

Intake and Output

Seattle Children's Hospital
PO Box 5371
Seattle, Washington 98105-0371

NAME: XIE, JIANHUA DRACO
DOB: 09/16/2012
MR: 1275567
Print Date 5/9/2014

Children's

Patient Name: XIE, JIANHUA DRACO
 Date of Birth: 09/16/12
 Sex: Male
 Attending MD:

Location: SUR-R6 RC.6.810 2 x73936
 Admit Date: 04/09/13
 Financial Number: 94243980
 Medical Record Number: 1275567

Intake and Output Record - 04/09/13 to 04/16/13

This encounter specific report displays I&O information for the selected encounter.

** All shift times and totals are based on PDT time **

Intake	04/16/13 - 04/17/13				04/15/13 - 04/16/13			
	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
D10W 1,000 mL								
D10W 1,000 mL					40	40	40	120
D10W 1,000 mL + sodium chloride 77 mEq + potassium chloride 20 mEq								
D10W 1,000 mL + sodium chloride 77 mEq + potassium chloride 20 mEq								
D5 1/2NS + potassium chloride 20 mEq/L 1000 mL								
D5 1/2NS 1,000 mL								
D5 1/2NS 1,000 mL								
D5 1/2NS 1000 mL								
NS 1,000 mL								
NS 500 mL								
NS BOLUS								
cefTRIAxone								
piperacillin-tazobactam								
phytonadione								
normal saline flush								
furosemide								
ioversol								
heparin flush								
micafungin								
fentanyl								
D10W BOLUS								
ursodiol					2	4		6
diphenhydramINE								
albumin human								
potassium chloride								
spironolactone					3	3		6
Cryo Volume Infused								
FFP Volume Infused								
OR Intake								
Oral Intake Formula					370	405	285	1060
Oral Intake Other								
8 HOUR TOTAL					415	452	325	
24 HOUR TOTAL					1192			

Output	04/16/13 - 04/17/13				04/15/13 - 04/16/13			
	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
Blood Draw Out								
Mixed Output Volume					418	344	157	919
Stool Volume					10		15	25

Output continues on the next page.

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	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
Urine Volume: (Intermittent straight catheter Urethral Midline 5 French)								
Urine Volume: (Indwelling catheter Urethral 8 French)								
Urine Volume: (Void)					110	253	277	640
Unmeasured Stool Episode(s)								
Unmeasured Urine Episode(s)								
Unmeasured Emesis Episode(s)						1	1	2
8 HOUR TOTAL					538	597	449	
24 HOUR TOTAL					1584			

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	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
D10W 1,000 mL						25.1667	11.1666	36.3333
D10W 1,000 mL	15	40	40	95				
D10W 1,000 mL + sodium chloride 77 mEq + potassium chloride 20 mEq								
D10W 1,000 mL + sodium chloride 77 mEq + potassium chloride 20 mEq	195			195			120.6667	120.6667
D5 1/2NS + potassium chloride 20 mEq/L 1000 mL								
D5 1/2NS 1,000 mL								
D5 1/2NS 1,000 mL								
D5 1/2NS 1000 mL								
NS 1,000 mL					35.0833	4.9167		40
NS 500 mL								
NS BOLUS								
cefTRIAxone								
piperacillin-tazobactam					14	14	28	56
phytonadione								
normal saline flush								
furosemide		0.5		0.5	0.5		0.5	1
ioversol								
heparin flush								
micafungin								
fentanyl								
D10W BOLUS								
ursodiol	2	4		6	2	4		6
diphenhydrAMINE					4			4
albumin human					40			40
potassium chloride	3.75		3.75	7.5				
spironolactone								
Cryo Volume Infused						38	19	57
FFP Volume Infused							250	250
OR Intake								
Oral Intake Formula	90	300	270	660	330	300	120	750
Oral Intake Other								
8 HOUR TOTAL	305.75	344.5	313.75		425.5833	386.0834	549.3333	
24 HOUR TOTAL	964				1361			

Output	04/14/13 - 04/15/13				04/13/13 - 04/14/13			
	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
Blood Draw Out								
Mixed Output Volume	106	66	30	202	54	52	97	203
Stool Volume	58		44	102	80		13	93

Output continues on the next page.

