Improve Nutritional Care in your NICU

Miris HMA™ – Human Milk Analyzer macronutrient analysis of human milk

MIRIS

5 Steps of Target Fortification

Pumping

According to the mother, normal schedule

Mother pumps and collects the milk in separate bottles/bags for each pumping during 24h in her normal pumping schedule.

24h pooling

Choose your method

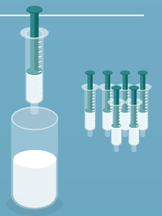
Full pool:
NICU defrosts all bottles/bags and pools into one container. A 24h pool sample is taken out after thorough mixing

OR

Aliquote pool:
NICU defrosts all bottles/bags and takes a 0.5-1 ml aliquot out of each bottle/bag. All aliquots are pooled in a single container

OR

Home pool:
Mother takes a 0.5-1 ml aliquot out of each bottle/ bag directly after pumping. All aliquots are pooled in a single container



To account for with in-day variation it is important to create a 24h-pool sample.

Analysis

Analysis is performed on a 24h-pool sample once or twice per week

In a single run Miris HMA™ measures the concentration of fat, carbohydrate, protein, total solids, and energy in human milk.

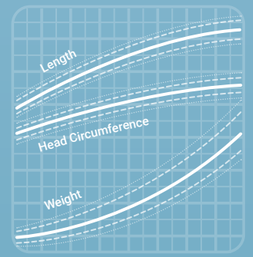
Fortification

Fortification is calculated to meet nutritional targets

The results of the analysis is used to calculate the fortification needed to reach the baby's target.

Evaluation

Growth is evaluated according to your standard practices



Achieving adequate nutrition for each preterm baby is an essential part of ensuring the best possible outcome.

Target fortification gives preterm babies a better start in life

The nutritional content of human milk changes over time and differs between mothers. Fortifying milk blindly without knowing the macronutrient content will often miss the nutritional target, leaving the infant at risk of over- or undernutrition. Miris HMA™ measures the energy, fat, carbohydrate and protein content. This enables clinicians to adapt fortification to the actual macronutrient content of the milk.

Read more

5 reasons to use target fortification

1 Overcome macronutrient variability in milk

There are large variations in the macronutrient content of human milk used in neonatal care. Mother to mother variation, stage of lactation, and methods of storage and treatment can all affect composition. Target fortification is used to tailor human milk for different nutritional needs by analysing the milk prior to fortification. By knowing the macronutrient content it becomes easy to identify if fortification is needed.

2 Facilitate quality of growth

Target fortification allows for the managing of protein intake and of the protein:energy ratio in the range of nutritional recommendations. This facilitates quality of growth for each preterm baby.

3 Limit the risk of protein deficiency

The concentration of protein in human milk declines significantly after birth. The ESPGHAN 2010 guidelines indicate that most preterm babies have a protein deficit that is linked to their weight and to the composition of their feed. Measuring the protein concentration makes it possible to fortify the milk to each babies requirement.

4 Focus on better clinical outcomes

Using target fortification will limit the risk for malnutrition, in the short term associated with poor growth and in the long term with complications such as visual impairment, developmental disorder and cardiovascular disease, and overnutrition associated with increased body fat, larger waist circumference and impaired glucose homeostasis.

5 Stabilise nutritional intake

The target fortification approach will reduce day to day variability in nutritional intake, giving each baby the best oportunity for stable growth.

Miris Products

Through years of experience Miris has developed a portfolio of instruments and consumables for the complete workflow of human milk analysis to provide the most accurate and reproducible results.

Products

Miris Support & Service

Support

Support

- Extensive experience in human milk analysis and composition
- Instruction videos and Troubleshooting guides
- Miris Studio
- FAQ section
- Free support via email, phone and Microsoft Teams

Service

- Installation & Training – on site/via Miris Studio
- MyMiris – Digital customer platform
- Follow-up training on-site/via Miris Studio
- Knowledgebank – Miris publication bank
- Service agreements

Miris Studio

Request an online meeting tailored to your needs:

Whether you want an overview of the Miris Human Milk Analyzer™ (Miris HMA™) features or you already have your Miris HMA™, our online live demonstrations in Miris Studio give you the opportunity to discover everything from set-up, walk-through of the analysis process, to discussions on clinical daily use of Miris HMA™.

We are happy to schedule an online training and support session.

Your team can even join the same meeting from different locations with their computer or smartphone.

Book here

Book through the QR-Code or visit www.mirissolutions.com/support/miris-studio