



Work in laboratories is often characterized by:

1. **High repetitive work** in hands and shoulders
2. Working in **LAF bench** which can be challenging ergonomic and often cause static work positions
3. Extensive work with **pipetting** with high stress on elbows and hands

The physical challenges lead to:

1. **4%** of all office workers experience issues with **carpal tunnel syndrome and tennis elbow**.
2. **15%** reports **lower back pain** within the last 4 weeks
3. Physical symptoms like headache, tensions in shoulder and neck are very common among laboratory technicians

The consequence is lowered efficiency, high sick leave, and lower life quality

The Novozymes case:

Novozymes is a global leading biotechnology company. A enzymes production unit had issues with attrition among employees. **12% reported issues in elbow or hand**. The unit had many different types of tasks, and it was difficult for them to point out why the problems occurred.

The unit was screened using MLI[®] Solution to figure out what tasks and employees were at high risk. Also focused on the core reason, why it constituted a high risk. After the screening improvements were implemented and an effect measurement was performed.

The results:

After implementing different improvements (physical training, job rotation, ergonomic improvements, and individual guidance), the unit achieved the following results:

1. **15% reduction in critical strain in general**
2. **42% reduction in critical strain for specific tasks**
3. **77% reduction in critical strain for individual users**