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	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
Urine Volume: (Intermittent straight catheter Urethral Midline 5 French)								
Urine Volume: (Indwelling catheter Urethral 8 French)								
Urine Volume: (Void)	82	351	199	632	514	54	346	914
Unmeasured Stool Episode(s)								
Unmeasured Urine Episode(s)								
Unmeasured Emesis Episode(s)								
8 HOUR TOTAL	246	417	273		648	106	456	
24 HOUR TOTAL	936				1210			

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	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
D10W 1,000 mL								
D10W 1,000 mL								
D10W 1,000 mL + sodium chloride 77 mEq + potassium chloride 20 mEq	50			50				
D10W 1,000 mL + sodium chloride 77 mEq + potassium chloride 20 mEq								
DS 1/2NS + potassium chloride 20 mEq/L 1000 mL	120			120			80	80
DS 1/2NS 1,000 mL						20		20
DS 1/2NS 1,000 mL					160	60		220
DS 1/2NS 1000 mL						80	60	140
NS 1,000 mL		40	40	80				
NS 500 mL								
NS BOLUS								
cefTRIAxone								
piperacillin-tazobactam	14	14	14	42	14	14	14	42
phytonadione								
normal saline flush						4	2	6
furosemide							1	1
ioversol					6			6
heparin flush						1		1
micafungin							27	27
fentanyl	0.4			0.4			0.4	0.4
D10W BOLUS							20	20
ursodiol		4		4				
diphenhydrAMINE								
albumin human								
potassium chloride								
spironolactone								
Cryo Volume Infused								
FFP Volume Infused								
OR Intake						50		50
Oral Intake Formula	180	360	280	820				
Oral Intake Other					186			186
8 HOUR TOTAL	364.4	418	334		366	229	204.4	
24 HOUR TOTAL	1116.4				799.4			

Output	04/12/13 - 04/13/13				04/11/13 - 04/12/13			
	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
Blood Draw Out								
Mixed Output Volume		71	144	215	224			224
Stool Volume	30	12	14	56	59			59

Output continues on the next page.

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	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
Urine Volume: (Intermittent straight catheter Urethral Midline 5 French)		50	56	106	65			65
Urine Volume: (Indwelling catheter Urethral 8 French)	65			65		75	95	170
Urine Volume: (Void)								
Unmeasured Stool Episode(s)								
Unmeasured Urine Episode(s)								
Unmeasured Emesis Episode(s)								
8 HOUR TOTAL	95	133	214		348	75	95	
24 HOUR TOTAL	442				518			

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Intake	04/10/13 - 04/11/13				04/09/13 - 04/10/13			
	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
D10W 1,000 mL								
D10W 1,000 mL								
D10W 1,000 mL + sodium chloride 77 mEq + potassium chloride 20 mEq								
D10W 1,000 mL + sodium chloride 77 mEq + potassium chloride 20 mEq								
D5 1/2NS + potassium chloride 20 mEq/L 1000 mL								
D5 1/2NS 1,000 mL	20			20				
D5 1/2NS 1,000 mL		20.6666	70	90.6666				
D5 1/2NS 1000 mL								
NS 1,000 mL								
NS 500 mL	5			5				
NS BOLUS							300	300
cefTRIAxone							7.5	7.5
piperacillin-tazobactam	7.47	14	14	35.47			6.53	6.53
phytonadione	10			10				
normal saline flush		1	1	2				
furosemide			0.5	0.5				
ioversol								
heparin flush								
micafungin								
fentanyl								
D10W BOLUS								
ursodiol								
diphenhydrAMINE								
albumin human								
potassium chloride								
spironolactone								
Cryo Volume Infused		53		53				
FFP Volume Infused								
OR Intake								
Oral Intake Formula	180	280	220	680				
Oral Intake Other								
8 HOUR TOTAL	222.47	368.6666	305.5				314.03	
24 HOUR TOTAL	896.6366				314.03			

Output	04/10/13 - 04/11/13				04/09/13 - 04/10/13			
	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
Blood Draw Out			5	5				
Mixed Output Volume	62	217	190	469				
Stool Volume	26	55		81				

Output continues on the next page.

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Output	04/10/13 - 04/11/13				04/09/13 - 04/10/13			
	6a-2p	2p-10p	10p-6a	Item Total	6a-2p	2p-10p	10p-6a	Item Total
Urine Volume: (Intermittent straight catheter Urethral Midline 5 French)			145	145			4	4
Urine Volume: (Indwelling catheter Urethral 8 French)								
Urine Volume: (Void)								
Unmeasured Stool Episode(s)							4	4
Unmeasured Urine Episode(s)							2	2
Unmeasured Emesis Episode(s)								
8 HOUR TOTAL	88	272	340				4	
24 HOUR TOTAL	700				4			

GRAND TOTALS for 04/09/13 to 04/16/13

TOTAL INTAKE	TOTAL OUTPUT	FLUID BALANCE
6643.4666	5394	1249.4666

**** END OF REPORT ****

Nutrition Progress Note

Date of Service: 4/10/2013 00:00 PDT
Authored By: Astrom, Linda J, RD CD (4/10/2013 16:32 PDT)
Result Status: Modified
Document Type: Nutrition Progress Note

Nutrition Progress Note

Document may Not be Signed/Finalized. See End of report for Electronic Authentication of Signature.

