

Manual Muscle Testing, MMT

This is the official list of names of all **manual neuromuscular tests** within **Manual Muscle Testing MMT** as used in **Manual Kinesiology** at the **Swedish School of Kinesiology** and the **Physiopractor®** Academy in Stockholm, Sweden.

Manual Muscle Testing was developed for the first time in the world during the 1860-1880 century by Swedish physiotherapists from the **Royal Central Institute of Gymnastics** (G.C.I.) in Stockholm, Sweden, founded by Pehr Henrik Ling, in 1813.

Sweden was during this period, 150 years ago, the pioneer and the world leader in all manual medicine and created the profession of *physiotherapist* / physical therapist.

An orthopedic physician and trained physiotherapist, *Gustaf Zander*, built the foundation for today's *Gym* with over 70 different strength training machines.

In 1887 Sweden was the first country in the world to give a government-approved medical license to physiotherapists / physical therapists.

The very first, still documented, manual muscle test was done by the famous Swedish medical gymnast and physical therapist **Henrik Kellgren**, who worked in Sweden, England and Germany.

The method of testing muscles was eventually spread to the **United States of America** by Swedish physiotherapists in *Boston* (at the "Boston Normal School of Gymnastics BNSG" and "Posse School of Physical Education and Physiotherapy")

It was later further developed by the physiotherapist **Wilhelmine G Wright** and orthopedic surgeon **Robert W Lovett** at Harvard University in Boston, in the early 1910s.

Most muscle tests used today in modern Manual Muscle Testing come from the physiotherapists **Henry Kendall & Florence Kendall** and the physiotherapists Lucille **Daniels** & Catherine **Worthingham** during the 1930-1940 century. The practical use of manual muscle testing in analysis and diagnosis was deepened and further developed in the United States by chiropractor **George Goodheart** and chiropractor **Alan Beardall** in the 1960s and 1970s, within Applied Kinesiology and Clinical Kinesiology.

In the late 1970's, the manual muscle testing returned to Sweden again, 100 years after the start.

Several new muscle tests and new methods of testing in manual muscle testing has also developed in Sweden in the 1990s and 2000s within Manual Kinesiology by kinesiologist and physiopractor **Mac Pompeius Wolontis**, Stockholm.

The "study of movement" of the human body in Sweden was called "Rörelselära", and from 1854 internationally called "Kinesiology", a new name that was invented and coined 1854 by the Swedish professor *Carl August Georgii* at the Royal Central Institute of Gymnastics in Stockholm.

Kinesiology was a method based on the ability to influence diseases and the neurophysiology of the internal organs through several hundreds of different specific medical muscular exercises.

Today's modern kinesiology, called *Applied Kinesiology*, is based on similar principles and ideas of affecting internal organs and endocrine glands by specific muscular exercises and tests.

Today we use over 150 specific manual muscle tests in Sweden.

Worth noting is that a special test technique in traditional manual muscle testing, developed by the Swedish physiotherapists nearly 150 years ago, are technically more advanced than the current form of muscle testing used today by the US chiropractors, kinesiologists and physiotherapists.

At the Swedish School of Kinesiology, we use this original Swedish test method.

The names in this list are names of neuromuscular **Tests** and not names of **Muscles**.

Therefore, the names differ in many cases with established muscular names.

The names of the neuromuscular tests have been developed by **Manual Kinesiology** in Sweden.

The basic principle is that all neuromuscular tests have their own unique name and should be easy to associate in relation to other muscles and their tests.

Within **Applied Kinesiology** (ICAK) own American names of muscles and tests are used.

The tests in AK have been developed based on older muscle tests from the physiotherapists Henry and Florence Kendall.

The manual muscle tests in AK are presented in *Applied Kinesiology Synopsis*, which is the official book of manual muscle testing within ICAK, written by David S. Walther, doctor of chiropractic.

A "---" symbol, under *Manual Kinesiology*, means that we chose not to use the manual muscle tests from Applied Kinesiology (as in the books of Applied Kinesiology), but we rather use new and improved variants of tests for this muscle.

The names of the **muscles** involved in the manual muscle test are the internationally officially recognised names from the *International Federation of Associations of Anatomists* (<http://www.iffa.net>), as presented in the *Terminologia Anatomica*.

Original Manual Muscle Test from the late 1800's, by Henrik Kellgren, Sweden.



Neuromuscular Test

Muscle

ICAK name

A

Abductor humerus

M. deltoideus pars acromialis,
M. supraspinatus.

Adductor femoris

M. adductor longus,
M. adductor magnus,
M. adductor brevis,
M. pectineus.

Adductors

Adductor longus

M. adductor longus,
M. adductor brevis.

Adductor magnus posterior

M. adductor magnus

Adductor humerus

M. latissimus dorsi,
M. biceps brachii caput breve,
M. pectoralis major,
M. teres major,
M. deltoideus pars clavicularis,
M. deltoideus pars spinalis.

