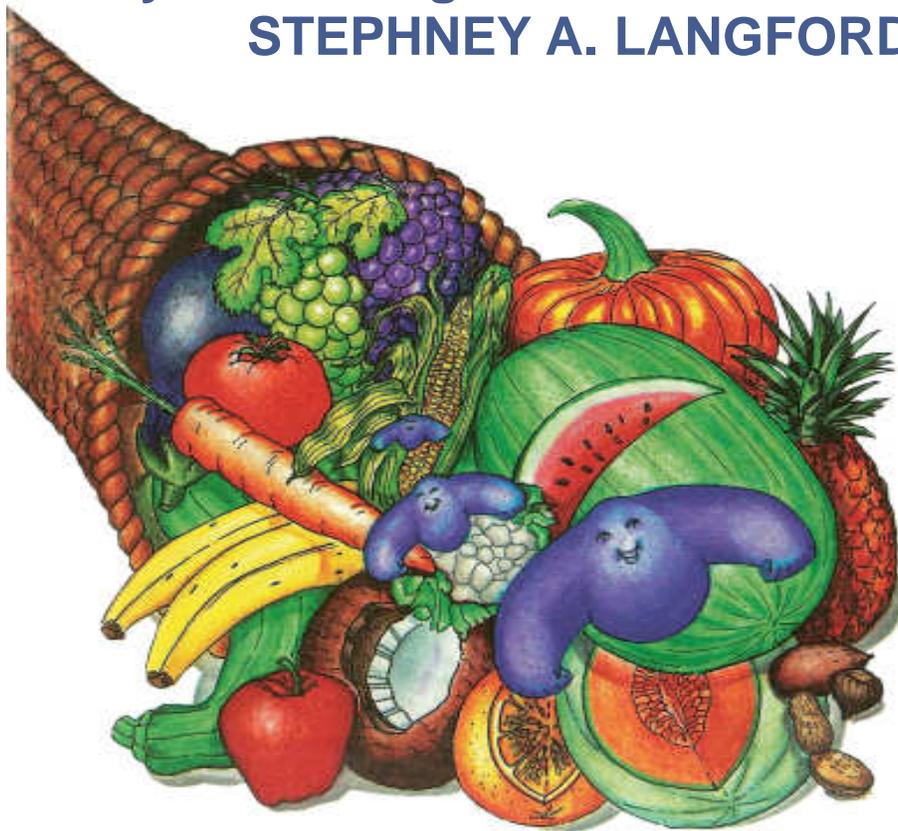


**HOW DO
ENZYMES
WORK IN YOUR BODY?**

**By bestselling nutritional author
STEPHNEY A. LANGFORD**





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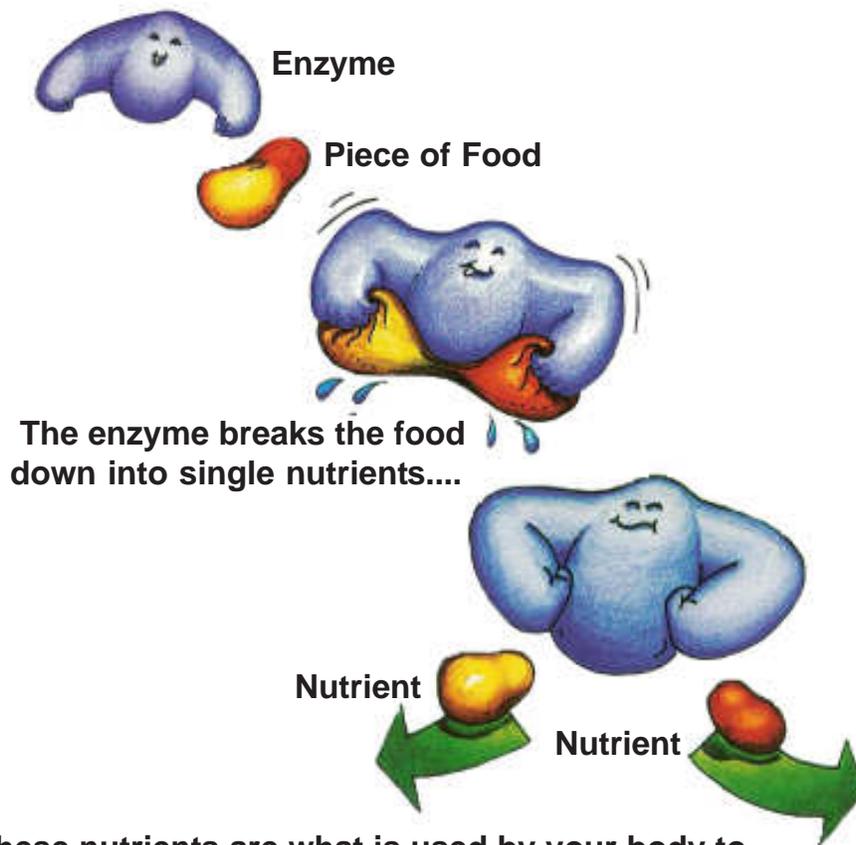
This booklet is for information purposes only and it is not intended for prescriptive or diagnostic use.
It is not meant to replace the advice and recommendation of a qualified health practitioner.

**To Every Man, Woman,
and Child on Earth –
This Book is Dedicated to
YOU**



What are Enzymes?

Enzymes come from fruits, vegetables, fish, and meat. They work in your stomach, where they help break down the food you eat into nutrients that your body can use.



These nutrients are what is used by your body to keep you alive and healthy.



Different enzymes work on different foods.



Lipase breaks down fats and oils.



Protease breaks down proteins.



Lactase breaks down dairy products.



Cellulase breaks down cellulose.



Amylase breaks down starches and sugars.



Bromelain breaks down many foods.



Papain also breaks down many foods.



The role of enzymes in the cycle of life.

A tree grows...



It blooms...



And bears fruit...

