

# healthierYOU

your healthy living newsletter

## THE CONCEPT OF THIRD-HAND SMOKE

- Andrew Kelly -  
LifeMark Occupational Services

The most recent Surgeon General's report outlines that there is no "safe" level of exposure to second hand smoke, but what about exposure to third hand smoke? **Third hand smoke** is a relatively new term that refers to **residual smoke that remains after smoking**.

Research has outlined that high levels of toxins from the tobacco smoke remain long after a cigarette has been extinguished. Smoking in a confined space will continue to expose people to toxins in the future, not just at the time of active smoking.

Research supports the toxicity of even low levels of exposure to tobacco smoke. Tobacco smoke contains over 250 poisonous chemicals, gases and metals. Some of the more well known poisons from tobacco smoke are also found in vehicle exhaust, household cleaners, paint and paint thinners, pesticides, and batteries. Some of these chemicals are known carcinogens (cancer-causing agents). Furthermore, some of the chemicals within tobacco smoke are undetectable as odorless, colorless gases and can remain in the environment even after detectable smoke has dissipated.

All exposed people are at risk, but children are at an increased risk of exposure to third hand smoke because they breathe near and put their mouths on surfaces within the exposed area.

Anti-smoking policies will continue to stress the need for zero exposure to second and third-hand smoke. The effects on children underscore the importance for eliminating indoor smoking even when children are not present as they may be exposed to third-hand smoke long after tobacco products have been extinguished.

**Even low levels of exposure have been associated with cognitive deficits among children supporting the possibility that the chemicals have neurotoxic effects in children.**

### ABOUT OUR EDITORS



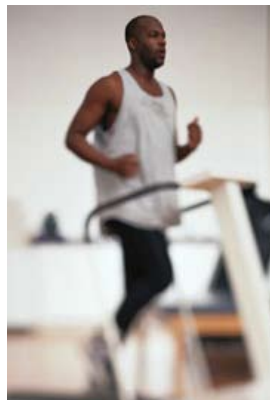
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## Getting Fit

As Physiotherapists, we're often asked how to exercise correctly.

There are three primary types of exercise:

- Cardiovascular training such as running or cycling.
- Resistance training such as using weights and resistance bands.
- Stretching programs.

Within each type of exercise there are many different variations. Each type of exercise offers it's own important benefits to everyone throughout their lifetime.

Here's what the research has to say about cardiovascular exercise. Cardiovascular activities have been shown to be very helpful in promoting heart and lung health. The recommended exercise involves 20-60 minutes of exercise 3-5 times per week. This involves an activity that picks up your heart rate like a brisk walk, jogging, or swimming. Ideally, you want to be working at an intensity where you can carry out simple conversation but not necessarily long discussions.

Next Issue we'll take a look at resistance training as a primary exercise.

**Remember: Speak with your health care provider before beginning a new exercise program.**

## Human vs. Horse Who's faster?

Over short distances, horses have humans beat . . . hands (or hooves) down. Quarter horses can run up 88km/hr while Donovan Bailey hit a speed of 42km/hr, the highest top speed ever recorded for a human runner (yes, faster than Usain Bolt).

However, over-long distances, humans just might hold their own. Since 1980, the Man Versus Horse Marathon has been run in Wales with a human winning the race twice, most recently in 2007 by a margin of 11 minutes over the fastest horse.

**The reason:** while a horse can sprint much faster than a human, they can sustain this speed only for a few minutes at a time. However strong human runners can actually jog faster than a horse can canter, allowing them to surpass horses over longer distances.



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HEALTH



# GOLF SEASON TIPS

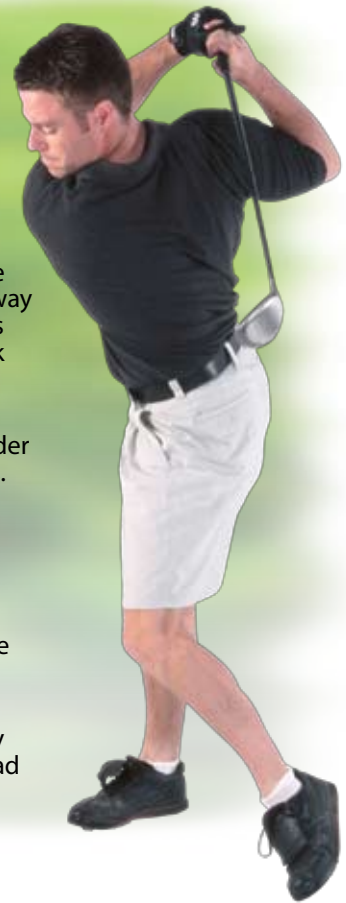
The most common types of injuries associated with golf are **back, shoulder, elbow** and **wrist** injuries. Several studies have identified three strategies to help reduce the risk of these problems:

