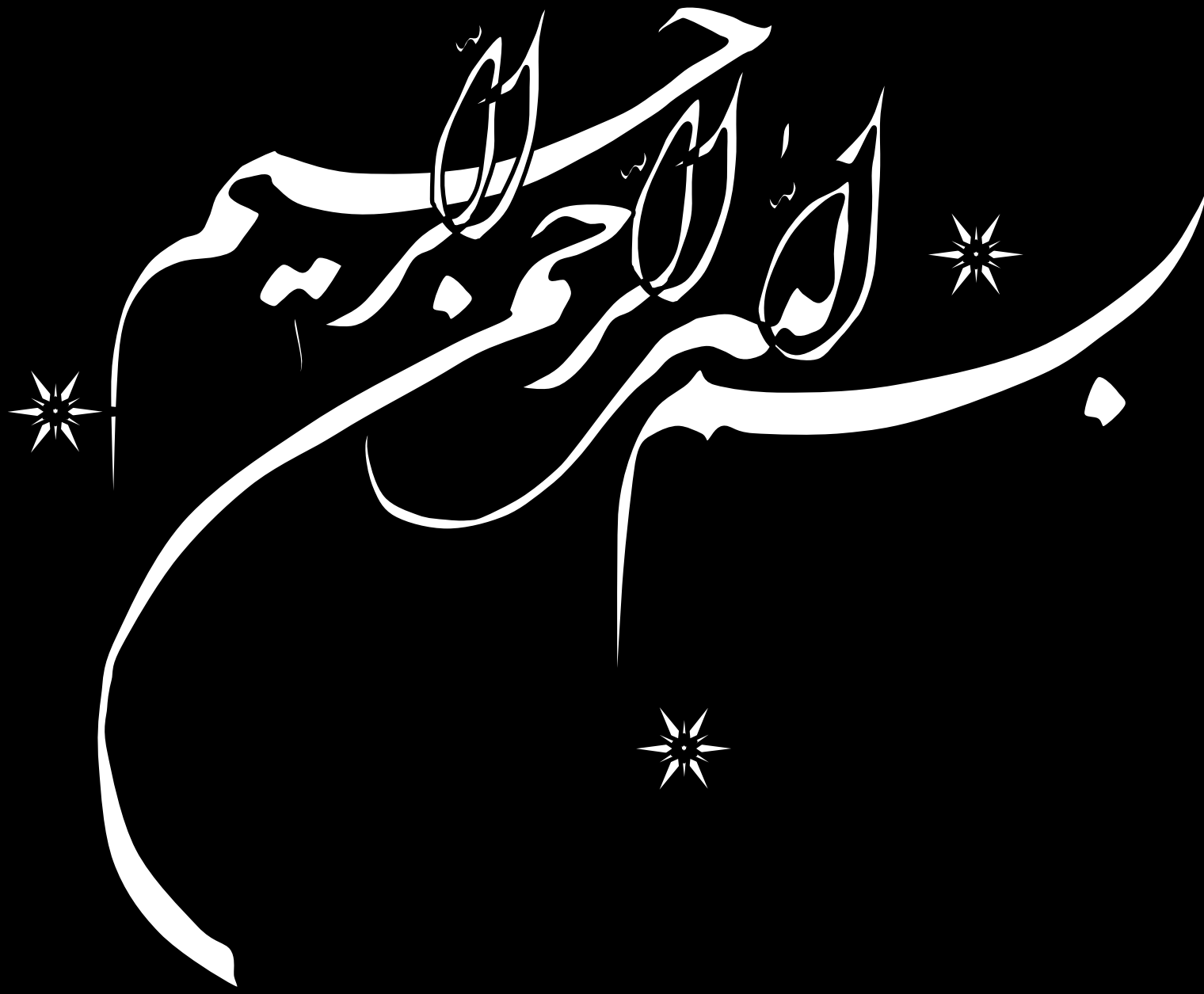
بسم الله الرحمن الرحیم

Nutrition in Infancy

During the first 2 years of life: …

Most infants who are genetically determined to be larger reach their **growth channel**, a curve of weight and length or height gain throughout the period of growth, at between 3 and 6 months of age.

many infants born at or below the tenth percentile for length may not reach their genetically appropriate growth channel until 1 year of age; this is called **catch-up growth**.

Infants who are larger at birth and who are genetically determined to be smaller grow at their fetal rate for several months and often do not reach their growth channel until 13 months of age. This phenomenon during the first year of life is called **lag-down growth**.

Growth in infancy is monitored with the routine collection and monitoring of anthropometric data, including weight, length, head circumference, and weight-for length for age

PHYSIOLOGIC DEVELOPMENT

Infants may lose approximately 7% of their body weight (10-15% in preterm) …

infants usually double their birth weight by 4 to 6 months of age and triple it by the age of 1 year.

Infants increase their length by 50% during the first year of life and double it by 4 years.

body fat :

body water:

stomach capacity:

Fat absorption varies in the neonate

fecal excretions of 20% to 48%

infant’s lingual and gastric lipases, bile salt–stimulated lipase

enzymes responsible for the digestion of Disaccharides:

Pancreatic amylase, salivary amylase

Kidneys: ?

ترکیبات	شیرمادر	شیر گاو
انرژی	۲۰ کیلوکالری/اونس	۲۰ کیلوکالری/اونس
پروتئین	٪۷-۶	٪۲۰
وی	٪۶۰	٪۲۰
کازئین	٪۴۰	٪۸۰
تورین و سیستئین	بیشتر	
لاکتوز	٪۴۲	٪۳۰
چربی	(جذب بیشتر)٪۵۰	٪۵۰
لینولئیک	٪۴	٪۱
کلسترول	mg/dl ۲۰-۱۰	mg/dl ۱۵-۱۰
ویتامین محلول در آب	بسته به دریافت مادر	ب کافی، ث کم
ویتامین آ	کافی	کافی
ویتامین E	بیشتر	

ترکیبات	شیرمادر	شیر گاو
آهن	mg/l ۰/۳	mg/l ۰/۳
جذب آهن	٪۵۰	<٪۱
روی	زیست دسترسی بیشتر	
کلسیم		۳ برابر
فسفر		۶برابر
فلوراید		۲ برابر
سدیم		۳ برابر
پتاسیم		۳ برابر
بار محلول کلیوی و N دفعی		بیشتر
اسمولالیته	mosm/kg ۳۰۰	mosm/kg ۴۰۰