Anconeus extensor

M. anconeus

B

Biceps brachii abductor

M. biceps brachii caput longum

Biceps brachii

Biceps brachii breve

M. biceps brachii caput breve

Biceps brachii extensor

M. biceps brachii caput breve

Biceps brachii longum

M. biceps brachii caput longum

Biceps femoris

M. biceps femoris

Lateral hamstring Biceps femoris

Biceps femoris flexor

M. biceps femoris

Brachialis rotator

M. brachialis

Hamstrings

Brachioradialis flexor

M. brachioradialis

Brachioradialis

C

Cervicale

M. scalenus anterior,
M. scalenus medius,
M. scalenus posterior,
M. sternocleidomastoideus

Cervicale extensor

M. sternocleidomastoideus,
M. splenius

Cervicale flexor

M. sternocleidomastoideus,
M. scalenus

Cervicale laterale

M. sternocleidomastoideus,
M. splenius,
M. scalenus anterior,
M. scalenus medius,
M. scalenus posterior.

Cervicale rotator

M. sternocleidomastoideus,
M. splenius

Coracobrachialis

M. coracobrachialis

Coracobrachialis

D

Deltoideus acromialis

M. deltoideus pars acromialis

Deltoid middle

Deltoideus anterior

M. deltoideus pars clavicularis

Deltoid anterior

Deltoideus clavicularis

M. deltoideus pars clavicularis

Deltoideus extensor

M. deltoideus pars spinalis

Deltoideus flexor	<i>M. deltoideus pars clavicularis</i>	---
Deltoideus posterior	<i>M. deltoideus pars spinalis</i>	Deltoid posterior
Deltoideus spinalis	<i>M. deltoideus pars spinalis</i>	---
---		Diaphragma meridian
Diaphragma fixation	<i>Diaphragma</i>	Diaphragma vertebral fixation
Diaphragma respiration	<i>Diaphragma</i>	Diaphragma breath holding
Diaphragma xiphoideus	<i>Diaphragma</i>	Diaphragma therapy localization
E		
Erector spinae	<i>M. erector spinae</i>	Sacrospinalis
Erector spinae laterale	<i>M. erector spinae</i>	---
Extensor carpale	<i>M. extensor carpi radialis brevis,</i> <i>M. extensor carpi radialis longus,</i> <i>M. extensor carpi ulnaris.</i>	---
Extensor digitorum	<i>M. extensor digitorum</i>	Extensor digitorum longus brevis
Extensor femoris	<i>M. semitendinosus,</i> <i>M. semimembranosus,</i> <i>M. biceps femoris.</i>	---
Extensor femoris laterale	<i>M. biceps femoris caput longum</i>	---
Extensor femoris mediale	<i>M. semitendinosus,</i> <i>M. semimembranosus.</i>	---
Extensor hallucis	<i>M. extensor hallucis longus,</i> <i>M. extensor hallucis brevis.</i>	Extensor hallucis longus brevis
F		
Fibularis longus	<i>M. fibularis longus</i>	Peroneus longus brevis
Fibularis tertius	<i>M. fibularis tertius</i>	Peroneus tertius
Flexor carpale	<i>M. flexor carpi radialis,</i> <i>M. flexor carpi ulnaris</i>	---
Flexor digitorum	<i>M. flexor digitorum profundus,</i> <i>M. flexor digitorum superficialis.</i>	---
Flexor femoris	<i>M. iliopsoas,</i> <i>M. rectus femoris,</i> <i>M. rectus abdominis.</i>	---
Flexor hallucis brevis	<i>M. flexor hallucis brevis</i>	Flexor hallucis brevis
Flexor hallucis longus	<i>M. flexor hallucis longus</i>	Flexor hallucis longus
Flexor humerus	<i>M. pectoralis major pars clavicularis,</i> <i>M. deltoideus pars clavicularis.</i>	---
G		
Gastrocnemius laterale	<i>M. gastrocnemius caput laterale</i>	Gastrocnemius lateral head
Gastrocnemius mediale	<i>M. gastrocnemius caput mediale</i>	Gastrocnemius medial head
Gastrocnemius flexor laterale	<i>M. gastrocnemius caput laterale</i>	---
Gastrocnemius flexor mediale	<i>M. gastrocnemius caput mediale</i>	---
Gemellus obturatorius	<i>M. gemellus superior,</i> <i>M. gemellus inferior,</i> <i>M. obturatorius internus,</i> <i>M. obturatorius externus,</i> <i>M. quadratus femoris.</i>	Piriformis (seated)
Gluteus anterior	<i>M. gluteus medius</i>	---
Gluteus maximus extensor	<i>M. gluteus maximus</i>	Gluteus maximus
Gluteus maximus abductor	<i>M. gluteus maximus</i>	---
---		Gluteus medius Gluteus minimus
Gluteus medius	<i>M. gluteus medius</i>	---
Gluteus minimus	<i>M. gluteus minimus</i>	---
Gluteus posterior	<i>M. gluteus medius</i>	---
---	<i>M. gracilis</i>	Gracilis
Gracilis adductor	<i>M. gracilis</i>	Gracilis alternate
Gracilis flexor	<i>M. gracilis</i>	---

