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FACTSHEET

Digestive Support as we Age

Our bodies are changing all the time, influenced by the environment around us, the food we eat and of course with age. After our developmental youth and peak in our 20's, some things are said to start to slow down in the body from the age of 30 onwards, with a particular shift observed after the age of 65. This however, doesn't need to mean that everything is downhill from there on! Some changes could be due to be the cause of a longer period of poor nutrition and/or lifestyle choices as opposed to a definitive consequence of old age.

Digestive Function Alterations with Age

We are home to trillions of different microorganisms, mainly located within the digestive tract. A healthy balance of beneficial bacteria plays an essential role in supporting healthy digestive and immune systems that can impact on the optimal function of every part of the body. Keeping a healthy digestive system should assist in optimal absorption and utilisation of nutrients from food, remove potentially damaging pathogens and toxins and reduce symptoms such as bloating and constipation.

A healthy balanced gut flora could be compromised over the years by infection, antibiotic therapy, travel, stress, excess alcohol or periods of inadequate nutrition. The composition, diversity and activity of this microflora is seen to change with age, with fewer bifidobacteria and lactobacilli and a less diverse range of species[1]. Effects appear to be more prominent in those in care homes and seem to correlate with a greater vulnerability to inflammatory and viral disease[2].

Digestive function and food choices appear to change with age and can range from any of the following:

- reduced stomach acid levels[3], subsequently comprising protein digestion[4] and possibly resulting in greater putrefaction by certain bacteria in the large colon
- decreased digestive enzyme production[5]
- reduction in absorptive capacity[6]
- decreased intestinal motility
- altered gut immune function[7]
- a reduced desire to cook a fresh meal due to a smaller family unit
- loss of sense of taste and smell
- decreased appetite
- poor chewing ability, possibly due to dentures or reduced muscle strength in the jaw
- impaired movement can negatively impact on the ability to shop for and cook fresh meals, and on the stimulation of colonic muscle necessary to propel waste through the colon.

Constipation

Constipation is common as we age and is often accompanied by a fall in numbers of beneficial bacteria[1]. Changes in the intestinal flora can in turn affect intestinal motility. Decreased water intake can cause stools to become hard and difficult to pass. An increase in easy to prepare low fibre processed foods and a reduction in fresh fibre rich salads and vegetables can affect the ability of waste products to form a solid bulky stool and ease movement through the lower digestive tract. The bulkier the faeces the more pressure it puts on the wall of the intestine, stimulating the muscles to contract and force the contents forward, a process known as 'peristalsis'. Decreased movement and intestinal motility can result in faecal impaction, which is associated with increased bacterial fermentation and gas production[1]. Slow waste removal in the colon and a build-up of toxins could also have an effect on brain fog and confusion in the elderly.

Loose Stools

Loose stools, bloating, flatulence and abdominal pain, can also seem to worsen with age[5]. These are common symptoms of poor digestion, such as lactose intolerance (inability to digest milk products). This rapid passage of the stool along the digestive tract, could cause damage to the gut wall and impair the absorption of nutrients.

Importance of Fibre

If there is insufficient dietary fibre or water in the diet, the faeces will move more slowly. There is more time for water to be absorbed from the ingested food into the rest of the body, leaving the faeces smaller and harder, which in turn is more difficult to move. Dietary fibre is found in natural wholefoods such as salad, vegetables, fruit and in the cell walls of wholegrains, legumes, nuts and seeds. For those who need a little extra fibre than their diet provides, psyllium husk is a gentle fibre supplement known to absorb much more water than other common fibres. It forms a soft gel like substance, shown to be much gentler than wheat bran[8] and without the side effects of laxatives[9]. Psyllium is also a popular supplement for use in cases of loose stools due to its ability to absorb excess liquid and thereby improve stool consistency[10].

Potential Benefits of Probiotics

One solution to help balance the gut flora is to consume fermented foods or an easy to take probiotic supplement. Improvements in constipation in the elderly have been seen with probiotics, increasing stool frequency by 24% in one study[11]. Taken for 3 months a multi-strain probiotic was shown to significantly shortened common cold episodes by almost 2 days and reduce the severity of symptoms by 23%[12]. Additional digestive enzyme supplements and probiotic bacteria have been demonstrated to relieve lactose intolerance, support a healthy gut lining and to improve lactose digestion.

Potential Benefits of Prebiotics

Soluble prebiotic fibres selectively stimulate the growth and/or activity of beneficial bacterial species already resident in the colon[13]. Lactobacilli and bifidobacteria are more efficient at fermenting these prebiotics than pathogenic strains, and produce a lot less (if any) gas during fermentation. They are found naturally in foods such as Jerusalem artichokes, onion, garlic, asparagus, chicory, leeks and bananas, or purchased in a supplement form (e.g. GOS, FOS and inulin). Prebiotic foods and starchy vegetables could however, cause some bloating in some people until their levels of bifidobacteria are increased so it is wise to increase intake gradually.

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