Leverage Zones

**Red  Danger Zone**
- Elbows stretch out, arms reach out in front of you
- Pivot point changes to the low back
- Back muscles are used to complete the task
- Force on the low back can be 50:1 in the far red zone
- Lifting here is lifting in the danger zone

**Yellow  At-Risk-Zone**
- About 6 inches out from your side (about the distance between thumb and little finger)
- The pivot point has moved to the shoulder
- Force on the shoulder and upper back can be up to 6 times that of Green Zone
- Shoulder muscles rely on the back muscles for help
- Extended reach: Max 27”

**Green  Safety Zone**
- Elbows in close to the body
- Pivot point is the elbow
- Weight is closer to the body
- Provides better leverage
- Requires less force to lift with your hands
- Less work for the low back muscles