**Indication**: Fat supplementation for neonates unable to digest or absorb conventional fats.

**Action**: Lipid fraction of coconut oil consisting of medium chain triglycerides with carbon chain lengths of 6-10 carbons. MCTs are more readily hydrolyzed and absorbed than long chain fats. MCTs are absorbed directly into the portal circulation and do not require bile salts for emulsification.

**Drug Type**: Medium Chain triglyceride (MCT) oil. Source of Oil: coconut and/or palm kernel oil

**Trade Name**: MCT Oil

**Presentation**: MCT Oil (Nutricia) – 500 mL. Approximately 1g (0.95 g)/mL fat giving 8.6 kcal/mL.

**Dosage / Interval**: 1–2 g/kg/day (1–2 mL/kg/day) in 3-4 divided doses.

**Maximum daily dose**: 4 g/kg/day

**Route**: ORAL

**Administration**: Oral or via intra gastric tube. DO NOT GIVE IV!

**Precautions**: MCT oil can adhere to feeding tubes resulting in loss of nutrient.\(^3\) Large intakes may cause vomiting or diarrhoea.\(^5\)

**Contraindications**: Acute intestinal obstruction

**Adverse Reactions**: Lipid aspiration pneumonia\(^4\)

**Stability**: Store in room temperature. Once opened, use within one month.\(^5\)

**Evidence summary**: High concentrations of MCTs have been used in some preterm formulas to increase the coefficient of fat absorption of preterm infants. Beside their good absorption even in the presence of low luminal bile salts and pancreatic lipases, further arguments for the use of MCTs include are their carnitine-independent transport into the mitochondria and subsequent oxidation that is more rapid than for longer chain fatty acids.\(^1\) An RCT conducted by Vaidya et al in very low birth weight infants showed a significant weight gain in VLBW infants supplemented with MCT oil.\(^2\)

**References**


2. Vaidya UV, Hegde VM, Bhave SA, Pandit AN. Vegetable oil fortified feeds in the nutrition of very low birthweight babies. Indian pediatrics. 1992 Dec 1;29(12):1519-27.

