

Anatomy & Physiology: Muscles—Flexor Digitorum Profundus.

STRUCTURE.

- Origin: anterior medial surface of body of ulna.
- Insertion: base of distal phalanx of each finger.

FUNCTION.

- Concentric action: flexes distal and middle phalanges of each finger at interphalangeal joints, proximal phalanx of each finger at metacarpophalangeal joint, and hand at wrist joint.
- Reverse mover action: flexion of metacarpals at MCP, flex proximal phalanges at PIP, wrist flexion.
- Eccentric action: controls/restrains/slows MCP, PIP, and DIP joint extension, wrist extension.
- Isometric action: stabilize wrist and finger joints.
- Innervation: median and ulnar nerves.
- Arterial supply: ulnar and radial arteries; anterior interosseus artery.

CLINICAL SIGNIFICANCE.

References

Biel, A. (2015). *Trail guide to the body: A hands-on guide to locating muscles, bones and more.*

Cedars-Sinai. (2018). Vertebrae of the spine. Retrieved from <https://www.cedars-sinai.org/health-library/diseases-and-conditions/v/vertebrae-of-the-spine.html>

Clark, M., Lucett, S., Sutton, B. G., & National Academy of Sports Medicine. (2014). *NASM essentials of corrective exercise training.* Burlington, MA: Jones & Bartlett Learning.

Jenkins, G., & Tortora, G. J. (2012). *Anatomy and Physiology: From Science to Life, 3rd Edition International Stu.* John Wiley & Sons.

Muscolino, J. E. (2017). *The muscular system manual: The skeletal muscles of the human body.*