

Osteoarthritis And Exercise

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Gain an enhanced understand of:

1. Does exercise cause OA: how will we ever know?
 - The literature is very confusing but the evidence overall suggests that exercise is good for joints
 - Need large scale collaborative research to fully describe the effects of exercise on OA in terms of: Timing, Type, Threshold

2. What exercise minimises the risk of osteoarthritis in adults?
 - Running does not cause OA: it does not 'wear out' joints
 - Interplay between genes and environment
 - Strongest risk factors: obesity, family history, female, injury
 - Prescription: Meet UK/Global Physical Activity Guidelines: aerobic & strength, Cross-train, Consider non-impact loading if appropriate, Avoid significant acute injury (directional change, collision), Try not to be over-weight ('Catch 22'), Understand your family history

3. What exercise is best in managing adults with OA?
 - Exercise reduces pain (Fransen M and McConnell S Cochrane review 2009)
 - Exercise improves function (Vincent KR PM R 2012 Resistance exercise for knee OA)
 - Exercise improves self efficacy and self management (Vincent KR 2012)
 - Weight loss, other chronic co-morbidities
 - Knee OA: Exercise decreases pain and improves function in 50-75%, No difference between strength and aerobic exercise (Bicshoff and Roos Curr Opin Rheum 2003), No difference between low and high intensity exercise (Brosseau L Cochrane Database Syst Rev 2003)

 - Summary of exercise interventions:
 - Significant evidence for exercise intervention in OA for pain and function
 - Moderate to large effect sizes
 - Combination strength, flexibility and aerobic work
 - Aquatic and land equally effective
 - Include higher intensity
 - DoH recommendations to reduce co-morbidity