

Ergo Report

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Assessment & Training Services

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MSI & Overuse Prevention Employee Training

Physical Demands Analysis

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Our 2008 Catalogue will be available soon showing our new products.

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AGING, OVERUSE INJURIES AND PREVENTION

An aging work force has stimulated new research that provides a better understanding of overuse injuries and their prevention.

Muscle balance is a key principle in keeping the aging body healthy and preventing overuse injuries.

Muscles used on a regular basis at work or doing a favorite sport become strong and tight but the opposing muscles (on the opposite side) tend to weaken. If one muscle becomes dominant (stronger or tighter), the proper functioning of the related muscles and joints is affected. This is called muscle imbalance and can set the stage for future injury and pain.

The development of a muscle imbalance will be gradual and can happen whether your job is physical or sedentary.

Not only do the muscles need to be matched strength wise, they also need to have a matched flexibility. To prevent overuse injuries, research has shown the importance of strengthening and stretching, not just the main working muscles, but also the muscles on the opposing side of a joint.

Tendon Overuse Injuries are recognized as a structural breakdown of the tendon rather than just an inflammatory condition. Improving ergonomics and maintaining a healthy muscle balance will prevent tendon overuse injuries. If a tendon problem develops the acute pain needs to be reduced. A "nitro patch" can be worn to reduce the pain but the key to the rehabilitation is to start loading (exercising) the tendon to stimulate it to repair itself. Dr. Khan of the Vancouver Coastal Health Research Institute says that if there is only rest, there is no stimulus for the tendon to repair itself.

Osteoarthritis is another overuse injury involving wearing of the joint surface called hyaline cartilage. Dr. K. Khan says that for every 10% overweight a person is, the risk of early arthritis is doubled. Prevention would include losing weight but strong and balanced muscles are needed around the joints because they act as shock absorbers helping to stabilize the joints and reducing the shock force to the joints.

Continuing research will provide more information on the importance of prevention of overuse injuries especially related to the aging work force.