

## Importance of staying hydrated during Sport

The amount of water in a lean healthy adult such as trained player is nearly 70% of his weight. Scientists tell us that being under-hydrated by as little as 2% of your body weight can result in significant decreases in performance (20,34,49). Thus the average player weighing 85 kg and who loses 1.7 kilos of water (or body weight) will likely display the effects of dehydration. We have measured hundreds of players' body weight before and after playing and have found body weight losses as high as 4.5 kg (10 lbs) after a 90 minute game! Some players also tend to lose more body weight and thus body water during training and playing than others. The rate and extent of fluid loss is very individual. Calculate your own body weight loss (weighing-in after training or playing) in relation to your pre-match weight. If it is 3% or more then you were likely dehydrated before the game ended. For each 1 kg lost during exercise you should consume at least 1 litre of fluid. The following table helps us understand the effects of progressive dehydration on performance

**Table 4. Effects of dehydration on Performance.**

Percent Bodyweight reduction	Body weight loss (kg)	Actual symptoms	Performance Reduction (est) 100% = optimum
1%	0.85	Increase in thirst; heat regulation altering; performance declining - player slowing down	99%
2%	1.70	Endurance and quickness affected	90%
3%	2.55	Considered clinical dehydration. Symptoms include reduced ability to concentrate and to react: player will cover less ground during training or playing	85%
4%	3.40	Clear performance decrement: Pace slower, poor concentration, reaction slower	75%
5%+	4.25+	Weakness, headache, irritability, severe effect on heat regulation	60%

Remember that if you arrive to training in a state less than normal hydration you are likely not to benefit from the training. More significantly, if you arrive to the dressing room 1-2% dehydrated then you will almost certainly not perform to you optimum during the game.

### Key Point 7

1. A loss of 2% of your body weight during training or playing can lead to poorer performance
2. Plan to consume at least 1 litre of fluid for each kilogramme lost during exercise