

Abstract

Regeneration encompasses all the activities that lead to complete and rapid recovery of all the physical and mental processes, the resting balance of which was disrupted due to some prior activity, and so shifted towards a particular intensity of fatigue. These activities are categorised as either passive or active. Passive regeneration is comprised of the physiological processes that naturally restore an organism's resting balance without any external intervention. Active regeneration, on the other hand, requires a degree of assistance from the outer environment.

One method of both passive and active regeneration (particularly the PNF method) was used in the experimental part, with the aim of accelerating the organism's recovery post-exertion. A series of load tests were used to verify this, as well as the subjective assessment of the subject's feelings on scales. It was proven that active regeneration can expedite the healing process and decrease the personal discomfort of the organism (exhaustion and delayed onset muscle soreness), after physical exertion. In addition (and with consideration to the method used for active regeneration) an increase in the range of motion in the treated part of the body was demonstrated.