



Human Milk Analyzer

- fat, protein, lactose, energy and dry matter



We make the invisible, visible!

A revolution in modern breast milk analysis

- RESULTS WITHIN 60 SECONDS
- NO CHEMICALS NEEDED
- BUILT IN COMPUTER
- CAN BE CONNECTED TO EXTERNAL PC
- SMALL SAMPLE SIZE
- EASY HANDLING
- PORTABLE



A new tool for individualized infant nutrition.

Investigations have shown that both mothers own milk and bank milk vary in nutritional composition. Being able to easily perform direct analysis of breast milk makes it possible to give the infant individualized nutrition. This is especially important for premature babies when the weight gain is too low and the baby shows symptoms of NEC.

MIRIS Human Milk Analyzer offers a unique opportunity for direct determination of the nutritional content of breast milk. With a small sample size of 1-3 ml it is now possible to analyze the composition of breast milk for the content of fat, protein, lactose, energy and dry matter. With the new instrument, MIRIS Human Milk Analyzer, the analyses are done without chemicals. Results are obtained within one minute. Features of the instrument are its small size, robustness and easy handling.

The instrument is portable and is intended for use in hospitals, milk banks and child welfare centers.

MIRIS Human Milk Analyzer is based on approved IR-technology (Infrared transmission spectroscopy) in combination with a new, unique patented technique. The accuracy is high and all components are analysed in one single run. The results are presented on the display of the instrument and can easily be transferred to your PC. The instrument has been evaluated for breast milk analysis at the University Hospital in Lund, Sweden, University of Western Australia and is today being used at several university teaching hospitals around the world. MIRIS Human Milk Analyzer is CE approved for In vitro diagnostics according to European Commission Directive 98/79/EC.



TECHNICAL DATA	
Dimensions (HxWxB)	9 x 26 x 31 cm
Weight	3 kg
Power supply	15V, 4A DC
PC connections	USB B for data transfer and Program updates via ActiveSync or Windows Mobile Device Center USB A for memory stick, and devices i.e. keyboard, mouse, scanner, etc. RS232 and Ethernet
Display	TFT QVGA 320*240
Environmental temperature	+15C° (59F°) to + 35C° (95F°)
Sample temperature *	+20C° (68F°) to + 40C° (104F°)
Internal Storage capacity	4000 measurements
Backup of measurement data	Internal persistent flash memory
Operative system	Windows CE 5.0
Measurement performance	Repeatability (SD) <0.05% Accuracy (SD) <0.1 %
Shown value	1 decimal
Time for analysis	60 seconds / measurement
Analytical method	Mid infrared transmission spectroscopy
Standards	CE class B LVD, FCC, Medical Device

* For optimum results preheating of the samples to 40C° (104F°) is recommended

STARTER KIT

- » Contains syringes, detergents, AC/DC adapter.
- » USB Cable for datatransfer to PC, CD with manual.
- » Quickguide, spare parts for inlet filter and outlet valve.
- » Robust carrying case.

OPTIONS

Equipment

- » Terminal cable for real time data transfer to PC (RS232).
- » Portable thermal printer for printouts of result.
- » Portable rechargeable battery for mobile use.
- » Barcode reader.

