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Bruce Anderson
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Dear Bruce,

I have reviewed the product material you have provided me with (rip packs of Elete electrolyte additives). The amounts of electrolytes provided by each pack are well marked and allow for a wide variety of volumes. This makes the product quite useful under arduous field operations.

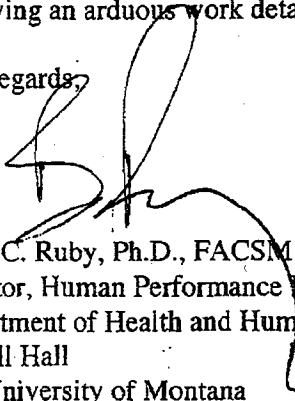
It is my opinion that such a supplemental electrolyte product would be useful under unpredictable field operations (wildfire suppression and military operations) when weather conditions and work requirements promote high sweat rates and elevated rates of water turnover. Endurance athletes and well-trained firefighters are conditioned to consume large amounts of water to avoid dehydration. Although this practice assists in the maintenance of plasma volume, inadequate electrolyte consumption can become hazardous during periods where hourly sweat loss approaches .5-1.0 L/hr.

Sport drinks are commonplace in the endurance sport and occupational settings (i.e. during arduous wildfire suppression). However, the palatability and the hassles of mixing these under field conditions (with concern for bacterial growth in water containers) limits their usefulness during all situations. The use of electrolyte additives offers a unique form of replacement that does not include some of the hassles of typical sport drinks. Although solid food sources can provide electrolyte replacement, food intake is often limited due to palatability, availability, and/or work schedule demands. Under field conditions, having a variety of options accessible to workers/soldiers/athletes will more likely best maintain electrolyte homeostasis.

When field ratios fail to provide adequate electrolyte replacement under periods of arduous work, high sweat rates, and elevated water turnover, supplemental electrolyte replacement provided in small amounts (added to normal potable water sources such as via the Elete rip packets), are convenient and safe alternatives.

Therefore, I would recommend the use of electrolyte additives during arduous field conditions when water intake often exceeds 4-8 liters during a 8-12 hour work shift. By adding supplemental electrolytes to drinking water, workers will more likely maintain normal electrolyte homeostasis regardless of nutritional intake prior to, during and following an arduous work detail.

Best regards,



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