

## FRUCTOSE

Fructose is the simple sugar present in fruits, some vegetables (eg. corn), honey and table sugar (which is sucrose – a compound sugar made up of glucose and fructose).

Fructose itself does not require digestion by enzymes and is completely absorbed up to quite high levels (25-50g) in most people. Absorptive capacity varies from person to person, and can be modified by the presence of other sugars such as glucose (increased) and sorbitol (decreased).

**INCOMPLETELY ABSORBED FRUCTOSE** is fermented in the large bowel by gas producing bacteria. Having excessive amounts of fruit (especially fruit juice, dried fruit) can cause symptoms such as bloating, reflux, abdominal discomfort, wind and diarrhoea.

- *Although incomplete fructose absorption can cause stomach and bowel symptoms, it does not cause other symptoms such as headaches, fatigue or skin rashes. These are more likely to be due to other food chemical intolerances.*
- *Breath hydrogen testing can measure fructose absorptive capacity but is of no value for diagnosis of intolerances.*

If you have an irritable bowel and are experiencing ongoing symptoms on your elimination diet, you may need to limit your intake of pears (which contain sorbitol as well as fructose). Refined sugar (glucose and fructose) is usually well tolerated. Raw sugar should be avoided since it contains salicylates and may be contaminated with pesticide residues.



### INTOLERANCES ARE DOSE-DEPENDENT

**NOTE:** a glass of orange juice is made from at least 4-6 oranges.

In addition to fructose, all fruit contains natural chemicals that can cause reactions in susceptible people. Salicylate levels vary, and are lowest in the flesh of pears. Apples contain moderate to high levels of salicylates, whilst oranges and other citrus fruits contain high levels of both salicylates and amines. Grapes and tomatoes contain high levels of glutamate in addition to salicylates and amines.

Improvement of symptoms after going onto a **LOW FRUCTOSE DIET** is most likely to be due to the simultaneous reduction of intake of natural chemicals in fruits and vegetables.