



Government of **Western Australia**  
Combat Sports Commission



# Rapid Weight Loss (‘Weight Cutting’) by Dehydration

The Dangers of Cutting Weight and Dehydration

**CSC**

PREPARE WELL  
PERFORM BETTER



### What is ‘Weight Cutting’?

Weight cutting is a dangerous practice often inappropriately undertaken in combat sports. This is where contestants rapidly decrease their body weight before weigh-ins through excessive dehydration, for the purpose of gaining an advantage by competing in a weight class artificially below what could be achieved through diet and training.

Contestants then attempt to regain the ‘lost’ weight in the time between the weigh-in and the contest (usually about 24 hours in Western Australia), with the intention of being ‘heavier’ than their opponent in the contest.

Many physical and mental symptoms occur as a result of weight cutting by dehydration which are harmful to all contestants.

In addition, while contestants may be able to regain most or all of the rapidly lost weight, research suggests that contestants are not adequately hydrated at the time of the contest. This creates an increased risk of injury, which can prove fatal.

### Health Dangers of ‘Weight Cutting’

**Decreased Muscle Strength and Endurance:** Dehydration causes decreased blood flow to muscles which causes them to function less efficiently.

**Heat Illness:** This occurs on four levels: heat cramps; heat syncope (fainting and loss of consciousness); heat exhaustion; and heat stroke (which can be fatal). Dehydration results in reduced blood flow to skin, muscles and the brain. This is followed by a decreased ability to regulate body temperature. Sweating becomes impaired, so core body temperature can rise. This increases the threat for significant ill-health when poorly hydrated athletes do strenuous activities.

**Electrolyte Problems:** Decreased kidney function results in imbalances of electrolytes with unhealthy increases in body electrolytes including potassium and sodium.

**Mood Swings and Mental Changes:** These hydration changes contribute to increased mood swings, poor concentration and ability to focus, disorientation and mental changes.

**Decreased Kidney Function:** Dehydration and increased sweating leads to decreased blood flow and so decreased kidney function. This contributes to reduced urine output, concentrated urine, and loss of proteins from the body.

**Increased Risk of Brain Injury:** There are likely increased risks of brain trauma, leading to concussion and possibly to brain bleeds.



**Decreased Heart and Cardiovascular Function:** The heart works harder and less efficiently.

**Reduced Energy Utilisation, Nutrient Exchange and Acidosis:** With decreased blood flow to tissues, nutrients don’t get delivered and the body’s waste products are not removed. A build-up of acid occurs which changes cellular functions in the body, making activity/exercise less efficient.

**Eye Trouble:** Dehydration may cause blurred vision and dry eyes.

All these changes result in an unhealthy contestant who cannot be at their best, because of forced dehydration. Staying well hydrated is best for performance and life.

**Loss of life:** In November 2017, Western Australian Jessica Lindsay (18) tragically passed away after attempting to cut weight for a Muay Thai contest.

Jessica’s family hope her legacy will help prevent any further injury or loss of life from weight cutting, so no other family should have to endure a loss from the same circumstances.



[@NEVER AGAIN Jessica Lindsay Legacy](#)

### Links to More Information

- [Combat Sports Commission – Weight Cutting](#)
- [Combat Sports Commission - Contestant Preparation Standards & Guidelines](#)
- [Association of Ringside Physicians – Dangers of Weight Cutting and Dehydrating](#)
- [Rondel Clark Foundation – Extreme Weight Cutting Awareness](#)



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