fortification should also be reviewed and updated as well.

Carbohydrate Sources

European guidance prefer lactose in all routine formulas, as well as in formulas for cow milk allergy, because protein-free, hypoallergenic lactose is now available. The rationale for this preference is that lactose, an easily digestible disaccharide, is the natural carbohydrate found in all mammalian milk. Lactose also serves as a prebiotic, and its component sugars, glucose and galactose, enhance intestinal absorption of other nutrients and synthesis of essential macromolecules.[12] Glucose enhances the absorption of sodium, calcium, and minerals in the jejunum, while galactose is essential for the synthesis of glycogen in the liver, and

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[7] Krebs NF et al, Balancing the benefits and risks of iron fortification in resource rich countries, J Pediatr 2015;167(suppl 1):S20-25

[8] Karamantziani T et al The Effect of Oral Iron Supplementation/Fortification on the Gut Microbiota in Infancy/ A Systematic Review and Meta-Analysis. Children 2024;11:231

[9] Gahagan S, Delker E, Blanco E, Burrows R, Lozoff B. Randomized Controlled Trial of Iron-Fortified versus Low-Iron Infant Formula: Developmental Outcomes at 16 Years. J Pediatr. 2019 Sep;212:124-130.e1.

[10] East PL et al, Iron supplementation given to nonanemic infants: neurocognitive functioning at 16 years. Nutritional Neurosci 2023

[11] Kleinman RE. Introduction: Recommended Iron Levels for Nutritional Formulas for Infants, J Pediatr 2015;167:S1-2

[12] Anguita-Ruiz A, Vatanparast H, Walsh C, Barbara G, Natoli S, Eisenhauer B, Ramirez-Mayans J, Anderson GH, Guerville M, Ligneul A, Gil A. Alternative biological functions of lactose: a narrative review. Crit Rev Food Sci Nutr. 2025 Feb 27:1-14. doi: 10.1080/10408398.2025.2470394. Epub ahead of print. PMID: 40013417.

galactosyceramides, which are structurally important for myelination and brain development.[13] Scientific evidence is lacking to show whether lactose is nutritionally better than glucose polymers; however, the lower glycemic index of lactose may have long-term beneficial effects on appetite and risk for obesity.[14] Studies have also noted differences in the microbiome in infants fed lactose containing formula to those consuming infant formula with corn syrup solids.[15] It is important to note that consideration of lactose would not necessarily be appropriate for all specialized formulas, such as those specifically designed for managing infants with malabsorptive disorders and for formula used for preterm infants.

Docosahexaenoic acid (DHA) and arachidonic acid (ARA)

Docosahexaneoic acid (DHA) and arachidonic acid (ARA) are long-chain polyunsaturated fats that are present in fish oil, eggs, and human breast milk. These nutrients were first added to some formulas in the United States in 2002. DHA and ARA are now included in most formula marketed in the United States as optional ingredients but the levels added vary by manufacturer. EFSA now requires the addition of 20 to 50 mg/100 kcal (0.5-1.0% of fatty acids) to infant formula based upon the concentrations found in human breast milk and upon studies in infants where benefits of DHA addition were demonstrated. EFSA does not require addition of ARA but most European formulas contain ARA. Other international regulatory agencies have continued to allow DHA and ARA as optional ingredients but have not required inclusion in infant formula. There is considerable controversy regarding whether adding DHA to infant formula confers clear benefits. Some studies show improved cognitive outcomes, improved visual development and reductions in allergy risk with addition of DHA and ARA to infant formula but others show no benefit. A recent draft AHRQ effectiveness review[16] and previous Cochrane review[17] both conclude that there was no well-established benefit but also no evidence of harm associated with addition of DHA to infant formula. The high variability in study designs and endpoints contributed to difficulties in excluding potential benefit from the addition of DHA to infant formula. Likely more important is the recognition that a subpopulation of individuals with

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[13] Schaeren-Wiemers N, van der Bijl P, Schwab ME. The UDP-galactose:ceramide galactosyltransferase: expression pattern in oligodendrocytes and Schwann cells during myelination and substrate preference for hydroxyceramide. J Neurochem. 1995 Nov;65(5):2267-78. doi: 10.1046/j.1471-4159.1995.65052267.x. PMID: 7595516.

[14] Mokhtari P, Schmidt KA, Babaei M, Goran MI. Altered Nutrient Composition of Lactose-Reduced Infant Formula. Nutrients. 2024 Jan 17;16(2):276. doi: 10.3390/nu16020276. PMID: 38257168; PMCID: PMC10821187.

