

Product testing

There are two steps to the acceptance of food products for the GI Symbol Program:

1. Supply of nutrition information – this is to ensure that the product fulfils the specific nutrient profile criteria for its particular food category.
2. Availability of GI data as determined by an accredited laboratory that uses the approved methodology (Australian Standard: Glycemic Index of Foods AS4694-2007).

To be considered for the GI symbol program, the food products must have both sets of data available.

Nutrition Information

Information on the product's current nutrition information panel is acceptable. If necessary, nutrient composition must be tested by a NATA-accredited laboratory. Current nutrition panel data or new laboratory results are to be submitted to the GI Foundation for assessment against nutrient criteria for the relevant product category

Nutritional data needed includes all mandatory nutrients required for the product's nutrition information panel and any other nutrient that is part of the nutrient criteria for GI symbol eligibility.

Sampling criteria are those required by the laboratory that undertakes the testing.

GI Testing

Products must have been tested for their GI using the approved methodology method within the previous 36 months. If formulation changes have occurred in the intervening period, then re-testing will be required.

Method of Analysis (summary only)

The glycemic index (GI) is a measure of the power of foods (or specifically the carbohydrate in a food) to raise blood glucose (sugar) levels after being eaten. To determine a food's GI rating, measured portions of the food containing 50 grams (or in some cases 25 grams) of available carbohydrate are fed to a minimum of 10 healthy people after an overnight fast. Finger-prick blood samples are taken at 15-30 minute intervals over the next two hours. These blood samples are used to construct a blood glucose response curve for the two-hour period.

The area under the curve (AUC) is calculated and reflects the total rise in blood glucose levels after eating the test food. The GI rating (%) of the test food is calculated by dividing the AUC for the test food by the AUC for the reference food (glucose) and multiplying by 100. A reference food is tested on 2-3 separate occasions for each individual subject. This is essential for reducing the confounding influence of differences between and within subjects. The average of the GI ratings from all 10 subjects is published as the GI of that food.