

# Muscle Groups According to Innervation

*It is helpful to know which muscles are related with each other according to their common nerve supply from the spinal cord. You may think of muscles within such an innervation group as belonging to the same ancestral family: They share the same embryological origin and history, and are regulated via the same neural communication pathways. Talking to one family member then often affects the whole group. This is specially important for structural bodyworkers which often tend to think along mechanical transmission lines only.*

## Lower Girdle

<u>Lumbar Plexus (FL)</u> <ul style="list-style-type: none"> <li>▪ Quadratus lumborum</li> <li>▪ Psoas</li> </ul>	<u>Femoral Nerve (EX)</u> <ul style="list-style-type: none"> <li>▪ Iliacus</li> <li>▪ Pectineus</li> <li>▪ Sartorius</li> <li>▪ Quadriceps</li> </ul>
<u>Obturator Nerve (FL)</u> <ul style="list-style-type: none"> <li>▪ Adductors (except for the Pectineus and the long tendinous portion of the Add. Magn)</li> <li>▪ Obturator externus</li> </ul>	<u>Gluteal Nerves (EX)</u> <ul style="list-style-type: none"> <li>▪ Gluteals (maj, med., min)</li> <li>▪ Tensor fasciae latae.</li> </ul>
<u>Tibial Portion of Sciatic Nerve (FL)</u> <ul style="list-style-type: none"> <li>▪ Hamstrings (except for the short head of the Biceps Fem.)</li> <li>▪ Long tendinous portion of Add. Magn.</li> </ul>	<u>Sacral Plexus (FL)</u> <ul style="list-style-type: none"> <li>▪ Piriformis</li> <li>▪ Obturator internus</li> <li>▪ Gemelli sup.&amp; inf.</li> <li>▪ Quadratus femoris</li> <li>▪ Levator ani</li> </ul>
<u>Tibial Nerve (FL)</u> <ul style="list-style-type: none"> <li>• All posterior calf muscles</li> <li>• All muscles on plantar side of foot</li> </ul>	<u>Common Peroneal Nerve (EX)</u> <ul style="list-style-type: none"> <li>• Short head of Biceps femoris</li> <li>• Tib.ant., Ext.dig.long., Ext. hal.long</li> <li>• Ext.dig.brev., Ext.hal.brev.</li> <li>• Peroneus longus &amp; brevis</li> </ul>

**FL** = muscles innervated by this nerve are all genetic **flexor** muscles  
**EX** = muscles innervated by this nerve are all genetic **extensor** muscles

## Upper Girdle

<p><u>Musculocutaneous Nerve</u> (FL)</p> <ul style="list-style-type: none"> <li>▪ Biceps br.</li> <li>▪ Brachialis</li> <li>▪ Coracobrach.</li> <li>▪ Pronator Quadr.</li> <li>▪ Fl dig. Prof., Fl. Poll.Long.</li> </ul>	<p><u>Radial Nerve</u> (EX)</p> <ul style="list-style-type: none"> <li>▪ Triceps brachii</li> <li>▪ Anconaeus</li> <li>▪ Ext.carpi rad. br. &amp; long.</li> <li>▪ Brachioradialis</li> <li>▪ Ext.dig., Ext.dig.min., Ext. carpi uln.</li> <li>▪ Supinator</li> <li>▪ Abd.poll. long &amp; br.</li> <li>▪ Ext. poll. long., Ext. indices</li> </ul>
<p><u>Median Nerve</u> (FL)</p> <ul style="list-style-type: none"> <li>▪ Fl. digit. superf.</li> <li>▪ Fl. carpi radialis</li> <li>▪ Palmaris longus</li> </ul>	<p><u>Axillary Nerve</u> (EX)</p> <ul style="list-style-type: none"> <li>▪ Deltoideus</li> <li>▪ Teres Minor</li> </ul>
<p><u>Ulnar Nerve</u> (FL)</p> <ul style="list-style-type: none"> <li>▪ Fl.carpi uln.</li> <li>▪ Fl. prof. dig.</li> </ul>	<p><u>Subscapular Nerve</u> (EX)</p> <ul style="list-style-type: none"> <li>▪ Subscapularis</li> <li>▪ Latissimus Dorsi &amp; Teres Major</li> </ul>

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