



LOOKING AFTER OUR DIGESTIVE SYSTEM

We may be eating all the “right” foods but as well as considering the foods we put into our bodies any holistic approach to nutrition must also consider the body’s ability to digest and assimilate all the goodness that passes through our mouths. Our digestive system tends to be overlooked as we fixate on the quest for health through nutrition. The positive impact of our food choices can be enhanced if we also give some attention to supporting our digestion.

The how of eating

Digestion begins when our body is anticipating food. The smell and sight of food activate our salivary glands and prepare the pancreas to release digestive enzymes. These moments between sitting down to eat and actually putting the food into our mouths are valuable and offer an opportunity to cultivate good digestion. Any pause we can create here will be helpful. We can allow time for the sight and smell of the food to excite our digestive system; we can bring our focus to eating and let go of whatever busy-ness we are carrying; we can relax the body and move into receptive mode; we can welcome the food into our bodies.

Let’s unpack this a little further. Digestion is facilitated by the parasympathetic nervous system. The parasympathetic nervous system is activated by relaxation, the sympathetic by action. When we eat food ‘on the run’ or come to the table stressed the sympathetic nervous system is dominant and energy and blood are shunted away from the digestive system toward the brain and muscles. There is a strong physiological reason behind this simple call to relax, to slow down before eating. Eating in a relaxed state benefits digestion. Simple.

Relaxation can also include attending to posture. If we eat slumped in an armchair or twisted we can interfere with the simple mechanics of digestion. The digestive organs don’t like to be compressed. So an open but not rigid posture also facilitates digestion. And just as the state of the body is important, so is the state of the mind. These days “mindfulness” has become something of a buzzword and we can bring this too as a support to digestion. If we eat mindfully, savouring and appreciating our food, two important things happen. One, we open the body to nourishment at deeper levels. Two, we notice when we are full.

In Chinese medicine we understand that emotions and states of mind impact our Qi. Worry, the emotion associated with our digestive system, knots the Qi. This manifests as tension in the digestive system and inhibits our ability to digest clearly. Anger causes our Qi to rise. As digestion requires downward movement Chinese medicine (and wise people all over the world!) advise not eating when angry.

It is not just our emotional state that effects our digestion. Our beliefs are also key players. There are two effects created by our beliefs, the placebo and



nocebo effects, which are increasingly talked about and researched. In the study of the effectiveness of pharmaceutical medicines, both the positive and negative beliefs of patients have been shown to enhance or block a drug's effectiveness. The same applies to food. If we believe that a food is good for us it is more likely to be so and if we believe a food is harmful the same is true. If we are in that particularly modern state of neurotic obsession with what we eat, we are already in trouble.

I don't want to underplay this. What we believe can become real. Sham surgery has been shown to create real healing, the fear of death can cause death. I cannot tell you the amount of harm that is done by those who project their own fears on to food and lead thousands into ever increasing anxiety and confusion about what they eat. But I am in danger of ranting....

So now we are relaxed, mindful, positive in our beliefs and appreciating our food. What next? Once food is in the mouth we have the opportunity to chew. Some of us wolf the food down and leave this work to the stomach. However, chewing is another aspect of good digestion. Chewing begins the breakdown of sugars; prepares food for the stomach by breaking it down and warming it; and slows us down enough to appreciate the food and regulate our appetite.

Once food arrives in the stomach it remains there for between thirty minutes and a few hours. The stomach churns and gyrates, spraying the food with hydrochloric acid and breaking it down into soup, stabilising it at just above blood temperature. This is all in a good days work for a healthy digestion but when the digestive system is weak, what then?

If we deliver food to the stomach ready made into soup we are lessening its workload. If we puree the soup we make its work even easier. Therefore in convalescence or times when the digestive force is weak we give soup. Part of supporting our digestive system is assessing its strength and preparing foods accordingly. A robust system will be very tolerant, a weak one needs help and one way of doing this is to offer warm foods well broken down by cooking.

In Chinese medicine we have a notion of "digestive fire" which we call the Spleen Yang. In Ayurvedic medicine it is called "agni". Supporting digestion means taking care of this fire. In practice this means avoiding excessive and continuous consumption of cold energy foods and refrigerated foods and giving preference to warm energy cooked foods. As digestion is a warm process it is also considered wise to avoid consuming chilled drinks with food. In fact, overconsumption of fluids of any temperature with a meal is seen as weakening digestion by diluting the digestive juices.

It is also better not to shock the digestive system, either by excessively consuming cold foods such as ice cream or hot foods such as chillis. Sudden changes of diet can also shock the system such as a sudden switch to raw foods or a fast entered without proper preparation. Even erratic eating patterns can



distress the digestion. A regular and varied diet, going easy on extremes, is the best option. And changes need to come gently.

