neonates without probiotics treatment were run, 0.7% were found positive for *L. rhamnosus*, 0.4% were positive for *B. lactis*, non of the samples were positive for both. A total of 247 faecal samples from premature neonates treated with probiotics were run, 57.0% of the collected faecal samples contained both *L. rhamnosus and B. lactis*, 38.0% were positive only for *L. rhamnosus*, 4.4% were positive for only *B. lactis* and 0.6% was negative for both probiotics.

**Conclusion** The probiotic supplementations do reach the gastrointestinal tract and be detected. In general the rate of NEC and death were reduced in premature neonates treated with *L. rhamnosus* and *B. lactis*.

**KNOWLEDGE AND ATTITUDE OF BREAST FEEDING AMONG FEMALES IN SAUDI ARABIA**

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**Background** As stated by the WHO, exclusive breastfeeding is unequalled for healthy growth and development in young infants. In this study; we attempted to address the attitude of females in Saudi population toward awareness and knowledge of breastfeeding.

**Method** An observational cross-sectional survey distributed participants who were interviewed at shopping malls in the city of Riyadh. The survey addressed socio-demographic data and attitude of eligible females toward breastfeeding exploring the benefits and reasons limiting breastfeeding practice among the population.

**Results** A total of 332 females were enrolled in this study. Most of the interviewed participants were Saudi, married, and had more than one child. 86% of interviewed participants believed the best way to start feeding the newborn are solely breastfeeding. 41% attended breast feeding health education. Availability of formula, cosmetic, short maternity leave from job and lack of awareness were factors believed to limit breast feeding. Mother’s education, parity, and age significantly correlated with the belief that exclusive breast feeding is the best start for the newborn.

**Conclusion** Females in Saudi Arabia are well aware that breast feeding is the best start for the newborn. Practical steps such as intensive education, support at postnatal period and longer maternity leave are required to improve rates of exclusive breastfeeding in the country.

**OPTIMIZING NUTRITION AFTER BIRTH WITH A UNIQUE STANDARDIZED PARENTERAL SOLUTION MAY REDUCE ELECTROLYTES ANOMALIES IN < 1250G INFANTS**

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Nutritional recommendations in VLBWs infants advised to increase protein and energy intakes but also advised to avoid parenteral nutrition electrolytes intakes during the first 2–3 days of life to reduce electrolytes anomalies that are frequently observed.

**The Aim** of this study is to evaluate the electrolytes tolerance of an optimized nutritional program using a unique standardized parenteral nutrition solution (StPNsol) containing electrolytes from the first day of life in < 1250g infants (N=102) during the first 15 days of life.

On the first day of life, PN intakes from the StPNsol included $32\pm6$ kcal/kg•d, $2.4\pm0.3$ g/kg•d of protein, $0.8\pm0.4$ mmol/kg•d of sodium and $0.8\pm0.4$ mmol/kg•d potassium. Afterwards, nutritional intakes rapidly increased.

Hyponatremia >150 mmol/L occurs in 16 infants (15.6%), on 27 days (1.8%), essentially between 1 and 5 days of life (19 days). Hyponatremia < 130 mmol/L occurs in 31 infants (30.4%) on 55 days (3.6%), essentially between 1 and 7 days of life (40 days).

No infant develops a hyperkalemia > 7 mmol/L. Hypokalemia < 3 mmol/L occurs in 9 infants (8.8%) on 16 days (1.0%), mainly between 1 and 8 days of life (7 days).

This study demonstrates that increasing protein and energy intakes with a StPNsol containing electrolytes from the first day of life is not associated with an increased incidence of hypernatremia or non-oliguric hyperkalemia. Furthermore, this study seem to suggest that optimizing nutritional intakes and increasing anabolism may require higher electrolytes intakes than usually recommended during the first days of life in VLBWs infants.

**IMPACT OF PERINATAL NUTRITION ON KIDNEY FUNCTION AT FIVE YEARS IN VERY LOW BIWEIGHT CHILDREN**

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**Aim** To determine the impact of perinatal factors on renal function in five year-old preterm-born children.

**Material and Methods** Prospective longitudinal study of preterm-born children from birth to five years of age, and five year-old full-term controls. Renal function measured in the neonatal period and at five years.

Primary outcome was renal function at five years: blood pressure (BP), estimated glomerular filtration rate (eGFR), albuminuria. Multivariate analysis was performed with multiple linear regression models.