

## ICU GUIDELINE: ADJUSTING GOAL FEED RATES IN THE PATIENT RECEIVING A PROPOFOL INFUSION

Propofol is a lipid solution containing 1.1 kcal /mL. When provided at an infusion rate exceeding 20 mL hr, the caloric value of the propofol in combination with feeds can lead to significant overfeeding. Overfeeding is associated with hyperglycemia, fatty liver, hypertryglyceridemia, and excess CO<sub>2</sub> production.

## ADJUST FEED RATE ONLY IF ALL OF THE FOLLOWING CRITERIA ARE MET

- Feeds at final goal rate and well tolerated (GRV < 250 mLq4h) x 24 hrs.
- Propofol provided as an hourly infusion (not as a bolus).
- Propofol already provided for > 24 hrs.
- Propofol expected to continue for an additional > 24 hrs.
- Propofol average hourly infusion rate ≥ 20 mL/hr.

## IF ALL OF THE ABOVE CRITERIA MET, PROCEED AS FOLLOWS

#### A) ADJUST FEED RATE:

## 1.0 – 1.2 kcal/ml feed (e.g. Isosource<sup>®</sup>; Promote<sup>®</sup>):

Reduce the feed rate equivalent to the propofol infusion rate.

Example: propofol infusion rate 30 mL/hr; decrease Isosource<sup>®</sup> feed rate by 30 mL/hr.

## 1.5 - 2.0 kcal/mL feed (e.g. Resource 2<sup>®</sup>; for other - see next page over)

Reduce feed rate by 50% (1/2) of the hourly propofol infusion rate.

Example: propofol infusion rate 30 mL/hr; decrease Resource 2<sup>®</sup> feed rate by 15 mL/hr.

## B) DOCUMENT/COMMUNICATE FEED RATE:

In order to prevent significant under/overfeeding, obtain an MD order that clearly states both feed rates (receiving propofol/not receiving propofol).

## Sample MD order:

Receiving propofol: Isosource<sup>®</sup> goal rate: 50 mL/hr Not receiving propofol: Isosource<sup>®</sup> goal rate: 80 mL/hr

### C) OPTIMISE PROTEIN INTAKE:

In order to prevent sub-optimal protein intake (propofol provides calories but no protein), if propofol is to be provided for, or has been provided for > 48 - 72 hrs, and the adjusted feed rate not meeting the patients protein needs, the dietitian will change the formulae to Promote<sup>®</sup>. If Promote<sup>®</sup> is contraindicated or the protein intake suboptimal, the dietitian will arrange for protein powder to be added to the feeding regimen (e.g. 1 Beneprotein powder packet mixed with 60 mL water provided per NG/ND Q6H).



# ICU GUIDELINE: ADJUSTING GOAL FEED RATES IN THE PATIENT RECEIVING A PROPOFOL INFUSION

Propofol hourly infusion	Reduce hourly rate of a 1.0 – 1.2 kcal/ml feed	Reduce hourly rate of a 1.5 - 2.0 kcal/mL feed
rate	Example:	Example:
	a) Promote <sup>®</sup> (1.0 kcal/mL)	a) 1:1 mixture of Promote <sup>®</sup> and Resource 2 <sup>®</sup> (1.5 kcal/mL)
	b) 1:1 mixture of Promote <sup>®</sup> and Isosource <sup>®</sup> (1.1 kcal/mL)	b) Resource 2 <sup>®</sup> (2 kcal/mL)
	c) Isosource <sup>®</sup> (1.2 kcal/mL)	c) Novasource Renal <sup>®</sup> (2 kcal/mL)
	by	by
ml/hr	ml/hr	ml/hr
20	20	10
30	30	15
40	40	20
50	50	25

**NOTE:** Regardless of propofol infusion rate, it is desirable not to reduce the feed rate to <10 mL/hr.

**Developed by:** J. Greenwood, RD, Clinical Dietitian Specialist, VCHA - VA. Reviewed by members of the ICU QI/QA Committee 11/7/08. Update 7/12/2009.