

Cortisol awakening response and emotion in Carlos Soria's Kanchenjunga climbing expedition 2013

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Carlos Soria is a 76-year old mountaineer born in Spain, and all over the world, the only one who has been capable of conquering, with an age above 60 years, eleven out of the fourteen eight-thousanders of the earth. These achievements are part of a fascinating and ambitious adventure into the limits of human resistance to extreme environmental conditions at advanced ages, the ultimate goal of which is to successfully fulfill, before his 80s, the ascent to all of these world's highest mountains. We compared here the cortisol awakening response, which is thought of as an abrupt psychologically-driven rise in cortisol in anticipation of the demands of the upcoming day, in his climbing team at high altitude (more than 5000 m) and a control group at sea level in the Sunshine Coast. Results show that, relative to resting days, the foreigner mountaineer group has a bigger cortisol awakening response in those days - implying the ascension of a novel and difficult track. Moreover, this cortisol awakening response positively correlates with fear-based emotions and anticipation of a hard day (from $\rho = 0.30$ to 0.52).