Physiothérapie
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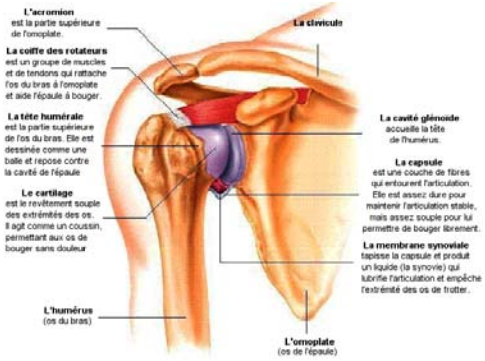
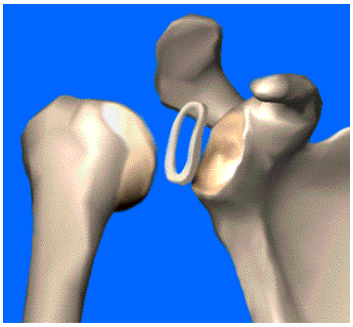
Posture :
Avoid those low shoulder blades!

Have you ever followed a yoga or Pilates course and been told to keep your shoulder blades down? If so, the following information may be of interest to you. In our practice, we frequently see clients who suffer from neck or shoulder pain because they are following this advice. Hopefully after reading this information you will understand the benefits of **not** forcing your shoulder blades down.

The bony anatomy of the shoulder is important to know in order to understand the pathologies that can occur in this region. A structure called the acromion is the outside part of the scapula (shoulder blade) and it sits on the upper part of the humerus (see figure below).

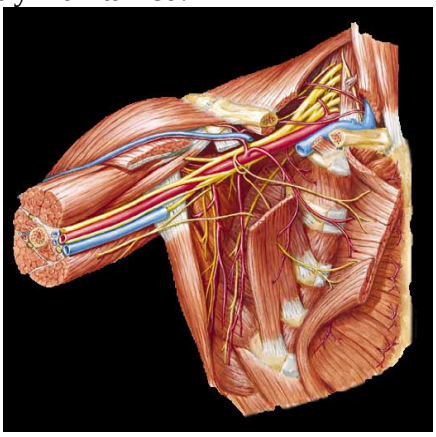


During elevation of the arm, the acromion must be able to move in order to allow proper movement of the head of the humerus. The muscles that attach to the scapula are programmed for this function. They contract in a synchronised way in order to elevate and turn the scapula upwards, which then allows the arm to elevate in such a way to avoid premature contact of the humerus with the acromion. With these proper dynamics, certain shoulder syndromes such as impingement at the shoulder can be avoided. Impingement can also be a factor in the development of other pathologies such as bursitis and rotator cuff tendinopathy.



humérus + glène + bourrelet

The above figure depicts the ideal position of the scapula as it receives the head of the humerus. Note that the cavity that articulates with the head of the humerus is angulated slightly upwards towards the ceiling. This position allows optimum contact between these two bones and helps to decrease tension between the soft tissues of the shoulder during movement (muscles, tendons, ligaments). If the shoulder blade is sitting too low, it tends to turn downward and we lose this good contact between the head of the humerus and the shoulder blade. The take-home message is clear: if the scapula sits too low, your muscles are forced to work harder and are therefore at risk for developing pathology.
A second reason for avoiding scapulae that sit too low is its relationship to neck pain. A number of structures are situated in between the neck and the shoulders. Important blood vessels (arteries and veins) as well as nerves (brachial plexus) occupy this space. Maintaining the scapulae low will increase the tension on these structures and given time, can create painful symptoms in the arm - symptoms such as a burning sensation, numbness and pins and needles. Your nervous system can tolerate these tensions briefly without any long term effects but it has a more difficult time tolerating even slight tension if it is constantly maintained.



Keeping the scapulae low will also affect the muscles acting on the neck. As a result of this scapular position, there is increased activation of the Levator Scapulae muscle and the Upper Trapezius muscle is usually overly lengthened. The Levator Scapulae muscle attaches directly to the cervical spine. If it is overused it will have a tendency to increase compression of the neck – this is not a good idea, especially while working in a seated position. This over-activation of Levator Scapulae is a key factor in the development of arthrosis of the neck and can lead to disc dysfunction and headaches.
It is therefore important to avoid keeping your scapulae too low as this can provoke a multitude of problems at the shoulder, the neck and the nerves going into the arm.