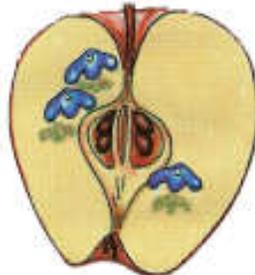




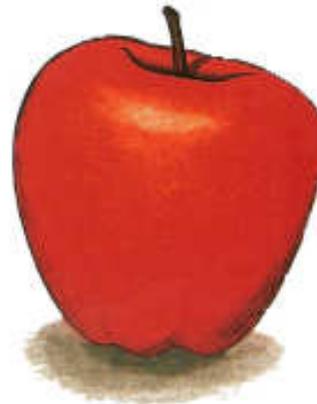
The fruit grows...



As the fruit ripens, enzymes develop in the fruit...

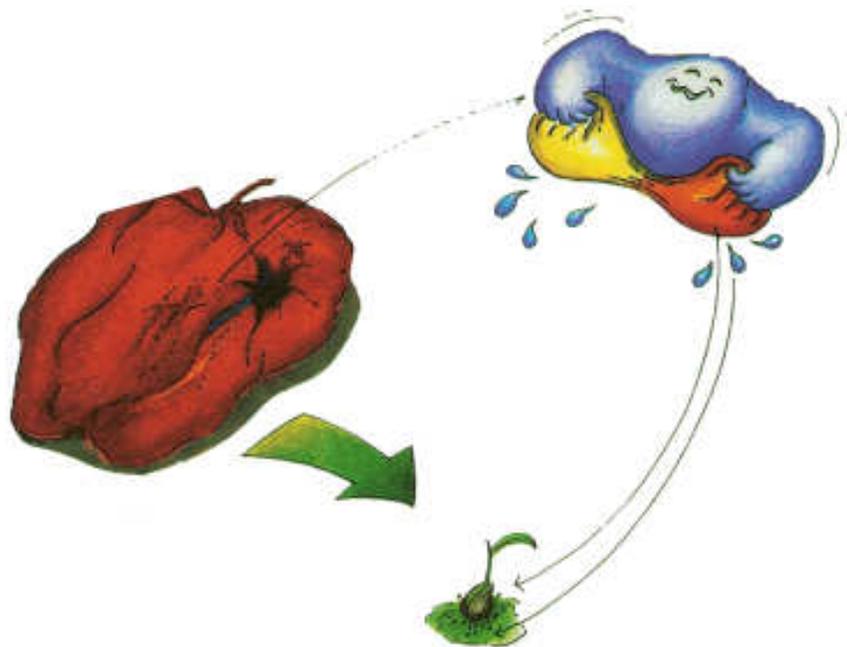


When the fruit is ripe, it falls to the ground.





As the fruit lies on the ground, the enzymes start to break apart the food in the apple. They also release the moisture in the apple.



The seed uses the broken-up food and moisture and starts to grow....

And a new tree is born!



Enzymes create new life.



Where, in nature, do enzymes come from?

Enzymes come from root vegetables...

Tuber vegetables,
like potatoes...



Stalk vegetables, like asparagus and celery...

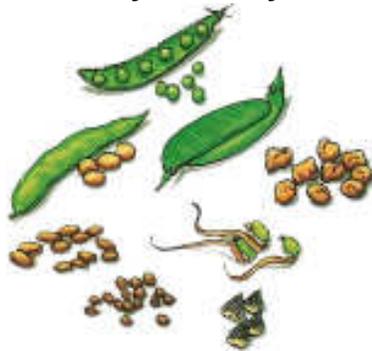


Leaf vegetables...





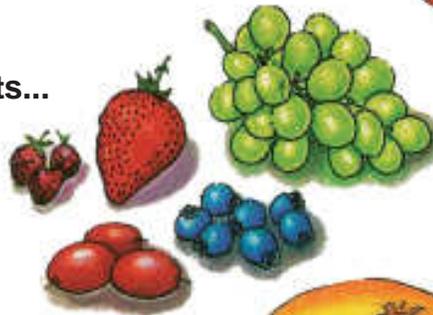
Seed vegetables...
(You can take beans and seeds and sprout them to increase your enzyme intake.)



Fleshy fruits, like peaches...



Berry fruits...



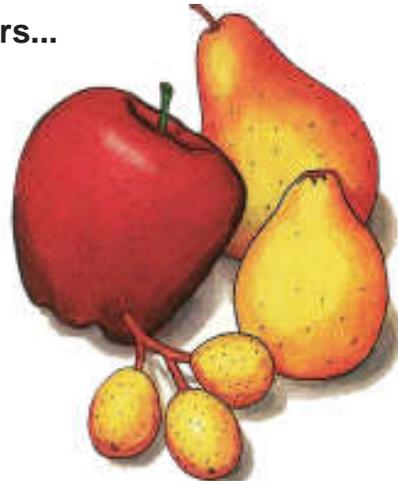
Citrus fruits...





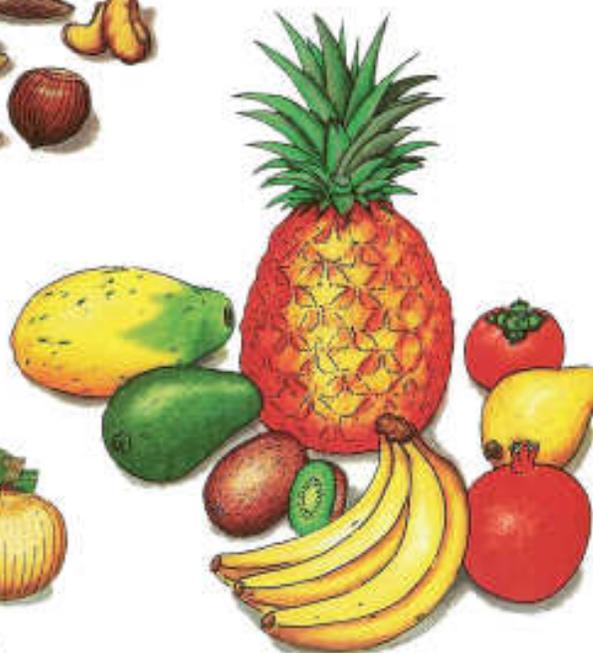
Seed fruits, like apples and pears...