Preparing food

How we prepare food will also impact our digestion. Grains, for example, become more digestible if soaked for up to a day before eating. This helps break down the phytic acid which blocks absorption of nutrients such as iron. This is less necessary for rice and millet. Beans also need soaking and can be cooked with seaweed or carminative herbs and spices to make them more digestible. Nuts and seeds also benefit from being soaked. If that seems unappealing it is at least worth gently dry roasting to counter some of the effects of rancidity which nuts inevitably acquire once out of their shell and exposed to light and air.

To properly digest raw foods and absorb all its benefits it is important to chew and to serve at room temperature. Marinating in oil and vinegar also helps. Although cooking destroys a certain amount of enzymes and vitamins, certain nutrients are made more available and toxins neutralized. Cooked carrots have more available beta carotene, grilled tomatoes more lycopene and cooked brassicas lose their thyroid suppressing action. What is most critical in the consumption of raw foods is protecting the digestive fire.

Fermentation also enhances digestion. Throughout the world many cultures have traditions of fermenting foods to extract nutrients, increase digestibility and preserve foods. The United Nations Food and Agriculture organisation actively promotes fermentation as a critical source of nutrients. Its studies show that starch digestibility in fermented foods is almost doubled and availability of minerals is increased.

In fermented dairy the lactobacilli break down lactose into the more easily assimilable lactic acid. In soya beans the complex proteins are broken down into readily digestible amino acids through the production of miso, tempeh and tamari. In sourdough bread phytic acid is broken down, enzyme inhibitors disabled and mineral availability increased.

Fermentation can be viewed as a kind of predigestion. It is an excellent way of eating raw foods in the form of sauerkraut. Fermented or cultured foods, particularly sauerkraut, miso and yoghurt enhance the ecology of the intestines protecting against inflammation. Sauerkraut in Europe and kimchi in Korea: such traditions have been highly prized for centuries.

In Brittany oat porridge was traditionally eaten after one night of fermentation. In Eastern Europe "Braga" is prepared from diluted and fermented millet porridge. Ogi in Nigeria, Uji in Kenya, Koko in Ghana: these are all examples of the worldwide use of fermentation in the preparation of grains. In some parts of Africa fermented gruels have been shown to reduce infant diarrhoea by 50%. Although I don't advocate that we ferment all our grains, soaking overnight is especially helpful for the digestion of the more glutinous grains and sourdough



breadmaking is infinitely preferable to commercial fast methods which don't allow time for the bread to prove.

We can also support our digestion by complementing one food with another. Sour foods such as lemon or vinegar, for example, help digest fatty foods. Heavy foods such as beef are complemented by foods with a light moving energy such as horseradish. Legumes are made more digestible when cooked with seaweed. Digestive teas such as fennel or peppermint are often helpful after a meal and an espresso coffee can help digest fatty meats

From a Chinese medicine point of view herbs and spices are high in Qi and their skilful use increases digestibility. The pungency of most culinary herbs and spices activates digestion and counters any tendency toward digestive stagnation. The bitter flavour is particularly helpful in stimulating the release of digestive enzymes, hence the tradition of digestive bitters. The sour flavour, perhaps in the form of pickles, can help regulate our desire for sweet desserts. Enlivening meals with herbs and spices will generally improve digestion.

As well as useful combinations, there are some which make digestion more difficult. The primary imbalance in the western diet is the over use of sweetness. In Chinese medicine we say that too much sweetness overwhelms and weakens the digestion. In western terms we can see that too much sugar causes pancreatic exhaustion. We can also see that too much sugar can cause fermentation in the digestive system resulting in bloating and wind and creating a "damp" environment where fungal overgrowth, parasites and less beneficial bacteria can thrive. Reducing sugar intake and avoiding sweet desserts is one of the most helpful actions to support the digestion.

Quantity, quality and timing

The amount we eat is also an important factor. Eating too little or too much can weaken digestion. Anorexic eating habits ultimately weaken digestive Qi. Overeating will burden digestion. The habit of stopping before we are too full may not always be easy, especially for fast eaters, but the rewards are significant: less tiredness after eating but more significantly better longterm health. All scientific studies in which any population - be it rats, monkeys or human beings – have been fed a nutritious but strictly limited diet have shown the same results: an extension of lifespan, freedom from many diseases, greater happiness and longer reproductive life.

