

January / February 2007

ENZYME WORLD



SERVING
GREENER
ENVIRONMENT



ADVANCED
ENZYME TECHNOLOGIES LTD

Where ENZYME is Life



CONTENTS

THE EDITORIAL *Team*

The Enzyme World Team

Compiled By:

Mr. Piyush Rathi

Mr. Dipak Roda

Ms. Ritu Pande

For your valued
inputs/feedback/queries/news,
We will be glad to assist you,
on
022-2583 8350/54.

Or write us at
info@enzymeindia.com

For the online newsletter:
Visit us at
www.enzymeindia.com

Designed by: Access Advtg.
28202091/92

Content	2
From The Desk Of The MD	3
VegPanzyme	4
Clinical Research & Enzymes	7
BoviSEB Enriched.	9
Enzymes and Backstaining Stainclear is answer from AETL	12
Company update	15
New Joinees & Birthdays	16
Wisdom from indian kitchen	17
Lifestyle	18
How to stay young always	
Quiz & Previous quiz answers/winner	19

FROM THE DESK OF THE MD

From MD's desk:

JAI GURUDEV to everyone!

Jai Gurudev has such vast meaning that it covers every kind of Greeting, Best Wishes, prayer, blessing, etc. It is also itself a great source of Knowledge!



We all at **AETL** are working to help create new level of learning in Human Life & Life in all forms! Over 40 scientists have been working relentlessly to this work who are employee of **AETL** out of which over 6 are Ph D's. **AETL** carries out lot of it's research work with various partners world over. I strongly believe in collaborative research as it has very strong possibility of success rate and faster time to reach market too.

Energy is core of every life + industrial segment. One of our group of Scientists are working on new frontiers of Bio-fuel production! The early work shows are very promising results. Our Scientists believe that they can improve the Bio-ethenol yields by 10-30% in current situations and helping processors save production costs! In next year, we expect to lainch few products in this segments.

AETL has formed a JV with German R&D company to manufacture Enzyme LIPASE to open up new VISTAs in Chiral Chemistry, Bio-Diesel production, Industrial Fatty Acid & esters productions. Lot of R&D work is being carried for this work.

In textile processing, wet processing is involved at each & every step. To help each & every process house & mills to get high end results, we have launched a General Wash Agent - STAIN-CLEAR. It has excellent wash properties & it is eco-friendly.

Role of PROBIOTICS, PRE-BIOTICS, and Enzymes has been gaining importance day-by-day. PRE-& PRO-BIOTICS offer high benefit when you deal with Live-stocks where daily feed changes & envirnmental changes affect the health of LIVESTOCKS! Here PROBIOTICS can very quickly adopt & help to produce required Enzymes & Bio-actives at site. Plus, PROBIOTICs are quite cheap to produce for similar effects.

There has been great demand for many Vegeterian people for effective VEGETATIVE BASED PANCREATIN, our VegPanZyme fills this important gap. It is totally VEGITATIVE + offer equall or better results over conventional Pork or Beef Pancreatin which is Animal Gland extraction based.

Wishing you happy reading of this ENZYME WORLD....

Jai Gurudev

C. L. Rathi

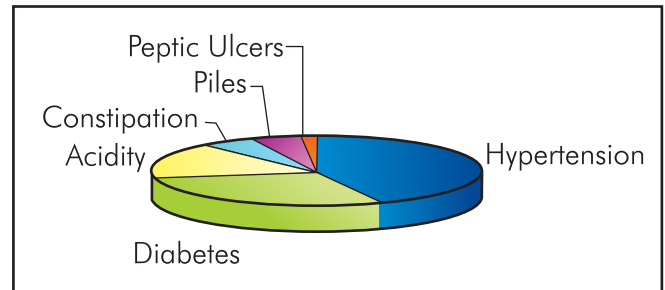
VEG-PANZYME[®] DIGESTIVE FIRST AID KIT



The recent national research survey from ACNielsen 2006 findings show that more than 20 percent of urban homes have someone suffering from at least one of the six chronic ailments Acidity, Constipation, Piles, Peptic Ulcers, Diabetes and Hypertension. However, this percentage is lower at 18 percent in the top eight metros, Delhi, Mumbai, Kolkata, Chennai, Bangalore, Hyderabad, Pune and Ahmedabad, but is higher for upper Secured Educational Class (SEC) more than 25 percent in other part of country.

