

## **Fact Sheet 27                      Breastmilk**

The approximate constitution of breast milk is:

Water	88%
Fat	3.8%
Protein	0.9%
Lactose	7.0%
Other	0.2%

### **How do babies get enough water**

The daily fluid requirements for healthy infants ranges from 80-100mls/kg in the first week of life to 140-160mls/kg at 3-6 months. These amounts are easily available from breast milk for two reasons, breast milk is 88% water and it is low in solutes.

An infant's kidneys are immature up to three months of age, but still able to function through concentrating excess solutes (e.g. Sodium, Potassium, Nitrogen and Chloride). As breast milk is low in solutes this is easier for the kidneys and they do not require as much water as an older child or adult.

Offering water to an infant before six months of age can pose potential problems:

- Consumption of even small volumes of water can fill an infants stomach and reduce their appetite for nutrient rich breast milk
- Water supplementation can reduce breast milk intake by up to 11% (sugar water has been associated with even great weight loss in infants)
- Water safety and the implements used for giving water often carry pathogenic bacteria that can cause diarrhoea and illness.

### **Colostrum**

Colostrum is the first milk produced by the mammary glands in late pregnancy and for only the few days after giving birth. It is a creamy yellow colour, and it is lower in energy than mature milk.

Colostrum is rich in protein and carbohydrate and low in fat. Newborns have very small digestive systems. Colostrum delivers its nutrients in a very concentrated low-volume. Much of the protein content present in Colostrum is as immunoglobulins

(mainly IgA) which aids in protecting against infection. Other benefits are thought to be its mild laxative effect which helps the baby to pass its first stool (meconium).

***Recommendations in Australia***

The recommendations around colostrum in Australia are that it is beneficial to the newborn and is an integral step in the breastfeeding process.