

OSTEO STRONG®

WELCOME TO OUR CENTER

**GOLF PRESENTATION** 

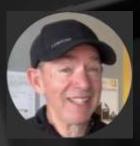


#### SKELETAL STRENGTH CONDITIONING





#### OSTEOSTRONG IS FOR EVERY BODY!



"After 6 months at OsteoStrong I have definitely improved my core strength and stability. My drive distance has increased by more than 20 yards and my game has definitely improved.

- Dale, OsteoStrong O'Fallon - Amateur Golfer



"As an athlete, OsteoStrong has changed the way that my body performs. In as little as a month, I noticed a major decrease in back pain that I've had for years AND I've broken several personal records! It's made rowing more comfortable and enjoyable in all aspects!"

- Lauren, 16 Rowing Team



"10 years I was diagnosed with Osteoporosis. After 22 months of OsteoStrong, my spine density increased 8.8%! I now have osteopenia instead of osteoporosis. I was shocked! My doctor asked what I was doing differently I told her that OsteoStrong was the only change I'd made. She was pleased. I couldn't be happier with my results at OsteoStrong!"

- Patty, 62



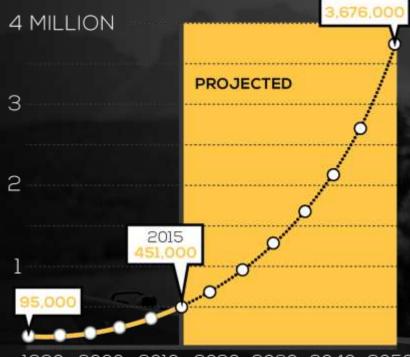
"I had total knee replacement 4 years ago brought on by a lifetime of competitive golf and tennis. I noticed that my "good" knee was tiring out after 16 holes and I was contemplating another knee replacement. After joining OsteoStrong, I no longer feel that way – 18 holes is not a challenge anymore and my "good knee" is holding up better than ever. I would recommend OsteoStrong to anyone!"



# LIFECYCLE OF BONE & MUSCLE

#### THE WORLD'S CENTENARIAN POPULATION PROJECTED TO GROW RAPIDLY

NUMBER OF PERSONS AGES 100 AND OLDER



2000 2010 2020 2030 2040 2050

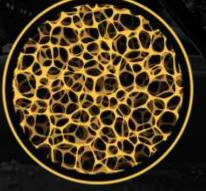
Source: United Nations, Department of Economics and Social Affairs, "World Population Prospects: 2015 Revision"

PEW RESEARCH CENTER





YEAR OLD BONE

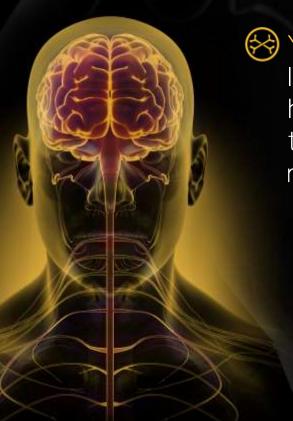


YEAR OLD BONE





# HACKING THE SYSTEM



Your brain is your command center. It is designed to protect you. It helps your body adapt and respond to your environment. Adaptive responses can be "triggered".

Based on science from the 1800's (Wolff's Law), it's a well-known fact that bone and muscle adapt and respond to heavy loading and impact force.



#### WHAT STRENGTHENS BONE?

- **OSTEOGENESIS**
- ⊗ COMPRESSIVE FORCE
- MINIMUM AMOUNT OF FORCE DISCOVERED IN 2012
- **4.2 MULTIPLES OF BODYWEIGHT**
- NORMAL ACTIVITIES DO NOT PROVIDE ENOUGH FORCE





# CONVENTIONAL METHOD TO STRENGTHEN SKELETAL SYSTEM

- HIGH IMPACT FORCES
- STRENGTHENS ENTIRE KINETIC CHAIN
- ELITE GYMNASTS UP TO 17X THEIR BODY WEIGHT
- **ODE** DAMAGES JOINTS
- HIGH RISK OF INJURY



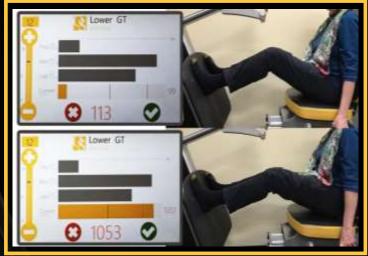


# OSTEOSTRONG METHOD

- **STRONGEST POSITION**
- MAXIMUM FORCE
- ⊗ NO IMPACT (SAFE)
- BENEFITS OF HIGH IMPACT, WITHOUT THE RISKS
- SWEAT FREE/PAIN FREE