Nuts...



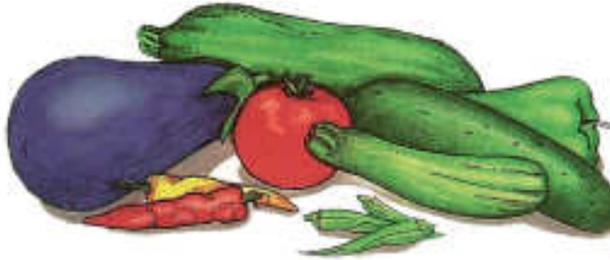
Tropical fruits...

Bulb Vegetables...





Fruit vegetables, like tomatoes...



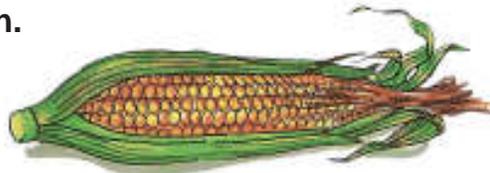
Melons...



Flower vegetables, like broccoli...



And corn.

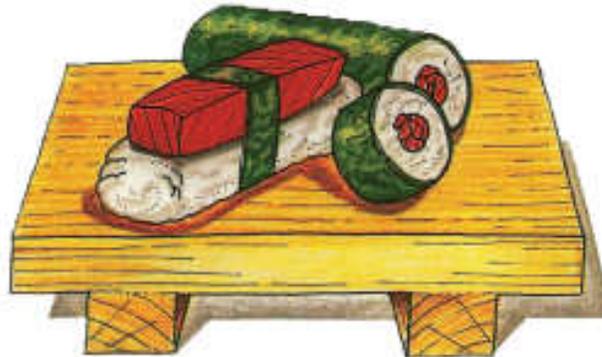




Enzymes are also present in raw meats, such as tartare steak...



And in raw fish, such as sushi.

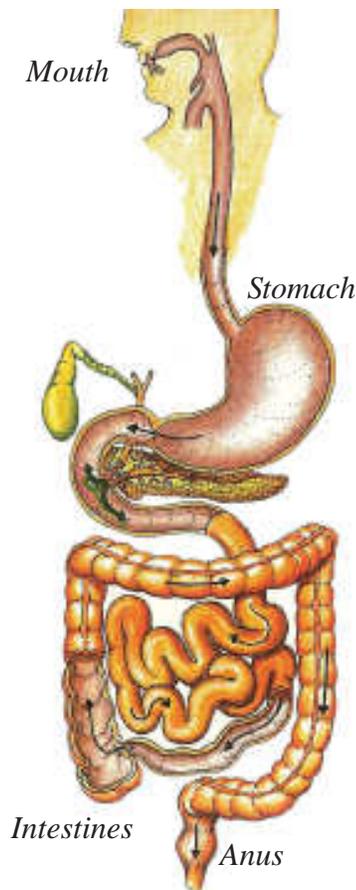




What do enzymes do in your body?

Food is broken down by chewing, and by the action of enzymes.

The food you chew in your mouth goes down your throat and into your stomach. The food then moves through your small and large intestine, and out of your body.



Some of the things your body needs, such as salt and minerals, can be absorbed directly into your bloodstream in your mouth. Most foods must be broken down into smaller pieces (called nutrients) before they can be absorbed.

Enzymes work in the stomach to break your food into individual nutrients.



In the **mouth** the food is chewed and mixed with saliva. Saliva starts to break down the food.

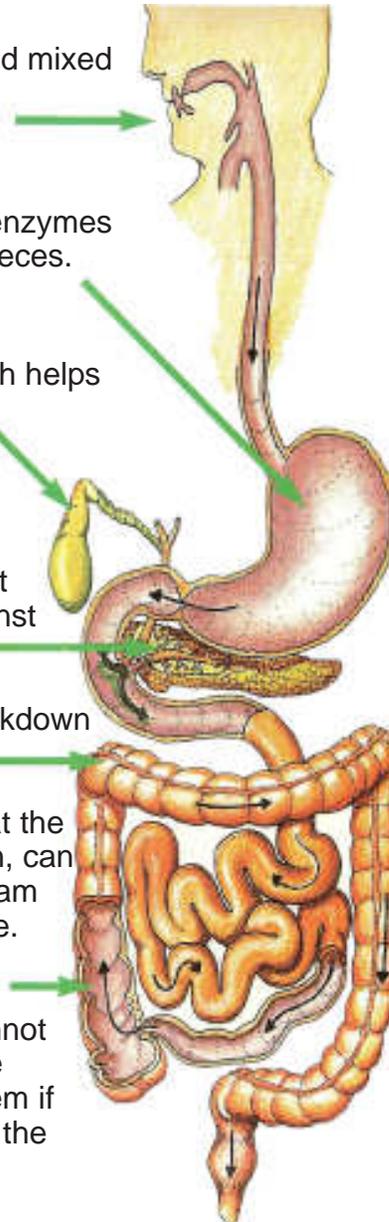
The **stomach** produces acids and enzymes that help break the food into finer pieces.

The **gall bladder** releases bile which helps break down oils and fats.

The **pancreas** releases enzymes and other substances. These neutralize the strong acids and enzymes in the stomach juices, so that the small intestine is protected against being digested itself.

