

# Food, Mood and IBS

## Food and Mood

When we are frantically busy and the sheer effort of holding it all together gets too much, we often turn to food for solace and comfort. Many of us eat, not because we are hungry, but because we are exhausted, anxious or paradoxically 'fed up'.

Food doesn't just satisfy the anxious drive to eat, it reduces social anxiety and rewards effort. Eating calms us down and distracts us from obligation and responsibilities. And, if eating is accompanied by a glass of wine, the pleasure is so much greater. We want to keep doing it. After all, are we not all lotus eaters to some extent?<sup>1</sup>

But what if the very activity that gives us so much pleasure also causes pain and bloating and upsets our bowels. What does that mean? How can we cope with our need without suffering for it?

Our relationship with food so often reflects our relationship with other people. If loneliness were classified as a disease, it would be as common as obesity. Overeating may reflect a need for companionship. The anorexic on the other hand is often solitary

and may keep other people away. And food intolerance may reflect general feelings of distrust and insecurity.

## Food allergy and intolerance

About 80% of people with IBS say that their symptoms are affected by the food that they eat. Yet, when they are tested, less than two percent have a food allergy, about four percent may have Coeliac Disease. Similarly, biological causes of food intolerance, mainly lactase deficiency and hereditary fructose malabsorption, are uncommon, occurring in less than 20% of the UK population.

## Is it the intolerable food or the intolerant gut?

A wide range of foods induce symptoms in people with IBS. These include fats, fibre, hot spices, coffee and those fruits and vegetables that contain poorly absorbed sugars and are collectively known as FODMAPs. The latter may retain fluid in the gut, causing diarrhoea or they may be fermented by colonic bacteria and generate gas, causing flatulence, pain and bloating. But many people with IBS have their own idiosyncratic food intolerances that defy medical explanation, though could have historical associations.

This lack of specificity begs the question: is there something about having IBS that makes the gut less tolerant to food, especially those foods that stimulate the gut? After all, people who do not have IBS usually eat a wide variety of foods with impunity.

Many studies over the last 20-30 years have shown that people with IBS have a gut that is more sensitive to mechanical distension or chemical stimulation<sup>2</sup>. Although this might be induced by infection or inflammation, the most frequent association would seem to be stress (which may act via the brain gut axis to cause mild inflammation). This might explain why symptoms of food intolerance can fluctuate according to what is happening in a person's life. For example, patients with IBS may be able to eat more foods containing FODMAPs and fat when they are relaxed and confident. It may not be so much the food that is the problem but the context in which it is eaten and what it might represent.

Food and mood work together and can so easily create a vicious cycle of anxiety and sensitivity. Anxiety makes the gut sensitive to food, which causes symptoms and creates more anxiety.

## How does 'what happens' cause gut reactions?

When things upset us, we may react emotionally with anxiety, frustration, desperation or sadness, but we also experience bodily reactions.

Emotions probably start as bodily sensations or reactions. The perception of emotion requires a context, *'I am angry with you'*, *'worried about something'*, *'sad that it happened'*.

Below the age of about three, infants do not have the integrative capability and the language to contextualize what they feel, let alone why. All they can do is react and hope that somebody understands how to comfort them. Vomiting, possetting, abdominal gripes, diarrhoea,

constipation, pallor, redness in the face or screaming are all expressions of emotional distress that may respond to a cuddle. As they get older and their frontal cortex develops, they learn, through their mother or caregiver, to associate what they are feeling with what has happened and recognize that they may be worried, angry or sad about it. In this way what happens can be dealt with when brought to mind as an emotion.

This does not work in every stressful situation. A major upset can cause the frontal cortex to go off line while the brain stem reacts with emotion and an increase in visceral sensitivity. So, if we can't acknowledge the context or resolve the emotion by bringing it back to mind, we may be left with a hypersensitive gut which reacts to food or changes in mood by generating symptoms of IBS. Also, while ever the frontal cortex is impaired, changing circumstances cannot be buffered by thought and go straight to the brain stem where they induce 'gut reactions'. When the gut has been 'sensitised' by trauma, everything can seem to set it off and trigger symptoms.

## How does stress increase gut sensitivity?

The gut is the most vulnerable surface in the body. Just one cell thick, it is continuously exposed to an enormous range of chemicals and mechanical influences. Yet, for most of the time, we are completely unaware of what is happening.

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***'Our digestions, going sacredly and silently right; that is the foundation of all poetry.'***

**G.K. Chesterton.** *The Man who was Thursday.* 1908.

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Stress is perceived by our sense organs and acts via the amygdalae, paired nuclei in the brain

stem that act like smoke alarms and stimulate the sympathetic nervous system. This not only increases the sensitivity of the gut directly but it also enhances the transmission of signals from the gut by suppressing the descending nerve traffic that normally damp them down. If we are upset about something and cannot relax over a meal, we may be much more aware of the presence of food in the gut and experience sensations of pain and bloating along with bowel disturbance. Food intolerance may therefore represent how we feel about what is going on.

