AA 50. What are acceptable growth goals for appropriate for gestational age (AGA) and small for gestational age (SGA) infants?

Source recommendation			Back to question list
Source guideline title and developer	Enteral Nutrition in Preterm Infants: ESPGHAN/ Guidelines 2022, Koletzko et al.		
Existing guidelines recommendation	Regular monitoring of weight, length and HC growth is strongly recommended. Ideally, weight should be measured at least once or twice daily during the first 1–2 weeks, followed by measurements 2–3 times weekly in the stable growing phase. Length and HC should be measured once weekly unless clinical conditions (e.g. hydrocephalus) indicate more frequent monitoring. **(Good Practice Point/ expert consensus)** After a typical acceptable initial weight loss of 7%–10%, reaching a nadir at days 3–4, nutritional strategies should aim to regain birthweight by 7–10 days of age, followed by growth along a target centile and a gradual transition to the corresponding birth percentile on the WHO postnatal growth chart within the first weeks or months post term. **(Good Practice Point/ expert consensus)** Nutritional management and growth assessment for infants born in-utero growth restriction and/or SGA should be the same as those born AGA, although initial weight loss is often less and acceptable up to 4%–7% of birthweight. **(GOR B recommended)** Postnatal growth trajectories (weight, length, and HC) of each infant must be followed and evaluated to ensure nutrition is adequate; ideally using a growth chart based on a large robust dataset. **(Good Practice Point/ expert consensus)**		
Year published	2022		
Search updated/assessment of new evidence	No		
Strength and direction of recommendation	Recommended		
Certainty of evidence	Moderate		
Were EtD and SoF available?	No		
Is the recommendation recent and credible	Yes AGREE II score: 67%		
Assessment of suitability for adolopment			
Is the recommendation relevant to local setting (population/ intervention/comparator)?	Yes		
Are the judgements in the source EtD acceptable without modification?	Yes		
Are any local contextual factors different (e.g. cost, equity, feasibility)?	Yes		
EtD Criterion	**Summary of local evidence or context**	**Judgement**	**Notes**
Problem	Faltering growth is common in preterm SGA infants, but rapid catch-up may lead to long-term metabolic issues.	Yes	Avoid overshooting optimal growth targets.
Desirable effects	Sustainable growth improves neurodevelopment while lowering obesity risk.	Favourable	Balanced growth approach is preferred.

Undesirable effects	Excess weight gain from overfeeding is linked to insulin resistance and metabolic syndrome.	Manageable	Individualised plans help avoid this.
Certainty of evidence	Moderate, mainly based on observational studies and long-term follow-up data.	Moderate	
Values and preferences	Parents prioritise visible growth. Clinicians prefer safe, steady improvement.	Possibly some variability	Clear communication is important.
Balance of effects	Favourable with guided targets avoiding extremes of under- or overgrowth.	Favourable	
Resources required	Close growth monitoring, including weight velocity and possibly body composition.	Moderate	Access varies between units.
Certainty of resource evidence	Low	Resource implications not well quantified.	
Cost-effectiveness	No research available.	Favourable	Cost-effective if long-term chronic disease risks are reduced.
Equity	Growth faltering more likely in populations lacking availability of nutrition support with variable access across the motu (country).	Concern	
Acceptability	Well accepted with appropriate parent education and team consensus.	High	
Feasibility	Feasible with dietetic support and consistent growth tracking protocols.	Yes	
Judgement criteria for EtD			
Decision Type	☑ Adopted as is ☐ Adapted ☐ De novo recommendation required		
Explanation of adaptation	ESPGHAN 2022 guidance on growth goals is adopted with minor modifications. Small changes to wording to define “close to” birth centile as “within 0.8 z-score of birth centile”.		
Final Recommendation			
Recommendation statement (adopted)	Nutritional management and growth assessment for infants born with in-utero growth restriction and/or SGA should be the same as those born AGA, although initial weight loss is often less and acceptable up to 4%–7% of birthweight.		
Strength	Strong		
Certainty of evidence	Moderate		
Basis for decision	Supports safe and sustained growth patterns with better long-term health outcomes.		
Subgroup Considerations	Extremely preterm and SGA infants may require nuanced plans based on clinical complexity.		
Implementation considerations	Requires multidisciplinary input and education to avoid overtreatment.		
Monitoring and Evaluation	Track longitudinal growth and ensure proportionality of weight and length gain.		
Research Priorities	More evidence needed on long-term outcomes of different SGA growth trajectories and best nutrition practices.		