For every 100 persons suffering from any one of the above chronic ailments, the ratio is:

Ailments	%
Hypertension	43.5
Diabetes	27
Acidity	17.5
Constipation	5
Piles	4.5
Peptic Ulcers	2.5



In the days of stress, gastro-intestinal upsets are very common, disturbing the quality of life and the thinking capacity. With good digestive supplement, the gastro intestinal tract irritation caused by the stress is reduced and subsequently, poor quality of life can be improved. **AETL** has conducted a pivotal scientific research and introduced **VEGPANZYME[®]** as a complete answer for digestive health ailments.

Why VEGPANZYME[®]..... ?

Digestion involves a series of processes in the gastrointestinal tract by which feeds are broken down in particle size and finally rendered soluble so that the absorption is possible. This is accompanied by series of mechanical and enzymatic processes. The enzymatic processes are very essential for the digestion and the microorganisms provide important enzymes that are not secreted by mammalian species. Digestive enzymes act in the mouth, stomach and intestines to break down food into simpler compounds usable for producing energy or for building various food substances.

There are eight major digestive enzymes as Protease, Amylase, Lipase, Cellulase, Maltase, Lactase, Phytase and Sucrase out of which the

Protease, Amylase, Lipase, Cellulase are absolutely essential for optimum health, and Maltase, Lactase, Phytase, Sucrase are generally manufactured by the body on an as and when required basis. However, all eight of these enzymes perform a very specific function that cannot be performed by a different enzyme, and so all are very important.

The deficiency or alteration in function of an enzyme first results in indigestion and further affects various body processes and functions. It is therefore necessary to replenish the enzymes using external sources.

What is VEGPANZYME® ?

VEGPANZYME® is a 100% non-animal origin polyenzyme, combination derived from special cultures of fungal, bacterial and botanical origin. Due to broader pH range dose not require any enteric coating and is an excellent tonic where a vegetarian source of enzymes is desirable.

VEGPANZYME® hydrolyzes food components and facilitates their digestion in a complete digestive track at various pH ranges and can be used for treatment of conditions in which the secretion of pancreatic juice is deficient e.g. pancreatitis. Its administration can significantly reduce the nitrogen and fat content of stool.

VEGPANZYME® has a FOUR WAY action

- GUT MOTILITY MODULATOR
- ANTACID
- APPETITE STIMULANT
- DIGESTANT

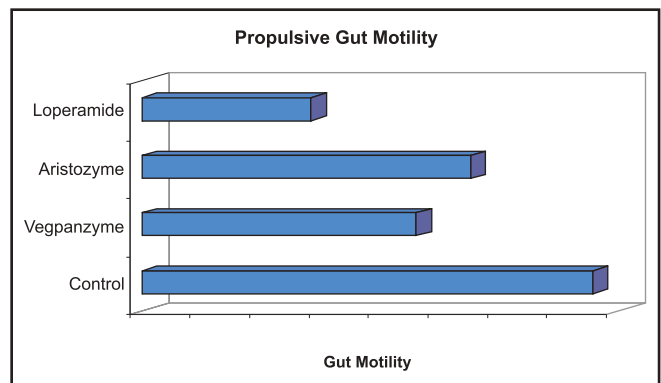
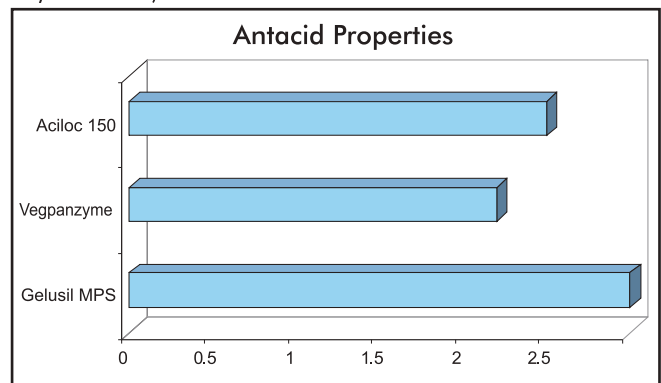
The preclinical pharmacological studies have confirmed the effectiveness of

VEGPANZYME® as a potent remedy for all the chronic digestive ailments.

