

# What has fructose got to do with a gluten intolerance ?

The symptoms of a 'gluten intolerance' can be similar to those of 'fructose intolerance', and whilst there is general community awareness of 'gluten intolerance', there is less awareness of 'fructose intolerance'. This is relevant to those people following a 'gluten free' dietary regime, but still suffering with symptoms.

The symptoms of a gluten intolerance include :

- Diarrhoea (probably the most major symptom).
- Anaemia (from poor iron absorption), along with low Vitamin B12 absorption.
- Bloating
- Abdominal pain
- Vomiting
- Fatigue
- Breathlessness
- Weight loss (from lack of absorption of calories).  
Bloating

The symptoms of Fructose Intolerance include:

- Diarrhoea
- Bloating
- Abdominal pain

There is also an association with depression, and low tryptophan levels.

A wheat/gluten free diet will improve both conditions, but will only partially resolve the 'fructose malabsorption' symptoms.

**Fructose** is commonly termed 'fruit sugar', as it is the source of sweetness in fruits and honey, existing as 'free fructose'. It is also found in sucrose – commonly known as 'sugar' – it is bound with glucose. Fructose is also found in some vegetables and **wheat**, as fructans ( which are chains of fructose linked together).

Fructose is absorbed in the small intestine. In people with fructose malabsorption, the unabsorbed fructose reduces the absorption of water in the large intestine, and is metabolized by normal colonic bacteria to short chain fatty acids, along with hydrogen, carbon dioxide and methane gases. This leads to the symptoms of bloating (from the gas), diarrhoea, wind and abdominal discomfort – even pain.

A simple home test that may indicate a 'fructose malabsorption' issue, is to reduce all forms of fructose for 1 week. Additional to wheat products, this means avoiding many fruits (especially apples, paw paws, mango, watermelon, honey melon and pear) and some vegetables (especially onions), all products using corn syrup solids as the sweetener, sugar, honey and fruit juices.

Go to [www.sacfs.asn.au/download/SueShepherd\\_sarticle.pdf](http://www.sacfs.asn.au/download/SueShepherd_sarticle.pdf) for a more comprehensive list of foods, and more detailed explanation of fructose malabsorption.

If symptoms improve, there may be a case for seeking a Clinical diagnosis for 'fructose intolerance'. This involves a 'hydrogen breath test', which is non-invasive, and can be arranged by a G.P.

