**Extensors**

**Common Digital Extensor Tendon**

|  |  |  |
| --- | --- | --- |
| Origin | Insertion | Action |
| Common digital extensor muscle on the lateral [humeral](https://en.wikivet.net/Limb_Bones_and_Cartilages_-_Horse_Anatomy#Humerus) epicondyle | Extensor process of [distal phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Distal_Phalanx)  | Extends [carpus](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb) and digit |

The common digital extensor tendon passes over the dorsolateral aspect of the [carpus](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb) , continuing distally over the dorsal [metacarpus](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb). The branches of the interosseous muscle (suspensory ligament) join the common digital extensor tendon before its insertion on the extensor process of the [distal phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Distal_Phalanx). A minor branch inserts on the [middle phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Middle_Phalanx) and some fibres insert on the [hoof cartilages](https://en.wikivet.net/Hoof_-_Horse_Anatomy#Ungual_Cartilages). The common digital extensor tendon is surrounded by the extensor retinaculum and a protective synovial sheath. The tendon sheath begins approximately 10cm proximal to the [carpus](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb), extending distally to the level of the [metacarpus](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb).

**Lateral Digital Extensor Tendon**

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| --- | --- | --- |
| Origin | Insertion | Action |
| Lateral digital extensor muscle on the lateral humeral epicondyle | Dorsolateral aspect of [proximal phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Proximal_Phalanx) | Extends the carpus and metacarpophalangeal joint |

The lateral digital extensor muscle arises from the lateral [humeral](https://en.wikivet.net/Limb_Bones_and_Cartilages_-_Horse_Anatomy#Humerus) epicondyle and forms the lateral digital extensor tendon on the lateral aspect of the antebrachium; caudal to the common digital extensor tendon. The tendon is enclosed within a synovial sheath as it extends distally over the [metacarpus](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb) to insert on the dorsolateral aspect of the [proximal phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Proximal_Phalanx).

**Flexors**

The digital flexor tendons are surrounded by synovial sheaths, which serve a protective function; allowing frictionless movement as the tendons traverse the bony prominences of the [carpus](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb) and [metacarpophalangeal](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb) (fetlock) joint.

Carpal Sheath

Arises approximately 10cm proximal to the [carpus](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb) and extends to mid-metacarpal region.

Digital Sheath

Arises at the distal [metacarpus](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb), approximately 5cm proximal to the [metacarpophalangeal](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb) joint and extends to the middle of the [middle phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Middle_Phalanx).

**Superficial Digital Flexor Tendon (SDFT)**

|  |  |  |
| --- | --- | --- |
| Origin | Insertion | Action |
| Superficial digital flexor muscle on the medial [humeral](https://en.wikivet.net/Limb_Bones_and_Cartilages_-_Horse_Anatomy#Humerus) epicondyle | Middle phalanx | Flexes the proximal and middle phalangeal joints, stabilises [metacarpophalangeal](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb) joint |

The SDFT arises from the superficial digital flexor muscle at the level of the [carpus](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb). At this level, the tendon combines with the accessory ligament (superior check ligament). The tendon passes distally on the caudal aspect of the limb, running through the carpal canal to the [metacarpus](https://en.wikivet.net/Limb_Bones_and_Cartilages_-_Horse_Anatomy#Metacarpals_and_Metatarsals). The SDFT and DDFT run within a synovial structure termed the carpal sheath. Just proximal to the [metacarpophalangeal](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb) joint, the SDFT forms a ring-like structure which wraps around the DDFT. This structure is known as the manica flexoria.

From the distal metacarpus to the level of the [middle phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Middle_Phalanx), the SDFT and DDFT are enclosed by another synovial structure, the digital sheath. The SDFT divides into two branches at the distal end of the [proximal phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Proximal_Phalanx). The branches insert on the lateral and medial eminences of the [middle phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Middle_Phalanx), a minority of fibres also insert on the lateral aspect of the [proximal phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Proximal_Phalanx).

 **Deep Digital Flexor Tendon (DDFT)**

|  |  |  |
| --- | --- | --- |
| Origin | Insertion | Action |
| Deep digital flexor muscle on the medial [humeral](https://en.wikivet.net/Limb_Bones_and_Cartilages_-_Horse_Anatomy#Humerus) epicondyle, [radius and ulna](https://en.wikivet.net/Limb_Bones_and_Cartilages_-_Horse_Anatomy#Radius_and_Ulna) | [Distal phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Distal_Phalanx) | Flexes the [distal phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Distal_Phalanx) |

The deep digital flexor tendon arises as three bellies from its origin on the medial [humeral](https://en.wikivet.net/Limb_Bones_and_Cartilages_-_Horse_Anatomy#Humerus) epicondyle, fusing to form a common tendon just proximal to the [carpus](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb) on the caudal aspect of the limb. The single tendon passes distally, enclosed in the carpal sheath, through the carpal canal. In the mid-metacarpal region, the tendon is enforced by an accessory ligament (inferior check ligament).

At the [metacarpophalangeal](https://en.wikivet.net/Joints_and_Ligaments_-_Horse_Anatomy#Thoracic_Limb) (fetlock) joint, the DDFT passes though the manica flexoria and over the sesamoid groove. In the mid –region of the [proximal phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Proximal_Phalanx), the DDFT runs between the branches of the SDFT and over the flexor cortex of the [distal sesamoid](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Distal_Sesamoid_.28Navicular.29_Bone) (navicular) bone to insert on the flexor cortex of the [distal phalanx](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Distal_Phalanx).

The navicular bursa is the space formed between the DDFT and the [distal sesamoid](https://en.wikivet.net/Phalanges_-_Horse_Anatomy#Distal_Sesamoid_.28Navicular.29_Bone) (navicular) bone, which is filled with synovial fluid. It extends beyond the borders of the distal sesamoid bone proximally, distally and laterally. The distal parts of the superficial and deep digital flexor tendons are supported by three annular ligaments:

* Palmar annular ligament
* Proximal digital annular ligament
* Distal digital annular ligament