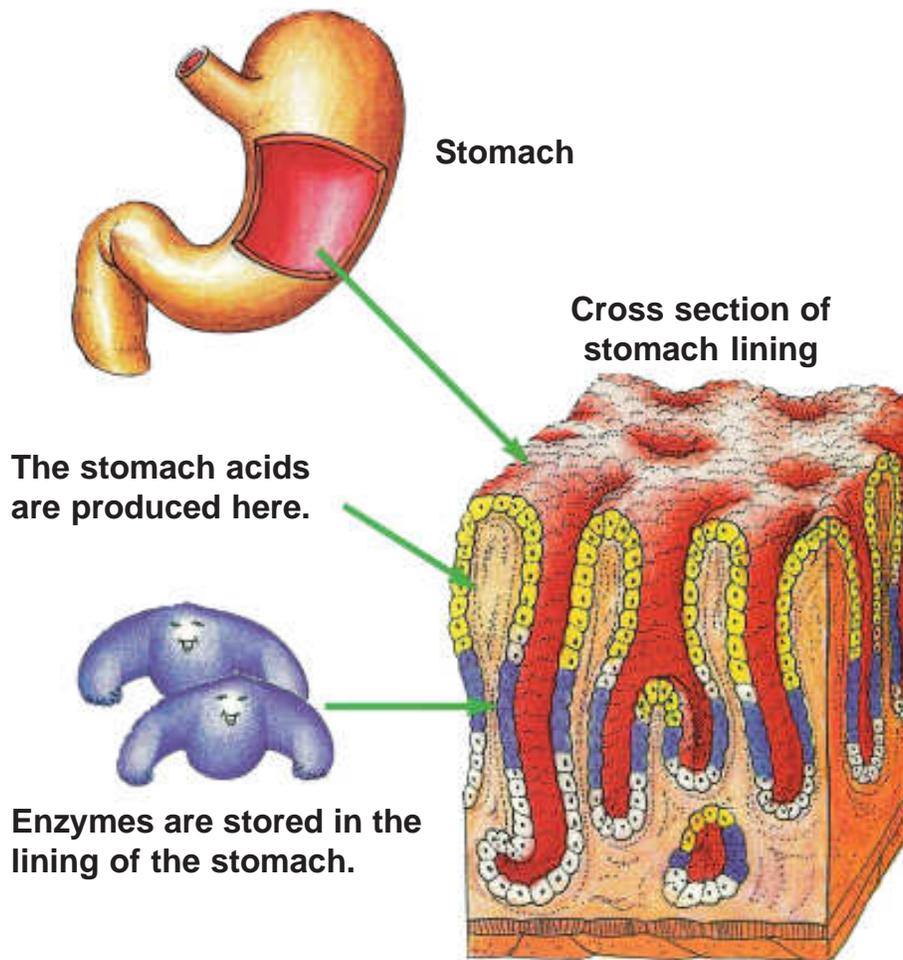
In the **small intestine** the final breakdown of proteins is done by good bacteria. The broken-down proteins, and the nutrients that the enzymes have already broken down, can now be absorbed into the bloodstream through the wall of the small intestine.

The **large intestine** prepares the left-over materials that the body cannot use to leave the body. These waste materials have water taken from them if the body needs it, or water added if the waste is too dry.



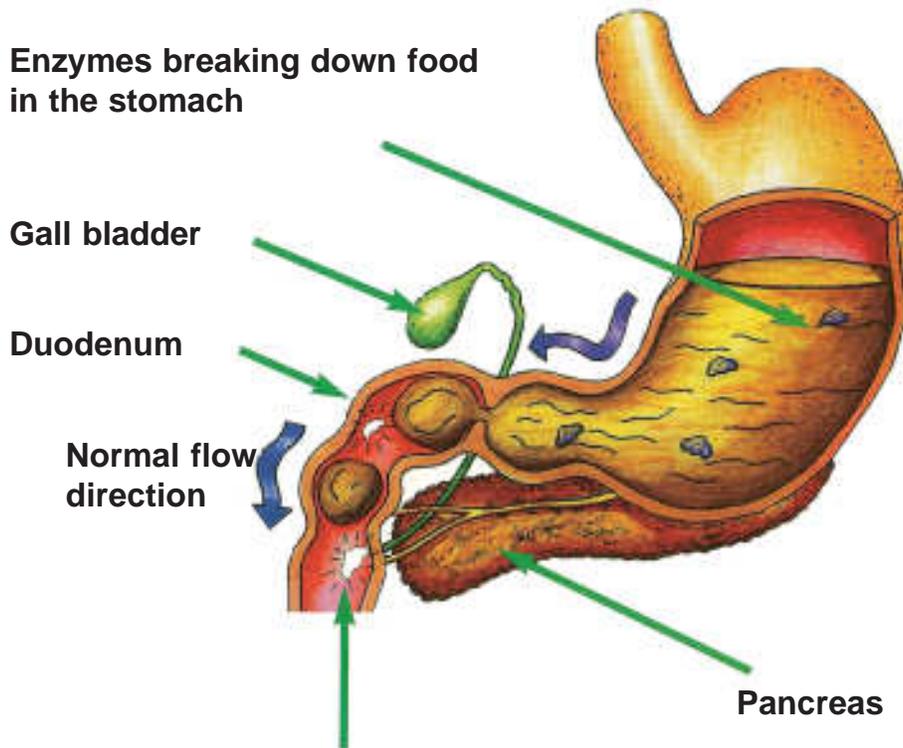


Enzymes work in the stomach.





