

Graph referenced as "Isotonic shortening of frog sartorius muscle in twitches at 0° [degrees]C P in g w t"

Contributors

Lowy, Dr.

Publication/Creation

September 1963

Persistent URL

<https://wellcomecollection.org/works/tny5hp9f>

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution, Non-commercial license.

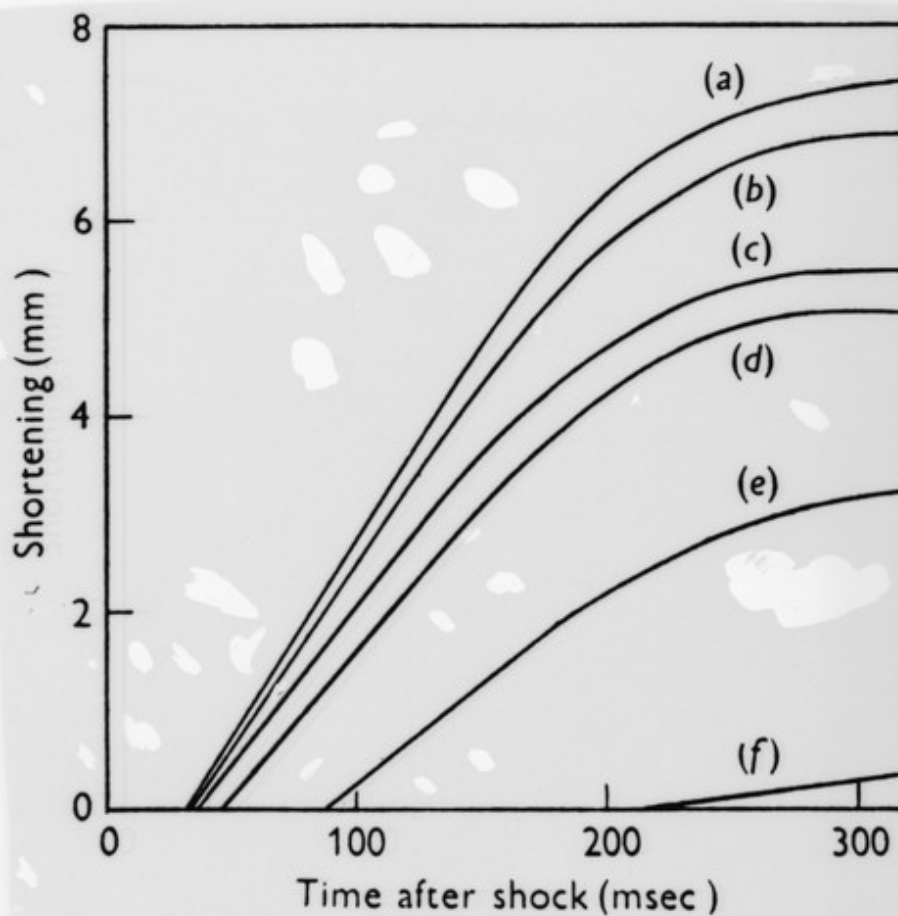
Non-commercial use includes private study, academic research, teaching, and other activities that are not primarily intended for, or directed towards, commercial advantage or private monetary compensation. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

by the muscle in lifting the weight. And then, later, when the stimulus ends, relaxation occurs, the load in falling does work on the muscle, and, as will be stressed later, this work is converted into heat in the muscle.



Isotonic shortening of frog sartorius muscle ($l_0 = 27$ mm) in twitches at 0°C . P in g wt: (a) 0.95, (b) 1.25, (c) 1.9, (d) 2.5, (e) 5.1, (f) 12 (8).

The features of active shortening have been presented so far as part of the general decreases in length which occur in quick-released isotonic contractions. They occur also, of course, in ordinary isotonic contractions in which the experimental arrangements involve only a lever, but no stop that forces the muscle first to develop full isometric tension. Responses of this sort are illustrated in Fig. 3, and the general mechanical equivalent of these is shown in Fig. 4. As indicated in the latter, immediately