Interpreting Mouse Chow Supply and Drinking Water Hydropac™ Levels

The 420 ml volume of water provided in a Hydropac™ bag and 367 grams of chow should last at least two weeks for a cage of five, nondiabetic mice. Animal care staff replace the Hydropac™ bag and add chow within the two week period if needed. Near the end of two weeks, the water level may appear low when there are still 3 days of water left. Please refer to the images using blue colored water to most easily understand what water level metrics are used to trigger replacement of a Hydropac™ bag in a mouse cage.

Helpful Hint: Please be sure not to place not too much pressure on the full Hydropac™ to avoid bursting or leaking. Be certain that one Red Safe Harbor is present in each mouse cage to provide a dry platform in case there is a Hydropac™ leak.

Please never hesitate to contact the vivarium office at 275-2651 with any concerns, questions or comments.
Average Mouse Food Consumption
(5010 standard diet)

1 mouse = 5 grams food per day

97 pieces of food per food hopper (average) = 366.9 grams

366.9 grams divided by 5 grams per mouse per day = 73 days of food for 1 average mouse

366.9 grams divided by 25 grams (5 grams per mouse per day for 5 mice) = 14.676 days of food for 5 average mice

97 pieces = 366.9 grams =

73.3 days 1 mouse
36.6 days 2 mice
24.4 days 3 mice
18.3 days for 4 mice
14.6 days for 5 mice
Average Mouse Water Consumption

1 mouse (up to 25 grams) = 4 ml water per day

Approximately 420 grams of water per Hydropac pouch divided by 4 ml per mouse per day = 105 days of water for 1 average mouse

420 grams divided by 20 ml (4 ml per mouse per day for 5 mice) = 21 days of water for 5 average mice

420 grams = 420 mls =

105 days 1 mouse
52.5 days 2 mice
35 days 3 mice
26.25 days 4 mice
21 days for 5 mice

Conclusion: Unless cage contains mice over 25 grams in weight or the mice in the cage have a condition which causes them to drink a non-standard amount of water (i.e. diabetic, large litter, etc.), a typical Hydropac pouch should last the standard 14 days between cleanings.
Water level slightly above metal food separator= non-diabetic standard 5 adult mice at least 7 days
Water level approximately ½ inch below metal food separator = non-diabetic standard 5 adult mice = approximately 3 days
Water level approximately ½ inch below metal food separator = non-diabetic standard 5 adult mice = approximately 3 days
Water level approximately ½ inch below metal food separator = non-diabetic standard 5 adult mice = approximately 3 days
Non-diabetic standard 5 adult mice = roughly 2 days

Dispense holes at base of valve

$\frac{3}{4}$ of valve above water line
Water level touching valve dispense holes= mice still have access to water but pouch needs to be changed before the end of the day
Water not accessible to mice= change immediately, provide Hydrogel cup and/or moist chow and report to DCM