[15] Jones RB, Berger PK, Plows JF, Alderete TL, Millstein J, Fogel J, Iablokov SN, Rodionov DA, Osterman AL, Bode L, Goran MI. Lactose-reduced infant formula with added corn syrup solids is associated with a distinct gut microbiota in Hispanic infants. Gut Microbes. 2020 Nov 9;12(1):1813534. doi: 10.1080/19490976.2020.1813534. PMID: 32887539; PMCID: PMC7524300.

[16] Dietary Total Fat Intake and Dietary Polyunsaturated Fatty Acid Intake and Child Growth and Development Outcomes: A Systematic Review. Agency for Healthcare Research and Quality; Aug. 28, 2025. https://effectivehealthcare.ahrq.gov/products/child-growth-development-outcomes/draft-report https://effectivehealthcare.ahrq.gov/products/child-growth-development-outcomes/draft-report Access Sept. 4, 2025.

[17] Jasani, B.; Simmer, K.; Patole, S.K.; Rao, S.C. Long chain polyunsaturated fatty acid supplementation in infants born at term. Cochrane Database Syst. Rev. 2017, 2017, CD000376

certain fatty acid desaturase (FADS) genotypes have a more limited ability to synthesize DHA.[18] These genotypes are more common among various ethnic groups including Latinos and Asians[19] who were not included in many of the outcome studies.

DHA is well-established to not be harmful, DHA is present in human breast milk, and dietary supplementation potentially benefits visual and cognitive development. In sum, DHA fulfills criteria for mandatory supplementation as recommended by EFSA (similar to iron inclusion in infant formula to prevent iron deficiency in a subset of infants despite concerns about safety). However, EFSA neglected to require simultaneous supplementation with ARA. Most international regulations require that ARA be added in at least a 1:1 ratio when DHA is added as an optional ingredient. There is a lack of evidence that the addition of DHA without ARA is safe and suitable to support growth and development in infants.[20,21]

NASPGHAN recommends the FDA impanel a group of experts to consider whether DHA and ARA addition to infant formula would benefit a substantial portion of U.S. infants receiving infant formula, and, if so, consider requiring mandatory inclusion of both DHA and ARA in infant formula to align with European DHA recommendations but to additionally require that ARA is added with at least the same concentrations as the added DHA. It would also be worthwhile to review newer data derived from brain MRI studies showing improved patterns of de novo myelination and cognitive outcomes in breast-fed versus formula-fed infants. Notably, among the formula-fed group, those fed formula with higher DHA and ARA content appeared to have outcomes closer to those of breast-fed infants.[22] Labeling requirements should also be updated to make levels of DHA transparent to health care providers and parents alike.

Fat

The lipids in human milk and infant formula provide about 45-55 percent of the total energy needs of the infant. The percentage of fat in human breast milk varies substantially among different mothers over the course of lactation, with time of day and in hindmilk versus foremilk. Triacylglycerol is the predominant component of breast milk fat, making up approximately 98

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[18] Mathias RA et al, Genetic Variants in the FADS Gene: Implications for Dietary Recommendations for Fatty Acid Intake. Curr Nutr Rep. 2014.

[19] Harris DM et al, Evolution of Hominin Polyunsaturated Fatty Acid Metabolism: From Africa to the New World, Genome Biol. Evol. 11(5):1417–1430.

[20] Koletzko B et al, Should formula for infants provide arachidonic acid along with DHA? A position paper of the European Academy of Paediatrics and the Child Health Foundation, Am J Clin Nutr2020

[21] Tounian P et al, ARA or no ARA in infant formulae, that is the question. Archives de Pediatrie 2021

[22] Deoni S et al, Early nutrition influences developmental myelination and cognition in infants and young children. Neuroimage 201;1778:649-659

percent of total breast milk lipid. There are wide variations in the fatty acid composition of human milk with ranges and mean contents being summarized in several reviews.[23,24]

No single animal or vegetable fat source mirrors the fatty acid profiles in human milk. Infant formula manufacturers use a blend of fat sources to produce infant formula with fatty acid profiles similar to those most frequently found in human milk. Combinations of soy, coconut, high-oleic sunflower, safflower, palm olein, canola oil and bovine milk fat are among the most common ingredients currently used for manufacture of infant formula. Although some have raised concerns about the excessive consumption of certain seed oils in the general population, there is no evidence of adverse effects when these oils are used as a component of the fat blends in currently marketed infant formula. Importantly, seed oils provide a source of the essential fatty acid, linoleic acid, which is required in infant formula to assure healthy infant growth and healthy skin.

NASPGHAN welcomes discussion and further research on whether alternative sources of lipids, including essential fatty acids, may be appropriate for infants and provide structural stability.