Cross Section of the Stomach



Enzymes breaking down food in the stomach

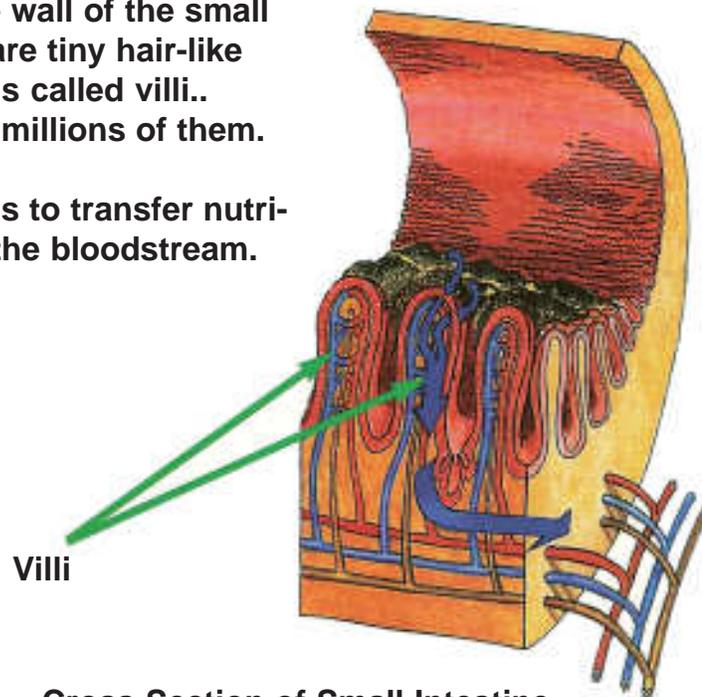
Enzymes being neutralized by pancreatic fluid

Enzymes help to break down the food in your stomach before it goes into your small intestine.



Lining the wall of the small intestine are tiny hair-like projections called villi.. There are millions of them.

Their job is to transfer nutrients into the bloodstream.



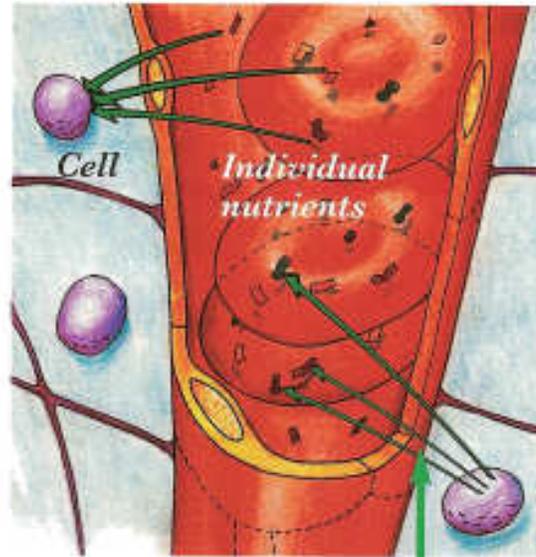
Cross Section of Small Intestine

Only when you food arrives in the small intestine completely broken down can the individual nutrients be transported into your bloodstream.

Your bloodstream carries nutrients to every cell in your body. These nutrients are the only thing that keep your cells alive.



Once the enzymes have split your food apart into nutrients, the blood vessels can carry the nutrients to the cells.



Cross Section of a Blood Vessel

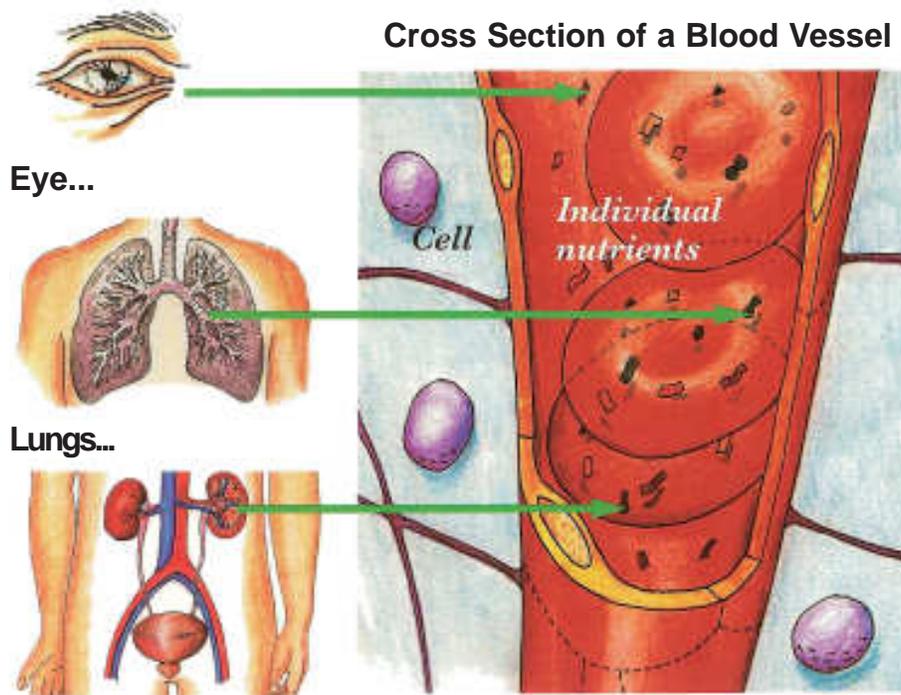
If the cells get the nutrients they need they can push out the toxins and wastes that have accumulated in them.

If the cells are well-nourished they can stand up to all the bad things that come into your body. Your body's immune response (its ability to fight back) has been built up.



Different nutrients are used to build and repair different parts of your body.

For example, the nutrients needed to repair the parts of your eyes are different from the nutrients needed to repair the lungs, the kidneys and all the other parts of your body.



Kidneys...and so on.



