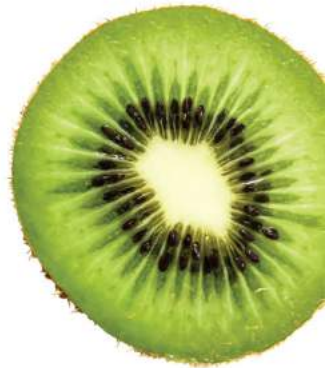




Enzymes: Where Life Begins

酶：生命的起源



“ *Enzymes are substances that make life possible.*

They are needed for every chemical reaction that takes place in the human body.

No mineral, vitamin, or hormone can do any work without enzymes.

Our bodies, all of our organs, tissues, and cells, are run by metabolic enzymes.

They are the manual workers that build our body from proteins, carbohydrates, and fats, just as construction workers build our home.

You may have all the raw materials with which to build, but without the workers (enzymes) you cannot even begin.

没有酶就没有生命。

它们是人体进行每一个化学反应的所需物质。

任何矿物质、维生素或荷尔蒙在无酶的情况下是不能进行任何作用的。

我们身体的所有器官、组织和细胞，都必须靠代谢酶才能运作。

它们是建立身体蛋白质、碳水化合物和脂肪的体力劳动者，就如同建造家园的**建筑工人**。

您可以拥有所有的建筑材料，但若没有**工人（酶）**工作，一切都无法开始。”

Dr. Edward Howell, *Enzyme Nutrition, the Food Enzyme Concept*, 1985.

艾德华贺威尔医学博士，《酶的营养学：食物酶的概念》，1985年

The late Dr. Edward Howell, M.D. spent his entire professional life studying enzymes. He developed his food enzyme concept in the 1930s after observing that people who ate raw foods had less illness than people who ate largely cooked foods. He wrote two fascinating books on his research, *Food Enzymes for Health and Longevity* and *Enzyme Nutrition*.

Through extensive research, he believed that we were born with a limited enzyme-producing capacity, and that our life expectancy depends on how well we preserve our “enzyme potential”. His theory was that if we don't get enough enzymes from the food we eat, great strain is placed on our digestive system. A deficiency in digestive enzymes then reduces availability of our metabolic enzymes. Dr. Howell believed this metabolic enzyme deficit was the root of most chronic health problems.

已故艾德华贺威尔医学博士穷尽他一生的职业生涯钻研酶。自从他观察到吃生食的人比吃熟食的人较少生病的现象后，他在1930年代便开始致力研究和发表对食物酶的概念。他将其一生的研究论文浓缩总结写成两本书，即《食物酶对健康长寿的重要性》和《酶的营养学》。

经过广泛的研究，他相信人体自体制造酶的能力有限，人类寿命的长短取决于我们如何保存维持这“酶的潜能”。要是我们从食物中获取的酶不足，这就会增加消化系统的负担。消化酶不足会间接降低代谢酶的可给性。贺威尔医学博士认为，代谢酶的缺乏是导致大多数慢性健康问题的根源。



Basics of Enzymes

There are three basic categories of enzymes:

1. Digestive
2. Metabolic
3. Food based

Digestive enzymes are *extra-cellular*—meaning, they are found outside your cells. They help break down food into smaller parts that can be absorbed, transported and utilized by every cell in your body.

Metabolic enzymes are *intra-cellular*—meaning, inside your cells, where they help the cell carry out a variety of functions related to its reproduction and replenishment. They are involved in running your circulatory, lymphatic, cardiac, neurologic, endocrine, renal, hepatic and reproductive systems, and maintaining your skin, bones, joints, muscles and other tissues.

Your pancreas produces most of these digestive and metabolic enzymes.

There are also enzymes that you can get (or should be getting) from the foods you consume. These directly help with your digestive process.

Enzyme Deficiency

Enzymes are easily lost during cooking, pasteurization, canning, microwaving, or heating above 47 degrees Celsius.

