



# The New Jersey Police Chief

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# 10<sup>th</sup>



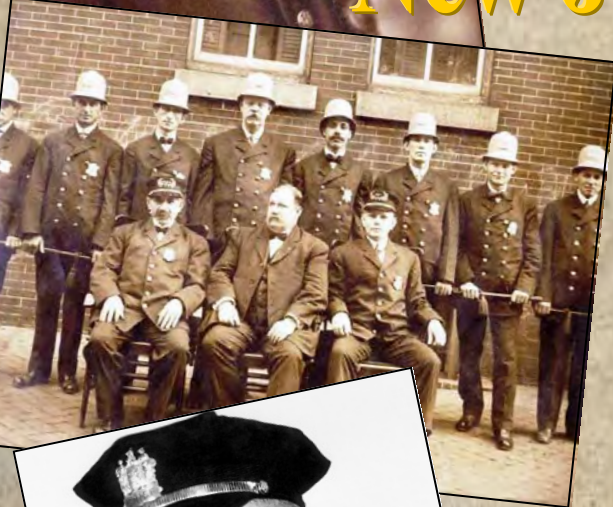
## Anniversary Luncheon New Jersey State Association of Chiefs of Police

### 1912 ~ 2012

Thursday, May 3, 2012  
Ocean Place Resort  
Long Branch, New Jersey

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# Do Toning Shoes Work?

By Matt Brzycki, Assistant Director of Campus Recreation, Fitness  
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The source of the quote is subject to debate but someone once said, "There's a sucker born every minute." Then the person added, "And two to take his money."

People are always searching for the "magic bullet" that will improve their health and fitness. In their quest to score quick and easy results, many people are often seduced by products that promise what amounts to miracles.

Take toning shoes, for instance. These shoes have been one of the fastest-growing products in the footwear industry. As the name implies, toning shoes are advertised for toning the muscles of your hips and legs. It's also claimed that the shoes can strengthen your hips and legs, promote weight loss, improve posture and reduce joint stress.

The basic premise of the shoes is to provide instability through a variety of designs – such as "rocker-like soles" and air pockets built into the soles – which make it more challenging for the wearer to maintain balance. Conceptually, this is similar to the difficulty that's encountered while trying to maintain balance on an unstable object such as a wobble board.

Promoters of toning shoes often point to a study that was done at the University of Delaware. In this study, five women walked on a treadmill for five minutes wearing toning shoes, wearing regular walking shoes and barefoot. It was found that the toning shoes produced significantly greater muscle activity in the gluteals, hamstrings and calves.

However, the design of the study had several holes including a small number of subjects. But the most glaring problem with the study is that it was funded by a manufacturer of toning shoes. This, of course, raises a red flag. Analyses of studies have shown that industrial funding has an effect on scientific findings in that the results of a study tend to favor the funder.

Researchers at the University of Wisconsin, LaCrosse conducted a pair of studies on toning shoes. In the first study, 12 women walked on a treadmill for five minutes wearing regular running shoes and wearing three different types of toning shoes. The women walked at three different speeds and grades while wearing each of the four shoes. There were no significant differences between any of the shoes in the number of calories that were used.

In the second study, 12 women (who were different from those in the first study) did the same protocol. There were no significant differences between any of the shoes in muscle activation.

So, toning shoes produced the same caloric expenditure and the same muscle activation as running shoes. In other words, no advantage was provided by toning shoes.

Not to be overlooked is the potential for injury due to the instability of the shoes. This includes trip-and-fall injuries, especially among those with poor balance. Even something as simple as walking up steps with the shoes presents an unwelcome risk. Ankle sprains are also a distinct possibility. In addition, your normal gait is altered when walking in toning shoes. Over time, this unnatural motion can lead to orthopedic stress (pain) in your ankles, knees and lower back.

Also of note is that in September 2011, Reebok was charged by the Federal Trade Commission with "deceptively" advertising in claiming that its toning shoes provide extra tone and strength to the muscles of the hips and legs. As part of the settlement agreement, Reebok will pay \$25 million to consumers who purchased the shoes and apply for a refund.

Bottom line: Run away from shoes that carry miraculous claims.

Matt Brzycki is the Assistant Director of Campus Recreation, Fitness at Princeton University in Princeton, New Jersey. A former Marine Drill Instructor, he has authored, co-authored and edited 17 books including *Dumbbell Training for Strength and Fitness*.