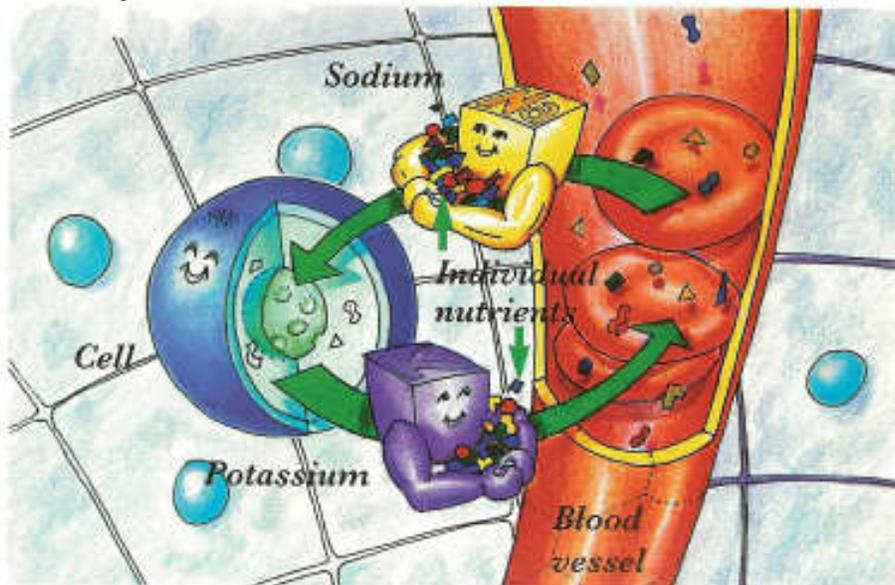
Sodium helps carry nutrients from the blood vessel into the cell.

Potassium helps carry unused nutrients back into the bloodstream so they can be transported to other organs that may need them.

The balance between sodium and potassium is vital for good health.

Skin

Close-up Inside the Skin



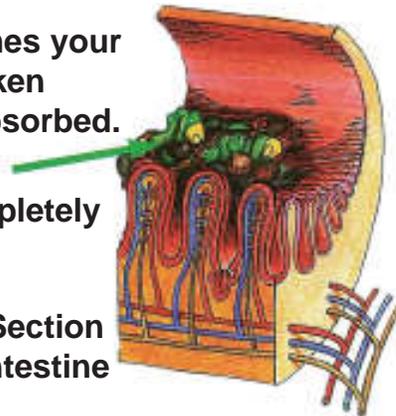


What happens if you do not get enough enzymes?

If you do not get enough enzymes your food cannot be completely broken down and so cannot be fully absorbed.

Food not completely broken down

Cross Section Small Intestine



If food arrives in your blood in a complex form the white blood cells have to work hard to destroy it. This lowers your immune response.

Fats that are not completely broken down stick to the sides of your blood vessels.

Molds like candida start to live in your blood on the complex sugars that have not been completely broken down. Candida can then move into your cells. These molds release toxins into your body.



Your body produces some enzymes itself, but eating foods that do not contain enzymes puts a big strain on your body. The food you eat may not be properly broken down and may leave your body without being absorbed.

You may be starving your body no matter how much food you put into yourself.

Some foods contain no enzymes. They may even contain preservatives that kill off enzymes.



Malnutrition and obesity...inability to concentrate...bad moods...tiredness...fussy babies...allergies...

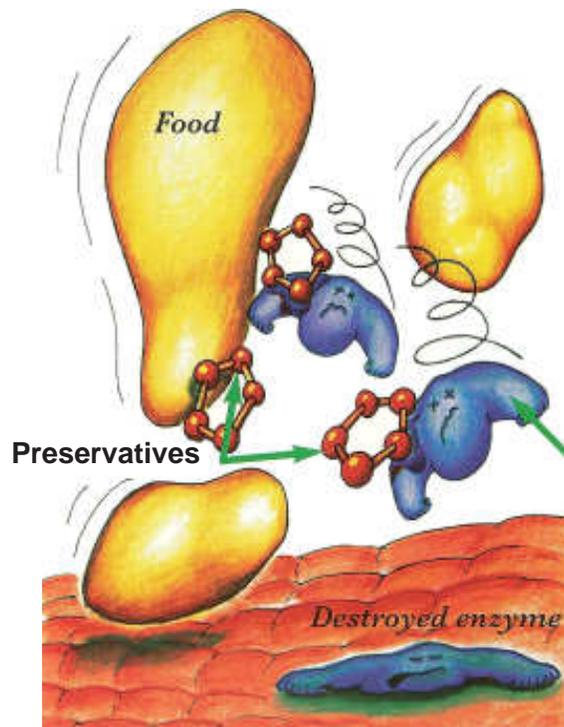
All these may result when the cells are starving.

Your health goes down and down.



What kills off enzymes?

Preservatives in food can kill off enzymes. Enzymes help food to break down (rot). Preservatives are put in food to prevent this. Preservatives kill enzymes and stop the breaking down process.



Preservatives not only destroy the enzymes in the food you eat, but can also end up inside your body, where they can kill off the enzymes already in your body.

Enzyme being destroyed by a preservative

Close-up of Enzymes in the Stomach



Hydrogenated oil is oil that has been treated to preserve it.



Salad dressing, like any prepared food, often contains preservatives such as **sodium benzoate**.



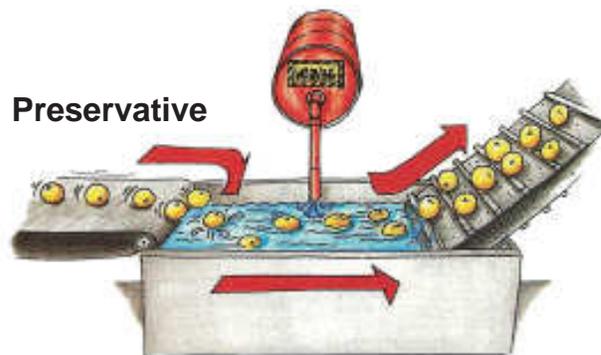
You eat a salad before your meal to provide your body with enzymes so that the rest of your food can be broken down.



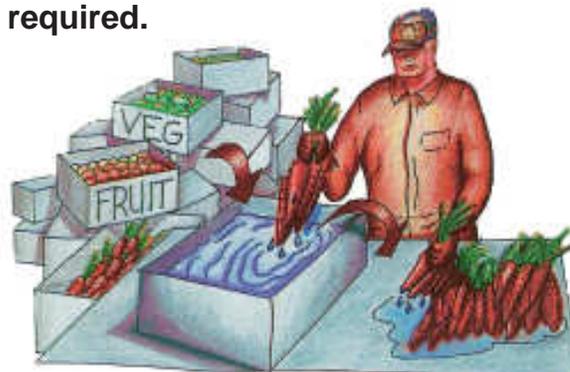
But if your salad dressing has preservatives in it they will kill off the enzymes in your salad.



