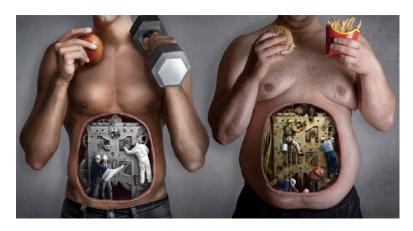
Enzymes: Augment or Abstain

https://robertinesbitt.com/blogs/enzymes-augment-or-abstain

How much, how long, what's right?

Digestive enzymes, Betaine Hydrochloride (HCL), Pepsin and the like are therapeutic nutrients that holistic health professionals use that can have amazing benefits, when used mindfully. Whether to "augment or abstain" will have to do what is right for the individual, while doing no harm. Following are some things to consider about enzyme supplementation, it's use and if it is right for you —too much, too little or just right?



Digestive Enzymes: Who Does and Doesn't Need Them?

Augmenting: If a person has weak digestive stomach cells, such as exhausted *parietal* cells (HCL and Intrinsic factor), exhausted *chief* cells (pepsinogen and chymosin (protease enzymes), weak pancreatic enzyme output, irregular or poorly formed stools (diarrhea, constipation), gas, collywobbles, bloating, heartburn, or other gastrointestinal (GI) complaints, then augmenting with digestive enzymes could very well be helpful.

From one time or another we all can benefit from enzyme augmentation to improve our digestion. Maybe we need them for gluten and dairy digestion or hydrolytic enzymes to keep pathogen biofilms at bay, proteolytic enzymes to help with specific kinds of inflammation, HCL/pepsin to give the parietal cells a rest, or a well-rounded digestive enzyme to replace what is missing from our cooked foods.

Abstaining: If you're one of those rare lucky individuals who state they have a "bulletproof stomach" and can eat even the strangest substances without any digestive distress, then you'll never think about augmenting your diet with betaine hydrochloric acid (HCL) and/or digestive enzymes for digestion. Additionally these people will tend to have perfectly formed stools and eliminate with ease like clockwork, as such why bother when digestion is great? So no need to fix something that isn't broken. However, these supplements will be a great relief when that time comes.

6 Reasons for Digestive Enzyme Augmentation

- 1) Much improved food digestion for greater nutrient assimilation.
- 2) Work in conjunction with the gut microbiome for better utilization of vitamins and minerals.
- 3) Gives a tired and weak digestive system a break, so that the stomach's parietal cells and other organs such as the pancreatic acinar and ductile exocrine cells which synthesize, store, and secrete digestive enzymes, allowing rest and rebuilding. Akin to fasting, this also allows rest and repair.
- 4) Aids in gastric enzyme output which triggers a digestive reaction of events and pancreatic completion of digestion (pancreatic enzymes).

- 5) Due to our grazing and snacking of foods, enzymes help beef up weakened digestion. It is now said that by our early 30's our digestive strength declines by 50%. A few decades ago that amount of decline didn't happen until we reached 50!
- 6) Enzymes strengthen the immune system to help keep pathogens and parasites to a minimum.

Digestive Enzyme Supplementation Cautions

- 1) Loss of natural production: The concern is the overuse of HCL and digestive enzyme supplements. To where the overuse of these items can cause the enzyme producing cells to stop producing due to the body's regulatory feedback loop. We take supplements to aid the body with nutrients during times of short supply and to enhance the body's natural production so the organs get a chance to rest and repair the body's natural processes.
- 2) What's the underlying issue: A big demand is to help correct the cause so the body can heal. The use of digestive enzymes doesn't directly correct the cause, but they can aid in this cause when used concurrently with other cause determined taking enzymes is a band aid approach. Such example and counter to these points would be a person who eats too much processed or cooked foods and a diet limited in raw food. The enzymes would merely be replacing what is missing from a healthy diet.





Now one would assume that if we are lacking enzymes in our food that we could merely get what we need from supplementation. This would be reasonable to assume, however these enzymes supplements are "generic" or "general" and not food specific. For example, celery has celery specific enzymes and radishes have their own specific enzymes that help break down those cell specific components. So enzymes from supplement and those from food aren't exactly compared equally. However it does make sense that digestive supplements will help lessen the load and improve digestion, but just can't compare to what nature provides.

We can certainly understand the practice of taking a general enzyme when our meals are mainly cooked meats or steamed veggies and other processed side dishes.

Let's bring this into perspective with an example of getting to the "cause". Brian Adams snacked continually on cashews and assorted nuts through the day and developed digestive distress and issues, such as foul gas, heartburn, indigestion and constipation. Occasionally his stools would have signs of undigested foods. He would ask "Why is this?" and "What is going on?" The problem is snacking on nut proteins diminished his HCL production and limited his pancreatic protease enzymes. This causes "gut rot" in the bowels as proteins aren't being digested properly.

