

# Health Awareness

A County Health Pool Publication



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## Glycemic Index and Low GI Foods

What is the Glycemic Index? No, it has nothing to do with Wall Street or the stock market. However, it has everything to do with your health. The Glycemic Index (GI) is “a ranking of carbohydrates on a scale from 0 to 100 according to the extent to which they raise blood sugar levels after eating.” Let’s explore further the Glycemic Index and how eating low-Glycemic Index Foods can promote good health and decrease the effects of diabetes, high cholesterol, coronary heart disease and obesity.

### How is the GI Determined?

The GI value is found by testing various foods eaten by volunteers who have been fasting prior to food consumption, followed by a blood test which then determines the GI rating of the food. In a highly specialized laboratory setting called Sydney University GI Research Service (SUGiRS), blood samples are taken from the volunteers and blood sugar levels are determined. Professor Jennie Brand-Miller, the head of the Human Nutrition Unit, oversees SUGiRS and is also a published author (*The Low GI Diet and Low GI Eating Made Easy*). Professor Miller’s research group has assigned GI values to 400+ foods. In addition, Professor Miller’s dedicated team is striving for improved nutri-



tional labeling of foods on an international level, including a GI Symbol that would appear on labels so that consumers are able to quickly identify healthy options when shopping for groceries.

### Delving Deeper into GI

According to the University of Sydney’s Glycemic Index website, “foods with a high GI are those which are rapidly digested and absorbed and result in marked fluctuations in blood sugar levels.” Translation: Unhealthy spikes in blood sugar. On the other hand, low-GI foods have the opposite effect on blood sugar levels. Because low-GI foods are slowly digested and absorbed, they have been proven to reduce insulin levels and insulin resistance. Low-GI foods also improve both glucose and lipid levels in type 1 and 2 diabetics. These foods have also been proven to help with weight control by moderating appetite and suppressing hunger because they make

you feel fuller for longer periods of time.

### High, Medium and Low-GI Foods

According to the GI research experts at the University of Sydney:

- **Low GI** = 55 or less
- **Medium GI** = 56 – 69
- **High GI** = 70+

Let’s explore specific examples by looking at the following food categories: Dairy, Breakfast Cereal, Bread, Staples, Fruits, Vegetables, Legumes (Beans), and Snacks and Sweet Foods.

### Dairy

**Low GI:** Whole milk, skim milk, chocolate milk, sweetened yogurt, artificially sweetened yogurt and soy milk fall -- meaning all are excellent choices for healthy eating.

**Medium GI:** Ice cream.

(Over)

## Glycemic Index and Low GI Foods (Continued)

### Breakfast Cereal

**Low GI:** Quaker Oats oat bran, rolled oats, and natural muesli.

**Medium GI:** Post Shredded Wheat, and Special K, and Grapenuts.

**High GI:** Kellogg's Corn Flakes, Post Bran Flakes, Total, Cheerios, Rice Chex, Cocoa Krispies and Rice Krispies.

### Bread

**Low GI:** Wholegrain Pumpernickel, Heavy Mixed Grain, Whole Wheat, Sourdough Rye, and Sourdough Wheat.

**Medium GI:** Croissant, hamburger bun, white pita, and wholemeal rye.

**High GI:** White, bagel, and French baguette.

### Staples

**Low GI:** Sweet potatoes, brown rice, white long grain rice, cheese tortellini, and pearled barley.

**Medium GI:** Basmati rice, couscous, canned potatoes, baked potatoes, taco shells, and wild rice.

**High GI:** Instant white rice, fresh mashed potatoes, French fries and instant mashed potatoes.

### Fruit

**Low GI:** Cherries, plums, grapefruit, peaches - fresh or canned in natural juice (not sugar), apples, pears, dried apricots, grapes, coconut, coconut milk, kiwi fruit, oranges, and strawberries.

**Medium GI:** Mango, bananas, raisins, papaya, figs, pineapple, cantaloupe.

**High GI:** Watermelon and dates.

### Vegetables

**Low GI:** Frozen green peas, frozen sweet corn, raw carrots, boiled carrots, eggplant, broccoli, cauliflower, cabbage, mushrooms, tomatoes, chilies, lettuce, green beans, red peppers, onions and tomato soup.

**Medium GI:** Beets (canned and drained)

**High GI:** Pumpkin and parsnips.

### Legumes (Beans)

**Low GI:** Kidney beans (canned), butter beans, chick peas (garbanzo beans), navy beans, red lentils, green lentils, pinto beans, black-eyed peas, and yellow split peas.

**Medium GI:** Baked beans.

### Snacks & Sweet Foods

**Low GI:** Slim-Fast meal replacement, Snickers (high fat), Nut & Seed Muesli Bar, Nutella, milk chocolate, hummus (very low rating of 6), peanuts, walnuts, cashews, jam, and corn chips.

**Medium GI:** Blueberry muffin, honey, strawberry jam (1 tablespoon) and Power Bar (Performance Chocolate).

**High GI:** Pretzels, rice cakes, donuts, scones, Skittles, and maple-flavored syrup.

### GI Newsletter

As you can see, becoming tuned in to foods with low GI ratings is important for your health and longevity. If you are diabetic, or have a family history of high cholesterol, heart disease, and/or obesity, keeping tabs on the GI of your food intake is very important.

To receive online monthly GI Newsletters from the Human Nutrition Unit at University of Sydney, please go to [www.glycemicindex.com/contact](http://www.glycemicindex.com/contact). The newsletters feature the latest news and research from international experts in the health field, as well as tasty and healthy low-GI recipes for you and your family to enjoy. A comprehensive list of GI foods can be found in a PDF document at [www.glycemicindex.com](http://www.glycemicindex.com).

Source: [www.glycemicindex.com](http://www.glycemicindex.com)

## Balsamic chicken and white bean salad (Low GI Recipe)

### Ingredients (serves 4)

600g skinless chicken thigh fillets, trimmed  
2 garlic cloves, crushed  
1 tablespoon wholegrain mustard  
2 tablespoons balsamic vinegar  
olive oil cooking spray  
400g can cannellini beans, drained  
250g cherry tomatoes, halved  
1/2 cup low-fat feta cheese, crumbled  
50g rocket leaves  
1 lemon, cut into wedges, to serve

### Method

1. Season chicken with salt and pepper. Whisk garlic, mustard and vinegar in a ceramic dish. Add chicken and turn to coat. Cover and refrigerate for at least 20 minutes.
2. Preheat a barbecue plate on high heat. Remove chicken from marinade. Lightly spray chicken with oil. Cook for 1 minute each side or until golden. Reduce heat to medium-low. Cook chicken for 6 to 8 minutes each side or until cooked through. Transfer to a plate. Cover and stand for 5 minutes.
3. Slice chicken. Combine beans, tomato, feta, rocket and chicken in a large bowl. Toss gently. Spoon onto plates. Season with pepper. Serve with lemon.