Waxing fruit. Preservatives are often added to the wax in which fruit is dipped. They get absorbed into the fruit through its skin, and then into your body when you eat the fruit.



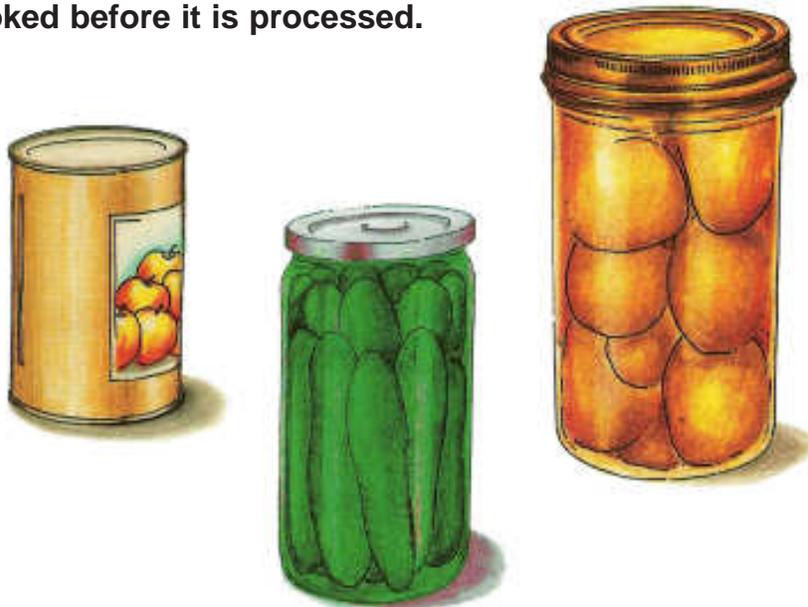
Dipping in preservatives is often done by the farmer or at the place where the produce is sold. This is permitted in many places, and labeling the food as preserved is not always required.



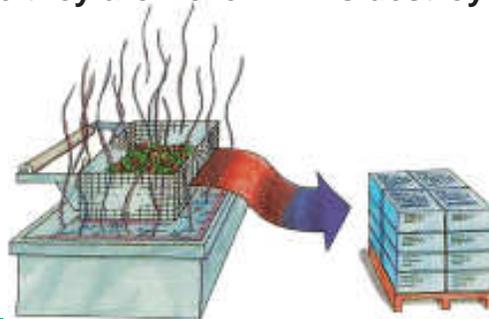
This is often done in some restaurants in their salad bars.



Canning, pickling, and bottling destroys enzymes because the food is cooked before it is processed.

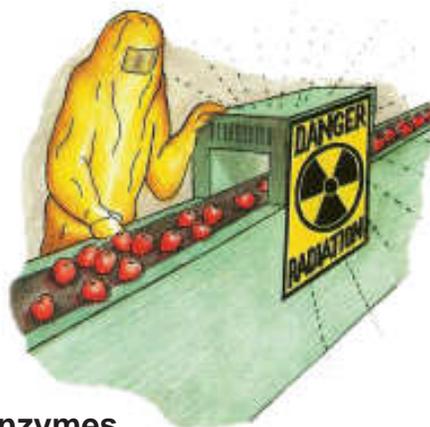


Freezing. Frozen vegetable are usually dipped in hot water before they are frozen. This destroys the enzymes.

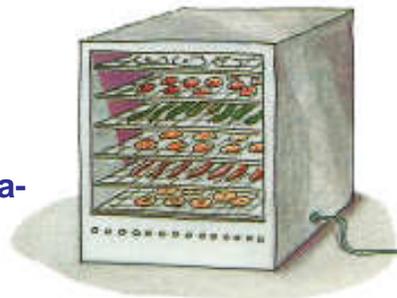




Carbonated drinks destroy enzymes in your body.



Irradiation destroy enzymes. The fruits and vegetables are exposed to nuclear radiations to lengthen their shelf life. Fruits and vegetables that are treated in this way are not always labeled as irradiated.



Drying food at high temperatures kills off enzymes. If drying is done at a low temperature, the enzymes are not destroyed.



If fruits and vegetables are picked when they are **too green** they will have no enzymes in them.



This is sometimes done when the produce must be transported long distances.

The enzymes in fruits and vegetables only develop when they ripen on the plant. If they are picked before they are ripe they do not have enzymes in them.



Cooking also destroys enzymes.

Frying...



Boiling or stewing...



Even stir-frying.



**You *need* to cook most of the protein you eat to make it soft and easy for your body to digest.
But cooking destroys the enzymes in the food.**