Protein

Bioactive proteins in breastmilk are numerous, dynamic and may vary across various stages of infant nutrition.[25] Dietary protein is essential for providing adequate amounts of essential and conditionally essential amino acids to achieve a positive nitrogen balance, meet physiological needs, and support deposition of tissue and growth at rates consistent with good health. The current FDA code of regulations (21 CFR 107.100) for the nutrient content of infant formula recommends a protein intake of 1.8 to 4.5 g/100 kcal when the biological value is equivalent to or better than that of casein. However, the protein content of human milk ranges from 1.1 to 1.4 g/100 kcal, and epidemiological studies suggest a link between high protein intake during early childhood and increased long-term risk for overweight and obesity.[26] Furthermore, clinical trials examining the growth outcomes of infants fed lower-protein formula (1.77 g/100 kcal) compared to higher-protein (2.9 g/100 kcal) formulas showed slower growth in the lower-protein group,

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[23] Zhang Z et al. Human milk lipid profiles around the world: A systematic review and meta-analysis Adv Nutr 2022:13:2519-2536

[24] Nguyen MTT et al, Comprehensive analysis of fatty acids in human milk of four Asian countries. J Dairy Sci 2021

[25] Zhou Y, Duan Y, Jiang S, Zhang Y, Liu M, Gu X, Li Y, Zhang N, Jiang R, Yang Z, Lai J. Longitudinal changes in human milk lactoferrin during the first year: a prospective cohort study. Pediatr Res. 2025 May 9. doi: 10.1038/s41390-025-04109-7

[26] Arnesen EK, Thorisdottir B, Lamberg-Allardt C, Bärebring L, Nwaru B, Dierkes J, Ramel A, Åkesson A. Protein intake in children and growth and risk of overweight or obesity: A systematic review and meta-analysis. Food Nutr Res. 2022 Feb 21;66. doi: 10.29219/fnr.v66.8242. PMID: 35261578; PMCID: PMC8861858.

which was similar to the normal growth patterns seen in healthy breastfed infants.[27] An International Expert Group (IEG) of infant nutrition experts from ESPGHAN and other societies recommends a narrower protein range than 21 CFR 17.100, and specific to the protein source. For intact or hydrolyzed cow's milk protein, the recommended range is 1.8-3 g/100 kcal, and for soy protein isolates, 2.25-3 g/100 kcal.[28] Therefore, the FDA's regulations regarding protein intake could be reconsidered to recommend slightly lower protein intake and narrower range. Moreover, should the United State move toward staged infant formulas, it would open the possibility of tailoring protein content more precisely to the developmental needs of infants at each stage.

Optional and New Ingredients

NASPGHAN encourages the FDA to recognize that advances in infant nutrition science have facilitated the development of new ingredients that may confer some of the benefits of human breast milk to the formula-fed infant. These new ingredients include a variety of bioactive protein isolates from cow milk, such as lactoferrin, alpha-lactalbumin; milk fat globule membrane enriched whey; structured lipids; and a variety of human milk oligosaccharides, other prebiotics, probiotics, and postbiotics. Establishment of a clear and standardized approach to assure safety and ideally to demonstrate benefits for new ingredient introduction would be helpful for both consumers and formula suppliers.

USE OF FORMULAS

We encourage the FDA to reinforce that this RFI addresses formula used for feeding normal, full-term, otherwise healthy infants. Currently, U.S. regulations require that formula be designed to meet the needs of infants from birth to age 12 months. As part of the FDA nutrient review, NASPGHAN believes the FDA should recognize that nutrient requirements change across the first year of life. It may be worthwhile to consider altering the U.S. regulatory structure to permit formulas to be designed to alter nutrient levels such that they provide optimal nutrition at each stage of infant development in an approach consistent with the approach used in much of the rest of the world.

Formulas for infants with special needs such as for cow-milk allergy, malabsorptive disorders and metabolic disorders, may require somewhat modified regulatory pathways. Nutrient requirements may differ in these specialized populations, and we encourage the FDA to work further with NASPGHAN and other professional organizations to assure that specialized formulas receive similar consideration to formula for healthy infants. Further, it is important for

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[27] Koletzko B, von Kries R, Closa R, Escribano J, Scaglioni S, Giovannini M, Beyer J, Demmelmair H, Anton B, Gruszfeld D, Dobrzanska A, Sengier A, Langhendries JP, Rolland Cachera MF, Grote V. Can infant feeding choices modulate later obesity risk? Am J Clin Nutr. 2009 May;89(5):1502S-1508S. doi: 10.3945/ajcn.2009.27113D. Epub 2009 Mar 25. Erratum in: Am J Clin Nutr. 2009 Jul;90(1):248. Monasterolo, Ricardo Closa [corrected to Closa, Ricardo]; Subias, Joaquín Escribano [corrected to Escribano, Joaquín]. PMID: 19321574.

