CCP or FP-C Review
Pedi Maintenance Fluids

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2 Calculations

100/50/20
OR
4/2/1

Pick one and commit to memory. Test answers will be in ballpark of either formula!

Dr. Carrubba’s protocol uses
100/50/20
100/50/20

• Formula for fluid requirements per 24 hour day
  – Needs to be divided by 24 for ml’s/hr rate if question asked in that form.
• 100 ml for each of the child's **first** 10 kg of weight
• 50 ml for each of the child's **second** 10 kg of weight
• 20 ml for each **additional** kg of weight
100/50/20

Calculate the hourly maintenance fluid rate for a child who weighs 25kg

- (100mL x 10kg) + (50mL x 10kg) + (20mL x 5kg) = mL daily
- (1000mL) + (500mL) + (100mL) = 1600mL daily

Using this formula the **hourly fluid** (1600 ÷ 24) maintenance for this child is 67mL/hr
Next Slide
• Formula for fluid requirements per hour
  – Needs to be multiplied by 24 for daily requirements if question asked in that form.
• 4 ml for each of the child's **first** 10 kg of weight
• 2 ml for each of the child's **second** 10 kg of weight
• 1 ml for each **additional** kg of weight
4/2/1

Calculate the hourly maintenance fluid rate for a child who weighs 25kg

• \((4\text{ml} \times 10\text{kg}) + (2\text{ml} \times 10\text{kg}) + (1\text{ml} \times 5\text{kg}) = \text{hourly rate}\)

• \(40\text{ml} + 20\text{ml} + 5\text{ml} = 65\text{ml/hr}\)

Using the 4/2/1 method, this child's hourly maintenance fluid rate is 65\text{mL/hr}

Multiply hourly rate \(\times 24\) for daily