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Fig. E-1 Photograph showing a Scale-Tronix pediatric digital scale. Fig. E-2 Photograph showing Group A, Glad Press'n Seal wrap.

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Fig. E-3 Photograph showing Group B, single plastic bag with elastic rubber band. Fig. E-4 Photograph showing Group C, single plastic bag with duct tape.

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Fig. E-5

Fig. E-6



**Fig. E-5** Photograph showing Group D, double plastic bags with duct tape. **Fig. E-6** Photograph showing Group E, CVS Pharmacy Reusable Cast & Wound Protector. **Fig. E-7** Photograph showing Group F, DryPro Large Half Leg Waterproof Cast Cover.

Fig. E-7

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TABLE E-1 Weight Difference of Casts*							
Trial	Control	Group A (Glad Press'n Seal Wrap)	Group B (Single Plastic Bag with Elastic Rubber Band)	Group C (Single Plastic Bag with Duct Tape)	Group D (Double Plastic Bags with Duct Tape)	Group E (CVS Cast Protector)	Group F (DryPro Cast Cover)
1	0.623	0.088	0.411	0.156	0	0.001	0.004
2	0.707	0.340	0.271	0.033	0	0	0.003
3	0.621	0.017	0.090	0.022	0	0	0
4	0.599	0.259	0.028	0.007	0	0	0
5	0.671	0.257	0.287	0.011	0	0	0
6	0.614	0.051	0.414	0.005	0	0.01	0.001
7	0.658	0.082	0.040	0.108	0	0.002	0
8	0.692	0.254	0.488	0.044	0	0	0.002
9	0.631	0.258	0.188	0.017	0	0	0.002
10	0.648	0.226	0.214	0.030	0	0	0
Median†	0.640	0.240	0.243	0.026	0	0	0.001
Range	0.599 to 0.707	0.017 to 0.340	0.028 to 0.480	0.007 to 0.156	0	0 to 0.01	0 to 0.004

\*The values are given as the number of kilograms for the calculated weight difference using cast weights before and after water submersion. Values were measured in kilograms and then converted to milliliters using the conversion of 1 gram of water equals 1 milliliter. The amount of water absorption does not include the weight of mannequins. †Because of a lack of normal distribution among the groups' data, median values were used as opposed to the mean.