Research Roundup

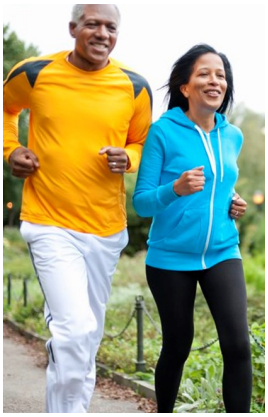
Middle age not too late to benefit from exercise

It's never too late to start exercising! A new research study from the Texas Health Presbyterian Hospital suggests that middle-aged individuals who are sedentary can start exercising and still reap the rewards of an active lifestyle, such as improving cardiovascular health and staving off the physical consequences of aging. The study consisted of a randomized trial that had 61 participants split across two groups—an experimental exercise group, and a non-active control group. Originally, all participants only had exercised for less than 30 minutes a day, three times a week. Additionally, participants did not have a history of hypertension, untreated hypo- or hyperthyroidism, obstructive sleep apnea, tobacco use within the past 10 years, heart disease, or chronic obstructive pulmonary disease.

The experimental group underwent an exercise routine that consisted of a work-out session at least 30 minutes long performed four to five days every week. After two years, researchers compiled data concerning training frequency, duration and intensity for the experimental group and found the exercise group, compared to the control group, had significantly improved their maximal oxygen uptake and general cardiovascular health (including a decrease in heart stiffness, and an increase in the heart's carrying capacity). These results suggest that an exercise regimen performed regularly over a long period of time can improve the health of middle-aged adults.

Both partners benefit even if only one is actively trying to lose weight

When one spouse actively tries to lose weight, the other spouse may find that they lose weight too—even if they do not actively try to lose weight. The University of Connecticut in Storrs recently published a paper suggesting that individuals who have partners that undergo weight loss programs will also lose some weight, but not nearly as much as the partner who is in the program. This effect can be attributed to a phenomenon coined as the "ripple effect." This effect explains how the changes in one partner's life style can influence the other partner's lifestyle.



The study consisted of 128 couples where 63 were in a Weight Watchers program and 65 were in a self-guided program. Researchers obtained results after one partner in each couple participated in their given program for six months, and the data suggests the presence of the ripple effect because partners who did not participate in the exercise activities reported a constant amount of weight loss across both groups. Therefore, this data underscores that the ripple effect occurs in both structured (i.e. the Weight Watchers program) and unstructured (i.e. the self-guided program) programs. If you have a significant other in your life, or even a group of friends, try exercising together. You just may find that changes in your lifestyle will positively impact your friends' lifestyle, or perhaps changes in your friends' lifestyle will positively impact yours.

Synthetic turf vs. grass

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Similar to knee injuries, the data on artificial and grass fields with respect to ankle injuries does not point to one conclusion. Several studies suggest that ankle injuries occur more often on third generation synthetic fields when compared to grass fields, and researchers have postulated that this is due to the high traction between the players' shoes and the field. High traction prevents the planted foot from slipping and/or moving, and therefore a sudden twist of the body may promote an ankle sprain. When it comes to other ankle-related injuries such as tibiofibular joint derangements, other studies have found that FieldTurf is safer than regular grass. Furthermore, some data underscores that there is no difference with the rate of ankle injuries on either field. Therefore, more research needs to be conducted on this subject as there is not definitive proof that states how third generation synthetic fields compare to regular grass fields within the scope of ankle injuries

When examining the impact of synthetic fields on concussions, one study suggests that second generation and early third generation synthetic fields are not as safe as grass fields due to their inability to absorb the energy of impact when a head hits the field. Additionally, when comparing new FieldTurf to a grass field when studying collegiate men's and women's soccer, two studies revealed that there was no significant difference between the two fields with respect to concussions. Another study analyzing high school football injuries depicted higher concussion incidence rates on regular grass fields than on FieldTurf fields. This collection of data suggests that when it comes to concussions, third generation synthetic fields such as FieldTurf are safer than first and second generation fields due to an increased ability to absorb energy; however, there is not enough data to say whether or not third generation synthetic fields are safer than regular grass fields.

Synthetic fields have a host of benefits: they are easier to maintain than grass fields, more resistant to fluctuations in temperature and weather, and are more cost-efficient. When it comes to the safety of athletes on the field, there is enough evidence to state that third and fourth generation synthetic fields are safer than first and second generation artificial fields due to increased cushioning as well as several other aspects that are geared toward protecting the athlete. When it comes to comparing the safety between these third and fourth generation synthetic fields and grass fields, more research must be conducted in order to definitively say whether or not one field is safer than the other. Until we have that research, it is important to practice activities that will help to prevent sports injuries from occurring, such as conducting proper warm-ups and cool-downs and wearing protective equipment on the field.

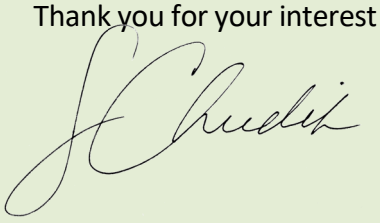
Orthopaedic Surgery and Sports Medicine Teaching and Research Foundation helps people stay fit and healthy

Steven Chudik, orthopaedic surgeon and sports medicine physician with the Steven Chudik Shoulder, Knee & Sports Medicine Injury Clinic, founded the Orthopaedic Surgery and Sports Medicine Teaching and Research Foundation (OTRF) in 2007. OTRF is a nonprofit, 501 (c)(3) organization dedicated to funding research and education for the purpose of keeping people active and healthy.

Dr. Chudik saw a growing demand by patients, athletic trainers and clinicians for up-to-date medical information and unbiased research on injury prevention—especially for children—as well as facts on arthritis and wear and tear on joints, cartilage, tendons, ligaments, etc. To fulfill these requests, OTRF produces and distributes this newsletter, shares information about health performance-related issues like nutrition and fitness, hosts athletic training educational programs, conducts seminars for healthcare providers and the community. Most important, OTRF funds unbiased research and development particularly in emerging areas such as arthroscopic and minimally invasive surgery for injuries to the meniscus, labrum, rotator cuff, ACL and cartilage.

However, none of this is possible without ongoing financial support. We are extremely grateful to all those who have contributed in the past. Many of the donations came from patients or their family members who benefited from Dr. Chudik's orthopaedic and sports medicine expertise you might be interested in helping us continue our educational programs and research, please visit our website, ***otrfund.org*** and click on the donation link. Or, if you prefer, email me at **contactus@chudikmd.com/**. Also, many companies sponsor programs that match their employees' charitable contributions. Some even match donations made by retirees and/or spouses. Matching gift programs are a great way to double your generosity. Regardless of the amount, every contribution helps make a difference.

Thank you for your interest in our newsletter, ***Active Bones***, and the ongoing work of OTRF.



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