Brian while being a bit health conscience, didn't want to address heartburn by squelching HCL with PPI's (proton pump inhibitors) that he heard others try. He had read about how heartburn is actually caused by LOW stomach acid not allowing the stomach valve (LES) to close, which can allow low pH acid to burn the esophagus, not from excess stomach acid which is a very rare condition. He didn't want laxatives to alleviate the constipation and possibly cause dependency. He wants to get to the root of the issue and regain normal lifestyle once again.

In Brian case, the root of this was stress. He was overworked and overwhelmed with family, so he grazed on nuts through the day in order to numb out his feelings and cognitive distortions. The constant eating helped him alleviate the stress and was comforting. This constant grazing caused enzyme and HCL depletion. As such, digestive distress started to rule his life.

His corrective actions were; Stress management and relaxation techniques, seeking out a coach to help with cognitive distortions, emotional numbing and limiting beliefs. Once Brian understood these reasons and how to apply them, he was able to make progress in getting the situation resolved without prescriptions. Brian was able to stop eating nuts all the time, as this was an emotional numbing reaction; this resulted in losing those extra pounds he was putting on. He also supplemented with a digestive enzyme and HCL products with each meal for a minimum of 60 days. The results were truly amazing!

Remember the body is designed to heal itself, however sometimes we need to give it some help. The body is complex, but yet simplistic. We operate on a system of feedback loops, constantly trying to obtain homeostasis; this is much like a "swing" or "checks and balances". If something is too low or too high the body will try to compensate to maintain equilibrium. If we take a hormone or prescription drug, it may satisfy the requirement for metabolic purposes, however over time the body will stop making the hormone itself, thus becoming dependent on the drug. Much like how an unused muscle will atrophy without use.

This scenario plays out way to often as in the case of hormone replacement therapies (HRT) as well as what this article subject is about. Digestive enzymes used continually over lengthy periods of time (many months) or in too high of dose can have side effects.

So, how much is too long? And what is too high? This will vary from person to person and is individualized. Too long would generally be several months of everyday consistent use. However, stopping supplementation can allow the body to come back renewed, rested and ready to re-start normal operation. Too high amounts would be that in excess of label recommendations. Such is the case where proteolytic enzymes were used in excess to aid in lowering inflammation; those that take 3-5 times the label recommendation 3 times a day for 90 days can disturb the guts microbiome supportive bio-films. This can take 60 days or longer of restoration work to reverse.

So haphazardly taking supplements is ill advised. There is an upper limit for length and quantity. However someone would have to really work hard to achieve those limits, let alone the cost. So apply good judgement and common sense when supplementing.

Those wishing to supplement have to be aware that pathogens can adversely affect and can be detrimental to the stomach lining when using Betaine HCL treatments. However, once the course is clear many have had success with a formula containing Betaine Hydrochloride, Pepsin, Ox Bile, lipase, protease, and amylase, maybe some Goldenseal, Berberine plus other botanicals and nutrients to help in the rebuilding of the pancreatic tissue and stomach parietal cells, which should not create dependency. Perform a 30-day Digestive Enzyme Trial and see.

The HCL Challenge Test

A common test to see how well your stomach parietal cells are working can be performed and is a terrific way to provide the needed rest and repair to rejuvenate these cells, while re-establishing connections with the pancreatic process. This challenge test is a process of sensing a reaction and listening to the body to achieve the correct safe effective dosage. This supports the "Do No Harm" philosophy, while finding the "root gut cause".

Note: HCL should never be taken while on any kind of anti-inflammatory medication. This includes but not exhaustive medication, such as Asprin, ibuprofen (e.g., Advil), and derivatives (NSAIDs), corticosteroids (e.g., Hydrocortisone, Glucocorticoid, Cortisone, Dexamethasone, Prednisolone). These medications can further damage the GI tract that HCL supplementation could aggravate further, which could lead to ulcers and other digestive stress, including bleeding.

As such, HCL challenge testing should be supervised by experienced personnel.

When to when enough is enough?

Elementary... Digestive issues and symptoms disappear when supplementation is discontinued.

Some Quick Facts about Supplementation and Digestion

- 1) Digestive enzymes are generally activated only once they have reached the duodenum (small intestine).
- 2) The digestive system thrives when given rest and will rejuvenate during periods of intermittent fasting.
- 3) Practical use of Betaine HCL/pepsin and a well-rounded enzyme can boost the digestive process as well as give the digestive system a rest.
- 4) While over indulgence of supplements can be difficult, it can occur with prolonged use of enzymes in very large amounts.
- 5) Anywhere from 1-3 months of consistent supplemental use, you should evaluate the effectiveness of your regime. If there is very little change, then further investigation and testing may be needed to find the underlying cause.
- 6) Enzymes for occasional use include: Lack of raw nutrient dense foods, during large meals (overeating), when consuming too many cooked foods, enzymes can help lower immunological white blood cell response (inflammation).



Finally, Digestive enzymes are a great tool and periodic usage can be very beneficial. It is suggested to have some readily available and taken when indicated. However, good judgement and common sense must be used to achieve the objective when correcting the real gut *cause*.