

fitness

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What's the difference between glycemic index and glycemic load?

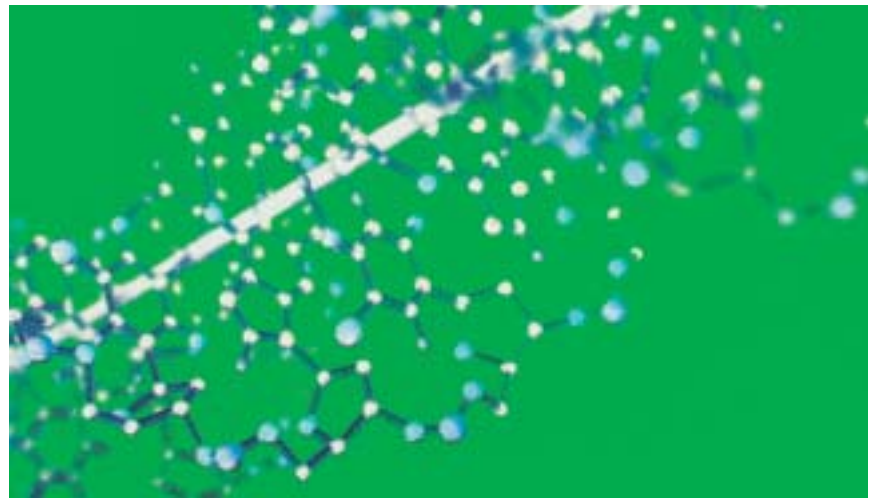
A 1981 study by a group of Canadian and British researchers determined the “glycemic index” (or GI) of 62 foods and sugars. The first table of GI was published in 1995 and had 565 entries. The most recent table was published in 2002 and has almost 1,300 entries.

The GI is a system of quantifying the carbohydrates in foods based on how they affect blood glucose compared to a reference food (either glucose or white bread). A value is assigned to a food that correlates to the magnitude of the increase in blood glucose. For instance, a food with a GI of 50 means that it elevates blood glucose to a level that's 50 percent as great as consuming the same amount of pure glucose (which has a GI of 100).

A limitation of the GI is that it's not related to portion size. So, the GI is the same whether an individual consumes 50 grams of a particular food or 150 grams. And that's where the glycemic load enters the picture.

The concept of “glycemic load” (or GL) was introduced in 1997. It's a measure of the quality of carbohydrates, not the quantity. The GL is the GI multiplied by the carbohydrate content in grams divided by 100. For

example, a food that has a GI of 50 and 20 grams of carbohydrate per serving has a GL of 10; a food that has a GI of 50 and 40 grams of carbohydrates per serving has a GL of 20. **FM**



What are the components of a fitness test for police and the military?

A fitness test for law enforcement and military personnel must be representative of their job requirements. In other words, the test must measure their ability to perform specific tasks that are most likely to occur “on the job.” Many fitness tests for law enforcement and the military include push-ups and sit-ups. But the ability to perform these and other calisthenic-type exercises isn't related to job performance. Depending on operational requirements, examples of appropriate activities include running up several flights of stairs, negotiating barriers/obstacles and climbing a rope.

What's more, a fitness test must distinguish between those who can meet the standards and those who cannot; the test shouldn't have different standards for different people. Those who have the same basic job requirements as others should be held to the same standards in a fitness test. As a result, there shouldn't be an “allowance” made for age or gender. Finally, a fitness test should be taken in operational gear (not a T-shirt, shorts and running shoes). **FM**

Is chewing food slowly an effective tactic for weight loss?

At first glance, this notion may sound a wee bit odd. But those who chew their food slowly are less likely to mindlessly inhale it as if they're the defending champion in an eating contest.

In one study, 30 women were given a mixed-macronutrient lunch and water, and told to consume as much as they wanted. When they ate quickly, they consumed about 646 calories in 8.6 minutes (or about 75.1 calories per minute); when they chewed their food slowly, they consumed about 579 calories in 29.2 minutes (or about 19.8 calories per minute). Besides eating fewer calories when they chewed slowly, the participants reported greater feelings of satiety (fullness) and lower feelings of hunger. And, they enjoyed their meal more.

By chewing food slowly, the brain is given adequate time to receive a signal from the stomach that it's full. In addition, taking the time to chew food facilitates the digestive process.

To help slow down, people can place their fork or spoon on the table between bites. They should pay attention to the food that's being eaten, and take the time to really savor the flavor. **FM**

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