The studies on Wistar rats conducted at RBIPL confirm the positive modulation of gut motility

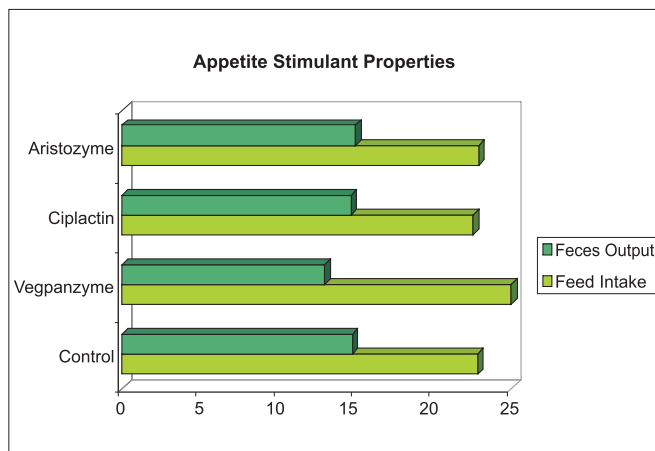
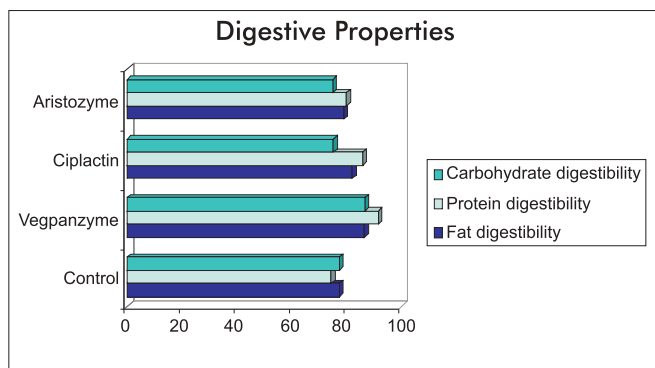
by **VEGPANZYME®** thereby preventing constipation and diarrhea.

Efficacy of **VEGPANZYME®** as an antacid has been studied in vitro by the methods of acid neutralizing capacity, as suggested by Vogel (2002). It was concluded that the antacid property of **VEGPANZYME®** is comparable to that of Aciloc 150 (Ranitidine) at different time intervals as well as in Gelusil MPS (Aluminium Hydroxide).



In vivo studies in laboratory animals very well conclude efficacy of **VEGPANZYME®** as a appetite stimulant and effective protein, carbohydrate and fat digestant.

VEGPANZYME® at 200mg/kg dose level reduced the feces output indicative of increase in digestion, at the same time, the feed intake was observed to be unchanged. Thus inferring that it helps to stimulate digestion and appetite. Both these properties are highest at day 15th, indicative of short duration feeding and so ideal as an adjuvant therapy with antibiotics, hepatotoxic drugs and health tonics after



Benefits:

- Requires no enteric coating, unlike pancreatic products.
- Has a broader pH range.
- Hydrolyzes food components.
- Facilitates digestion in a complete digestive tract.

Indications :

VEGPANZYME® supplements are useful in various gastrointestinal ailments, from simple heartburn and bloating to more persistent problems, such as chronic indigestion and irritable bowel syndrome. The supplements also are given as digestive aids for patients battling cancer, and sometimes for non digestive complaints, such as the skin ailment rosacea. Some times, **VEGPANZYME®** even benefits patients when taken daily resulting in peak digestive performance & prevention of acidity. Specifically, **VEGPANZYME®** supplements may help to:

- Reverse the digestive upset that can occur with normal aging. Many practitioners contend that

digestive problems often develop in later decades because stores of digestive enzymes decline with advancing age. Taking **VEGPANZYME®** supplemental enzymes helps to restore good digestion by replenishing these dwindling supplies.

