



The Optimal Formula

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Disclosure

- We have no commercial or financial relationships to disclose

Objectives

- Review considerations for formula recommendations
- Review infant, pediatric, adolescent and adult formula options
- How can we make an individualized recipe?
- The breakdown of commercial formulas

Considerations

- Age
 - Premature, infant, junior/toddler, adolescent, adult
- Disease State
 - allergies, short bowel syndrome, congenital heart defects, renal impairment, etc.
- Coverage
 - Insurance/DME, out of pocket, assistance programs
- Calorie Concentration
 - Mixing, powder vs. liquid, modulars

Infant Formulas

	Abbott	Mead Johnson	Nestle	Nutricia
Standard	Similac Pro Advance	Enfamil NeuroPro Infant	-	-
	Similac Neosure (premie)	Enfamil Enfacare (premie)		
Low lactose	Similac Sensitive	Enfamil Gentlease	Gerber Goodstart Soothe	
Partially Hydrolyzed	Similac Total Comfort		Gerber Goodstart	
Hydrolyzed	Similac Alimentum	Pregestimil Nutramigen	-	-
Elemental	Elecare Infant		Alfamino Infant	Neocate Infant

Calorie Concentration and Modulators

Infant Standard Calorie Concentration

- Premature: 22kcal/oz
- Standard/term: 19-20kcal/oz

	kcal/mL	Gm pro/mL	
Canola oil	8.3		fat
Soybean oil	7.96		fat
Corn oil	8.4		fat
Corn syrup	3.9		fat
MCT Oil	7.7		fat
Microlipid	4.5		Fat
liquigen	4.5		Fat (emulsified)
Liquid protein fortifier	0.667	.167	protein
Promote Liquid Protein	3.3	.33	protein
Benecalorie	7.5	.159	protein

Powder Modulators

	Cal/gm	Gm prot/ gm
Nutrisource fiber	3.75	3gm/Tbsp
Beneprotein	3.57	0.857
Cornstarch	4	0.003
Duocal	4.92	-0.07
Nonfat dry milk	3.6	0.76
PolyCal	3.84	-
Solocarb	3,75	
Rice Cereal	4	

Pediatric (1-10 years of age) Formulas

	Abbott	Mead Johnson	Nestle	Nutricia
Standard	Pediasure/ Pediasure Enteral	Enfagrow – Toddler Transitions	Boost Kid Essentials; Nutren Jr	-
Increased Calorie Standard	Pediasure 1.5		Boost Kid Essentials 1.5	
Hydrolyzed	Pediasure Peptide 1.0 and 1.5	Nutramigen Toddler	Peptamen Jr 1.0 and 1.5	
Elemental	Elecare Jr	Puramino Toddler	Vivonex; Alfamino Jr	Neocate Jr and Neocate Splash

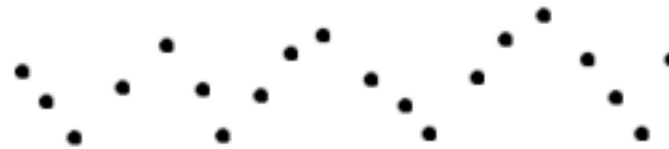
Difference in Peptide Chains



Protein In Formula



Protein In Hydrolyzed Formula



Protein In Elemental Formula

Pediatric (1-10 years of age) Formulas

	Abbott	Mead Johnson	Nestle
Soy-based		Enfagrow Toddler Transitions Soy	
Real food ingredients	Pediasure Harvest		Compleat Pediatric and Compleat Reduced Calorie
Clear liquid supplement	Ensure Clear		Boost Breeze

Adolescent or Adult (>10 years of age) Formulas

	Abbott	Nestle	Nutricia
Standard	Ensure; Osmolite	Boost; Nutren	-
Increased calorie standard	Ensure Plus; Osmolite 1.2 and 1.5	Boost Plus; Nutren 1.5	-
Hydrolyzed	Pediasure Peptide 1.0 and 1.5; Vital Peptide	Peptamen Jr 1.0 and 1.5	-
Elemental	Elecare Jr	Vivonex Plus; Alfamino Jr	Neocate Jr and Neocate Splash

Real Food Formula Options

- Kate Farms
 - Standard formula
 - Peptide-based 1.5
 - Pediatric peptide-based 1.5
- Functional Formularies
 - Liquid Hope
 - Nourish
- Real Food Blends
 - 3 different blends available
- Homemade blended diets
 - Provided/discussed with medical team

Formula Breakdown

- Common sources of carbohydrates
 - Sugar, maltodextrin, inulin, scFOS, sucrose
- Common sources of protein
 - sodium and calcium casienates, milk protein concentrate, whey protein concentrate, soy protein isolate
- Common sources of fat
 - high oleic sunflower oil, soybean oil, MCT oil, canola oil
- Additions
 - prebiotics (oligosaccharides, polysaccharides, inulin-type fructans)
 - Fiber
 - modulars

Are they growing?

Assess growth

- Track changes in weight and length/height
- Ideal growth velocity

Assess tolerance

- Increased stool output?
- Vomiting issues?
- Gradual transition or slow increases in rate may be needed



Conclusion

- There is no optimal formula for everyone, only the optimal for YOU.