If we are committed to regulating the quantity of food we eat, its quality becomes ever more important. The idea that eating good quality food in moderate quantities leads to good health and happy digestion is not exactly rocket science. But good quality food is also food which satisfies. Quantity and quality are complementary. If we are deeply satisfied by the quality of our food (organic, fresh, tasty, beautifully prepared) we will find it easier to regulate the quantity we eat.



Then comes the issue of timing. Chinese medicine recognises that the body's systems display a tidal movement of energy symbolised by the Chinese clock. Digestion is strongest in the morning and weakest in the evening. The notion of a biorhythmic body clock is supported culturally by sayings such as "eat breakfast like a king, lunch like a merchant and supper like a pauper". So here, too, is a way we can support our digestion: eating our evening meal earlier and balancing our eating so that we eat more for breakfast and lunch and less for supper. In this way we make our digestion work hardest when it naturally has the most energy.

Finally, it is worth saying that exercise is a pivotal support to good digestion. Some of us worry that our body is becoming over-acidic and try to tackle this through diet. Actually it is exercise and breathing which is far more influential on the body's acidity. Some of us fixate on food but stop looking at the broader picture. Regular exercise, whether that means walking, dancing, swimming or any way of moving the body will support good digestion. However, you guessed it, too much exercise in the form of extreme training may have the opposite effect, exhausting our Qi and ultimately weakening digestion. Well, that's how it is with Chinese medicine, nothing in extremes.....and that includes taking an extreme line with diet.



SECTION TWO: A SELECTIVE MATERIA MEDICA

GRAINS

Grains are considered to be the foundation of Qi and most can be considered tonifying to the Qi and Blood.

Warming: Oats, Quinoa, Sweet Rice, Spelt

Neutral: Rice, Corn, Rye

Cooling: Barley, Buckwheat, Millet, Wheat

DEFICIENT CONDITIONS

For **Qi and Blood Deficiency**

Oats, Rice, Corn, Millet, Spelt, Sweet Rice

For **Yang Deficiency and Cold**

Oats, Quinoa, Sweet Rice

For **Yin Deficiency**

Barley, Millet, Wheat, Spelt

EXCESS CONDITIONS

For **Heat**

Barley, Wheat

For **Dampness**

Millet, Rye, Barley, Buckwheat

For **Dryness**

Wheat

For internal wind avoid buckwheat



ABOUT GRAINS

Historically cereal grains are at the centre of the growth of civilisation. The word cereal derives from Ceres, the Roman goddess of agriculture. Humans began cultivating grains at least 10000 years ago in the fertile crescent and broadly around the same time people began cultivating rice in China. Corn began to be cultivated about 1000 years later in Central America.

There is evidence to suggest that we were harvesting grains from the wild well before this time. An ancient site in Israel yielded a significant collection of grains, which were dated to about 23,000 years ago, (according to a 2004 *Proceedings of the National Academy of Sciences* paper) and we may have been including grains in the diet for about 70,000 years

Nevertheless this is a relatively short timespan in human evolution and many people argue that we are still adapting to digesting grains. Archaeological evidence suggests that the early stages of adaptation were quite strenuous with a synchronous appearance of dental decay and the shortening of average height. Interestingly 1% of Europeans may have full blown celiac disease and over half carry the celiac gene. This suggests that we are still in an adaptive stage.

But grains brought huge advantages. Because grains store well human beings could settle more permanently in one place. Their cultivation goes hand in hand with the domestication of animals. The creation of a consistent food supply allowed populations to grow. The world is now largely dependent on grains, the “staff of life” for most of us. From a Chinese medicine viewpoint grains are the foundation of Qi and Blood.

As we are wedded to grains, it makes sense to pay attention to the quality of the grains we eat and look at how to get the most from them.

In their raw state grains are hard to digest. Our ancestors used soaking, sprouting and fermenting to make grains more digestible. The activated enzymes break down toxins. For example, these methods disable the action of phytic acid in grains which can block the absorption of some nutrients. This still holds true. If we want to increase the digestibility of grains we need to make use of these traditional methods

For the same reason, sourdough baking makes grains much more digestible and increases their nutrients. The slow proving of bread allows time for the transformation of the grain. This bacterial action is far preferable to the fast proving of commercial bread.

Thirdly, the Chinese caution against eating too many flour based foods such as pastries. This is not just about calories but because flour is seen as dampening, more so than the original whole grain. Flour oxidises easily and some of its nutrients are lost or damaged.



RICE (brown)

There are over 80000 different strains of rice. In East Asia typical rice consumption is around 200 kilos per year, in the UK and USA around 3-4 kilos. In Chinese mythology rice was a gift from the animal kingdom to human beings. After a great flood which wiped out food production animals were seen with grains around their mouths. These were planted and many lives were saved.

