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A Healthy Bowels Report

Could Glutamine be the natural missing link for your bowel health?

Glutamine could be the vital nutrient for your gut health but its importance has only been recognised in the last ten years. It could be the important missing link for many people whose bowels are not healthy.

Most people now understand the importance that certain types of fibre and natural probiotic bacteria have to their long term bowel health. However, there is one new amazing nutrient, Glutamine, which has been shown to be just as important and in some cases even more so. The main aim of this report is to tell you more about this extraordinary nutrient and to explain why it is just so vital and why in some cases it might be deficient.

Glutamine – what is it?

Glutamine is an amino acid that is derived from protein in food. Most of your body structure is made up of protein which is the major component of the muscles, heart, liver, bowel, kidneys, and other organs so it is not surprising that you need a lot of protein in your food to survive.

When you digest food, the body breaks down protein into smaller particles for ease of absorption and utilisation. These smaller particles are known as amino acids. Once they are absorbed into the bloodstream, these amino acids can perform their vital duty of rebuilding body protein. This means they maintain the use and strength of the muscles and other organs.

There are a number of different amino acids but glutamine is the most common one.

Glutamine is so important because:

- It is a key to the metabolism and maintenance of muscle.
- It is the primary fuel, or energy source, for the entire immune system.
- It is essential for DNA synthesis, cell division, and cell growth, which are all necessary for wound healing and tissue repair.
- It is the primary nutrient for the cells that line the gastro-intestinal tract.
- It is important for neutralising toxins in your body.

But there is one part of your body that needs it most of all. Glutamine is the primary nutrient for the cells that line the gastro-intestinal tract.

Why is Glutamine so important for bowel health?

One way to look at Glutamine is to refer to it as your GUT'S BEST FRIEND because it is in every cell that line the digestive tract.

These cells are so important because they are responsible for the shoulder to shoulder tightness that the digestive tract needs in order to act as a barrier between the food that is being digested and the body itself.

When the cells are doing their job properly, tiny particles of food that the body needs to survive are absorbed through the digestive tract wall into the blood stream. They reject unwanted food and waste matter that the body doesn't need.

As these cells need to be replaced every four days they use up an enormous amount of energy. This energy is supplied by Glutamine and your guts need plenty of it.

Most other organs in the body actually use glucose as an energy source, but your intestinal tract is different.

This is why Glutamine is so vital to the health of your digestive system. Sufferers of Inflammatory Bowel Disease for example are more likely to be depleted of glutamine than non-sufferers.

If there is a deficiency of Glutamine this will mean that the cells that line your digestive tract will not get fed. This weakens them and reduces their ability to perform their important task of acting as a barrier to unwanted undigested food getting into the body.

What can deplete you of this vital nutrient?

Anything that attacks your digestive system can increase its requirements for Glutamine.

Simple daily stress is one example. Also athletes who can put their bodies under great physical stress have been shown in a number of studies to be depleted of Glutamine, leaving their immune systems weak and themselves more prone to infection.

Prescription products such as anti-biotics are known 'irritants' for the bowels and they increase your requirements for the important fuel Glutamine.

Anti-biotics are well known for killing bad bacteria. Unfortunately, they don't differentiate between good and bad bacteria in your digestive tract, particularly in your large bowel. The good bacteria form a protective shield on the walls of your digestive system and if they are knocked out by the anti-biotics, your gut wall can be weakened.

Another attack to your system can come from the widely prescribed non-steroidal anti-inflammatory drugs, which have a habit of punching holes in your digestive tract. Excessive alcohol can have the same effect.

Adverse reactions or intolerances to certain foods can also cause stress. The obvious examples are intolerances to wheat and dairy, but there are many others. Gluten in wheat and whey protein in dairy can be difficult for the body to break down and this, over time, can put extra stresses on the digestive system. Undigested food floating around and decaying in the gut can provide the perfect conditions for irritating the intestinal wall, making it 'leaky'.

Why depletion can weaken your digestive tract and immune system.

If you suffer any of the following symptoms, then you might consider taking extra Glutamine in your diet:

Bloating, chronic fatigue, Irritable bowel syndrome, increased susceptibility to viruses and bacterial infections, poor digestion, sensitivity to a range of foods, weakened immunity and inflammatory responses in your joints.

If you get sick, proteins can become quite vulnerable and break down leaving you weak and more susceptible to infection.

The main reason for this is that when your body is under stress, your intestines become more active and use more energy, particularly if the location of the stress is in the intestines themselves. The result is a rushed increase in the demand for Glutamine.

So, in order to supply this increased need for Glutamine, the body can catabolise Glutamine in the muscles and other areas to supply the requirements of the intestines. (This is one of the causes for weight loss during illness).

Peter robs Paul to meet the immediate demand.

Physicians have, over the years, tried to rebuild or maintain body protein in sick individuals, but this has been found to be a difficult or near impossible task. It is as if something were missing from the food provided.