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*...it may not be what you eat,  
but the way that you eat it.*

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If you are busy and trying to grab a bite to eat before dashing off to work or hurrying to get the children to school on time, then that bowl of cereal may cause indigestion and pain. The gut is sensitive and stressed and cannot digest it properly. If you grab a sandwich at lunch time without getting up from your desk, then it may not be surprising you feel bloated. Digestion and normal intestinal function are regulated by the parasympathetic nervous system which works best if you allow yourself time to relax.

## The things that happen at mealtimes

Mealtimes can be a cauldron of emotion. Issues that have been simmering all day, tend to boil over when families or couples come together, talk and try to sort things out. They may dysregulate the nerves that control our appetite and digestion and cause a conflict in the gut, resulting in indigestion, pain, bloating and bowel upset.

Emotional upsets may not only make you feel sick at the time. If they are indicative of a serious disruption of a relationship, the ongoing trauma may predispose to ongoing gut symptoms. These may be triggered by anything

that recalls the context, including, of course, the food that was being eaten at the time.

One of my patients developed a severe intolerance to fish after her then fiancé rejected her for somebody else during what she thought was going to be a romantic meal at a fish restaurant. The context of the argument may be repressed and forgotten, but it's the body that remembers and 'keeps the score'<sup>3</sup>, and the food is often considered to be the culprit.

## Don't just test for the food, look for the context

If eating tends to bring on your IBS symptoms, of course you assume that something in the meal has upset you. It's a no-brainer! You may even keep a food and symptom diary to try to find out if particular foods always tend to cause your symptoms. You may then avoid these and see if you feel better. With so many different foods that can upset your sensitive gut, this can be a long process and one that is fraught with frustration. The low FODMAP diet<sup>4</sup> has made it simpler by excluding all those foods that contain poorly absorbed sugars from your diet and then reintroducing them one by one until you find out what you can eat and what you can't. The problem with that is that you may exclude so many foods, you can end up with a diet that is nutritionally depleted, yet be unable to reintroduce foods for fear of pain.

A better way might be to try to find out what it is that is making your gut sensitive and try to reduce its impact. You might do this by filling in the IBS symptom tracker, (to gain access to the symptom tracker see <https://www.theibsnetwork.org/> to become a member). You may discover that your symptoms tend to come on at particular times, perhaps every Monday morning when you go back to work, maybe when your partner's children visit, perhaps after a telephone call from your parents. When you have brought it back to mind, you can then talk

about the situation that upsets you and work out a resolution. Find the time and space for yourself to relax, be mindful, living in the present will allow you to get what happened in perspective.<sup>5</sup> It may be the social context that is responsible for your sensitive gut, and gassy foods are what trigger the symptoms.

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## The meaning of what we eat

It is not just the memory of an upsetting meal that can cause food intolerance or even being too busy and stressed out, it could also be what a particular food represents. There is so much personal history and meaning attached to what we eat. Unease about certain foods may be explained and exaggerated by the ideas and opinions we gain from family, friends, the internet and the media. 'Greens are healthy. Wheat may be toxic. Milk may generate gas and cause bloating. Shellfish can cause allergies. We must eat five fruits a day, but restrict red meat. Muesli for breakfast is a good start for the day.' It is not always the food that makes us ill, it may be the idea that it might. If you believe that something will make you ill, it almost certainly will. This is known as the nocebo effect, the opposite of the 'placebo effect'.

Twenty years ago, for her dissertation for the Sheffield Masters Course in Human Nutrition, Joan Ransley conducted a study on people with IBS, none of whom had any biological evidence of food intolerance or allergy, in order to find out what different foods meant to them. Her results revealed just how much meaning was conveyed by different foods. For example, chocolate was

a treat but too much was associated with guilt, muesli was a controlling food, milk intolerance could be associated with a difficult relationship with mother, red meat had connotations of aggression, an intolerance to shellfish indicated ambivalent feelings about sex.

## The psychology of dieting

It has been estimated that about 40% of women and 20% of men are on a diet of some sort; low fat, low sugar, gluten free, dairy free, low FODMAPs, the Atkins diet, food combining, the Hay diet, the Paleo diet. All of these diets emphasise which foods should be excluded or restricted, so if we break our diet and eat something that is prohibited, then we may feel guilty and tense and get ill. It's a self-fulfilling prophecy that only serves to convince us that it was the food we ate that caused the problem, not the guilt we felt.

The more people restrict and reject food, the more it is desired. Anorexics and people suffering extreme starvation think about food most of the time. Those with food intolerances worry that what they most crave is going to give them pain. That makes their gut rebel even more. They are in conflict, both in their mind and in their gut.