- Treat flatulence, heartburn, irritable bowel syndrome, and other digestive complaints. Nearly all types of digestive problems can benefit from **VEGPANZYME®**. In the case of heartburn, for example, the thinking is that any means of accelerating the stomach's emptying of food may well reduce stomach acid and lessen irritation along the digestive tract. Upset due to irritable bowel syndrome or inflammatory bowel disease (Crohn's disease, ulcerative colitis) may also be eased.

- Provide nutritional support for cancer patients. **VEGPANZYME®** therapy as adjunctive (supportive) treatment for cancers of the pancreas, colon, lung, and other organs so as to soothe the side effects from harsh chemotherapy and radiation regimens.

- Ease symptoms of candida overgrowth syndrome. This controversial illness, thought to be due to runaway growth of Candida yeast in the intestines, can cause diarrhea, gas, bloating, joint aches, and many other discomforts. Plant-based **VEGPANZYME®** helps to restore good digestion.

- Adjunctive therapy with Antibiotics and Hepatotoxic drugs. In antibiotic treatment, the beneficial gut flora get affected, ultimately disturbing the digestion. By proper supplementation of **VEGPANZYME®** as the adjuvant, it can be prevented. In hepatotoxic drugs, liver function is altered which can be maintained by **VEGPANZYME®**.

CLINICAL RESEARCH & ENZYMES



Advanced Enzyme Technologies is currently undergoing Clinical Trials in various hospitals and sites. Clinical Trials are done to find out the safety and efficacy of the drug before launching the product in Market. All over the world there are so many drugs for arthritis, cardiac problem, diabetes etc. But all these drugs along with its benefits have many risk factors. There are higher chances of serious adverse effects. Though these drugs cure your current illness, besides that one has to take other drugs for healing the side effects produced by the drug itself.

AETL is dealing with enzymes which are one of the best treatments for the targeted diseases with no side effects.

Enzymes have very specific mechanisms. Many are well known and characterized. Each enzyme has a very particular job. Enzymes work according to ordinary biochemical properties and are not living organisms complete with free will and instincts. Because of this, enzymes have far fewer side-effects and unknown possible reactions than other compounds, supplements, or medications. This feature makes them extremely safe.

Also, healthy tissue and cells have natural mechanisms protecting them from enzyme action. The body is full of checks and balances, including lots of enzyme inhibitors, which allow



enzymes in your body to function properly without digesting you away. Enzymes are used for wound healing because they selectively degrade infection and dead tissue away while leaving healing tissue growing. Enzymes are used to remove tumors because they attack the cancerous tissue and remove it, while facilitating the growth of healthy tissue. This built-in natural selective property of enzymes can be seen on surface wounds. It has also been seen and measured in cell cultures and by monitoring internal wounds and tumors (Enzyme therapy, Wolf)

Digestive enzymes are classified as a safe food in the United States and have GRAS status (Generally Regarded As Safe). Since they are not in the realm of the Food and Drug Administration (FDA), specific digestive enzyme blends are neither FDA approved or unapproved, just as oatmeal is not specifically

FDA approved or unapproved for you to eat. However, enzyme therapy is currently FDA approved in the treatment of certain health conditions (Lopez 1994).

These include:

Cardiovascular disorders

Gastrointestinal conditions, particularly pancreatic insufficiency and related disorders

Replacement therapy for specific genetic disorders and deficiencies Cancer treatment

Debridement of wounds (degradation or cleaning out of dying or dead/necrotic tissue)

Removal of toxin substances from the blood

Think of this analogy:

Everyone dies and everyone drinks water; so can we prove that drinking water causes death? The same applies to breathing oxygen: can we prove that since everyone breathes oxygen and everyone eventually dies, dying is a long-term effect of breathing oxygen? Maybe not since water and oxygen are necessary for life. But we can turn this around and look at it: If we take away water or oxygen, will a person live the same length of time or even longer? What usually happens is that if you take away air and water, the person dies pretty rapidly. So the lack of oxygen and water is a cause of death far, far more and quicker than taking in too much.

