Importance of chewing for a comfortable tummy! by Tessa Jupp RN

"Chew your food a hundred times!" my grandad used to tell me. I'm not saying we have to actually count to 100 for every mouthful, but we do all probably need to chew quite a lot more times than we do at the moment.

The older I get the more I realise that our "oldies" had a wisdom that is missing today. Life seems to be so much busier than in our parents' time.

Remember when we all sat around the table (there was no TV), ate a leisurely meal and talked. Mind you I was always getting into trouble for reading a book at the table when I was a kid.

Digestion starts even from the time food is being prepared. If you eat a meal too fast you get a bloated, uncomfortable Your body starts to produce digestive enzymes long before the food actually travels down your oesophagus. That is why our mouths water and we feel hungry just looking at food or watching an advert on TV. Chewing is one trigger, but even the act of smelling or looking can get the process started! By the time you have started eating your meal, your entire digestive system has already prepared itself in anticipation that food is coming.

When you chew each bite of food thoroughly, you begin to enjoy the taste of the subtle flavours in the food making eating more enjoyable. Chewing and tasting your food sends an immediate signal to the rest of your body. Your stomach lining starts to produce hydrochloric acid. The release of stomach acid signals your pancreas to begin to release digestive enzymes, carb soda and insulin; your gall bladder to release bile. So the more time you take eating your meal, the better prepared your digestive system will be. Chewing for longer means making more stomach acid, more enzymes and better digestion.

Chewing serves many purposes, and one of these is to coat minerals, energy, we need and should be getting from it. your food with as much saliva as possible. If you've ever swallowed a large piece of food without chewing properly, you'll understand the reason why! It can get stuck. With potential weakness of the swallowing muscles from polio, this can be an even bigger problem as we age, causing choking on food or even water or choking on your own saliva. Drinking more fluids with your meals can actually help with swallowing as it makes the food more slippery going down. Certainly keep drinking if food is stuck.

This coating of saliva prevents injuries to your throat and oesophagus and allows food to slide more comfortably down into your stomach. It helps to bind all those chewed up pieces of food into a bolus - a slippery ball of food that you can swallow more easily.

A lot of people tell me they have **problems swallowing** tablets. I often take mine with a warm milky drink (cocoa). It helps to swallow them more easily as it provides a similar coating like saliva does, to help them go down. If swallowing per se is still a problem, try turning your head left or right while you swallow.



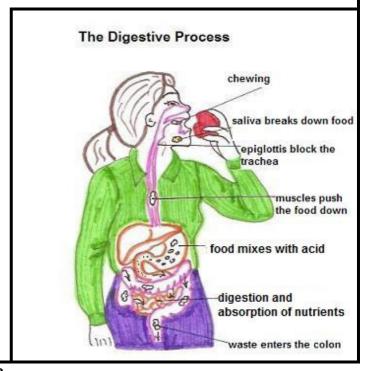
Often the muscles on one side are stronger or less affected by polio than the other and by turning the right way will help your swallowing reflex.

A British study found that the average chewing time per day has fallen to just 39 minutes. Thanks to the pressures of modern life, we eat breakfast in 7 minutes, lunch in less than 13 minutes and dinner in a relatively leisurely 19 minutes. At some point along the line, eating became less about enjoying food and companionship and more about shovelling down food as fast as possible.

Chewing prevents gas and bloating.

sensation in your gut. A feeling of pressure that won't go away. And it's often accompanied by embarrassing gas an hour or two after you've finished eating. If this is a description of how you feel after meals, chewing your food more thoroughly can help. By breaking down the large chunks of food into smaller particles, chewing can reduce the amount of work that your stomach acid and digestive enzymes need to do.

Larger chunks are more difficult to process, and so they pass through to your intestines where even bacteria there may not be able to finish the job. Have you ever tried to defrost a pack of mince quickly in a saucepan because you didn't take it out of the freezer in time? Only a small layer on the underside exposed to the heat can be peeled away with a spoon when you turn it over. The large frozen centre remains intact. It is the same with food that is not chewed into very small pieces. Our saliva and digestive enzymes can only get to the outer surface to breakdown the food we eat into the amino acids, glucose, vitamins,



The Digestive Process - what happens where! Breaks up food particles Saliva moistens and Assists in producing lubricates food spoken language Amylase digests polysaccharides Pharynx Swallows Esophagus Transports food Liver Breaks down and builds up Stores and churns food Pepsin digest protein many biological molecules Stores vitamins and iron Destroys old blood cells HCI activates enzymes, breaks up food, kills germs Destroys poisons Bile aids in digestion Mucus protects stomach wall Stores and concentrates bile Hormones regulate blood glucose levels Bicarbonates neutralize stomach acid Trypsin and chymotrypsin digest proteins Amylase digests polysaccharides Lipase digests lipids Completes digestion Mucus protects gut wall Absorbs nutrients, most water Peptidase digests proteins Sucrases digest sugars Amylase digests polysaccharides Large intestine Reabsorbs some water and ions Forms and stores feces Opening for elimination of feces Rectum Stores and expels feces

In the gut, undigested sugars like lactose in milk and the wheat in bread, get converted into gas. Chewing thoroughly will reduce the amount of undigested food that reaches your intestines and cause much less bloating. When large, undigested chunks of foods pass through your stomach without being properly broken down, many of the nutrients trapped within them are lost to your body

and simply pass through your gut system and out the other end.

Another reason why saliva is so important is it contains a couple of different enzymes that actually start the chemical digestion of your food, while it's still in your mouth. This is another way that chewing reduces the load on other parts of your digestive system. Less work for your stomach and intestines means better digestion, less bloating and less gas.

There are other ways to reduce bloating too. Eating with your mouth closed is a good habit anyway, but it also has the benefit of preventing air from being sucked in as you chew.

Spending more time **chewing** your food might even **help you lose weight!** This has been demonstrated in a number of different research studies. One study gave the same meal twice in one day to a group of men, but asked them to chew 15 times per mouthful at one meal and 40 times at the other. On average, **they consumed 12% less when they chewed each mouthful 40 times.** Another study demonstrated that the **length of your meal** has an effect too. Eating more slowly (chewing more), reduces levels of the hunger hormone grehlin, so you eat less.

It also increases feelings of satiety and reduces your appetite. So maybe there is a point for the long waits we have in restaurants between courses!

Your saliva also contains an enzyme named lysozyme that attacks bacteria and destroys their cell walls. The more time you spend chewing your food, the more of

these bacteria will be killed before they reach your stomach and gut.

If reflux (indigestion) is a problem, you may not be producing enough stomach acid. A teaspoonful or so of 100% lemon juice WITH your meal will solve this. Sprinkle it on your vegies or salad or just take it neat from the teaspoon after the first couple of mouthfuls of food. The rest of the meal will wash it off your teeth so that there is no problem there. Apple cider vinegar can also be used. If your

meal is "repeating" on you a few hours later, then ½ teasp of bicarb in ½ cup of fruit juice (will fizz up when stirred) is an effective old remedy.

Chewing your food well, sets the scene for the rest of the digestive process to work. If you are **constipated**, try more fibre, fluids, magnesium and Vitamin C twice a day. I am **not a fan of smoothies** either. External processing cuts out chewing and the extra energy we could get from digestion of food to smaller particles. So make sure you do chew some sort of food as well if you have a smoothie.

