

## *Dr. Ellen's Way* Digestive Enzyme Supplements

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### What are Digestive Enzymes?

Digestive enzymes are proteins produced by the body that play a key role in the breakdown of the foods we eat in order to facilitate the absorption and utilization of the nutrients contained within. They are made primarily in the stomach, pancreas, and intestines. There are three main categories of digestive enzymes:

- Carbohydrate digesting enzymes such as amylase (breaks down starches), lactase (breaks down lactose in dairy products), and invertase (breaks down table sugar)
- Protein digesting enzymes such as protease (breaks down proteins) and peptidase (breaks down shorter parts of proteins)
- Fat digesting enzymes called lipases

These enzymes produced by the body require a relatively narrow pH range in which each works best. This optimal acid/alkaline environment is provided in each section of the gastrointestinal (GI) tract to allow maximal enzymatic activity.

The optimal availability of the full array of digestive enzymes for digestion of the foods we eat has become increasingly important. This is due to several factors. For example, modern technologies have made food more plentiful and available than ever before. However, there are downsides to the technologies used to increase productivity. Various pesticides used to increase crop yields have been increasingly recognized as causing long-term health problems.<sup>(1)</sup> The actual amount of the various nutrients in each food continues to decline because of the very farming methods used to increase their quantity.<sup>(2)</sup> Preservatives and additives that increase consumer appeal and shelf life have led to additional health concerns.<sup>(3)</sup> Thermal effects of food processing and preparation can produce toxic compounds and denature proteins.<sup>(4)</sup> This can, also, produce allergens (that can cause food sensitivities) as well as inactivate the naturally occurring enzymes in our foods.<sup>(5)</sup>

Many factors can adversely influence the digestive enzyme production in the body. Local pathology can directly interfere with enzyme production; for example, exocrine pancreatic insufficiency (EPI) has been increasingly identified and can lead to significant GI symptoms. Similarly, chronic GI infection, repeated antibiotic exposure, and chronic GI inflammation can decrease digestive enzyme output. Other causes of decreased enzyme production include consuming certain foods and drinks (such as coffee, alcohol, processed sugar, and ultra-processed foods), chronic stress, individual food sensitivities (e.g., gluten, dairy, and corn), smoking, and the ageing process.<sup>(6)</sup>

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\*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, mitigate, cure, or prevent any disease.

## Digestive Enzyme Supplementation

Digestive enzyme supplementation can have a significant positive effect on the overall health of an individual. The chief formulator of *Dr. Ellen's Way* supplements, Dr. Ellen Cutler, has over 40 years of experience using digestive enzymes to help patients achieve their optimal state of wellness. Decades ago, frustrated with the enzyme supplements available for her patients (and herself), she created her first line of digestive enzyme supplements, which were for professional use. They were extremely beneficial for her patients, as well as those of other healthcare professionals. The line of supplements was slightly modified by her over the years to increase their effectiveness.

Broad-spectrum digestive enzyme supplements provide digestive support for the stomach, pancreas, and intestines by 'supplementing' your own GI enzymes. They help promote optimal digestion of all foods, increasing nutrient availability for absorption and assimilation. Many clinicians, including Dr. Cutler, have also found that broad-spectrum digestive enzyme supplements are beneficial to a wide variety of people, even without specific GI complaints. One reason might be that they can help avoid food intolerances.<sup>(7)</sup>

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### *Dr. Ellen's Way* Digestive Enzyme Supplements

Dr. Cutler has already formulated the first two digestive enzyme supplements for *Dr. Ellen's Way* consumer line. They can be purchased directly by the consumer. Both have been designed to parallel the formulations of professional line supplements and to optimize digestion. Both have had great user feedback. Like the professional line, these supplements contain only non-animal sourced enzymes. These are used because of their ability to breakdown food substrates over a wide pH range. Modern filtration technology removes the residue from the manufacturing process, thus leaving a clean, pure product.<sup>(8)</sup> Also, non-animal sourced supplemental enzymes can retain their enzymatic activity despite exposure to the low pH of gastric acid and the body's own protein digesting enzyme, pepsin, without being broken down themselves.<sup>(9)</sup>

The first is *Digest Supreme*, a broad-spectrum non-animal derived digestive enzyme supplement. *Digest Supreme* is designed to assist the body's own enzymes in breaking down dietary nutrients, making them more readily available for optimal absorption. The formulation includes enzymes to catalyze the digestion of proteins, carbohydrates, fats, and additional enzymes to help break down plant fiber (cellulase and hemicellulase) and to free minerals bound within the food (phytase). *Digest Supreme* contains only non-animal sourced enzymes and does not contain potentially allergenic papaya or pineapple enzymes. The best time to take *Digest Supreme* is just before each meal to maximize digestion.

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The second is *G.I. Calm*, which was designed to help maximize digestion in those with GI complaints. *G.I. Calm* provides a modified broad-spectrum blend of non-animal derived digestive enzymes, which assist the body's own enzymes in breaking down dietary nutrients, thus maximizing their absorption. *G.I. Calm* also includes a pair of herbal extracts along with quercetin in its formulation to help optimize a healthy mucosal lining in the GI tract. *G.I. Calm* is designed to be taken just before each meal to maximize digestion and can also be taken at other times to soothe GI upset.

Our goal at *Dr. Ellen's Way* is to create the highest quality line of digestive enzyme-based supplements available directly to consumers.

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## References

1. "Health Concerns of Pesticides" at [https://www.researchgate.net/profile/Samavi-Bint-E-Naser/publication/316141933\\_Pesticide\\_Food\\_Laws\\_and\\_Regulations/links/5c61cf6145851582c3e16b09/Pesticide-Food-Laws-and-Regulations.pdf#page=109](https://www.researchgate.net/profile/Samavi-Bint-E-Naser/publication/316141933_Pesticide_Food_Laws_and_Regulations/links/5c61cf6145851582c3e16b09/Pesticide-Food-Laws-and-Regulations.pdf#page=109)
2. "Changes in USDA Food Composition Data for 43 Garden Crops, 1950 to 1999" at <https://www.tandfonline.com/doi/abs/10.1080/07315724.2004.10719409>
3. "Toxicological and Teratogenic Effect of Various Food Additives: An Updated Review" at <https://www.hindawi.com/journals/bmri/2022/6829409/>
4. "Thermal process contaminants: acrylamide, chloropropanols and furan" at <https://www.sciencedirect.com/science/article/abs/pii/S2214799316000072>
5. "Chemical Changes in Proteins Produced by Thermal Processing" at <https://pubs.acs.org/doi/pdf/10.1021/ed061p303>
6. "Digestive Enzymes" at <https://www.clinicaleducation.org/news/digestive-enzymes/>
7. "Digestive Enzymes to Aid in Food Intolerance" at <https://www.iherb.com/blog/digestive-enzymes-to-aid-in-food-intolerance/213>
8. "Unique Features and Application of Non-Animal Derived Enzymes" at <https://www.lifestyleenzymes.com.au/wp-content/uploads/2018/03/Unique-Features-and-Application-of-Non-Animal-Derived-Enzymes.pdf>
9. "GASTRIC STABILITY STUDY OF SUPPLEMENTAL DIGESTIVE ENZYMES" at [https://guna.in.ua/wp-content/uploads/frm\\_journal/2-Art.%20Mamadou.pdf](https://guna.in.ua/wp-content/uploads/frm_journal/2-Art.%20Mamadou.pdf)

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