Diets feed our anxiety around food by prohibiting so many of the foods we either like or have come to regard as healthy. No sooner had people with IBS adapted to eating a healthy, low fat, high fibre diet, rich in fruit and vegetables than the low FODMAP diet encouraged them to exclude their mainstays of fruit, vegetables and cereal fibre. Even staples such as bread and milk were restricted. Although the low FODMAP diet is a scientific approach to reducing foods that stimulate a sensitive gut, it can pose a desperate dilemma for vegetarians, vegans or people on a weight reducing diet. How can they know what to eat without upsetting their gut? And, of course, the ensuing gut-focused anxiety over what they should eat may just make their food

intolerance worse. As one patient said to me recently, *“Following the FODMAP diet is like living in a dietary police state; one onion out of line and I am tortured by pain.”*

Nevertheless, some trials have shown that as many as 70% of people can experience an initial reduction in IBS symptoms after the exclusion phase of a low FODMAP diet<sup>4</sup>. And, with the right support from a dietitian, and motivation, some may be able to reintroduce certain foods and find a regimen that suits them. Not all trials report such promising results<sup>6</sup>. It is however important to be flexible and willing to adjust your diet according to your symptoms.

Rigid rules around food set you up for failure and disappointment. Self imposed food restriction can be a form of masochism. The deprivation and hunger may cause you to obsess about the food you are missing. But if you cheat, feelings of deprivation can be amplified by pain, disappointment and guilt. Severe dietary restriction may make this even worse through additional nutritional stress.

So choose the foods you eat with care, but do not make dieting an obsession. That only increases your anxiety and food sensitivity, tempting you to eliminate more foods in a desperate attempt to calm your rebellious bowels. Moreover, it fixates your thoughts, preventing you from making the changes that might resolve what is making your gut so sensitive.

## How can you manage your food intolerance?

Food intolerance is rarely constant unless reinforced by rigorous dietary control. Mood, however, is forever changing and with it, the sensitivity of your gut. So although you may find that restricting certain foods, for example a low FODMAP diet, may reduce your symptoms when they are particularly troublesome, be flexible. When you feeling more confident and your symptoms are better, extend your diet and eat

more of the foods you may have excluded.

Satisfaction derives from the expectation of a meal, the presentation and the social context. By preparing your own meals you have the flexibility to choose and control the ingredients and can more easily relax into a confident and healthy pattern of eating.

## Ten top tips

1. *When things upset you, try to recognize what has been happening. Don't immediately assume it is the food.*
2. *There is no reason why you can't eat the foods that you like, but you may need to limit your intake when you are feeling less secure.*
3. *Adopt mindfulness techniques to reduce stress. Allow time to relax, do the things you enjoy, remain active.*
4. *Be in control of what you are eating. Cook your own meals.*
5. *A low FODMAP diet is not for life; only when and for as long as you need it. Try reducing your intake of onions and pulses first to see if this makes a difference.*
6. *Get to know when you need to reduce your intake of trigger foods.*
7. *If you eat something that upsets you, let it be your guide to know your limits.*
8. *Be careful about what you eat, but don't take it too seriously.*
9. *Don't try to be perfect. You will inevitably fail. Be good enough. Aim to get things right 70% of the time. This applies to your diet, your work, bringing up your children and your social life.*
10. *When you are ill, ask yourself what has happened to make you sensitive to the food you have eaten. Ask yourself why that should be.*

## References and Further Reading

1. The term lotus eater has come to mean a person who spends their time indulging in pleasure and luxury rather than dealing with practical concerns. In Greek mythology the lotus eaters were a race of people living on an island near North Africa where lotus plants grew in abundance. The lotus fruits and flowers were the primary food of the island and were narcotic, causing the people to sleep in peaceful apathy.
2. **Delvaux, M.** (2002). *Role of visceral sensitivity in the pathophysiology of irritable bowel syndrome.* Gut, 51(suppl 1), 67-71.
3. **Van der Kolk, Bessel** (2012). *The Body Keeps the Score.* Mind, brain and body in the transformation of trauma.
4. **Staudacher, H. M., Whelan, K., Irving, P. M., & Lomer, M. C. E.** (2011). *Comparison of symptom response following advice for a diet low in fermentable carbohydrates (FODMAPs) versus standard dietary advice in patients with irritable bowel syndrome.* Journal of Human Nutrition and Dietetics, 24(5), 487-495.
5. **Garland, E. L., Gaylord, S. A., Palsson, O., Faurot, K., Mann, J. D., & Whitehead, W. E.** (2012). *Therapeutic mechanisms of a mindfulness-based treatment for IBS: effects on visceral sensitivity, catastrophizing, and affective processing of pain sensations.* Journal of behavioral medicine, 35(6), 591-602.
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## About this factsheet

This Factsheet was written by Professor Nick Read, M.A., M.D, F.R.C.P Medical Adviser to The IBS Network, July 2016.

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