

The Dangers of Smelling Salts

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The use of smelling salts (Ammonia Inhalants) is a growing, yet dangerous trend, in the pits of NXL tournaments. As a medical professional, I was shocked to see how casually entire teams passed around smelling salts to use in the seconds before running out onto the field.

After a few conversations with multiple players, both amateur and professional, I found that every single one of the players I spoke with thought that smelling salts were safe to use and had no side effects. When asked why they used smelling salts the buzzwords were increased “alertness” and “focus”. One player commented that the use of smelling salts must be safe because “...it’s not banned by the NFL and Manning uses them.”

Modern smelling salts are a mixture of ammonia, water, and alcohol. When broken open ammonia gas is released and inhaled. The inhalation of ammonia gas irritates the respiratory tract, including the nose, lungs, and stomach, and activates a sequence of hormonal changes. The hormonal changes result in increased heart rate, increased blood pressure, and the *feeling* of increased alertness.

The forced increased heart rate activates the sympathetic nervous system (SNS), aka the “fight or flight” response. The activation of the SNS does increase focus but at the cost of a temporary loss of fine motor skills and decision-making, which in the game of paintball, may be the difference between a win and a loss.

The after-effects of smelling salts use are cough, diarrhea, headache, and vomiting, this doesn’t include the long-term effects that chronic overstimulation of SNS can cause. One of the hormones stimulated by the use of smelling salts is cortisol. The repeated activation of cortisol contributes to high blood pressure, atherosclerosis (clogged arteries), sleep disturbances, anxiety, and depression.

In a game that can be won or lost by one good or bad decision, the false sense of heightened alertness that players are receiving through the use of smelling salts does not balance out the risks and side effects.

References

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