Dehydration adversely affects worker productivity, safety and morale. Loss of fluids can cause Dehydration, Heat Stress, and Fatigue (DHF), the effects of which include decreased cognitive abilities, reduced performance and slowed reaction times.2,3,4 This can lead to reduced output and careless work practices which may contribute to serious accidents in the workplace. At just 1% dehydration, productivity reduces by about 12%.1,2 At 2% dehydration, heart rate increases by 8 beats per minute (bpm) which increases perception of effort and reduces bodyperformance by up to 30% 1,5

At 3% dehydration, heart rate increases by 12bpm and performance is reduced by 25-50%. Reaction time is also slowed to levels similar to that of having a .08 Blood Alcohol Content (.03 above the legal driving limit).1,6

At .08 BAC (Blood Alcohol Content) drivers are five times more likely to be in a car accident.7 Similarly, the more dehydrated workers become, the more a Loss Time Incident (LTI) is likely to occur.

Drinking water replaces lost fluids but not essential salts, minerals, carbohydrates and amino acids needed to maintain optimum performance and productivity.

Sweat contains water, and essential salts known as electrolytes. In a thermally stressful environment like a mine site where workers can sweat anywhere from 1L-2.5L per hour, 6,8,9 a specially formulated mixture of Electrolyte salts is required to replace fluid losses and re-establish the correct fluid-electrolyte balance.1,10

Electrolyte drinks increase water retention by 25% compared with drinking water, assisting workers to avoid dehydration.11

The addition of other ingredients such as Amino Acids will help the body to maintain stamina during prolonged physical activity.

WHY THORZT?

- AUSTRALIAN MADE
- PROPRIETARY ELECTROLYTE FORMULA
- CONTAINS MAGNESIUM AND B & C GROUP VITAMINS
- CONTAINS BRANCH CHAIN AMINO ACIDS

- UP TO HALF THE SUGAR OF OTHER ALTERNATIVES
- GLUTEN AND CAFFEINE FREE
- HYPOTONIC
- HYDRATION AWARENESS PROGRAMS
- 1. Kenefick RW, PhD. Hydration at the Worksite. American College of Nutrition Vol.26 No.5, 597S-603S
- 2. Wasterlund DS, Chaseling J, Burstrom L: The effect of fluid consumption on the forest workers' performance strategy. Appl Ergon 35:29-36, 2004
- 3. Ganio, MS & Armstrong, LE.Mild Dehydration impairs cognitive performance and mood of men. British Journal of Nutrition / Volume 106 / Issue 10 / November 2011, pp 1535-1543
- 4. Armstrong LE, Ganio, MS. Mild Dehydration Affects Mood in Healthy Young Women. American Journal of Nutrition, Jan 1, 2012. jn.111.142000
- 5. Bean, Anita (2006). The Complete Guide to Sports Nutrition. A & C Black Publishers Ltd. pp. 81-83.
- 6. Brake, R & Bates GP. Fluid Losses and Hydration Status of Industrial Workers under Thermal Stress Working Extended Shifts. QLD Mining Industry Safety & Health Conf. August 2001
- 7. Drinkwise Australia: http://www.drinkwise.org.au/you-alcohol/alcohol-facts/drink-driving/
- 8. Sawka M N. Hydration Effects of thermoregulation and performance in the heat. In: Lau W M, ed. Proceedings of the International Conference on Physiological and Cognitive Performance in Extreme Environments, Defence Scientific and Technology Organisation, Australian Department of Defense, Canberra. 2000:21-23
- 9. Bishop PA, Pieroni RE, Smith JF, Constable SH: Limitations to heavy work at 21 degrees Co of personnel wearing the US Military chemical defense ensemble. Aviat Space Environ Med 62:216-220, 1991
- 10.Sawka, M & Montain SJ: Fluid and Electrolyte Supplementation for Exercise Heat Stress. In: American Journal of Clinical Nutrition 2000;72 (suppl):564S-72S
- 11. Seifert J, Harmon J, DeClercq P. Protein added to a sports drink improved fluid retention. Int J Sports Nutr Exerc Metab. 2006, 16, 16, 420-429.

EVERY WORKER NEEDS HYDRATION



NOT JUST RORINK RHYORATION
SOLUTION

THE OPPORTUNITY FOR INDUSTRIAL ATHLETES - YOUR WORKFORCE TO STAY HYDRATED OVER SUMMER

WHAT IS MILD DEHYDRATION?

50-60% OF WORKERS REPORT TO WORK





DEHYDRATION CAN SLOW REACTION TIMES

TO THE SAME EXTENT AS HAVING A BLOOD ALCOHOL CONTENT (BAC)

AT 0.08 BAC, YOU ARE 5X MORE LIKELY TO CRASH YOUR CAR

DOES THIS SOUND LIKE YOU OR YOUR TEAM?
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