I

Iliacus	<i>M. iliacus</i>	Iliacus
Iliacus flexor	<i>M. iliacus</i>	---
Iliococcygeus	<i>M. iliococcygeus (M. levator ani)</i>	---
Iliocostalis lumborum	<i>M. iliocostalis lumborum</i>	---
Iliopsoas	<i>M. psoas major,</i> <i>M. iliacus</i>	---
Infraspinatus	<i>M. Infraspinatus</i>	Infraspinatus
Ischiococcygeus abductor	<i>M. ischiococcygeus</i>	---
Ischiococcygeus extensor	<i>M. ischiococcygeus</i>	---

L

Latissimus adductor	<i>M. latissimus dorsi</i>	---
Latissimus dorsi	<i>M. latissimus dorsi</i>	Latissimus dorsi
---		Levator ani
Levator scapulae	<i>M. levator scapulae</i>	Levator scapulae
Levator scapulae extensor	<i>M. levator scapulae</i>	---
Lumbal	<i>M. quadratus lumborum,</i> <i>M. multifidus lumborum,</i> <i>M. iliocostalis lumborum,</i> <i>M. obliquus abdominis,</i> <i>M. erector spinae</i>	---

M

Multifidus lumborum	<i>M. multifidus lumborum</i>	---
----------------------------	-------------------------------	-----

O

Obliquus abdominis	<i>M. obliquus externus abdominis,</i> <i>M. obliquus internus abdominis.</i>	Internal External oblique abdominal
Obliquus abdominis flexor	<i>M. obliquus abdominis</i>	---
Obliquus abdominis laterale	<i>M. obliquus externus abdominis,</i> <i>M. obliquus internus abdominis.</i>	---
Obliquus abdominis rotator	<i>M. obliquus abdominis</i>	---
Opponens	<i>M. opponens pollicis,</i> <i>M. opponens digiti minimi.</i>	---
Opponens pollicis	<i>M. opponens pollicis</i>	Opponens pollicis
Opponens minimi	<i>M. opponens digiti minimi</i>	Opponens digiti minimi

P

Pectineus	<i>M. pectineus</i>	---
Pectoralis major abdominalis	<i>M. pectoralis major pars abdominalis</i>	---
Pectoralis major clavicularis	<i>M. pectoralis major pars clavicularis</i>	Pectoralis major clavicular
---		Pectoralis major sternal
Pectoralis major sternocostalis	<i>M. pectoralis major pars sternocostalis</i>	---
Pectoralis major adductor	<i>M. pectoralis major pars sternocostalis</i>	---
Pectoralis minor	<i>M. pectoralis minor</i>	Pectoralis minor
Pectoralis minor superior	<i>M. pectoralis minor</i>	---
Piriformis	<i>M. piriformis</i>	Piriformis (prone)
Piriformis abductor	<i>M. piriformis</i>	---
Piriformis flexor	<i>M. piriformis</i>	---
---		Popliteus (prone) / Popliteus (seated)
Popliteus	<i>M. popliteus</i>	---
Popliteus flexor	<i>M. popliteus</i>	---
Popliteus rotator	<i>M. popliteus</i>	---
Pronator quadratus	<i>M. pronator quadratus</i>	Pronator quadratus
Pronator teres	<i>M. pronator teres</i>	Pronator teres

