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GOOGLE TRANSLATE	E F P P P P P P P P P P P P P	We investigated parameters of bo metabolism in a c endurance runne mountain ultra-m Jura Marathon' in performed the 7 km, a total ascer of 8,000 m withir	the changes in body mas oth renal function and flui case study in a female ult narathon in Europe, the ' 2008. The female ultra- stages with a total distant of 5,000 m, and a tota of 23:11 h: min, finishing	Is and Brown d ra- i-stage Swiss Funner Ince of 175 I descent as second	wse By Issue By Author By Title rch Search





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decreased by 0.3 kg, fat mass by 1.2 kg and skeletal muscle mass by 0.7 kg. Haemoglobin and haematocrit decreased by 4.5% and 7.5%, respectively, and plasma volume increased by 10 %. Serum osmolality decreased by 3.3%. Parameters of myocellular damage increased substantially (CK + 630 %, LDH + 178 % and GOT + 181 %). Creatinine continuously increased in plasma (+ 23 %) and urine (+ 47 %). Creatinine clearance (- 18.7 %), glomerular filtration rate (-19.4 %) and serum albumin (- 10.6 %) decreased. Urinary specific gravity decreased after each stage and was increased before each stage. Urinary osmolality decreased after each stage and was increased before each stage. The average daily fluid intake from stage 1 to stage 7 (during performance and rest) was 4.9 I per day. Total body water increased by 1.2 I by the end of the race. The potassium-to-sodium ratio in urine was increased after each stage. We assume that the increase in total body water was due to an increased activity in the renin-angiotensin-aldosterone-system as evidenced by the change in urinary electrolytes after the stages and an increased activity of vasopressin as evidenced by increase of urinary osmolality before the stages.

female runner. By the end of the race, body mass

Key words: ultra-run; fluid intake; skeletal muscle damage; renal function

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