As a result of the findings in the research, it was concluded that at least for lactate and glycogen, there are fiber-specific differences in prolonged sub maximal exercise. The investigators suggested that the cause of the difference is probably due to the unique energy metabolic characteristics of each fiber type and to the way that they are used during the exercise. It was found however that lactate was slightly higher in type II fibers during the early to middle stages of the exercise, whereas glycogen utilization was much more pronounced in type I fibers throughout the exercise. It was suggested, that based on the histochemically determined glycogen depletion data, that the higher lactate concentration in type II fibers was due to a greater anaerobic metabolism, whereas the greater glycogen loss found in type I fibers reflected the larger involvement of this motor unit type in the exercise activity. However, on the whole, as mentioned, no reduction in ATP concentration or CrP in either fiber type during prolonged exercise was found, even in the face of a progressive increase in the number of fibers showing little or no glycogen concentration. This suggests that there are protective mechanisms that prevent an energy crisis. This is an interest concept, but the mechanism and nature of these protective mechanisms remains unknown.

Words: 650

Ball-Burnett.M, Green.H and Houston.E. Energy metabolism in human north no fast twitch fibers during prolonged cycle exercise. Journal of Physiology 437: 257-264 Lean Note for a state of the state of