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HEALTH BENEFITS OF EXERCISE REPORT

GROUP FITNESS REDUCES CARDIOVASCULAR RISK FACTORS IN HEALTHY ADULTS

Research has shown that physical activity can help prevent heart disease, yet sticking to an exercise routine remains challenging. A study published in the *Open Journal of Preventive Medicine* looks at the impact of a structured group fitness program on heart disease risk factors in healthy but sedentary adults. The program was developed to meet American College of Sports Medicine (ACSM) exercise recommendations of 150 minutes per week, with strength and flexibility exercises twice per week. During the study, young adults with an average body mass index (BMI) of 30 or more and no other clinical symptoms of chronic disease participated in an introductory period of six weeks during which they started with 20 minute classes, followed by 24 weeks of hour-long group exercise sessions in their community five to six times per week.

The results showed improvements in body mass, fat body mass percentage, lean mass, and blood lipid levels (cholesterol and triglycerides). In addition, participants attained a 98% compliance rate during the study, and after two years approximately 85% of the participants are still exercising regularly. Health clubs provide a supportive environment for new exercisers, and group classes can be a good way to help people continue their exercise routines for the long term.

HIGH INTENSITY EXERCISE BENEFITS WOMEN WITH METABOLIC DISORDERS

Metabolic disorders, like hypercholesterolemia (high cholesterol) and hyperglycemia (high blood glucose), and elevated body mass index (BMI) are indicators of metabolic syndrome. A study recently published in the *Chilean journal Revista Medica de Chile* looked at how high intensity exercise training can help sedentary women improve their metabolic profiles. Forty-six overweight women were separated into groups based on their diagnosis of high blood sugar, high blood glucose, both high blood glucose and high cholesterol, or neither. During the study, the women completed 20-minute high intensity interval training sessions five times per week for 12 weeks.

The results showed that after 12 weeks of high intensity interval training, BMI and waist circumference decreased significantly. Blood glucose levels improved across all groups, but more so in women who had hyperglycemia, and blood lipid levels improved among women who had high cholesterol.

Health clubs provide a safe, supportive environment for women to get active and try new exercise routines – like high intensity interval training – with the guidance of knowledgeable staff.

ACTIVE LIFESTYLE LEADING UP TO IN VITRO FERTILIZATION COULD BOOST PREGNANCY CHANCES

A study published in the journal *Fertility and Sterility* assessed the impact of an active lifestyle on the likelihood of successful in vitro fertilization (IVF) treatment outcomes. The study followed 121 women undergoing IVF treatment. Participants filled out a questionnaire regarding their activity levels over the past year, and wore an accelerometer during the time between embryo transfer and pregnancy testing.

The results showed that women who were more active in the year leading up to their IVF treatments had higher odds of attaining a successful pregnancy than women who were inactive

during that time. Women's activity levels between embryo transfer and pregnancy testing were not associated with pregnancy success.

These results illustrate yet another reason maintaining an active lifestyle is important, and health clubs provide a safe, supportive environment in which to do so.

SOURCES

Jinger S. Gottschall1*, Justin L. Jones1, Jackie Mills2, Bryce Hastings. Group fitness is effective in reducing cardiovascular disease risk factors in healthy adults. Open J Prev Med. Vol.3, No.1, 132-140 (2013).

Alvarez L C, Ramírez-Campillo R, Flores O M, Henríquez-Olguín C, Campos J C, Carrasco V, Martínez S C, Cells-Morales C. Metabolic response to high intensity exercise training in sedentary hyperglycemic and hypercholesterolemic women. Rev Med Chil. 2013 Oct;141(10):1293-9.

Evenson KR1, Calhoun KC2, Herring AH3, Pritchard D4, Wen F5, Steiner AZ6. Association of physical activity in the past year and immediately after in vitro fertilization on pregnancy. Fertil Steril. 2014 Feb 10. pii: S0015-0282(13)03477-8. doi: 10.1016/j.fertnstert.2013.12.041. [Epub ahead of print]