



# Body By Berle

Personal Training Center

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## **Irrational FEAR of Failure**

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### **Force = Mass X Acceleration**

A client recently expressed concern over performing her exercises to muscular failure because she did not want to injure herself. That fear couldn't be further from the truth.

An injury in exercise occurs when the force of a movement is greater than the force that a joint can withstand. Keeping in mind that force is made up of mass x acceleration and that mass doesn't change during the exercise, only acceleration can increase the overall force. During a strength training exercise, a person becomes progressively weaker until his strength is less than that of the resistance (AKA failure). In the first few reps, the trainee's strength is at its peak and it's possible that he could produce that injury-causing acceleration. However, strength is so compromised by the last few reps before failure that it's impossible to produce any meaningful acceleration. Therefore, the first few reps are the most dangerous and the last reps before failure are the safest.

