

## HOW TO CHOOSE YOUR HEALTH PROFESSIONAL

- Ask about school attended (formal, recognised school or correspondence or week-end).
- Ask about experience.
- Ask if the professional is affiliated with an organization that imposes a code of ethics and allows recourse in case of professional negligence.
- Ask about the details of the warranty.
- Ensure that follow-up service including adjustments is available. It is important to know if it is possible to obtain adjustments quickly. (Advantage with a clinic that fabricates on site). Some adjustments should be included in the initial price (without supplementary fees). However, pathological and physiological changes and the results of orthotic treatment cannot be guaranteed.

## PRESCRIPTION AND ORTHOTICS

The involvement of the physician is important. The prescription ensures the medical aspect of treatment. The prescription is also usually required by insurers and third party payers.

## HOW TO KNOW IF YOU NEED ORTHOSES

- 1- Pain in feet, ankles, knees, hips and lower back
- 2- Pain during or after walking, standing
- 3- Callouses on feet
- 4- Abnormal walk
- 5- Premature wear or abnormal wear of shoes
- 6- Medical conditions such as diabetes, arthritis, arthrosis, osteoporosis, neuropathy
- 7- Conditions that affect muscle strength
- 8- Motor vehicle accidents, sport and work injuries



## IS YOUR ORTHOSIS GOOD FOR YOU?

*Some questions to ask are: Does the orthosis conform to my shape? Does it stay in place? Is it safe?*

A good orthosis is one that was designed by a professional and must act positively on your condition. It must improve the original problem. It must not cause increased pain; it must be safe and functional. Other elements can mask the result of an orthosis such as a worn-out shoe that misaligns the orthosis. It is important to know that it is not abnormal to require certain adjustments when receiving a new orthosis. If a problem occurs the professional must find a solution.

## THE CLINIC

**Ortho Solutions** is an orthotic clinic based in Moncton founded in 2003. The fabrication is done on site by our technician and thus creates local jobs. Benoit Roussy C.O. (c) Certified Orthotist ensures the quality of clinical services. The administrative and clinical assistants ensure smooth continuity of services. We also offer services in northern NB. Our work helps people to return to their activities and return to work.

*Some of the services offered: Assessment, follow-up, gait training, etc.*

*Some of the products offered: Foot orthoses, ankle braces, knee braces, back orthoses, cervical collars, orthoses for hands, elbows and shoulders, orthopaedic shoes.*



**Benoit Roussy C.O. (c)**  
*Certified Orthotist / Orthésiste Certifié*

300 rue St-George Street, Moncton, NB E1C 1X1  
Tel: (506) 388-2021 • Fax: (506) 384-7980

# ORTHOSES

## FOOT, KNEE, BACK, ARM PROBLEMS

## PROFESSIONS THAT DISPENSE ORTHOSES:

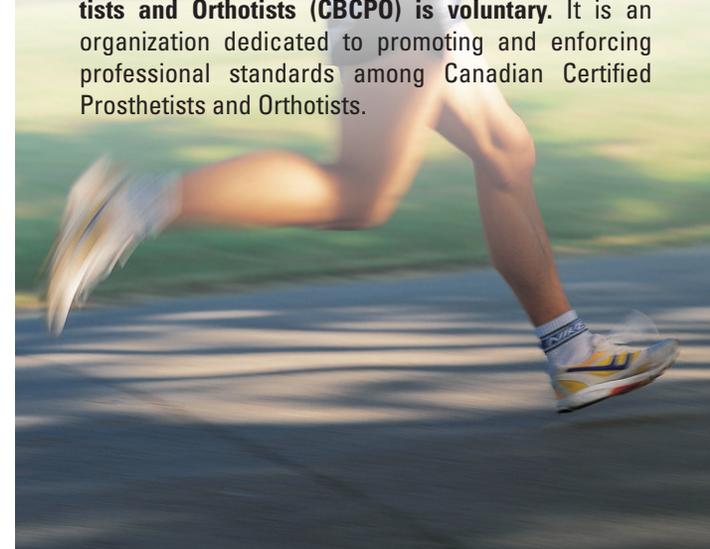
Orthotists, Certified Orthotists, Chiropractors, Physiotherapists, Podiatrists, Pedorthotists.

## DEFINITION OF CERTIFIED ORTHOTIST:

A Certified Orthotist provides care to patients with disabling conditions of the neuromuscular-skeletal structures of the body by evaluating, designing, fabricating, fitting and aligning braces known as "orthoses". Certification is exclusive to persons holding a diploma in Orthotics who have passed the residency requirements and the 3-day additional examinations with CBCPO.

