

AFQ&A

BY MATT BRZYCKI

Does chocolate improve cognitive function?

Much ado was made when a correlation was found between the amount of chocolate that a country consumes per capita and the number of Nobel Prize winners that a country produces (which was used as a proxy for cognitive function).

The basis for this notion was questionable, though: For one thing, the data used the consumption of chocolate by individual countries, not individual Nobel laureates. In addition, the data showed the consumption of chocolate over a two-year period but looked at more than 100 years of Nobel laureates.

Researchers in Belgium pointed out that there's also a pretty high correlation between the number of Ikea furniture stores that a country has per capita and the number of Nobel Prize winners that a country produces. In fact, the correlation was actually higher than that of chocolate.

So, don't rush out to the candy store just yet. At this juncture, the effect of chocolate (cocoa) on the cognitive function of humans is purely hypothetical. It has been demonstrated in studies of animals, such as rats and snails, but responses by animals can't always be generalized to humans.

Bottom line: Eating chocolate doesn't necessarily mean that you'll be smarter let alone end up in Stockholm to accept a Nobel Prize.



Do aerobic training and weight training have different effects on the vascular system?

Weight training and aerobic training have different roles and, therefore, must be included in a well-rounded fitness program. Weight training can improve muscular strength and increase lean-body mass; aerobic training can enhance cardiovascular fitness and produce a sustained expenditure of calories. But it now appears as if these two types of training also have different roles in decreasing cardiovascular risk.

Researchers in Australia and the United Kingdom randomly assigned 23 men (average age 27) to two groups: One group did endurance training and the other did weight training. Endurance training consisted of walking, jogging and running; weight training consisted of "Olympic weight lifting" along with five supplemental exercises. All subjects completed their assigned workouts with supervision three times per week for six months.

The study found that both types of training produced adaptations in the structure and function of conduit arteries (brachial, femoral and carotid), potentially reducing the risk of a cardiovascular event. Furthermore, the adaptations were specific to the type of activity that was performed: Improvements were seen in the femoral artery from endurance training and in the brachial artery from weight training.

How accurate is the nutritional information on the labels of snack foods?

Reading nutrition labels is beneficial for those who want to manage their weight effectively. Obviously, then, it's important that the nutritional information on food labels be accurate.

Researchers analyzed the caloric content of 24 popular snack foods and compared the amounts to what was listed on the food label. A subset of 10 snack foods was analyzed for macronutrient content (carbohydrates, protein and fat). The snack foods came from eight categories: candy bars, chips, cereal bars and pastries, cookies, crackers, ice cream, nuts and nut mixes, and yogurt.

The study found that the caloric content of these particular snack foods, on average, was 4.3% higher than what's noted on the label, which is well below the allowable limit of 20% that's set by the Food and Drug Administration. In addition, the carbohydrate

content was significantly higher than what's noted on the label while the protein and fat content was about the same.

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