### OSTEOSTRONG GOLF PERFORMANCE DATA

- (8) 11 Professional and amateur golfers tested
- ⊗ Taylor Made Swing Labs conducted the testing
- Participants wore suits fitted with 12 sensors
- Tracking recorded included;
  - Shoulder rotation
  - Club head speed
  - Ball speed
  - Weight transfer from address to back swing through ball contact
- All participants had 4 OsteoStrong sessions over 4 weeks





# OSTEOSTRONG GOLF DATA - RESULTS

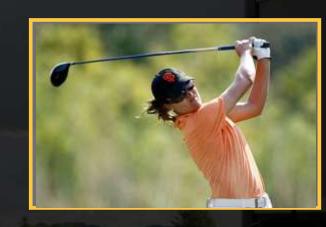
- SHOULDER ROTATION increased on average by +13 degrees
- Club Head Speed increased by an average of +8.05 kph
- ⊗ Ball Speed increased by an average of +14.5 kph
- Stability in Balance had all golfers finishing their swing on their front foot 6 tested before OsteoStrong sessions finished their swing on their back foot.





# OSTEOSTRONG SHOULER ROTATION BENEFIT

- SHOULDER ROTATION increased on average by +13 degrees
- Golf Instructors David Leadbetter and Butch Harmon confirm why increased shoulder rotation is important; more flexibility = greater shoulder rotation = more power (torque) = more club head speed = greater distance
- Comparing skilled and unskilled golfers, the skilled group demonstrate larger rotation angles and developed superior torque. (2010, Trunk Rotation and Weight Transfer Patterns between Skilled and Low Skilled Golfers, I.Okuda et al)
- As we age our flexibility reduces and injury potential increases proportionally. At peak backswing, senior golfers exhibited 38 degrees less right-side shoulder external rotation than college golfers (2003, K.Mitchell et al. Shoulder motions during the golf swing in male amateur golfers)





#### OSTEOSTRONG CLUBHEAD SPEED INCREASE

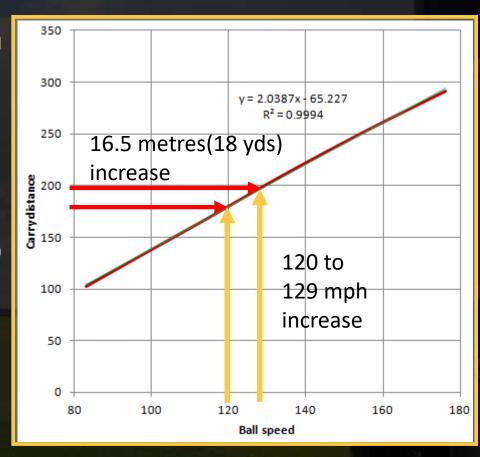
- Club Head Speed increased by an average of (5 mph) +8.05 kph
- Distance travelled increases approximately 2.9 metres (3.16 yards) per 1 mph club head speed increase.
  - (http://www.tutelman.com/golf/clubs/Mike1.php)
- 8.05 kph increase = 14.5 m increased distance (5 mph increase = 15.8 yds)





### OSTEOSTRONG BALL SPEED INCREASE

- Ball Speed increased by an average of +14.5 kph (9 mph)
- Distance travelled increases approximately 1.83 metres (2.0 yards) per 1 mph ball speed increase.
- (http://www.tutelman.com/golf/clubs/Mike1.php)
- 14.5 kph increase = +16.5 m increased distance (9 mph increase = + 18 yds)





# Graham Honeycutt

Graham is a PGA Professional and former President of the middle Tennessee Section of the PGA of America. Graham once said in humour that OsteoStrong sessions had ruined his golf game. After many years as a professional golfer, he suddenly started hitting the ball further and could not work out which club to use!



# Sophia Gustafson

More famous is Sophie Gustafson from Sweden. She was a member of the US based LGPA Tour and is a life member of the Ladies European Tour. Sophie has five LPGA Tour and 23 international wins in her career. Sophie liked OsteoStrong so much, that she is now one of the owners of the OsteoStrong Master License for Sweden and Denmark.