The breakthrough

In the last 10 years it has been found that glutamine can form a part of this missing link.

If the body can get extra supplies whilst under stress, then this will mean that the body will not have to rob peter to pay paul.

Did you know that in Japan, glutamine is routinely administered for people undergoing any type of operation as this helps the body cope better with any related stress?

So, if your body does come under stress, particularly if this stress is gut related with something like IBS, then supplementation with Glutamine could be vitally important.

If your digestive system becomes depleted of Glutamine your cells will not get the energy they need to do their work, leaving your digestive tract more prone to infection and to becoming 'leaky.' A leaky gut is one which is more likely to allow particles of food into the body that should otherwise be eliminated.

It doesn't take much imagination to understand that if unwanted food and bacteria is getting through into your body, this can't be good for you. Many practitioners believe that a 'leaky' or 'inflamed' digestive tract can be the start of other seemingly unrelated diseases.

So maintaining good levels of Glutamine is one way to help keep your digestive tract in good shape.

Let's take a look at other nutrients that have been shown to be important as well.

Why multi vitamins are good for your bowel health.

Whereas glutamine is the most important nutrient for bowel health, there are a whole host of others that have also been shown to be of benefit. In fact there have been three studies in the last few years that have supported this statement.

The first study was reported recently in the Lancet. It looked at the long term use of multi vitamins and their effect on colon health. The results were very conclusive. Long term use of multi vitamins was very protective and reduced the incidence of Colon Cancer.

The second was a study from Harvard University where they analysed food questionnaires given to 88,756 women in the nurses's health study. **They concluded that women who had taken multi vitamins for over 15 years had a significantly lower risk of colon disease than those who did not take supplements.** The researchers believe this could be due to the folic acid in the multi vitamins. (The Nurses study is one of a number of studies into the long term health of our diets that are going on around the world).

The conclusion: never before has such a massive reduction in colon disease risk been shown by the use of a multi vitamin and mineral formula.

So to reinforce these amazing findings, three separate Pilot studies carried out in Europe have shown the positive effect on bowel health of supplementation with calcium, vitamins ACE and omega 3 fatty acids plus folic acid.

So, which nutrients in addition to Glutamine have been shown to be good for long term bowel health?

Calcium

After protein, fat and carbohydrate, calcium in the body has the highest RDR (recommended daily requirement) of any nutrient.

Milk has often been advocated as the main way of supplying calcium. However, for various reasons, milk is not an option for more and more people particularly those with bowel issues, so getting extra calcium in supplement form can be useful.

A long term study in the USA (known as the nurses study (mentioned earlier) which follows the diets and health of more than 80,000 nurses over the course of their life) has indicated that 1200mg of calcium per day reduced the incidence of colon cancer by 75%.

Folic Acid

Cells in the digestive tract require folic acid to replicate and heal. Ironically the medication that is often dispensed to treat inflammatory bowel disorder can drain the body of folic acid.

Sensitive bowel disorders can quite often make it difficult to absorb folic acid so extra is always useful.

Dietary sources of folic acid are liver, kidney, broccoli and other greens, beef and turnips.

As cooking readily destroys folic acid, taking it in supplement form can be a good option.

Selenium

Selenium is found in many enzymes. It is the chemical catalyst without which our metabolisms would grind to a halt. It is a particularly important antioxidant enzyme that mops up free radicals and protects cells from damage. Selenium helps improve the immune system and to defend you from infections. Selenium is a natural anti-inflammatory.

Vitamin A

Necessary for the healing of mucus membranes, vitamin A is available from liver, cod liver oil, herrings and mackerel. This vitamin is a major antioxidant. It is needed for healthy reproduction and defence against infection amongst other things.

Because of its close connection to mucus membranes and the cells in the digestive tract, and its ability to facilitate tissue repair, vitamin A is an important addition to any bowel health supplement.

The Vitamin B Complex

The B vitamins work best when balanced together rather than taken on their own. They are important for maintaining overall good digestive health.

Supplementation can be particularly important in any Inflammatory Bowel type of situation when the body can weep and deplete the B vitamins. Also those with yeast problems find it difficult to metabolise B6 which is the most important B vitamin for digestive health. B12 is another member of the family and this is often deficient in people with low stomach acid.

Vitamin C

This is the most amazing antioxidant and is ideally taken with food and minerals.

Vitamin C is the nutrient that does it all. It is the chief antioxidant nutrient and it also extends the lives of other antioxidants including vitamin E. No protective formula would be complete without vitamin C.

It is also used to build collagen and is therefore very important for repairing mucus membranes. It is available in many fruits and vegetables.

Vitamin D

Since the beginning of this year I have lost count of the number of positive articles that have been written in the press about vitamin D. Researchers have taken a 'relook' at this vitamin and found that many people are deficient in it despite the fact it is so important for many aspects of our health, including our bowel health.