[28] Koletzko B, Baker S, Cleghorn G, Neto UF, Gopalan S, Hernell O, Hock QS, Jirapinyo P, Lonnerdal B, Pencharz P, Pzyrembel H, Ramirez-Mayans J, Shamir R, Turck D, Yamashiro Y, Zong-Yi D. Global standard for the composition of infant formula: recommendations of an ESPGHAN coordinated international expert group. J Pediatr Gastroenterol Nutr. 2005 Nov;41(5):584-99. doi: 10.1097/01.mpg.0000187817.38836.42. PMID: 16254515.

the FDA to recognize certain specialized formulas, which specifically alter the protein, carbohydrate, or fat composition to safely feed infants with medical conditions. These diagnoses of concern include diseases such as allergic colitis, complex congenital heart disease, eosinophilic diseases, kidney disease, intestinal failure, and metabolic/genetic disorders. These formulas are medically necessary and often the only way to safely feed these infants. Without these different formula types, children may be at risk for malnutrition including vitamin and mineral deficiencies. Malnutrition can also lead to increased prolonged hospitalizations and even death in extreme cases.

We encourage the FDA to work with formula manufacturers to establish a realistic timeline for the application of any changes in guidelines such that the resiliency of infant formula supply is not impacted by any regulatory changes.

MARKETING AND LABELING OF FORMULAS

Although the current RFI is focused upon nutrient levels in infant formula, NASPGHAN urges the FDA to review and update guidance on infant formula labeling and marketing. The myriad of formulas currently available with a variety names and labels that suggest various benefits confuses parents and caregivers, as well as health care providers. Often these formula labels imply benefits that are not scientifically validated. Labels should be simplified and standardized.

We recommend that the FDA work with professional societies and parent/family organizations to assure that formula names, labels and advertising provide consumers with less confusing formula choices such that the composition is readily understandable, and that actual and/or implied claims are substantiated. Use of terms such as "clinically tested" to imply benefit even if the referenced clinical study did not show any meaningful benefit compared to other formulas should be limited.

A review of the current criteria for permissible structure-function claims (e.g., claims that a formula improves digestion) or benefit claims would be useful to promote greater trust among health care professionals and consumers. Demonstration of a clinical benefit such as reduced infection rates, reduced antibiotic usage, softer stools or improvements in cognitive outcomes may be considered as preferable claim justifications for new ingredients as opposed to structure/function claims.

Formula names should not imply unproven benefits. Many formulas are heavily marketed to parents and physicians who are caring for infants with irritability, which suggest that the formula is "soothing" or "gentle," for example, without proven evidence. Some of these formulas are altered in some way, such as eliminating lactose or partially digesting proteins, which does not benefit the majority of infants with infantile colic, milk protein allergy, or gastroesophageal reflux. This marketing tactic leads to multiple formula changes without clear benefit to the infant. As such, optional ingredients should specify the specific level of the relevant component on the label, and claims regarding benefit should only be permitted when the nutrient level in the specific formula has been demonstrated to confer a benefit in well-designed clinical studies. A review process should be established such that claims to consumers are based on scientific

evidence from relevant clinical studies in infants. Furthermore, consistent standards for "organic" labeling should also be established for infant formula.

It is important that changes in advertising regulations do not disincentivize innovation by formula companies. Harnessing the emerging science in infant nutrition to improve infant formula requires substantial investments. Companies that engage in research to improve infant formula should be allowed to inform health care professionals and consumers about proven benefits.

CONCLUSION

We hope the FDA will look to NASPGHAN in the same way that the expertise of ESPGHAN is leveraged in Europe for providing expert advice on formulas. NASPGHAN commends the FDA for initiating this long-overdue review, and it is imperative the outcome of the review be transparent, involve the input and expertise of the pediatric physician community, be grounded in robust scientific evidence and centered around well-designed clinical studies. NASPGHAN looks forward to future engagement with the FDA on this important topic. For additional information or to be connected with NASPGHAN members who can serve as topic experts to the FDA, please contact Camille Bonta, NASPGHAN policy advisor, at cbonta@summithealthconsulting.com or (202) 320-3658.

Sincerely,

Vicky Lee Ng, MD, FRCPC
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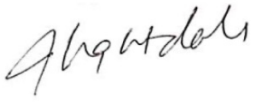

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