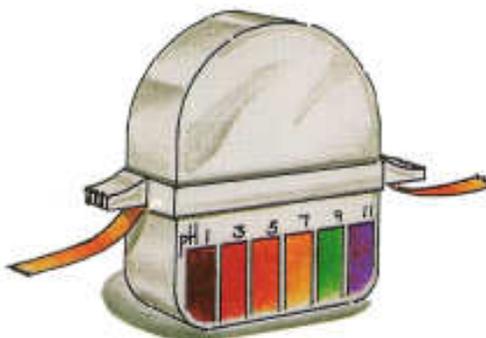


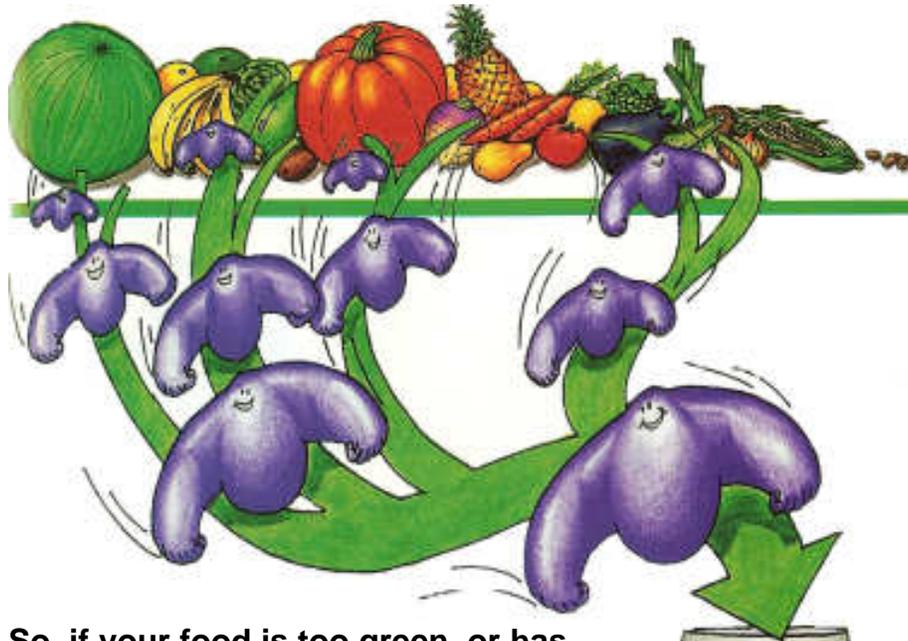
How do you replace lost Enzymes?

How do you know if you have enough enzymes in your body and are getting the full value from the food you eat?

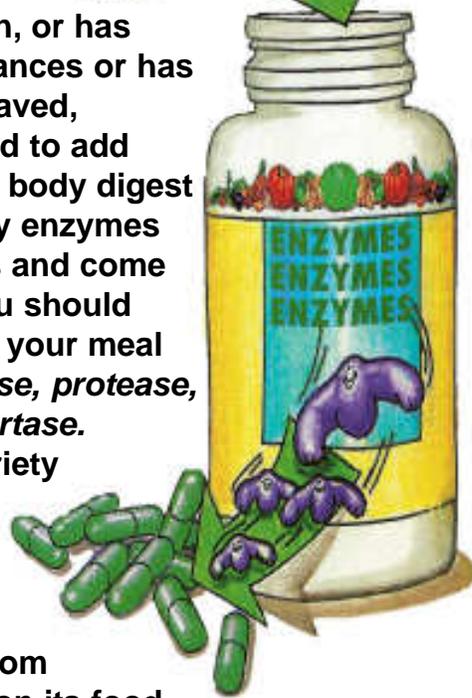
First check if your body needs enzymes. Use litmus paper to check your pH (acidity level). Quickly dip a piece of the paper into your first urine stream in the morning. It will change color. Match this against the colors on the side of the box, and you will find your pH. You can get litmus paper (also call pH paper) from any good drugstore.

If your pH is between 5 & 6, your body is not using all the food you eat fully. **Increase your intake of fresh fruits and vegetables, and take enough live enzymes in the capsules to get the pH to between 7 & 8.**



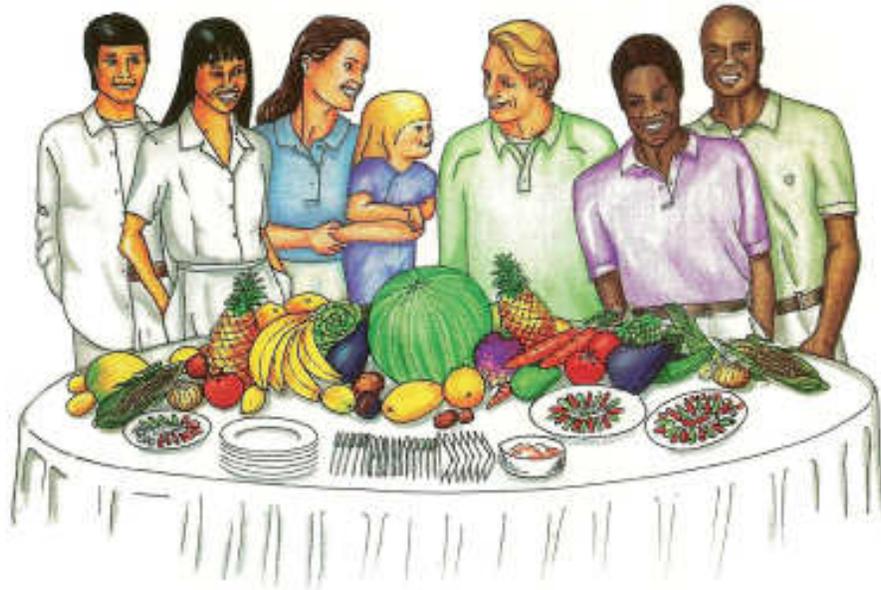


So, if your food is too green, or has been transported long distances or has been fried, boiled, micro-waved, steamed or boiled, you need to add extra enzymes to help your body digest its food. The highest quality enzymes are from vegetable sources and come in a vegetarian capsule. You should have a formula to take with your meal that contains *amylase, lipase, protease, cellulase, lactase, and invertase*. There should be a large variety of enzymes to help you digest all the different kinds of food you eat.



Your pet can also benefit from having enzymes sprinkled on its food.

Supplement with enzymes to replenish your body's enzyme bank account and to more easily digest and assimilate your food.



Fresh, ripe fruits and vegetables give your body enzymes that turn the foods you eat into nutrients your body can use. They also supply your body with nutrients that are important for cellular repair.

If you can, grow your own fruits and vegetables. That way you know what has been done to them.

If you cannot do this you should **supplement your daily diet with capsules that contain live enzymes.**

These are vital for pet's health too.



**Bestselling author Stephney A. Langford
has studied the needs of the human body
for over twenty years.**

**You need to know and use this data for
your own health and the health of your
loved ones.**

Use this book to come alive and have fun!

