

## Functional foot correction is the basis of any therapy

Gusyev Valentyn

President, Member of Pedorthic Association of Canada, Canada.

**Corresponding Author:** Gusyev Valentyn, President, Member of Pedorthic Association of Canada, Canada.

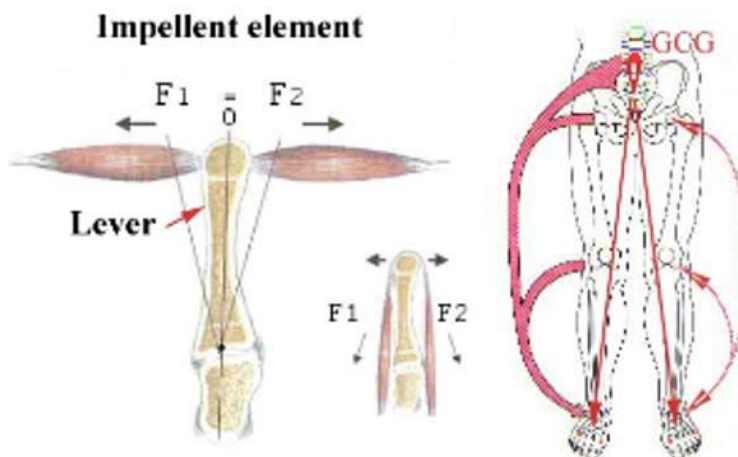
**Received date:** February 15, 2022; **Accepted date:** March 29, 2022; **Published date:** April 13, 2022

**Citation:** Gusyev Valentyn (2022) Functional foot correction is the basis of any therapy. *J. Archives of Medical Case Reports and Case Study*, 5(5); **DOI:**10.31579/2692-9392/122

**Copyright:** © 2022 Carmine Finelli, This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

The main element that supports lymph and blood circulation in the body - the processes of cell metabolism, are musculoskeletal structures. This is indicated by human physiology, but this is not taken into account in the treatment - rehabilitation of the body. The skeleton must be considered not only as a system of levers and muscles that form our posture, but also as a set of movements that are laid down by nature to support the functioning of lymphatic and venous-muscle pumps. The paired muscles hold the bones of

the skeleton in the so-called neutral stable position. This achieves the relative stability of the body, in which the General Center of Gravity (GCG) of the body constantly makes oscillations in the X-Y planes within 2-4 cm from its neutral position. So in a state of rest, cell nutrition is continuously maintained, and their decay products are excreted. Without muscle contraction, the respiratory, digestive, and thermoregulation systems would not work.



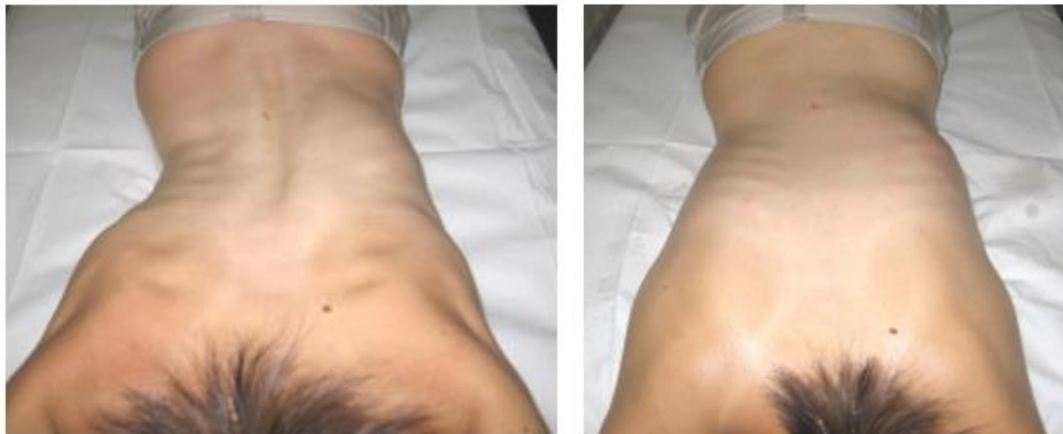
Two-thirds of all energy the body spends on maintaining the work of the musculoskeletal system. From this it can be argued that the work of all organs is aimed at developing and maintaining muscle performance. Two thirds of the blood is in the venous system. The rise of lymph and blood from the feet to the heart is carried out due to the synchronously connected operation of the lymphatic and venous-muscle pumps, which is determined by the biomechanics of walking, in which sequence the muscles of the feet, hips and abdominal muscles contract. The muscle mass of a physically developed person is 55-67% of body weight. Mental development of a

person, recharging of brain cells is also considered in conjunction with the state of muscles. But for some reason, those who do not possess knowledge in the field of biomechanics are engaged in this basic function of the musculoskeletal skeleton of the body. Here is the reason for such a rapid increase in the percentage of deformations of the feet and spine, diseases of the body. Deformations in the structures of the skeleton today began to be observed already in childhood. Medicine only says that the disease is younger, but it does not give an explanation.



