**Competition Nutrition Practices of Elite Ultra-Marathon Runners**

By Trent Stellingwerff in IJSNEM, June 2015

3 world-class male ultra-runners
Adam Campbell, Max King & Rob Krar

**IN 2014**
16 ultramarathons with a total of eight wins, including winning the prestigious Western States Endurance Run 100-miler

**DURING THE 100-MILE RACES**
Throughout their respective 100-mile races, athletes consumed 1162±250g of CHO (71±20g/h), with minimal fat and protein intakes

- Runner #1: 1000g CHO intake during the race (61g/h)
- Runner #2: 500g CHO intake during the race (57g/h)
- Runner #3: 0g CHO intake during the race (94g/h)

Total caloric intake during the 100-mile: **5530 ± 1673 kcal**

2 athletes consumed 12.5 and 4.2g of ginger throughout their races

Athletes also consumed 912 ± 322mg of caffeine and 6.9 ± 2.4g of sodium

Commercial products accounted for 93 ± 12% of energy intake (sports drinks, gels, candies & commercial colas)

However, one athlete did mention increasing contributions of real food into his fueling plan: “I increasingly use and experiment with real food for races over 12 hours, and I do try and take in a bit of protein and fat. This largely comes down to trying to avoid flavor fatigue.” A second athlete noted “at crewed aid stations I also picked up ~1oz. salted chocolate covered almonds. They are an easy way to get some calories and protein in, especially later in the race when gels become less and less appealing.”

**CONCLUSION**
All three athletes practice nutrition strategies providing high CHO availability throughout their races. Furthermore, substrate oxidation estimates demonstrated a very CHO vs. fat dominant race performance while winning the World 100km Championships