

Are Masters Athletes Healthier Than the General Population?

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Introduction

Masters swimmers get involved with swimming for many reasons. Fun, fitness and friendship are the major drivers. As a researcher I am often asked if older adults who engage with masters sport are healthier than the general population. Theoretically the answer would be yes, particularly for masters athletes who engage with endurance training. Why? Because research has conclusively shown that the higher your level of endurance fitness, the less likely you are to have chronic disease and the more likely you are to live longer.

At last there has been some research that has proven the same theory to be true when it comes to masters athletes and endurance sports such as masters swimming. Masters athletes have dramatically lower risk of chronic disease than the general population. Here's the research that proves it!

The Research

An international team of researchers investigated the health of the Sydney 2009 World Masters Games North American (Canada and the USA) participants. They used an online survey to investigate participant demographics (age, height etc), physiological measures of health, and each participant's medical health history. Questionnaire responses were collected from competitors representing 95 countries in 28 sports. For the research paper, data were culled to focus on North American participants whose results were compared with the incidence rates of chronic disease in the USA as reported by the [Centers for Disease Control and Prevention](#).

The Results

A total of 928 participants from Canada and the United States (age 52.6±9.8 yrs) completed the survey. The top five sports were football (25.6%), track and field (15.4%), swimming (8.4%), volleyball (8.2%), and softball (7.8%). Very few (2.5%) reported currently smoking with an average of 65 cigarettes per week, while 13.6% were ex-smokers. Alcohol consumption (82.0% of the participants) averaged 4.7 drinks week (recommended in Australia to no more than two per day), while 0.6% were ex-drinkers.

The top five chronic disorders were rheumatoid arthritis or osteoarthritis (10.0%), hypertension (9.1%), hyperlipidemia (high blood fats) (8.0%), asthma (6.5%), and depression (5.5%) (see Table 1 below). Prevalence of these chronic diseases was significantly lower versus the general US population for hypertension, high blood fats, arthritis, asthma, and depression.

Table 1: Incidence of chronic disorder of Sydney World Masters Games participants compared to general USA population.

Disorder	Masters Competitors (%)	USA Population (%)	Statistically Different
Rheumatoid Arthritis	10	33	Yes

Osteoarthritis			
Hypertension	9.1	33	Yes
High blood fats	8.0	16.7	Yes
Asthma	6.5	8.2	Yes
Depression	5.5	8	Yes

The top three operation treatments were knee replacement or repair (12.2%), hernia repair (6.1%), and herniated disc surgery (2.0%). The top four prescription medications were anti-hypertension drugs (6.9%), thyroid hormones (6.6%), hypolipidaemic (blood fat lowering) (6.0%), and medications to increase bone strength (5.9%).

So What?

Chronic disease and disorders reported by participants of the 2009 World Masters Games were significantly lower compared to the general US population. The results clearly show that involvement in masters sport improves the health of participants. Moreover, the results are a strong argument for older persons to take up regular participation in masters sport. Moreover, medical and allied health professionals as well as exercise professionals should be encouraging their older patients and clients into master sport. Finally, I strongly believe that local, state and federal governments need to be promoting and supporting masters sport at every level. Our burgeoning health budget will not be able to afford them not to!

Source: DeBeliso, M. and others (2014). World Masters Games: North American Participant Medical and Health History Survey. The Sport Journal, April.

*Peter Reaburn is an Associate Professor in exercise and sport science at CQUniversity. He has recently written the **definitive book for masters athletes** titled [The Masters Athlete](http://www.mastersathlete.com.au) now in its second reprint and available hardcopy or in pdf format with individual chapters also available in pdf at: www.mastersathlete.com.au. Peter was the founder of Miami Masters in Queensland, Chair of the 1990 National Swim Organising Committee, spent two years as State President of AUSSI Queensland and 10 years on the National Coaching Panel. He has won national distance swimming championships and was world-ranked in 1500m freestyle as a younger master swimmer. He still swims open water and was winner of the Australian Ironman Triathlon (50-54 years) in 2005.*