Digestive enzymes are similar because they are a necessary part of sustaining life in animals. So far, taking too many enzymes hasn't been a cause of death or even shortening one's life span. However, not taking adequate amount of enzymes has been a cause of death and sharply declining health.

Compiled by
Shalaka Gadkar
The Pharma Lab

IMPROVE YOUR ANIMAL'S PERFORMANCE WITH BOVISEB ENRICHED



What is BoviSEB?

BoviSEB is 100% natural and a Perfect Blend of Enzymes & Probiotic for use as an effective Bio-feed supplement.

What is BoviSEB Enriched?

BoviSEB Enriched is rationale combination of enzymes and multi-strain probiotics and fortified with beneficial yeast culture specially designed and developed to enhance digestibility and utilization of all essential nutrients from feed which in turn help to increase the milk yield with improved fat and SNF profile.

How BoviSEB Enriched Useful to Animals?

The facts about the animals are

The animal health can be maintained by prevention of pathogenic attack and by specific alteration of the host's microflora population. It will also have beneficial effects on production by alteration of rumen flora to help digestion.

Thus certain microbes can improve production efficiency of animals on optimal nutritional regimens. These microbes which are termed as Probiotic will help the host animal to improve its

intestinal microbial balance.

Probiotics promote the establishment and development of a desirable intestinal microbial balance in the animal. There is a delicate balance within the animal between normal and pathogenic Micro-organisms. This balance can be upset by poor husbandry conditions, by disease or by stressor. Research has proved that supplementing ruminant diets with fiber degrading and other enzymes in combination with Probiotics has significant-potential to improve feed utilization, feed conversion and to boost milk production.

In ruminants Probiotic and Enzyme combination has been used potentially to improve feed efficiency along with better health. This combination, if fortified with essential strains of yeast culture such as *Saccharomyces servicae* will help to increase the milk production.

Advanced Enzyme Technologies Limited who has pioneered the use of enzymes in India thorough its research and development has stressed on combined use of enzymes, probiotics and natural vegetable proteins for all the major



group of animals with corporate vision to provide ecosafe solutions and has developed a unique product BoviSEB Enriched which will help the host animal in multiple ways.

Modes of Action of Probiotics and Yeasts Included in BoviSEB Enriched

The different enzymes, probiotics and yeast included in BoviSEB Enriched will help by one and /or more than one of the ways mentioned below

Production of organic acids

Probiotics have been found to produce a number of organic acids. The most common are lactic, acetic, and formic acids, which inhibit intestinal pathogens. Organic acids also serve as energy sources to the animal or other beneficial bacteria.

Production of antimicrobials

Research has reported certain strains of bacteria produce bacteriocins, hydrogen peroxide, and other compounds that inhibit intestinal pathogens.

Competitive exclusion

The basic idea behind competitive exclusion is that the probiotic organisms occupy the attachment sites that potentially pathogenic bacteria use and thereby prevent them from colonizing the intestinal tract.

Stimulation of immune response

Research has reported that when animals are fed certain strains of bacteria, the activity of their immune systems increases.

Enzyme activity

Beneficial bacteria, especially Bacillus, produce a variety of enzymes which in case of BoviSEB Enriched is boosted up with their exogenous supplementation. These different enzymes will help for better digestion of the fibrous feed stuff and fibrous feed stuffs are commonly used in animals.

Reductions of toxic amines

Amines, produced by some intestinal microbes, are irritating and toxic, and have been associated with diarrhea. Lactic acid bacteria have been found to reduce the level of amines in the gut and to neutralize enterotoxins.

What are the Benefits of BoviSEB Enriched?