This is why it is so important to eat your foods raw. Raw foods give you the digestive enzymes and decrease your body's burden to produce its own enzymes. The high demand for digestive enzymes depletes the availability of your metabolic enzymes. Why does this matter? The more raw foods you eat, the less the burden on your body to produce the enzymes it needs, not only for digestion, but for practically everything. Whatever enzymes that are not used up in digestion are then available to help with other essential biological processes, for example,

- Absorption of oxygen
- Circulation of nutrients into your cells
- Energy production
- Elimination of toxic wastes and unwanted chemicals
- Fighting infections and healing wounds
- Breaking down fats in your blood, regulating cholesterol and triglyceride levels
- Dissolving blood clots
- Immune support
- Proper hormone regulation
- Reduction of inflammation
- Protection against harmful effects of radiation
- Slowing the aging processes
- and a myriad of other biochemical processes that are happening every second without you even thinking about them

酶的简介

酶也称为酵素，可分为三种类型：

1. 消化酶
2. 代谢酶
3. 食物酶

消化酶存在于细胞外。帮助分解食物成更小部分，以让身体吸收、运输和提供每个细胞利用。

代谢酶存在于细胞内，帮助细胞进行各种与其再生和修复相关的功能。它们可促进身体血液循环、增强淋巴结、心脏、神经、内分泌、肾脏、肝脏和生殖系统的运作，以及维持皮肤、骨骼、关节、肌肉和其他组织的功能。

胰脏是身体生产大部分消化酶和代谢酶的器官。

另外，您也可从食物中获取酶。这些食物酶对您的消化功能有直接的帮助。

酶缺乏

酶的活性很容易被破坏。若经烹饪、杀菌、罐装、微波或在温度摄氏47度或以上加热，食物其中的酵素将被破坏殆尽。

这就是为什么生食对身体来说非常重要。新鲜、未煮过的食物可提供身体消化酶和减少身体自行合成更多酶的负担。大量利用消化酶来分解食物将耗尽代谢酶的可用性。这为什么重要呢？因为您吃的生食越多，就能减轻身体制造酶的负担（不单只是消化酶，还有身体其它机能所需的酶）。消化过程中未被用尽的酶，就能用来促进其他重要的生理机能，例如：

- 吸收氧气
- 将营养成分输送到全身细胞
- 产生能量
- 排除有毒废物和有害化学物质
- 对抗感染和愈合伤口
- 分解血液中的脂肪、调节胆固醇和三酸甘油酯
- 溶解血块
- 增强免疫
- 调节荷尔蒙
- 抗炎症
- 防辐射
- 延缓老化
- 以及许许多多您从来没留意到却分分秒秒都在发生的生化过程

Enzymes are the catalysts that cause many of these important biochemical reactions to happen by speeding up the reactions.

Hence, if most of your diet comprises of cooked and processed foods then you are travelling down the road of being enzyme deficient. Enzyme deficiency results in indigestion and poor nutrient absorption. This creates health issues like:

- Constipation
- Bloating
- Cramping
- Flatulence and belching
- Heartburn and acid reflux

In fact, if you have enzyme issues, chances are your immune system is not functioning as well as it should be. If immune response is impaired, it can lead to a variety of illnesses.

Therefore, the best way to get enzymes into your body is by consuming at least 75% of your foods raw. For many of you, you will have to work towards this goal gradually.

While all raw foods contain enzymes, the most powerful enzyme-rich foods are those sprouted, such as seeds and legumes. Other enzyme-rich foods include:

- Papaya, pineapple, mango, kiwi and grapes
- Avocado
- Bee pollen
- Raw honey (the enzymes come from the bee's saliva)
- Extra virgin coconut oil
- Raw apple cider vinegar

Leaky Gut Syndrome

Though the original research on enzymes and immunity dates back to the 1930s, it has only been in recent years that the various mechanisms involved have begun to be made clear. At one time it was thought that the specialized cells lining the intestines prevented penetration by large food molecules, but it is now known that large molecules can pass through the intestinal wall and enter the bloodstream.

One of the best ways of preventing the absorption of these large molecules is through the complete breakdown of food, especially protein, into its smallest components prior to absorption. Unfortunately, because of today's diet that is heavily cooked, processed and sugary, most people's own digestive system is not capable of breaking down this quantity of large food molecules effectively, thus resulting in some of these molecules being absorbed through the intestinal walls.

In addition, there are a number of factors that can further hinder this process of complete breakdown of food. Eating too fast, not chewing thoroughly, eating under stress, drinking (water, beverage or even soup) with meals and also the over-use of antacids can inhibit the proper functioning of the body's own digestive enzymes. Overuse of pharmaceutical drugs such as antibiotics, also depletes your body's ability to make enzymes. As a result, an increased amount of undigested or partially digested food passes through the small intestines. This absorption of large food molecules causes a condition called "Leaky Gut Syndrome."

