

Goal total mL formula per 24h		Volume Based Feeding Schedule																					
		Hours remaining in the day to feed 24h volume																					
24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
<b>2400</b>	100	104	109	114	120	126	133	141	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
<b>2350</b>	98	102	107	112	118	124	131	138	147	150	150	150	150	150	150	150	150	150	150	150	150	150	150
<b>2300</b>	96	100	105	110	115	121	128	135	144	150	150	150	150	150	150	150	150	150	150	150	150	150	150
<b>2250</b>	94	98	102	107	113	118	125	132	141	150	150	150	150	150	150	150	150	150	150	150	150	150	150
<b>2200</b>	92	96	100	105	110	116	122	129	138	147	150	150	150	150	150	150	150	150	150	150	150	150	150
<b>2150</b>	90	93	98	102	108	113	119	126	134	143	150	150	150	150	150	150	150	150	150	150	150	150	150
<b>2100</b>	88	91	95	100	105	111	117	124	131	140	150	150	150	150	150	150	150	150	150	150	150	150	150
<b>2050</b>	85	89	93	98	103	108	114	121	128	137	146	150	150	150	150	150	150	150	150	150	150	150	150
<b>2000</b>	83	87	91	95	100	105	111	118	125	133	143	150	150	150	150	150	150	150	150	150	150	150	150
<b>1950</b>	81	85	89	93	98	103	108	115	122	130	139	150	150	150	150	150	150	150	150	150	150	150	150
<b>1900</b>	79	83	86	90	95	100	106	112	119	127	136	146	150	150	150	150	150	150	150	150	150	150	150
<b>1850</b>	77	80	84	88	93	97	103	109	116	123	132	142	150	150	150	150	150	150	150	150	150	150	150
<b>1800</b>	75	78	82	86	90	95	100	106	113	120	129	138	150	150	150	150	150	150	150	150	150	150	150
<b>1750</b>	73	76	80	83	88	92	97	103	109	117	125	135	146	150	150	150	150	150	150	150	150	150	150
<b>1700</b>	71	74	77	81	85	89	94	100	106	113	121	131	142	150	150	150	150	150	150	150	150	150	150
<b>1650</b>	69	72	75	79	83	87	92	97	103	110	118	127	138	150	150	150	150	150	150	150	150	150	150
<b>1600</b>	67	70	73	76	80	84	89	94	100	107	114	123	133	145	150	150	150	150	150	150	150	150	150
<b>1550</b>	65	67	70	74	78	82	86	91	97	103	111	119	129	141	150	150	150	150	150	150	150	150	150
<b>1500</b>	63	65	68	71	75	79	83	88	94	100	107	115	125	136	150	150	150	150	150	150	150	150	150
<b>1450</b>	60	63	66	69	73	76	81	85	91	97	104	112	121	132	145	150	150	150	150	150	150	150	150
<b>1400</b>	58	61	64	67	70	74	78	82	88	93	100	108	117	127	140	150	150	150	150	150	150	150	150
<b>1350</b>	56	59	61	64	68	71	75	79	84	90	96	104	113	123	135	150	150	150	150	150	150	150	150
<b>1300</b>	54	57	59	62	65	68	72	76	81	87	93	100	108	118	130	144	150	150	150	150	150	150	150
<b>1250</b>	52	54	57	60	63	66	69	74	78	83	89	96	104	114	125	139	150	150	150	150	150	150	150
<b>1200</b>	50	52	55	57	60	63	67	71	75	80	86	92	100	109	120	133	150	150	150	150	150	150	150
<b>1150</b>	48	50	52	55	58	61	64	68	72	77	82	88	96	105	115	128	144	150	150	150	150	150	150
<b>1100</b>	46	48	50	52	55	58	61	65	69	73	79	85	92	100	110	122	138	150	150	150	150	150	150
<b>1050</b>	44	46	48	50	53	55	58	62	66	70	75	81	88	95	105	117	131	150	150	150	150	150	150
<b>1000</b>	42	43	45	48	50	53	56	59	63	67	71	77	83	91	100	111	125	143	150	150	150	150	150
<b>950</b>	40	41	43	45	48	50	53	56	59	63	68	73	79	86	95	106	119	136	150	150	150	150	150
<b>900</b>	38	39	41	43	45	47	50	53	56	60	64	69	75	82	90	100	113	129	150	150	150	150	150
<b>850</b>	35	37	39	40	43	45	47	50	53	57	61	65	71	77	85	94	106	121	142	150	150	150	150
<b>800</b>	33	35	36	38	40	42	44	47	50	53	57	62	67	73	80	89	100	114	133	150	150	150	150
<b>750</b>	31	33	34	36	38	39	42	44	47	50	54	58	63	68	75	83	94	107	125	150	150	150	150
<b>700</b>	29	30	32	33	35	37	39	41	44	47	50	54	58	64	70	78	88	100	117	140	150	150	150



## Nursing Instructions for Physician Ordered 24 hour Volume-Based Enteral Feeding

If the dietitian has not yet assessed the patient on day 2, when volume-based feedings are ordered by a physician, use a weight-based target volume until the dietitian assesses the patient:

Weight	24-hour target volume with a 1.5 cal/mL feeding
≤50 kg	700mL/24hrs
50.1-65 kg	900mL/24hrs
65.1-80 kg	1100mL/24hrs

Weight	24-hour target volume with a 1.5 cal/mL feeding
80.1-95 kg	1300mL/24hrs
≥95.1 kg	1600mL/24hrs

### Example:

- Order for volume based enteral feeding will be the total volume goal for 24 hours. The 24 hour period corresponds to the flow sheet (i.e X am to X am each day).
- If the total volume ordered is 1800 mL, the hourly rate is 75 mL/hour. If the patient was fed 450 mL of feeding (6 hours) and the tube feeding is on "hold" for 5 hours, then subtract from the goal volume the amount of feeding the patient has already received.

$$\text{Volume Ordered per 24 hours } 1800 \text{ mL} - \text{Tube feeding in (current day) } 450 = \text{Volume of feeding remaining in day to feed}$$
$$1800 \quad - \quad 450 \quad = \quad 1350 \text{ mL}$$

Patient now has 13 hours left in the day to receive 1350 mL of tube feeding.

- Check the chart for the new goal rate based on the number of hours remaining in the current 24 hr period. Select the goal rate closest to volume needed.
- In this example it would be 1350. Next go to column 13 (the number of hours remaining to feed) and the amount of feeding to provide will be 104 mL/hour. In this example the patient will receive a total volume of 1352 mL for the remaining hours in the day.

### Important Nursing Assessment

Volume based feeding should be used with caution. Nurses should always assess for feeding intolerance. Examples of intolerance include: abdominal distention, abdominal cramping, nausea & vomiting, diarrhea defined as 5 stools or 750 mL per 24h period, and gastric residuals greater than \*300 mL.

\*Sites may customize the gastric residual volume threshold in keeping with their current practice and best available evidence which supports a gastric residual volume between 250 – 500 mL. Source: 2012 Canadian Clinical Practice Guidelines [www.criticalcarenutrition.com](http://www.criticalcarenutrition.com), 2009 ASPEN/SCCM Guidelines.

Please contact your ICU dietitian or PIT (Protocol Implementation Team) Crew if you have any questions