

UCI Sports Nutrition Project: Health issues in cycling

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The 2026 Union Cyclisme Internationale Project on Nutrition for Cycling recognised the unique health issues affecting riders across the 11 disciplines within three specific reviews: 1. Body Composition, Energy Requirements and Energy Availability in Cycling; 2. Does Cycling Create a “Perfect Storm” for Bone Health?: Cycling-specific challenges to bone and nutritional strategies to overcome these and 3. The role of nutrition in the prevention and management of illnesses and injuries in elite cycling. This presentation summarises the key findings and recommendations from each review. First, it discusses the unique energy challenges faced by riders across many cycling disciplines/events; the extreme energy expenditure involved in specialized training periods and during some events (e.g. the road cycling Grand Tours) and the energy restriction/deficits involved in achieving the perceived benefits of very low body mass and body fat levels to maximise power to mass ratio (PMR). The potential concerns associated with some scenarios of low energy availability and allostatic/moderating factors need to be better investigated, and managed by strategies at the level of the individual cyclist and sporting organisations. The perfect storm that underpins findings of poor bone health in cyclists include a light and lean phenotype, the repetitive low impact nature of cycling (limited stimulus for bone metabolism); post-cycling episodes of transient increases in bone resorption, and low energy availability or inadequate intake of bone-important nutrients. A multi-faceted approach to address these is needed. Finally, common injuries and illnesses in elite cycling, including skin injuries, upper respiratory tract infections (URTIs), gastrointestinal (GI) disturbances, and sports-related concussions can involve nutritional strategies, many of which require further research.