Comparing acute bouts of sagittal plane progression foam rolling vs. frontal plane progression foam rolling.


What did the researchers do?

Researchers explored whether the precise location of foam rolling (either mostly on the side aspect of the body or mostly on the front and back aspects of the body) affects the acute effects of the treatment on athletic performance (by reference to the vertical jump, broad jump, shuttle run, and 1RM bench press) and flexibility (as measured by the sit-and-reach test).

What did they do?

The subjects performed an acute bout of foam rolling at a rate of 5 rolls per 30 seconds. In one condition, the subjects rolled the lower spine region, the gluteal region, the hamstring region, the posterior calf region, the pectoral region and the quadriceps region.

In the other condition, the subjects rolled the lateral aspect of the middle back region, the lateral aspect of the trunk region, the lateral aspect of the hip region, the iliotibial band region, the lateral calf region and the adductor region.

What happened?

Athletic performance
The researchers found that there were no significant differences between the side and front-back foam rolling conditions for the vertical jump, broad jump, shuttle run, and 1RM bench press.

Flexibility
The researchers reported that the side foam rolling condition displayed a significantly greater sit-and-reach test distance compared to the front-back foam rolling condition.

What did the researchers conclude?

The researchers conclude that the aspect of the body that is subjected to foam rolling has an effect on flexibility as measured by the sit-and-reach test but not on performance.
measures such as vertical jumps. Therefore, for increasing flexibility in the lower body, a greater focus on the side or lateral aspect of the legs and trunk may be beneficial.