INPATIENT NUTRITION PROGRESS NOTE

XIE, JIANHUA
DRACO

DOB: 09/16/2012 M -MR #: 01-27-55-67

DATE OF ADMISSION: 04/09/2013

DATE OF REPORT: 04/10/2013

INPATIENT NUTRITION SUPPORT

Baseline Nutrition Assessment

ASSESSMENT

Present at Visit: Parents, medical team member, unit nurse and inpatient attending PICU.

Medical Diagnosis: Admit 4/9/13 with acute liver failure of unknown etiology, some respiratory distress but on room air, +edema per PICU team, 3 day hx loose stool and malaise, otherwise previously healthy.

Age: 6.75 months

Food and Nutrient Delivery: Oral.

20 cal/oz Isomil p.o. ad lib started this am

Food and Nutrition History: Spoke with parents at bedside this am. Spoke with parent in English and they seemed to understand and answer all questions appropriately.

Parents report Jianhua was breastfed for the first month of life. Then they switched to formula. At first they tried cow's milk formula (Similac Advance, then Enfamil Gentleease). At first Jianhua tolerated the formula fine, but after several weeks, he developed gassiness and "loose stool." Parent then tried soy formula. They settled on Similac Isomil (Jianhua seemed to like this the best). He has been on this about 2 months, but developed loose stool 3 days prior to admit. Father asks if there are other formulas that are not cow's milk or soy that they might try with Jianhua given development of loose stool on both cow's milk and soy formulas. I told father that there are several protein hydrolysate formulas that are sometimes used for allergies and formula intolerance. Dad asked if we could switch to one of these formulas.

Mom also reports Jianhua started infant solids ~3 weeks ago. He was receiving ~5 ml twice/day of rice cereal and mashed fruit (e.g., banana, pumpkin).

Anthropometry

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NAME: XIE, JIANHUA DRACO
DOB: 9/16/2012
MRN: 1275567

Print Date: 9/23/2015 13:52 PDT
RRID: 25788848

Nutrition Progress Note

Weight:	9.98 kg (admit DCW; may include edema) kg	95-98th percentile for age
Length:	66 cm (tape measure; parents declined length board) cm	~10th percentile for age
Weight/length:		>98th (may not be accurate with edema affecting weight) percentile for age
Ideal Body weight:	kg	
Percent of ideal body weight:	%	

Growth/weight changes: Based on length (via tape measure), weight (with some edema), and OFC, Jianhua has normal growth parameters for age. His weight for length appears high, likely due to artificially high weight with edema. Visually, he appeared pale but well nourished (again, he had some edema when I observed him).

Estimated Requirements

Calories	~90-100 kcal/kg
Protein	2 gm/kg (no indication for protein restriction in setting of acute liver failure at this point)
Fluid	100 ml/kg

NUTRITION DIAGNOSIS:

Increased nutrient needs (NI5.1) related to acute liver failure and associated risk for malabsorption as evidenced by elevated liver function tests, serum albumin 2.3 (low), 3 day hx loose stools.

INTERVENTION:

Revised Food and Nutrient Delivery: Oral

Will switch formula to 20 cal/oz Nutramigen (protein hydrolysate formula) per father's request.

Nutrition Education/Counseling: Not applicable

COORDINATION OF CARE: Not reviewed at this visit.

MONITORING AND EVALUATION:

Will monitor formula intake, in's and outs, and labs as work up continues for etiology of acute liver failure.

Goals include resolution of edema, adequate p.o. intake, improvement of serum proteins and any nutrition-related deficiencies that may be present as a result of acute liver failure, appropriate growth for age.