It is the 'wonder' vitamin of the moment. A colorectal cancer meta-analysis (a summary of recent studies), published in the American Journal of Preventative Medicine, pulled together five previous studies on vitamin D and showed an overall trend that those with low levels of vitamin D were far more vulnerable to colon cancer.

It is worth adding that a lack of vitamin D is one of the most frequently encountered deficiencies for those people with Crohn's and Ulcerative Colitis.

Vitamin E

If vitamin C is the king of all antioxidants, then vitamin E is the chief executive.

It is one of the four most researched and talked about antioxidants.

It can help to give support to the immune system and it can influence tissue inflammation. For this reason, it is an important ingredient for bowel health when inflammation is present but it can also be considered as a preventative as well.

Zinc

This is a vital nutrient which is often deficient in our diets. This is mainly due to the fact that the soil on which we grow our food is so often depleted of Zinc.

It is important for all tissue building and repair as well as producing enzymes and HCL (Hydrochloric acid) which you need to break down protein in your stomach. The more efficiently you break down your protein in your stomach, the easier it is for your small intestine to digest it.

I read a report recently in which it was reckoned that 40% of people who have crohn's disease are deficient in Zinc.

In developing nations giving supplements to Zinc deficient children cuts down the number of cases of dysentery and diarrhoea.

After Glutamine, Zinc is probably the next in line in its importance for digestive health.

So, the question that everyone always asks is: Don't we get all the nutrients we need from food? Another US study would suggest not.

Many people over the age of 50 are deficient in important nutrients

Researchers writing in the Journal of the American Dietetic Association also found that a substantial portion of people in this age range do not get enough vitamins and minerals from their diet alone and they feel that the use of supplements is necessary.

Are you 50 plus? Are you taking nutrients that are known to be vital to bowel health?

The researchers found that fewer than half of the 4,384 studied took supplements daily.

Those who did take supplements succeeded in meeting recommended daily levels of vitamins A, B and C as well as iron, folic acid and zinc.

In contrast, the study found that those that relied on just diet alone had intakes below the estimated average requirements for Vitamins A, B6, and C, folic acid, zinc and magnesium.

Disturbingly and in stark contrast, those who did take a daily multi vitamin and mineral supplement did not have these deficiencies.

Supplements definitely improved the nutrient intake of older adults. More than 80% of those taking a multi supplement met the requirements for vitamins A, B6, B12, C and E, folic acid, iron and zinc, although not magnesium, the researchers found.

These statistics are absolutely amazing if you think about it. Just by taking something as simple as a good multi vitamin and mineral formula can help to make up inadequacies in the diet. It blows the theory out of the water that we get all our nutrients by diet alone.

Why are we so nutrient deficient without supplements?

The outcome of these studies does not surprise me as it is estimated that most of the food we eat today contains barely half of the vitamins and minerals it did fifty years ago. These nutrient deficiencies, it seems, are more prevalent than we dare to admit.

Today's high yield wheat crops offer only half the protein they did a century ago. Processing methods by their very nature deplete food nutrients.

The length of time it takes to pick, transport and stock onto a supermarkets' shelves means food has lost much of its nutritional value by the time it finally gets to our plate. While alternatives such as organic foods are free of dangerous GMO's and many toxic pesticides and fertilizers, they are far from perfect as it can take decades for soil to fully recover from years of abuse.

How chemicals and food processing methods affect our food.

The over-cultivated soil in which we grow our food is depleted of zinc, manganese, chromium, molybdenum, calcium and magnesium.

The superphosphate fertilisers we use in place of manure contain mainly nitrogen, potassium and phosphorus, but are deficient of the many vital trace elements contained in good, old-fashioned manure.

Refining wheat into white flour strips it of between fifty and eighty percent of its cobalt, magnesium, zinc, chromium and manganese.

Refining sugar cane into white sugar depletes it of ninety-nine percent of its magnesium.

And so it goes on.

It seems that we do not get all the important nutrients from our food that our parents and grandparents did.

So, what does all this mean?

Looking after your bowels is the key to your health.

The main aim of this brief report has been to give you a quick update on which nutrients are now known to be vital for the health of your bowels and digestive tract.

It appears from the latest research those of us over the age of 50 would benefit from a multi vitamin and mineral supplement to try and make up for potential deficiencies in our diets.

It is a fact that everyone on the planet at some point in their lives will require extra vitamins and minerals to compensate for deficiencies in the standard UK diet. In times of special need – during pregnancy, periods of overwhelming stress, or illness – nutrients can be good therapy, so it's vital to keep updated on the latest research, particularly if you are over 50!

The more you get to understand the workings of your bowels, the more you should realise that healthy bowels are the key to our overall health.

Remember, prevention is always better than cure so if taking Glutamine and something as simple as a good multi vitamin can help your bowel health, they are probably worth considering!

For further information FREEPHONE 0500 127249