Any movement begins with the displacement of the bcc of the body or its individual part: arm, body or head. The bending, torsional, and other moments of forces that arise at the same time are compensated by the muscles, trying to return the body to a stable position. This condition is controlled by the vestibular apparatus and the Central Nervous System, acting on the muscles of the spine, bending it to bring the head and vestibular apparatus to a vertical position. Thus, a C-shaped or S-shaped spine is formed, which also depends on the position of the sacroiliac joints, which are located at different heights for each of us due to the formed functional and anatomical difference in leg lengths. Having eliminated the functional component of shortening: deformations of the arches of the feet, deviations of the calcaneus, ankle and knee joints, compensating for the anatomical difference in the lengths of the legs, the body GCG will be brought to the CG of the supporting triangle of the feet, after which the spine will align and occupy a vertical position. To carry out all this work without special equipment is beyond the power of any specialist. Especially if it concerns the removal of the arches of the feet in a neutral position. If the load on the arches

of the foot is directed from top to bottom, then it can be compensated only by the opposite directed force, that is, in a standing position, but not sitting or lying, which is done today when taking foot prints. In this case, the projection of the GCG should be in the area of the supporting triangle of the feet. This means that in this case it will be necessary to compensate for the difference in the lengths of the legs. All this is achieved in a device that I created on the basis of knowledge of the laws of hydrodynamics and theoretical mechanics. Thus, performing correction of the feet and spine, the conclusion suggests itself: the process of correction of the feet should not be carried out by a specialist with a narrow focus. If one will do insoles, and the other will deal with the spine without taking into account the relationship between them, then a positive result cannot be achieved. A holistic system is characterized precisely by the fact that, without normalizing one of the parameters, all other characteristics will not be normal. Without eliminating the deformation of the skeleton, it is impossible to normalize the metabolism of cells and the work of internal organs.



During deformations, when there is a shift of the skeleton bones from a neutral position, one of the paired muscles will be weakened, and the opposing muscle will be excessively stretched and it cannot contract. The question was how to quickly relax it and thereby help the spine to level out when the patient is on the device. This is important because when the same load on the feet is reached, the device will compensate and measure the existing anatomical component of the difference in leg lengths, the pelvis and spine will take a natural anatomical position. So the muscle relaxation technique was developed, which allows achieving the desired results in 30-40 minutes. They can be explained by the fact that in the stretched muscle the ion channels of the cell membranes have changed their shape so much that elementary particles cannot contribute to the cell, contributing to its

contraction. It is possible to restore the structure, shape of the cell, like any other substance, by heating to a certain temperature. So we do before the process of taking footprints in a standing position on a hydrostatic installation. With the help of such a system, the task of removing the skeleton of the arches of the feet and above the underlying skeleton structures to a neutral position is solved. In this case, the projection of the body GCG will be as close as possible to the center of reference of the foot triangle. The

removal of the skeleton in a neutral position is one of the main conditions for the restoration of the work of venous-muscle pumps.

So the problems of correction of the musculoskeletal skeleton of the body are directly related to the vital activity of our self-regulating organism, with the support of the processes of metabolism of its cells. Any effect on the body should be directed and carried out taking into account the restoration of the functionality of skeletal muscles.



This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article Click Here: [Submit Manuscript](#)

DOI: [10.31579/2692-9392/122](https://doi.org/10.31579/2692-9392/122)

**Ready to submit your research? Choose Auctores and benefit from:**

- ❖ fast, convenient online submission
- ❖ rigorous peer review by experienced research in your field
- ❖ rapid publication on acceptance
- ❖ authors retain copyrights
- ❖ unique DOI for all articles
- ❖ immediate, unrestricted online access

At Auctores, research is always in progress.

Learn more [www.auctoresonline.org/journals/archives-of-medical-case-reports-and-case-study](http://www.auctoresonline.org/journals/archives-of-medical-case-reports-and-case-study)