When absorbed into the bloodstream, some of these molecules are seen by the body's immune system as foreign, and an immune response is triggered, producing the symptoms of an allergy. These circulating molecules can also damage the immune system, thus contributing to the development of inflammatory disorders, autoimmune diseases and food allergies.

酶是促使许多生化反应发生的重要媒介，它们在反应过程有催化加速的作用。

因此，若您大部分的饮食都是熟食和加工食品，那么很大可能您将面对缺乏酶的问题。酶不足可造成消化和营养吸收不良，进而导致一些健康问题如：

- 便秘
- 腹胀
- 痉挛
- 胃胀风和打嗝
- 胃灼热和胃酸倒流

事实上，如果体内酶失调，免疫系统功能一定不佳。免疫系统一旦受损，健康一定会亮起红灯，各种疾病必相继出现。

因此，增加体内酶存量的最佳方法就是在饮食上要有三成以上都属生食。对大多数人来说，这个目标必须要分步努力达至，而不是一气呵成。

一般来说，所有生食都可提供食物酶，当中会发芽的种子和豆类食物所含的酵素最高。其他高酶的食物还包括：

- 木瓜、凤梨、芒果、奇异果和葡萄
- 酪梨
- 蜜蜂花粉
- 纯天然蜂蜜（酶来自蜜蜂的唾液）
- 特级初榨椰子油
- 纯天然苹果醋

肠漏症

虽然有关酶与免疫的关联性的研究早在1930年代就已经开始，但直到近年来，对此有关的各种机理才开始被证实。从前大家都以为肠壁的特殊细胞会阻止食物大分子的渗透，但现在才发现其实大分子也可渗透肠壁进入血液里。

预防这些大分子渗透肠壁进入血液的其中最佳方法就是要把食物完全分解，尤其是蛋白质，在被人体消化吸收之前必须将其分解成最小组分。然而由于今天的饮食都是熟食、加工或高糖，因此大多数人的消化系统都无法完全有效地分解这些食物大分子，进而导致其中一些分子会渗透肠壁进入血液。

还有其他一些因素也会妨碍食物完全有效的被分解。比如吃得太快、没彻底咀嚼、在压力情况下进食、用餐期间饮水（白开水、饮料或汤）以及过度使用抗酸药都可抑制人体自体消化酶的正常运作。还有过度服用药物如抗生素，也会影响身体自行制造酶的能力。结果更多未被消化或部分消化的食物将会渗透小肠进入血液。这种情况就称为“肠漏症”。

当进入血液，这些大分子将被身体免疫系统视为外来者，因此引发免疫反应，产生过敏现象。这些循环的分子还会进一步损害免疫系统，从而导致发炎性疾病、自体免疫疾病和对食物过敏症等。

Who Needs Enzyme Supplements?

Everybody! Especially those who have digestive problems, irritable bowel syndrome, skin allergies, inflammatory conditions, viral infections, and all chronic and degenerative conditions like rheumatic disorders, soft tissue trauma, arthritis, multiple sclerosis, cancer, autoimmune diseases, etc.

Even raw food eaters can still be enzyme deficient and need enzyme supplements because nowadays plants are grown in depleted, sick soils. These plants will give up their enzymes to the soil in an effort to replenish it. Taking a food enzyme supplement will spare your pancreas from having to do 100% of the digestion in the duodenum and allow your body to put more of its energy into producing metabolic enzymes, which every cell in your body needs in order to function.

Furthermore, research has shown that your capacity for enzyme production declines at the rate of 13% every 10 years starting at the age of 20. So by the time you are 60, you could be producing only half of the enzymes your body needs.

That's why you should consider a good, natural enzyme supplement in addition to eating more of your foods raw.

Special supplementary enzymes from plant microbial sources, taken with meals, can provide valuable assistance to the body's own digestive processes. These enzymes are stable and active throughout the pH range of the entire gastrointestinal tract; and therefore can help ensure that food is completely broken down by the time it passes out of the small intestine. By preventing the absorption of these potentially harmful large molecules, supplementary enzymes can alleviate some of the stress and damage to the immune system that these large molecules can cause.

Another way that supplementary enzymes can support the immune system is through their systemic effect. In order for enzymes to be used systemically, they must be ingested on an empty stomach (between meals). Otherwise, your body will use them for digesting food, instead of being absorbed through your gut and into your bloodstream, where your cells can use them metabolically.

谁需要摄取酶补充剂?

