

Advancing Neonatal Nutrition: Insights from MedStar Georgetown University Hospital NICU's Use of Miris HMA[®]



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In the dynamic landscape of neonatal care, precision and tailored nutrition play a pivotal role in ensuring the optimal growth and development of premature infants. MedStar Georgetown University Hospital NICU, a Level 4 facility with 36 beds in Washington DC, is renowned for its commitment to innovative approaches in neonatal care. In 2020 their NICU invested in Miris HMA[®] to further improve the nutritional care they provide to their patients. Miris interviewed registered dietitians Sejal Dave and Loredana Cunningham to hear how Miris HMA[®] has reshaped their approach to neonatal nutrition and elevated the standard of care for premature infants in their unit.

How did your interest Neonatal Nutrition start?

Sejal: My interest in nutrition began with a focus on wellness, disease prevention, and utilizing nutrition to enhance patients' health. Mid way in my career my path led me to working with Pediatric and Neonatal populations. It was very rewarding to work with populations where nutrition contributed to the overall health and well-being of patients.

Lori: My interest in NICU nutrition started when I changed jobs and had the opportunity to train in the NICU. Prior to this I had pediatric and adult intensive care experience and was ready for a new challenge. I have worked in the NICU since 2003 and continue to love the complexity of this special population.

When did you first come into contact with Miris HMA[®]?

In 2019 Dr. Lewis Rubin, joined our neonatology staff at MedStar Georgetown University Hospital. He invited MIRIS to give the team a demonstration of the analyzer as he wanted to bring this new technology to our NICU. In 2020 the NICU invested in Miris HMA[®] to help provide targeted nutrition care for our most vulnerable populations.



Sejal Dave

“Overall, we have seen improved growth and less waste of formula/fortifiers.”

How was it getting started with analysis?

It was simple to get started with analysis. We received training on the analyzer by a trainer from Miris and there are many training videos and manuals available as needed.

In the beginning we had some resistance from staff members that wondered why the analysis was being done and if this was helpful, but this was overcome by re-education to the staff by the dietitians.

We first did a trial to set up routines and processes for use and to decide on the appropriate space to keep and use the equipment. In our NICU we as dietitians are running the samples, so no extra staffing was needed but it added to our workload and responsibilities.

After this we developed its use into the standard of care for our unit. Today the process takes approximately 90 minutes to 2 hours each week depending on the census of babies in our NICU.

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How is the Miris HMA® implemented in your standard of care today?

We use the results to provide individual attention and care to the nutrition plan for each infant. We try to make the fortification specific to the baby vs. one size fits all. We discuss the results of the mothers

milk or donor milk with the team during rounds and make fortification decisions based on the results and growth of each baby.

What results have you seen after the implementation of Miris HMA® in your NICU?

Overall, we have seen improved growth and less waste of formula/fortifiers. The feedback from our colleagues have been very positive and they have shown great interest in seeing the results from analysis.

Parents are always interested in how their breast milk supports their infant’s growth and what can be done to optimize their milk.



Loredana Cunningham

Now that Miris HMA® is part of standard of care in your NICU, how would you feel if analysis results were not available?

Nutrition is extremely important for the preterm infant who is at a deficit simply by being born too early. When nutritional needs are not adequately met, this can lead to growth failure, possible cognitive and developmental disabilities, and vitamin deficiencies.

If we did not have access to the nutritional value of mother's milk in our NICU it would be a disadvantage

for the patients. Now that we use the analyzer, we enjoy having the information at our disposal to provide more individualized care for our most vulnerable patients. We are also using the information for process improvement in our nursery.

We recommend that institutions consider their populations and how easily they can modify mothers' breast milk. If resources (i.e. staff) are limited, then this may not be possible but should be considered to support the nutritional care of premature infants.

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