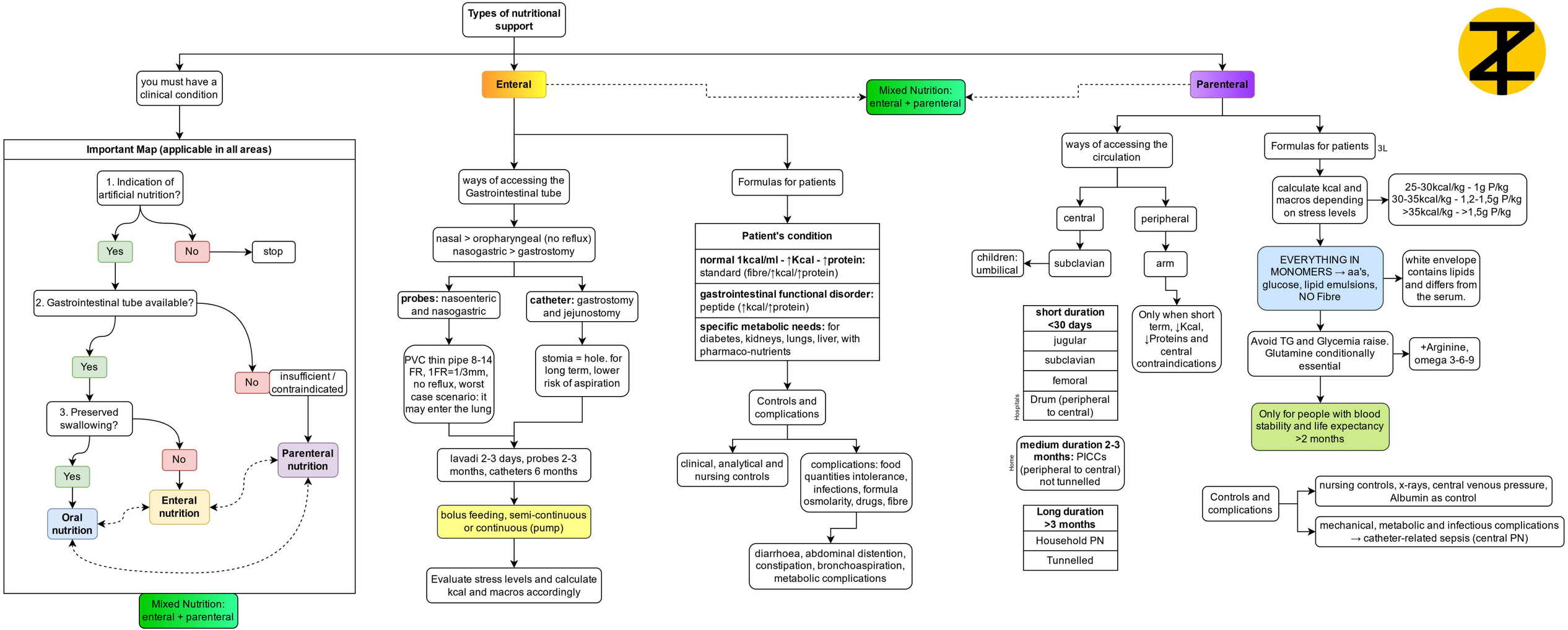
Types of nutritional support
you must have a clinical condition
Important Map (applicable in all areas)
1. Indication of artificial nutrition?
Yes
No
stop
2. Gastrointestinal tube available?
Yes
No
insufficient / contraindicated
3. Preserved swallowing?
Yes
No
Oral nutrition
Enteral nutrition
Parenteral nutrition
Mixed Nutrition: enteral + parenteral
Enteral
Mixed Nutrition: enteral + parenteral
Parenteral
ways of accessing the Gastrointestinal tube
nasal > oropharyngeal (no reflux)
nasogastric > gastrostomy
probes: nasoenteric and nasogastric
catheter: gastrostomy and jejunostomy
PVC thin pipe 8-14 FR, 1FR=1/3mm, no reflux, worst case scenario: it may enter the lung
stomia = hole. for long term, lower risk of aspiration
lavadi 2-3 days, probes 2-3 months, catheters 6 months
bolus feeding, semi-continuous or continuous (pump)
Evaluate stress levels and calculate kcal and macros accordingly
Formulas for patients
Patient's condition
normal 1kcal/ml - ↑Kcal - ↑protein: standard (fibre/↑kcal/↑protein)
gastrointestinal functional disorder: peptide (↑kcal/↑protein)
specific metabolic needs: for diabetes, kidneys, lungs, liver, with pharmaco-nutrients
Controls and complications
clinical, analytical and nursing controls
complications: food quantities intolerance, infections, formula osmolarity, drugs, fibre
diarrhoea, abdominal distention, constipation, bronchoaspiration, metabolic complications
ways of accessing the circulation
central
peripheral
children: umbilical
subclavian
arm
Only when short term, ↓Kcal, ↓Proteins and central contraindications
Hospitals
short duration <30 days
jugular
subclavian
femoral
Drum (peripheral to central)
Home
medium duration 2-3 months: PICCs (peripheral to central) not tunnelled
Long duration >3 months
Household PN
Tunnelled
Formulas for patients
3L
calculate kcal and macros depending on stress levels
25-30kcal/kg - 1g P/kg
30-35kcal/kg - 1,2-1,5g P/kg
>35kcal/kg - >1,5g P/kg
EVERYTHING IN MONOMERS → aa's, glucose, lipid emulsions, NO Fibre
white envelope contains lipids and differs from the serum.
Avoid TG and Glycemia raise. Glutamine conditionally essential
+Arginine, omega 3-6-9
Only for people with blood stability and life expectancy >2 months
Controls and complications
nursing controls, x-rays, central venous pressure, Albumin as control
mechanical, metabolic and infectious complications → catheter-related sepsis (central PN)