每一个人都需要服用酶补充剂,尤其是那些患有消化问题、肠燥症、皮肤过敏、炎症、病毒感染以及所有慢性和退化性疾病如风湿性疾病、软组织创伤、关节炎、多发性硬化症、癌症以及自体免疫疾病等的人士。

即使那些以生食为主的人士,也仍可能缺乏酶而必需摄取酶补充剂。这是因为现今的农作物大多都生长在贫瘠、不肥沃的土壤里。这些植物会为了补充土壤的养分而流失自身的酶。服用食物来源的酶补充剂不但可减轻胰脏支持十二指肠的消化工作的负担,还可让身体利用更多的能量产生代谢酶,以提供体内每一个细胞的功能需求。

此外,研究也显示,人类自行制造酶的功能从20岁开始会随着年龄增长而逐步降低,大约将每十年就降低13%。换句话说,当您到了60岁时,您的身体所制造的酶可能只有身体所需的一半而已。

有鉴于此,除了要多吃生食外,您也应该考虑服用一个有效的天然酶补充剂。

从植物微生物提炼制成的特殊酶补充剂,随餐服用可提供消化过程协助效果。这些酶在整个胃肠道的酸碱值范围内都很稳定和活跃,因此可帮助确保食物完全被分解。酶补充剂可防止这些潜在有害大分子渗透肠壁进入血液,进而减轻它们对人体免疫系统所带来的一些压力和损害。

酶补充剂也可发挥系统效应来支持免疫系统。为了让身体更有系统性地运用这些酶,服用者必须在空腹时(两餐之间)摄取。要不然,身体将会利用它们来消化食物,这些酶就没有机会被肠道吸收进入血液,以让细胞在代谢时可利用。



What is N.Zimes PA Plus™?

N.Zimes PA Plus™ is a result of eight decades of research and expertise in the study and safe handling of enzymes founded by Dr. Edward Howell.

The name **N.Zimes PA Plus™** denotes that it contains a proprietary blend called N.Zimes PA which stands for Pancreatin Alternative. This product is specially formulated to provide digestive support throughout a broad range of conditions.

Unique features of **N.Zimes PA Plus™**:

1. It is 100% plant based; suitable for vegetarians.
2. It is sourced from the highest quality ingredients and is guaranteed free of GMO.
3. It contains microbial enzymes that are active in the pH range of 2.5 to 10.0. This means that unlike supplemental enzymes of animal origin (active only in the narrow pH range of 7.5 to 8.5, an alkaline environment found in the small intestines), **N.Zimes PA Plus™** is active in both the acidic environment of the stomach and the alkaline environment of the small intestines. It starts digesting food in the stomach, and continues the process as the food enters the small intestines, ensuring complete digestion of the food.
4. **N.Zimes PA Plus™** contains a complete spectrum of enzymes necessary for digesting a broad range of foods. They include:
 - A variety of **proteolytic enzymes** which help to break down proteins at different optimum levels (effective in the broad pH range of 2.5-10). This enables protein digestion to begin in the upper stomach where pH is lower, and to continue in the higher pH environment of the small intestines.
 - A variety of **carbohydrolytic enzymes** which help to digest various forms of carbohydrates, like maltose, sucrose, glucose, fructose, complex sugars found in vegetables, grains as well as legumes.
 - **Lactase** to help digest lactose found in dairy products.
 - **Lipase** that helps to break down oils and fats.
 - A variety of **fibre-hydrolysing enzymes** that help to break down the fibrous cell walls present in grains, fruits, and vegetables. These help to release the nutrients within and enable the absorption of the resulting smaller molecules. They also help to prevent gas formation in the intestines.

Now that you understand how important enzymes are to your overall health, right down to the cellular level, hopefully you may begin to appreciate just how important it is to eat a diet rich in fresh, organic, raw foods and start taking a natural enzyme supplement.

