



STABILITY BALLS- Although stability balls are useful for maintaining a healthy lifestyle, the Office of Safety, Risk & Sustainability strongly suggests against using stability balls as an alternative to an office chair. As more stability balls **POP** up on campus, please consider the risk factors involved in using them in a professional office environment.



Risk of Falling:

- One of the biggest drawbacks of sitting on a stability ball (instead of an office chair) is that it introduces employees to the potential risk of falling.
- Individuals might be hurt if they fall off the ball (even at a height of less than 2 ft.), particularly during a moment of distraction or inattention to balance.

Potential for Bursting:

- Although exercise/stability balls are made of very tough plastic, they're still essentially giant balloons. Accidentally rolling the ball over a dropped thumbtack could cause it to burst, resulting in the person landing suddenly onto the floor.
- Even burst-proof stability balls can deflate if punctured – although they usually lose air slowly enough that a person has a chance to get off (instead of being unceremoniously dumped).



Lack of Support:

- There have been claims that stability balls offer more comfort while sitting for long periods of time. However, according to a 2006/2009 research by Kingma, Gregory and McGill), more discomfort was reported when sitting on a stability ball for prolonged periods of time
- There is an increase in contact surface while seated on a stability ball, which is more uniformly distributed compared to an office chair. As a result, this has been shown to actually increase discomfort.
- In addition, back muscle fatigue makes sitting on a stability ball (for extended periods of time) very uncomfortable during prolonged sitting. It should be noted that chairs equipped with seat pans are designed to distribute the weight away from the softer tissues and load under the sitting bones (ischial tuberosities), which have greater pressure thresholds.
- It has been also theorized that the unstable nature of stability balls may contribute to a reduction in low back pain, by allowing for greater lumbar spine motion – which would be beneficial for both the intervertebral and muscle nutrition.
 - To the contrary, according to information researched by Kingma, Dunk, and Roffey (2008/2010), there have been no significant differences observed in lumbar motion when sitting on a stability (compared to an office chair), but enhanced spinal shrinkage was observed.
 - It may be true that a stability ball may offer more trunk motion, but this is at the increased cost of lumbar muscle and spine loading.
 - Higher compression was found to increase stiffness, and prevent nutrients and blood flow to these areas – and was observed to be a major contributing factor to lower back pain (LBP).

