

at rest. This same increase is found in the blood.

2. The rapid increase in the acidity of the muscle causes a gradual limitation of its capacity for work which finally prevents the muscle from further contraction.
3. It is probable that the interference with the conduction of the nerve impulse in absolute fatigue is located at the threshold of the muscle fibers, and is probably due to a resistance or region of decremental conduction.
4. The ability of the muscle to perform additional work after absolute fatigue depends upon the removal of the free acid substances of fatigue from the muscle by oxidation, restoration to its precursor, or removal to other parts of the body by the circulation.
5. The removal of the acid-fatiguing substances is apparently greatly hastened by the application of radiant heat, massage, and galvanism, after which the muscle is able to do more work than during the initial effort.
6. In the experiments conducted:
  - (a) The recovery from localized absolute fatigue after two minutes' massage as compared with rest for the same period, showed an increase of 1% in the amount of work that could be performed.
  - (b) With five minutes' massage, the muscle was able to perform 18.9% more work than when the muscle rested for the same length of time.
  - (c) With ten minutes' rest, the muscle performed 82.2% of its initial effort.

Radiant heat enabled the muscle to do 101.3% or 19.1% more than rest.

Massage enabled the muscle to do 108% or 25.8% more than rest.

Galvanism enabled the muscle to do 110.3% or 28.1% more than rest.

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