Psoas adductor	<i>M. psoas major</i>	---
Psoas flexor	<i>M. psoas major</i>	---
Psoas major	<i>M. psoas major</i>	Psoas
Psoas rotator	<i>M. psoas major</i>	---
Pubococcygeus	<i>M. pubococcygeus (M. levator ani)</i>	---
Q		
Quadratus lumborum	<i>M. quadratus lumborum</i>	Quadratus lumborum
---		Quadriceps Rectus femoris
Quadriceps femoris	<i>M. quadriceps femoris</i>	---
R		
Rectus abdominis	<i>M. rectus abdominis</i>	Rectus abdominis
Rectus abdominis femoris	<i>M. rectus abdominis</i>	---
Rectus abdominis flexor	<i>M. rectus abdominis,</i> <i>M. psoas major.</i>	
Rectus femoris	<i>M. rectus femoris</i>	---
Rectus femoris flexor	<i>M. rectus femoris</i>	---
---		Rhomboideus major minor
Rhomboideus	<i>M. rhomboideus major,</i> <i>M. rhomboideus minor.</i>	Rhomboideus major minor alternate
Rhomboideus major	<i>M. rhomboideus major</i>	---
S		
Sartorius	<i>M. sartorius</i>	Sartorius
---		Sartorius alternate
Scaleni		---
	<i>M. scalenus anterior,</i> <i>M. scalenus medius,</i> <i>M. scalenus posterior,</i> <i>M. sternocleidomastoideus.</i>	
Scalenus anterior	<i>M. scalenus anterior</i>	Neck flexors medial
Scalenus medius	<i>M. scalenus medius</i>	---
Scalenus posterior	<i>M. scalenus posterior</i>	---
Semitendinosus Semimembranosus	<i>M. semitendinosus,</i> <i>M. semimembranosus.</i>	Medial hamstrings
Semitendinosus flexor	<i>M. semitendinosus,</i> <i>M. semimembranosus.</i>	---
Serratus anterior	<i>M. serratus anterior</i>	Serratus anticus
Serratus anterior inferior	<i>M. serratus anterior</i>	---
---		Soleus
Soleus flexor	<i>M. soleus</i>	---
Splenii	<i>M. splenius capitis,</i> <i>M. splenius cervicis,</i> <i>M. semispinalis capitis,</i> <i>M. semispinalis cervicis.</i>	Neck extensors deep, unilateral

Sternocleidomastoideus	<i>M. sternocleidomastoideus</i>	Neck extensors deep, bilateral
---		Sternocleidomastoid
		Subclavius
Subclavius	<i>M. subclavius</i>	---
Subscapularis	<i>M. subscapularis</i>	Subscapularis
Subscapularis adductor	<i>M. subscapularis</i>	---
Supinator extensor	<i>M. supinator</i>	Supinator
Supinator flexor	<i>M. supinator</i>	Supinator alternate
Supraspinatus	<i>M. supraspinatus</i>	Supraspinatus
Supraspinatus abductor	<i>M. supraspinatus</i>	---

T

Tensor fasciae latae	<i>M. tensor fasciae latae</i>	Tensor fascia lata
Tensor rotator	<i>M. tensor fasciae latae</i>	---
Teres major	<i>M. teres major</i>	Teres major
Teres major adductor	<i>M. teres major</i>	---
Teres minor	<i>M. teres minor</i>	Teres minor
Thoracale rotator	<i>M. obliquus externus abdominis,</i> <i>M. obliquus internus abdominis.</i>	---
Tibialis anterior	<i>M. erector spinae</i>	Tibialis anterior
Tibialis posterior	<i>M. tibialis anterior</i>	Tibialis posterior
Trapezius ascendens	<i>M. tibialis posterior</i>	Trapezius lower
Trapezius superior	<i>M. trapezius pars ascendens</i>	Trapezius upper
Trapezius cervicale	<i>M. trapezius pars descendens</i>	---
Trapezius descendens	<i>Mm. scalenii,</i>	---
Trapezius transversa	<i>Mm. splenii.</i>	---
Triceps brachii	<i>M. trapezius pars descendens</i>	Trapezius middle
---	<i>M. Trapezius pars transversa</i>	Triceps brachii Anconeus (prone)
Triceps brachii extensor	<i>M. triceps brachii,</i>	---
Triceps brachii laterale	<i>M. anconeus</i>	Triceps brachii Anconeus (seated)
Triceps brachii longum	<i>M. triceps brachii caput longum</i>	---
Triceps brachii mediale	<i>M. triceps brachii caput laterale</i>	---
Triceps femoris	<i>M. triceps brachii caput longum</i>	---
	<i>M. triceps brachii caput mediale</i>	---
	<i>M. semitendinosus,</i>	---
	<i>M. semimembranosus,</i>	---
	<i>M. biceps femoris.</i>	

V

---		Quadriceps Vastus group
Vastus flexor	<i>M. vastus intermedius,</i>	
	<i>M. vastus lateralis,</i>	
	<i>M. vastus medialis.</i>	
Vastus flexor medialis	<i>M. vastus lateralis</i>	---
Vastus flexor lateralis	<i>M. vastus medialis</i>	---
Vastus femoris	<i>M. vastus intermedius,</i>	---
	<i>M. vastus lateralis,</i>	
	<i>M. vastus medialis.</i>	
Vastus femoris medialis	<i>M. vastus lateralis</i>	---
Vastus femoris lateralis	<i>M. vastus medialis</i>	---