

# Acetaminophen Oral Dispensers

### A Safer, More Precise Administration of Liquid Medication

Researchers have shown that only 30% of caregivers are able to demonstrate both an accurately measured and correct dose for their child.¹ Generally over-the-counter (OTC) medications are considered safe, however they are the most frequently implicated pharmaceuticals involved in cases reported to the American Association of Poison Control Center's National Poison Data System.²

Current dosing recommendations for Infants' OTC Acetaminophen oral solution specify a volume of medication for a weight or age range<sup>3</sup>, rather than using the dosage strength of the medication specific to an exact infant weight. This dosing regimen results with infants in a designated range receiving the same amount of medication, even though their individual weight may differ more than 45% (6-11lbs); and patients in different ranges receiving double the medication (40-80mg) despite having a difference in weight of 1lb, (11-12lbs). <sup>3</sup>



#### **Acetaminophen Dosing - Infants Current Dosing:** 7.00 Ave: 5.48 Min: 3.64 6.50 Max: 6.67 6.00 Josage(mg/lb) 5.50 **D2W Dosing:** 5.00 Ave: 4.57 Min: 4.57 4.50 Max: 4.57 4.00 Current 3.50 Dose-2-Weight 3.00 26 30 32 34 Patient Weight

## Dose-2-Weight Syringe®

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The Dose-2-Weight Syringe® is specifically calibrated to the dosage strength of Infants' Acetaminophen 160/5mL liquid medication and is marked with multiple correlated dosing measurements of child weight, age, and volume of medication. These measurements allow the dispensing of the medication in all recommended dosing methods; including the highest standard of accuracy by exact child weight to the minimum optimal dosing efficacy of 4.57 mg per lb. (10.07mg per kg) as recommended.<sup>5,6,7,8</sup>

This industry unique medication dispenser provides safety and convenience during the preparation and administration, while in parallel provides ultra-precise dosing and visual reverification of the amount of medication specific to a child's weight and/or age range.

The Dose-2-Weight Syringe® eliminates the need to correlate a volume, unit dose or patient feature from the medication package or any other instructional media to the dispenser. These design features circumvent the procedures shown to be the primary cause of error during the preparation and administration of liquid medications via oral dispenser.

### Benefits:

- ✓ Personalized Weight Base Dosing
- ✓ Ultra-Precise Dosing
- ✓ Age and Volume Dosing
- ✓ Safe and Convenient
- ✓ Calculation Free
- ✓ Lower Incremental Dosing
- ✓ Easy to Read Measurements
- ✓ Easy To Clean and Reusable
- ✓ CE/ISO/WHO/TUV Certified
- ✓ US FDA Inspected Manufacturing
- ✓ Made in U.S.





### **INFANTS' ACETAMINOPHEN DOSING**

(Dose-2-Weight - Verses- Current U.S. Dosing Schedule<sup>3</sup>)

Current Dosing Schedule <sup>1</sup>				
Aceta	minophen	160	mg/5mL	
lb	mL	mg	mg/lb	
lb	Current	Current	Current	
6	1.25	40	6.67	
7	1.25	40	5.71	
8	1.25	40	5.00	
9	1.25	40	4.44	
10	1.25	40	4.00	
11	1.25	40	3.64	
12	2.5	80	6.67	
13	2.5	80	6.15	
14	2.5	80	5.71	
15	2.5	80	5.33	
16	2.5	80	5.00	
17	2.5	80	4.71	
18	3.75	120	6.67	
19	3.75	120	6.32	
20	3.75	120	6.00	
21	3.75	120	5.71	
22	3.75	120	5.45	
23	3.75	120	5.22	
24	5.0	160	6.67	
25	5.0	160	6.40	
26	5.0	160	6.15	
27	5.0	160	5.93	
28	5.0	160	5.71	
29	5.0	160	5.52	
30	5.0	160	5.33	
31	5.0	160	5.16	
32	5.0	160	5.00	
33	5.0	160	4.85	
34	5.0	160	4.71	
35	5.0	160	4.57	
		Average:	5.48	

Dose	e-2-Weigh	t Schedu	<b>le</b> <sup>4,5,6,7,8</sup>
Acetar	ninophen	160	mg/5mL
lb	mL	mg	mg/lb
lb	D2W	D2W	D2W
6	0.86	27.4	4.57
7	1.00	32.0	4.57
8	1.14	36.6	4.57
9	1.29	41.1	4.57
10	1.43	45.7	4.57
11	1.57	50.3	4.57
12	1.71	54.8	4.57
13	1.86	59.4	4.57
14	2.00	64.0	4.57
15	2.14	68.6	4.57
16	2.29	73.1	4.57
17	2.43	77.7	4.57
18	2.57	82.3	4.57
19	2.71	86.8	4.57
20	2.86	91.4	4.57
21	3.00	96.0	4.57
22	3.14	100.5	4.57
23	3.28	105.1	4.57
24	3.43	109.7	4.57
25	3.57	114.3	4.57
26	3.71	118.8	4.57
27	3.86	123.4	4.57
28	4.00	128.0	4.57
29	4.14	132.5	4.57
30	4.28	137.1	4.57
31	4.43	141.7	4.57
32	4.57	146.2	4.57
33	4.71	150.8	4.57
34	4.86	155.4	4.57
35	5.00	160.0	4.57
		Average:	4.57

<sup>&</sup>lt;sup>1</sup>Simon, H. K., & Weinkle, D. A. (1997). Over-the-counter medications: do parents give what they intend to give? *Archives of pediatrics & adolescent medicine*, *151*(7), 654-656. <sup>2</sup>Bronstein AC, Spyker DA, Cantilena LR, Green JL, Rumack BH, Heard SE. 2007 annual report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 25th Annual Report. Clin Toxicol (Phila). 2008; 46(10):927-1057.

Attention: for Infants under 2 years of age and/or 24 lb. always contact your pediatric physician as to the recommended dose that may be best prescribed for your individual child.

<sup>&</sup>lt;sup>3</sup> Tylenol<sup>®</sup> Infants and Children's Dosing Information for Healthcare Professionals

<sup>&</sup>lt;sup>4</sup> Adjusted for U.S. Market and mL dosing conformity – (adjusted from Dose-2-Weight Optimal Dose of 5.67 mg/lb. to 4.57 mg/lb.)

<sup>&</sup>lt;sup>5</sup>Temple AR. Pediatric dosing of acetaminophen. Pediatr Pharmacol (New York). 1983;3(3-4):321-7. PMID: 6677877.

<sup>&</sup>lt;sup>6</sup> Boston University Fever Study. 1994 http://www.bu.edu/slone/research/scor-network/

<sup>&</sup>lt;sup>7</sup>Temple, Comments Regarding the Labeling of Pediatric OTC Acetaminophen. FDA-2009-N-0138, Joint Meeting of the Drug Safety and Risk Committees, June 29 and 30, 2009

<sup>&</sup>lt;sup>8</sup>Temple, A. R., Zimmerman, B., Gelotte, C., & Kuffner, E. K. (2017). Comparison of the Efficacy and Safety of 2 Acetaminophen Dosing Regimens in Febrile Infants and Children: A Report on 3 Legacy Studies. *The journal of pediatric pharmacology and therapeutics: JPPT: the official journal of PPAG*, 22(1), 22–32. https://doi.org/10.5863/1551-6776-22.1.22