

## 1.5 Magnesium absorption and metabolism

Generally, magnesium intake is directly related to energy intake, a well known exception is when the majority of energy comes from refined sugars or alcohol.

(Rude, 1998; Jahnen-Dechent & Ketteler, 2012; Altura *et al.*, 2013).

The exact mechanism involved in magnesium homeostasis is not well understood despite narrow maintenance of its level in serum. The average magnesium intake in normal adult is ~12 mmol/day. Additionally, 2 mmol/day of magnesium is secreted into intestine in bile, pancreatic and intestinal juice. Thirty percent of this intestinal pool is absorbed giving a net absorption of 4 mmol/day (Swaminathan, 2003; Pasternak *et al.*, 2010), as seen in the Fig 1.1 Distribution of Magnesium in the body (Source:(Swaminathan, 2003)).

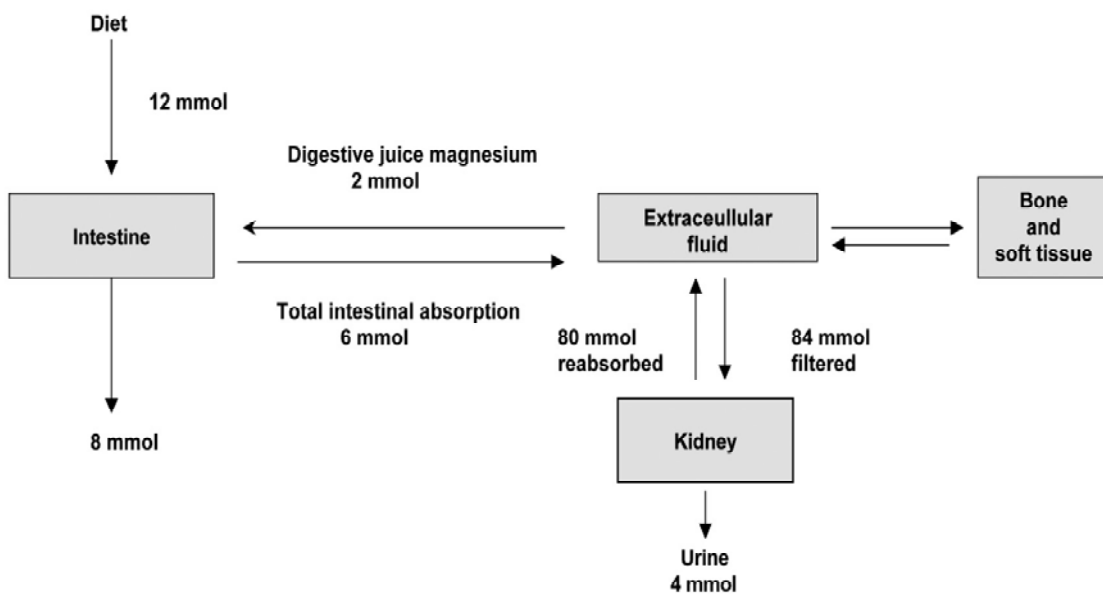


Fig 1.1 Distribution of Magnesium in the body