什么是胰酶（植物）添加剂？

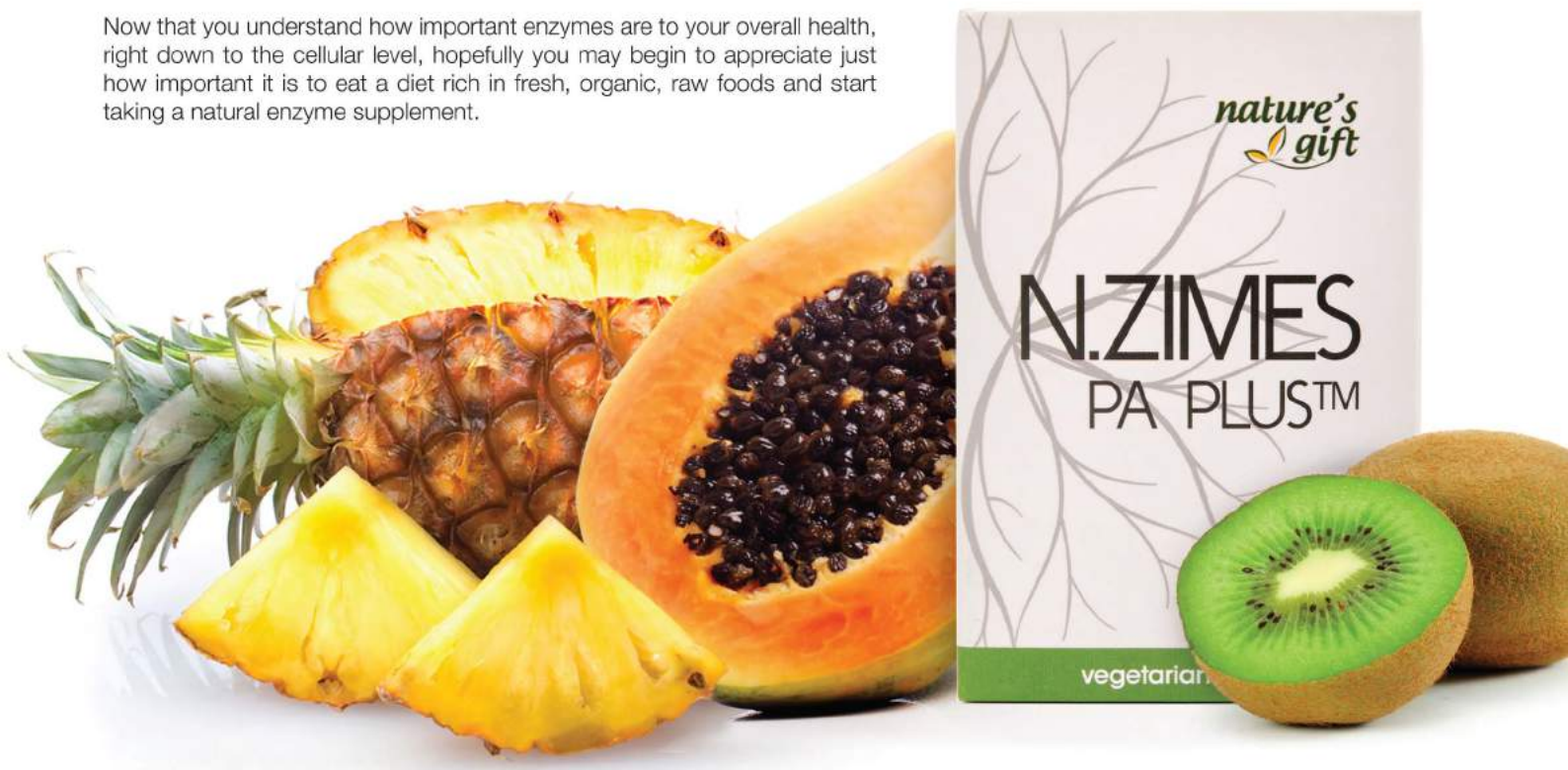
胰酶（植物）添加剂是长达八十年以艾德华贺威尔博士安全处理酶的细心研发为基础，所作出的专业研究与技术成果。

胰酶（植物）添加剂是一个专利配方，它是一种另类胰酶替代物。本产品经过特别配制，可提供消化道广泛的支援功能。

胰酶（植物）添加剂的独有特色：

1. 它是100%植物性食品；适合素食者食用。
2. 取自最高质量的成分，保证无含转基因物质。
3. 它含有许多微生物酶，可活跃在介于2.5至10的酸碱值范围。不同于动物来源的酶补充剂（只在酸碱值7.5至8.5之间较有活性，即只活跃于碱性环境的小肠中），**胰酶（植物）添加剂**在酸性环境的胃部和碱性环境的小肠中都具有活性。它在胃中开始分解食物，并在食物进入小肠的过程中持续进行消化，以确保食物完全被分解消化。
4. **胰酶（植物）添加剂**含有一系列完整的酶，可对各种不同的食物进行消化分解。它们包括：
 - 多种**蛋白分解酶**，在各最佳水平（酸碱值2.5至10的范围）有效分解蛋白质。这使蛋白质在胃上部（较低的酸碱值）就可开始被进行消化，一直到较高酸碱值环境的小肠中。
 - 各种**碳水化合物分解酶**，有助消化各种形式的碳水化合物，如存在于蔬菜、谷类以及豆类中的麦芽糖、蔗糖、葡萄糖、果糖和复合糖等。
 - **乳糖酶**有助消化乳制品中的乳糖。
 - **脂解酶**有助分解油脂。
 - 多种**纤维水解酶**，有助分解谷类、水果和蔬菜中的纤维细胞壁，帮助释放食物中的营养物质，并使所有小分子更容易被体内吸收。它们也有助于预防肠道内气体的形成。