Electronically Authenticated by

Linda J Astrom, RD CD 04/10/2013 04:32 P

Linda J Astrom, RD CD , Clinical Dietitian

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Nutrition Progress Note

LA/ Doc #2931951 d: 04/10/2013 03:53 P t: 04/10/2013 03:53 P (101118512-)

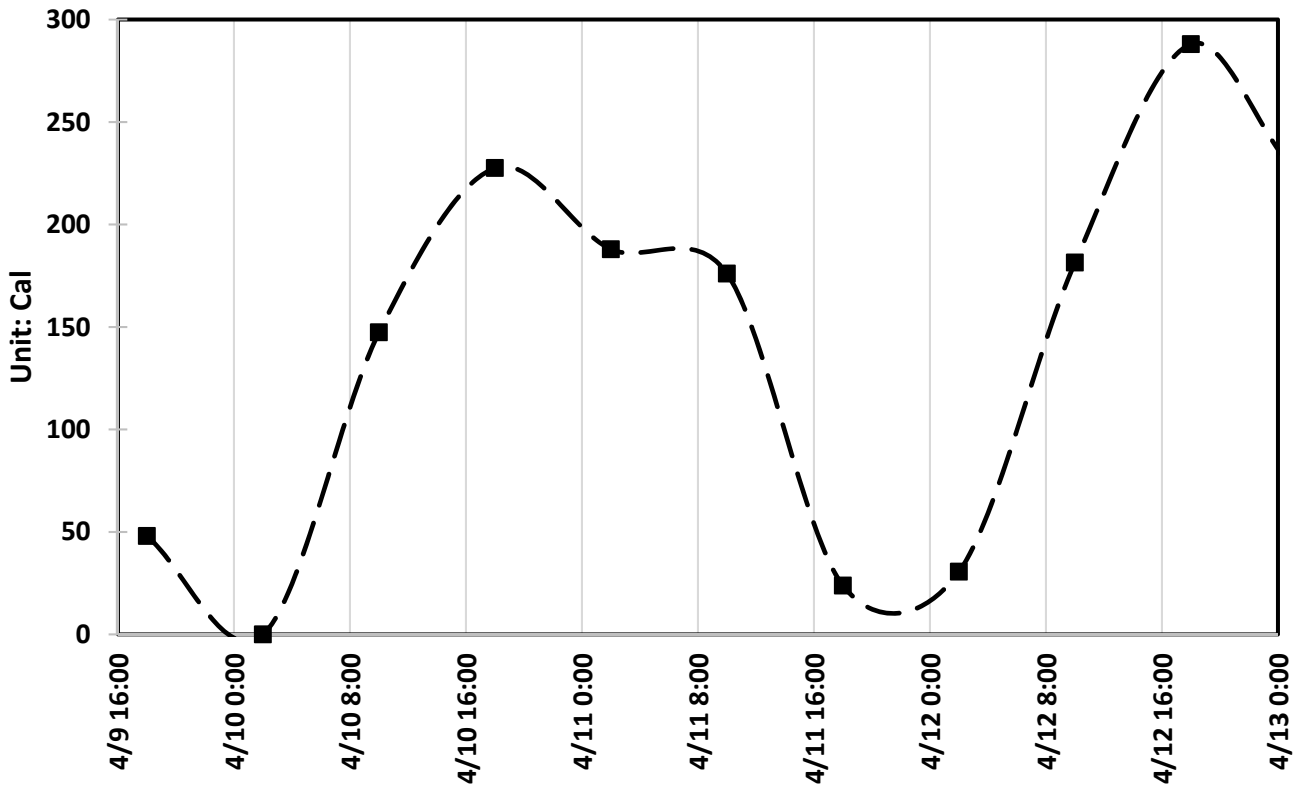
cc:

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Jianhua's nutrition intake per 8 hours. (Assuming he had used 100% fat in formula.)
 (Suggested 300 Cals per 8 hours based on the nutrition note 20130410, 1Cal=1kcal)



Jianhua's nutrition intake considering his extreme low CPT-II activities at high temperature (0% fat usage) and blood glucose values in the first 3 days in SCH.
 (Suggested 300 Cals per 8 hrs, as shown per grid in plots)