**IMPROVE YOUR GOLF SWING:** Not only will this help your handicap, it's the most effective way to reduce your risk of injury. The golf swing requires a lot of movement from the back and shoulders with good strength and endurance from the forearm muscles. Without a smooth, consistent swing you run the risk of pushing these joints and muscles farther than they're capable of. This results in pain and stiffness and potentially a short golf season. What is the best way to improve your swing? Spend time with your local pro each season. Addressing body mechanics is the most effective way to resolve the most common injury amongst amateur golfers, lower back pain.

If pain persists after spending some time with your coach, see your rehabilitation professional to address any weakness in the muscles that stabilize the trunk. Finally, shortening your stroke in order to keep your spine in a neutral, stable position may be useful for people with chronic back injuries.

**WARM-UP:** When elastic bands are cold, they are more likely to tear when stretched. The same story goes for your muscles. Joints in the spine are also more likely to be sprained when the muscles crossing these joints aren't warmed-up. The ideal warm-up for golf involves two things – light cardiovascular exercise such as a 10-15 minute walk to increase the temperature of muscles throughout the body and then practice swings, gradually increasing intensity. Start with easy swings while focusing on your form and then increase the power and speed of the swings over the course of 10 minutes.

**FOLLOW THE RULES:** What is the most common injury related to not following the rules? Being hit by clubs or balls. An Australian study found that among 300 golfers going to Emergency Rooms, 65% were related to being hit. These injuries can be serious, and amongst children golf had the highest proportion of sport-related hospital admissions in Australia.



# Trans Fats



## Nutrition Facts

Serving Size 1/2 cup (57g)  
Servings Per Container 15

Amount Per Serving		% Daily Value*
<b>Calories</b> 230	Calories from Fat 100	
<b>Total Fat</b> 11g		<b>17%</b>
Saturated Fat 2g		<b>10%</b>
Trans Fat 0g		
<b>Cholesterol</b> 0mg		<b>0%</b>
<b>Sodium</b> 95mg		<b>4%</b>
<b>Total Carbohydrate</b> 32g		<b>11%</b>
Dietary Fiber 3g		<b>12%</b>
Sugars 18g		
<b>Protein</b> 5g		
Vitamin A 0%	Vitamin C 0%	
Calcium 4%	Iron 10%	

\*Percent Daily Values are based on a diet of other people's secrets.  
Your daily values may vary depending on your calorie needs.  
Calories from Fat 100  
Total Fat Less Than 11g  
Saturated Fat Less Than 2g  
Cholesterol Less Than 0mg  
Sodium Less Than 95mg  
Total Carbohydrate Less Than 32g  
Dietary Fiber 3g  
Sugars 18g  
Calories per gram:  
Fat 9 • Carbohydrate 4 • Protein 4

Trans fats, you hear about them all the time in the news and most of what you hear isn't good. So what are trans fats and what should you be doing about trans fat in your food?

Trans fats differ from other types of fat. Trans fats occur naturally in some dairy products and meats such as beef and lamb. They are also present in refined canola and soybean oils as well as some fish oils. In addition, over the last 100 years, trans fats have been produced to make spreadable margarines and oils that have longer shelf-lives and are easier to bake with. Initially, trans fats were felt to be healthier than the animal fats that they replaced. In 1994, two researchers from the Harvard School of Public Health, attributed 30,000 deaths in the U.S. to trans fats in the diet while the Canadian Heart and Stroke association estimates that trans fats lead to 3,000 to 5,000 Canadian deaths per year.

Trans fats increase the levels of low-density lipoproteins (LDL) in the blood and decrease the levels of high-density lipoproteins (HDL). LDLs are commonly referred to as bad cholesterol while the HDLs are good cholesterol. LDLs increase the risk of coronary heart disease while HDLs lower this risk.

So can you completely eliminate trans fats from your diet? Probably not without losing the beneficial nutrients found in some of the foods that these trans fats occur in naturally.

**Read the labels of the foods you buy in the grocery store and pay attention to the trans fat content. Try to buy foods that contain less than 5% trans fats whenever possible. Encourage your local health authority to require restaurants to minimize their use of trans fats in their oils and margarines to less than 2%.**

**Coming up in our next issue:**  
Osteoporosis  
Resistance Training

If you have a pre-existing medical condition/injury or are in pain, please consult your health care professional prior to changing your diet or commencing any exercise.

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