- Long grain rice requires largest proportion of water to rice in cooking. The cooked grains separate well.
- Medium grain rice cooks as tender grains which cling to each other and is favoured for risotto and paella.
- Short grain rice is favoured for sushi and general eating
- Sticky rice, or sweet rice, requires the least water and is often soaked then steamed as it tends to fall apart. It can be used to make sweet dishes and is the favoured rice in Thailand.
- Aromatic rice, e.g jasmine or basmati, has unusual concentrations of volatile oils

Nature

Western: Vitamins B, E, magnesium, manganese, potassium, zinc, iron, sodium, phosphorus, copper, calcium

Temperature and Flavour: Neutral, Sweet

Route: Stomach, Spleen

Energetic actions

Strengthens Spleen and Stomach

Nourishes Qi and Blood

Harmonizes Stomach

Notes

Benefits nervous system

Benefits, diarrhoea, nausea, diabetes and thirst

Provides complex carbohydrates

Traditional medicinal uses

- 1) White rice is made into a gruel and forms the basis of medicinal porridges for almost everything!
- 2) Diarrhoea. Slightly burned white rice.
- 3) Child regurgitating mother's milk. Dry roast rice until slightly burned, add water and simmer 20 minutes to make tea for child to drink.

Sweet rice is warmer and also enters Lung channel. Contains more protein, fat and gluten. Mildly astringent nature means that it is used for frequent urination, diarrhoea and spontaneous sweating. May help diabetes. Should be cautious in conditions of Phlegm and deficient digestive fire.



SECTION THREE: TCM PATTERNS

TCM PATTERNS

YANG DEFICIENCY

Flavours: sweet, pungent

Temperature: warm

Recommendations: root vegetables, onion family, meat stock/broth, lamb, trout, oat porridge; warming spices such as cinnamon, ginger, cardamom; chai, red wine

Avoid or decrease: cold foods, raw foods

Kidney Yang

Onion family, chicken, lamb, trout, salmon, shrimp, prawn, mussel, lobster, quinoa, oats, chestnut, pistachio, walnut, ginger, clove, fenugreek, star anise, fennel, rosemary, chai, black beans

Spleen Yang

Oats, chestnut, lamb, chicken, horseradish, cardamom, ginger, black pepper, fennel, jasmine

Heart Yang

Cinnamon, lamb's heart, ginseng



SECTION FOUR: HEALING SOUPS

YANG DEFICIENCY/DAMPNESS/COLD

LEEK, PARSNIP and GINGER SOUP

TCM action: tonifies Qi and Yang, regulates Dampness

Good for poor circulation, low energy

Main ingredients

Parsnip warms the body, tonifies Spleen Qi and counters Dampness

Leek strengthens Yang, circulates Qi

Ginger strengthens Yang, circulates Qi, expels Wind

Ingredients

2 tbsp olive oil

225g leeks

25g fresh root ginger

650g parsnips

300ml dry white wine

1.2 litres vegetable or chicken stock

Salt and pepper

Parsley to garnish

Method

Slice the leeks in rounds and fry gently in the oil for 5 minutes. Finely chop the ginger, add to the leeks and fry gently for 2 minutes. Add the parsnips and cook until they begin to soften (about ten minutes). Add the wine and reduce for 2-3 minutes. Add stock and bring to the boil. Simmer for about 25 minutes.

Puree and season to taste. Serve with a garnish of parsley.



SECTION FIVE: MAIN COURSES

RECIPES FOR YANG DEFICIENCY

VENISON & CHESTNUT CASSEROLE

Ingredients

2 tbsp butter
100g smoked bacon
800g diced venison
125ml red wine
2 cloves garlic
3 red onions
2 carrots
1 stick celery
1 tbsp tomato puree
1 sprig thyme
1 bay leaf
300g roasted chestnuts
Sea salt and pepper

Method

Preheat oven to 130°C/gas 2. Heat the fat in a heavy-based pan and fry the bacon in butter until golden. Remove and cook the venison in batches in the same pan, until browned

Remove the meat and transfer to a casserole dish, along with the bacon and any scrapings from the pan. Chop the onions, carrots, celery and garlic and add to the pot with the wine. Bring it to a strong boil. Add the purée, herbs, salt and pepper and enough water to just cover the meat. Cover, bring to a simmer and cook in the oven for 2 hours.

After an hour add the chestnuts and cook until the meat is very tender.

Energetics

Venison is one of the most Yang strengthening meats with a particular affinity for the Kidney. Most of the other ingredients support the warming nature of this dish. Chestnuts are a warm Yang and Qi strengthening tonic for the Kidneys and Spleen making the dish ideal for Kidney and Spleen Yang Deficiency.