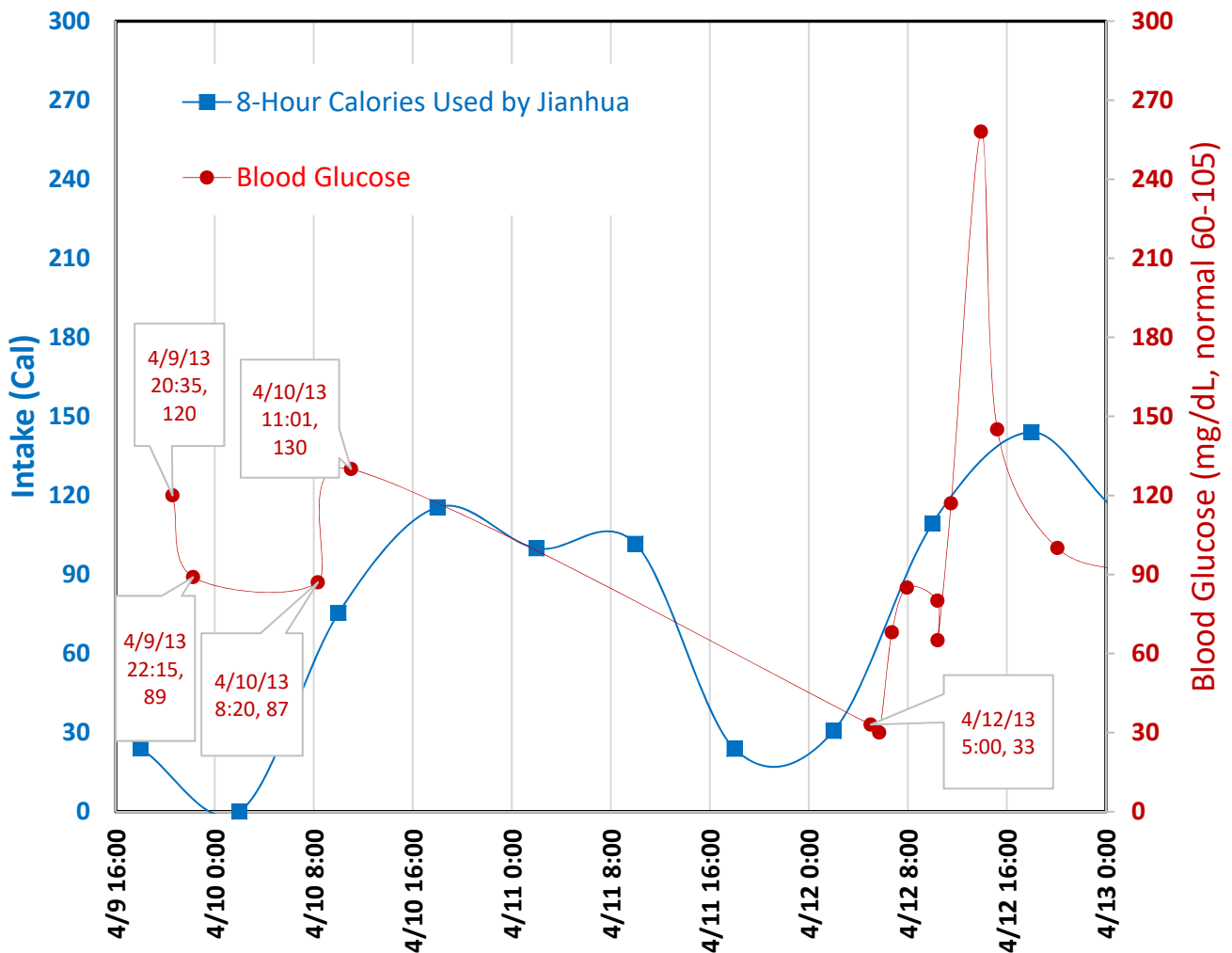


Table of Commonly Used IV Solutions

Name of Solution	Type of Solution	Ingredients in 1-Liter	Uses	Complications
0.9% Sodium Chloride Shorthand Notation: NS	Isotonic pH 5.7	154 mEq Sodium 154 mEq Chloride	isotonic hydration; replace sodium and chloride; alkalosis; blood transfusions (will not hemolyze blood cells)	None known
5% Dextrose in Water Shorthand Notation: D5W	Isotonic pH 5.0	5 grams dextrose (170 calories/liter)	isotonic hydration; provides some calories	water intoxication and dilution of body's electrolytes with long, continuous infusions
10% Dextrose in Water Shorthand Notation: D10W	Hypertonic pH 4.3	10 grams dextrose (340 calories/liter)	may be infused peripherally; hypertonic hydration; provides some calories	
5% Dextrose in 1/4 Strength (or 0.25%) Saline Shorthand Notation: D5¼NS	Hypertonic pH 4.4	5 grams Dextrose 34 mEq Sodium 34 mEq Chloride	fluid replacement; replacement of sodium, chloride and some calories	vein irritation because of acidic pH, causes agglomeration (clustering) if used with blood transfusions; hyperglycemia with rapid infusion leading to osmotic diuresis
5% Dextrose in 0.45 Sodium Chloride Shorthand Notation: D5½NS	Hypertonic pH 4.4	5 grams Dextrose 77 mEq Sodium 77 mEq Chloride	hypertonic fluid replacement; replace sodium, chloride, and some calories	
5% Dextrose in Normal Saline Shorthand Notation: D5NS	Hypertonic pH 4.4	5 grams Dextrose 154 mEq Sodium 154 mEq Chloride	hypertonic fluid replacement; replace sodium, chloride and some calories	