KINESIOLOGY

DESCRIPTION:

Kinesiology is defined as the scientific study of human movement. The term comes from the Greek word "kinesis", which means "to move." In this sense, the kinesiologist is a health professional, a specialist in physical activity.

Kinesiologists apply the science of exercise and movement to promote health and wellness, and thereby prevent, manage and rehabilitate injuries, treat disease, restore function, and optimize the performance of individuals in their daily lives or in their sport. Kinesiologists therefore work in the fields of sports performance, rehabilitation, prevention and management of chronic diseases.

WHY USE IT?

The kinesiologist assesses the physical condition of individuals and makes a clinical judgment on their state of health. The kinesiology assessment can aid in the development of a medical diagnosis and influence the direction to follow for an intervention team. The kinesiologist assesses the functional capacity, motor skills and the determinants of an individual's physical condition (not their pathology). They intervene to improve their functional and motor capacities as well as their physical condition.

The kinesiologist can therefore treat asymptomatic (healthy) individuals and others who may suffer from chronic illness or pain. Studies have shown the psychosocial benefits of regular, dosed and individualized physical activity in chronically ill people.

Science particularly notes the following benefits:

- Improved mental health and well-being;
- Reduction of the side effects of treatments;
- Better ownership of chronic medical condition or disease;
- Improved self-management of the medical condition or disease.

Thus, many people with chronic conditions benefit from the expertise of a kinesiologist. This is particularly true for those living with various musculoskeletal pathologies or people with disabilities, including individuals with dwarfism.

FORMS OF INTERVENTION:

The kinesiologist establishes a partnership with their client. They begin by assessing their motor skills and functional ability before establishing a treatment plan.

To do this, they can carry out various examinations, such as:

- A musculoskeletal assessment;
- Strength, resistance and endurance tests;
- An assessment of functional capacity;
- An ergonomic assessment;
- A biomechanical analysis.

They then work to ensure that the treatment plan is adhered to in order to obtain optimal functional performance including the advancement with respect to adaptation and rehabilitation goals. Finally, for the duration of the treatment, they provide the client with advice on healthy lifestyle habits.

One of the key principles of kinesiology is adaptation through exercise. Exercise is an activity used to treat many movement disorders and musculoskeletal problems caused by neuroplasticity in the brain. Therapeutic exercise has been shown to improve neuromotor control as well as motor skills. Different types of exercises can be incorporated into the plan. For example, aerobic exercise helps improve cardiovascular endurance, and anaerobic strength training helps increase strength, power, and lean muscle mass. The decreased risk of falls and the increase of neuromuscular control are the result of balancing between intervention programs. In addition, flexibility routines increase the functional range of movement and reduce the risk of injury. Finally, the kinesiologist may add hydrotherapy including warm water (92F/33C+) hydrotherapy to the treatment program.

RESOURCES:

Association québécoise des personnes de petite taille
https://www.aqppt.org/

Little People of Ontario
https://littlepeopleofontario.com/

Alliance canadienne de kinésiologie
https://www.cka.ca/fr/bienvenue/the-canadian-kinesiology-alliance-proudly-announces-a-

partnership-with-polar-

Alliance canadienne de kinésiologie, *Kinésiologie : faits saillants de la profession de kinésiologue*, Ottawa, 2018. Available online : https://s1.membogo.com/company/CPYAqmN6sA5dtX7Tfy3DpJ0b/asset/files/Faits%20saillants%20sur%20la%20profession%20de%20Kin%C3%A9siologue%20au%20Canada.pdf

Fédération des kinésiologues du Québec
https://www.kinesiologue.com/

Julie Frappier, *Évaluation clinico-économique de l'apport de l'activité physique des kinésiologues comme partenaires de la santé pour la gestion (prévention et traitement) des maladies chroniques et invalidantes*, Fédération des Kinésiologues du Québec, 2014. Available online : https://www.kinesiologue.com/images/files/RAPPORT%20FINAL-V2%20AMENDER.pdf

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