



IT'S TIME TO GET FUNCTIONAL! - RE-THINKING YOUR WORKSITE STRETCHING PROGRAM

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Historically worksite stretching programs have focused on just that - stretching, static stretching in particular. In addition they are traditionally a "one size fits all" approach and are not progressive or periodized. Today's workers whether Industrial Athletes or Office Jockeys encounter specific physiological demands which left unaddressed can lead to musculoskeletal pain and dysfunction and ultimately lost-time injury.

Current exercise science reports significant losses in muscular force following acute static stretching, so one has to ask "why are we performing static stretching programs as a means of reducing musculoskeletal disorders (MSDs)?"

A case study conducted on an open-pit gold mining population where a peer led, start of shift, core strengthening program was conducted, produced significant increases in functional movement ability, productivity and decreases in pain over a short period of time.

Methods:

Employees were assessed using the functional movement screen pioneered by physical therapist Gray Cook. The screen identifies an individual's compensatory movement patterns which are thought to lead to MSDs over time. A customized, progressive core strengthening program was then designed to increase mobility, stability, strength and muscular endurance in this population. Employees participated for 7-10 minutes at the start of each shift. A pilot period of five weeks in duration was first implemented with 26 participants, followed by site wide implementation (151 participants). Pain surveys and the Stanford Presenteeism Scale (SPS-6) were also administered pre and post. All assessments were repeated at week six, and annually. Periodic single-leg squat and overhead squat assessments were also offered. Peer Trainers were trained prior to the implementation of the program and at periodic intervals as the program was progressed.

Initial outcomes:

1. Employees increased their functional movement capacity as demonstrated in:
 - an in-line lunge by 100%
 - an active leg raise by 90%
 - a deep squat by 69%
 - a hurdle step by 61%
2. Pain was reduced by:
 - 60% in the mid back
 - 56% in the hips
 - 37% in the shoulder
 - 31% in the knees
 - 26% in the low back
3. Productivity Increased by 4.2% over a four week period, as measured by the Stanford Presenteeism Scale (SPS-6).