现在您既然明白酶对您的整体健康和细胞活动有多重要，那么也希望您会作出补救行动，今天起就多生吃新鲜、有机生食以及开始摄取天然的酶补充剂。



Testimonials

Occasionally, I have a feeling of fullness after having my meals, and sometimes this leads to discomfort and even affects my sleep.

I have tried a few remedies proposed by my friends and relatives, but I find my wife's recommendation the best. It is through her that I first learned about N.Zimes PA Plus™ and its benefits. After taking the recommended dose, I find that the feeling of fullness and discomfort disappears. What a relief!

N.Zimes PA Plus™ is an amazing digestive aid, and it is so easy to consume. Now I carry it in my bag wherever I go, and I have even recommended it to my friends and relatives who share the same problem with me.

Kelvin Choong, Kuala Lumpur.

I have been taking N.Zimes PA Plus™ consistently everyday with my meals for 6 months already. It greatly helps improve my digestion. During the Chinese New Year period when I was enjoying so many feasts and yummy goodies and also, whenever I felt that I have over eaten during my meals, I would take N.Zimes PA Plus™ and it helps to reduce the gas and bloatedness rather quickly. I think it is a must-have as we eat a lot of cooked food in our daily meals because it helps in breaking down the food for easier absorption.

Kelly Wong, Singapore.

There are certain foods that tend to provoke my indigestion. After eating them, I would be burping a lot and feeling very bloated. Such uncomfortable feeling usually carries on for many hours and does not seem to go away by itself until I turn to N.Zimes PA Plus™ for relief. Without fail, N.Zimes PA Plus™ always works! Shortly after taking half or one teaspoon of N.Zimes PA Plus™, the burping and bloated feeling disappear. Perhaps my body is lacking of certain digestive enzymes hence the indigestion experience with certain food. N.Zimes PA Plus™ provides me every necessary enzyme so that food can be broken down properly for digestion and absorption.

Madam Lee, Kota Kinabalu.

见证分享

我偶尔在用餐后都会感到腹胀，有时还会导致身体不适或甚至影响睡眠。

我尝试过几个朋友和亲戚建议的疗法，比较后还是觉得我太太介绍的疗法最有效。通过我太太，我认识了新生命的胰酶（植物）添加素和体验了其健康效益。服用推荐剂量后，我发现腹胀和不适的问题全都消失了，实在是太太好了！

新生命胰酶（植物）添加素是个超棒的消化助剂，容易服用。我现在不管去哪都会随身携带，也极力推荐给跟我一样有相同健康问题的亲朋好友。

鍾先生，吉隆坡

我每天都有定时随餐服用新生命的胰酶（植物）添加素，服用至今已有六个月的时间，消化功能确实有很大的改善。尤其是农历新年期间盛宴美食不间断，或是平时偶尔吃多了，我都会服用胰酶（植物）添加素，它可快速帮助减少肠气和胃胀的问题。我觉得大家餐餐以熟食为主，真的需要每天都服用胰酶（植物）添加素，因为它可帮助分解食物，使身体容易消化吸收。

袁美珠女士，新加坡

一些食物会造成我消化不良。每当吃了这些食物，我会一直打嗝和感到腹胀，非常难受不舒服。这种感觉可持续好几个小时，往往都不会自动消失，只有等到我服用了新生命胰酶（植物）添加素才能得到舒缓。胰酶（植物）添加素非常有效，从没令我失望！我每次服用半茶匙或一茶匙的胰酶（植物）添加素后，只稍一会打嗝和胀气的感觉就会完全消失。这或许是因为我体内缺乏某种消化酶，所以当我吃了某些食物就会出现消化不良的症状。胰酶（植物）添加素可提供我所有所需的消化酶，帮助身体完全分解食物以利消化和吸收。

李女士，哥打京拿巴鲁