



Glycemic Index Ltd

Position Statement

Lowering the average dietary glycemic index

Definitions

The glycemic index, or GI, is a ranking of carbohydrates in foods or beverages according to their affect on blood glucose levels. Small groups of healthy individuals are given portions of a test food or beverage that contain a standardised amount of available carbohydrate, and their blood glucose levels are measured over a 2 hour period. The same group are fed an equivalent amount of carbohydrate in the form of glucose. The glycemic index is the relative response of the test food/beverage compared to the glucose standard, which is given a value of 100. Low GI foods/beverages are defined as those with a GI value less than or equal to 55, medium GI foods as those with a GI between 56 and 69, and high GI foods as those with a GI equal to or greater than 70 ¹.

The average dietary GI and health

The average glycemic index (GI) of the diet of adults in the developed world is 55 - 60 ². To help reduce the risk of developing of a range of common lifestyle-related diseases like type 2 diabetes, cardiovascular disease and some cancers, people need to lower the average GI of their diet to approximately 45 units ^{2,3}. In addition, it is important that the regular diet provides optimal amounts of all macro and micro nutrients, consistent with national dietary guidelines ⁴.

Lowering the average dietary GI

In order to achieve the required 10 unit reduction in average dietary GI, individuals need to choose, wherever possible, the lowest GI foods/beverages within each carbohydrate-containing food group. Ideally, this means choosing carbohydrate foods/beverages with a low GI (≤ 55) for each main meal or snack (if consumed). Unfortunately, some food/beverage categories like starchy vegetables, rice and white breads have few, if any, low GI alternatives. Individuals may choose to avoid these food/beverage categories entirely, but this may not always be appropriate (due to cultural beliefs/traditions, life-stage, personal preferences, etc...), and therefore may not be an acceptable long term strategy for dietary change. Alternatively, products with a medium GI (56 - 69) may be substituted for high GI alternatives, because they may still have a substantially lower GI than their regular high GI (70+) counterparts and provide a range of essential nutrients important for good health. Under these circumstances, replacement of high GI foods/beverages with medium GI foods will still help to lower the average dietary GI overall.



A range of healthy low and medium GI foods/beverages can be easily identified in Australian and New Zealand supermarkets as they carry the Glycemic Index Tested certification trademark (CTM). The Glycemic Index Tested CTM indicates that the food or beverage has had its GI tested using an approved methodology, at an accredited GI testing facility, using the Australian Standard¹ and that it meets strict, category-specific nutrition criteria that are in line with the dietary guidelines, so they are great choices for all Australians⁴.

Conclusion

Adults in most developed nations need to eat more lower GI foods and beverages to bring the average GI of their diet down to 45 units.

References

1. Standards Australia. Glycemic Index of Foods AS4694-2007
2. Barclay AW, Petocz P, McMillan-Price J, Flood VM, Prvan T, Mitchell P *et al.* Glycemic index, glycemic load, and chronic disease risk--a meta-analysis of observational studies. *Am.J.Clin.Nutr.* 2008;**87**:627-37.
3. Brand-Miller J, Hayne S, Petocz P, Colagiuri S. Low-glycemic index diets in the management of diabetes: a meta-analysis of randomized controlled trials. *Diabetes Care* 2003;**26**:2261-7.
4. Food for Health: Dietary Guidelines for Australian Adults. Canberra: Commonwealth of Australia, 2003.