## ORTHOTICS AND LEGISLATIVE FRAMEWORK IN NEW BRUNSWICK:

There is no legislation governing the field of orthotics in New Brunswick. Certain third party agencies and insurers impose provision conditions. **Adherence to the Canadian Board for Certification of Prosthetists and Orthotists (CBCPO) is voluntary.** It is an organization dedicated to promoting and enforcing professional standards among Canadian Certified Prosthetists and Orthotists.



## DIABETIC FOOT

The diabetic foot requires a regular and attentive follow-up by the multi-disciplinary professionals involved. The neuropathy that sometimes develops with this condition is associated with the following problems: loss of sensation, fragile skin easily injured, once injury occurs is harder to heal. **An accommodative type of foot orthosis is recommended to protect the skin against pressure points.**

## PLANTAR FASCIITIS

It is a painful inflammation of the plantar aponeurosis (fibrous tissue). The fascia supports and protects the tendons of the arch. It is caused by bio-mechanical deficiencies of the foot such as flat or pronated feet, high arches, but can be aggravated by the following: excess strain, excess stretching, high intensity sports, walking, prolonged standing, and prolonged activity on hard surfaces. Other causes can be the plantar cushion thinning out with age, and obesity. **A corrective type foot orthosis is recommended to improve the biomechanics of the foot in order to decrease irritative factors acting on the plantar fascia.**

## HEEL SPUR

Excess calcium deposits on the bony hook which serves to attach the plantar fascia under the heel. The pain results from the inflammation surrounding this spur. **A corrective type foot orthosis is also recommended to improve the bio-mechanics in order to decrease the strain on the hook, and decrease pressure on the painful areas.**

## SPRAIN

A sprain is an excess stretch or tear of a ligament. Ligaments are bands of fibrous tissue, very resistant, non extensible, which act as “cables” to attach bones together. They provide stability to joints. There are three types of sprains: 1st: stretched ligament, 2nd: partial tear and 3rd: complete tear.

**A properly designed orthosis will act as a stabiliser and help protect the affected joints. This will help to decrease pain and prevent premature wear on joints.**

## ARTHRITIS, ARTHROSIS, OSTEOPOROSIS

The term arthritis: arthron means “joint” and the suffix – itis refers to “inflammation”. Describes the conditions that are characterized by pain, stiffness and swelling in one or more joints. The causes are varied. Acute disorders are osteoarthritis and rheumatoid arthritis.

## RHEUMATOID ARTHRITIS

Involves inflammation and pain of the joints which can result in loss of range of motion and possible deformity. The most commonly affected joints are the hands, wrists, knees and the small joints of the feet. Other joints that can be affected are: shoulders, elbows, neck, jaw, hips and ankles.

## ARTHROSIS

Defined as destruction of the cartilage that covers and protects the bones of a joint. The joint wears down and produces boney growths called osteophytes. It affects the hips, knees, feet and spine. It is caused by repetitive strain, bio-mechanical problems and excess weight. It rarely appears before the age of forty.

## OSTEOPOROSIS

Defined as a disease characterized by an excessive fragility of the bones caused by a decrease in density of the bones and an alteration of the boney microarchitecture. **Orthoses can play a role in protecting a joint, limiting pathological movements, improving alignment and providing heat to the joints. A well designed and fabricated orthosis is efficient at decreasing pain of mechanical origin, but cannot alter pain caused by the disease process itself.**

## LIGAMENT LAXITY OF THE KNEE

Results from overly lengthened ligaments of the knee. They can no longer correctly stabilize the knee. **The orthotic objective is to limit the pathological movements, to protect and stabilise the knee joint, and decrease the pain affecting the knee.**

## ORTHOSES AND SPORT

Orthoses have a direct effect on proprioception and can change the body's alignment. It is therefore important, when receiving an orthosis for the first time, to begin training gradually in order to permit adaptation and limit the possibility of injury. It is important that the orthosis be well-adjusted.

Footwear has a direct impact on the orthosis. The footwear must be neutral otherwise it may change the alignment of the orthosis. It must be stable and solid; otherwise, it may collapse under the orthosis, thereby reducing the efficiency of the orthosis.

## HOW TO CHOOSE FOOTWEAR

A heel height of more than two inches is contra-indicated. Ideally, it should be less than one inch. The heel reinforcement must be solid. The front of the shoe (where the forefoot joints are) must be flexible. The middle of the shoe under the arch must be solid in order to avoid collapse of the shoe under the arch. It should attach with velcro, laces or straps. The foot must be stable inside the shoe.

## SPECIALIZED REQUIREMENTS

Runners and certain people with flexibility limitations require a rocker type outsole which permits a more natural progression of the foot.

Diabetics that have a loss of sensation should have a flexible seamless shoe. The primary objective is to reduce the risk of ulceration.

It is important to discuss footwear with your health professional. It may be that your objective is to keep your particular style of shoe and not to obtain 100% efficiency from the orthosis. The professional must try to design the best orthosis possible to respect this choice after having explained the elements involved.