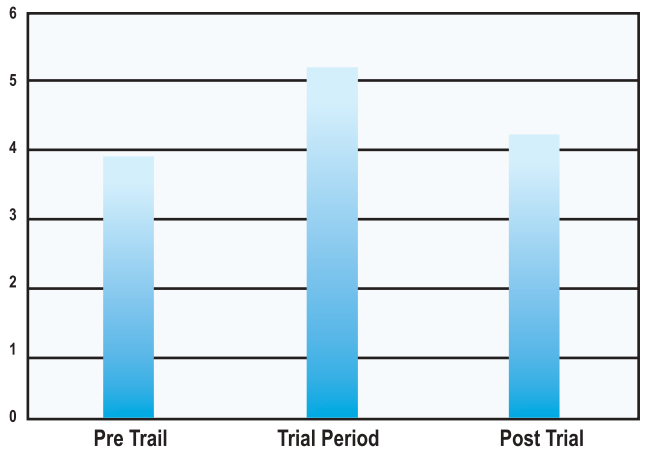
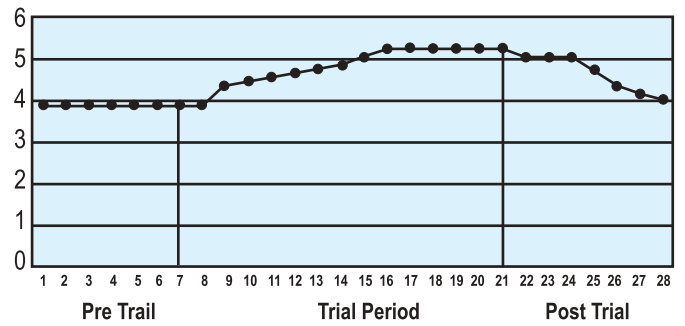
- Improves fibre digestibility
- Stimulates the growth of beneficial bacteria in Rumen.
- Enhances Milk Production.
- Improves fat and SNF content of milk.
- Improves disease resistance
- Triggers growth rate
- Better feed conversion efficiency.

Following are the results of the BoviSEB Enriched trial in crossbred cattle conducted at Veterinary Livestock Center, Vijipur, District - Kolar by Dr.S.N.Murthy

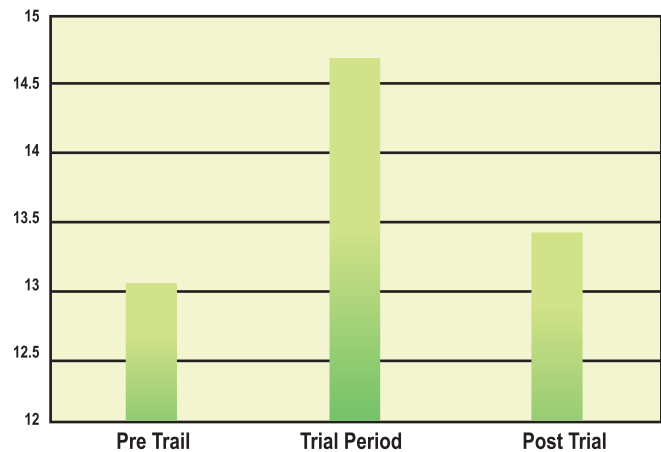
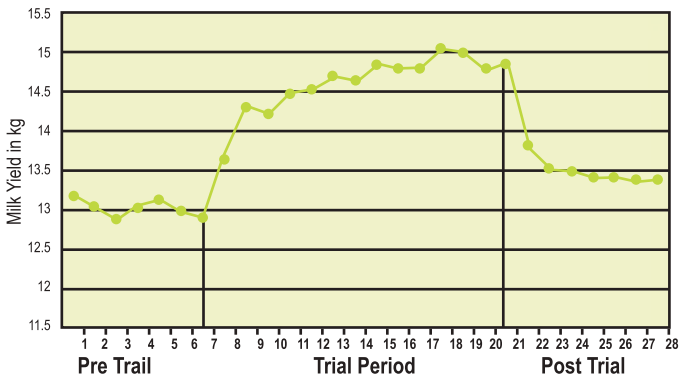




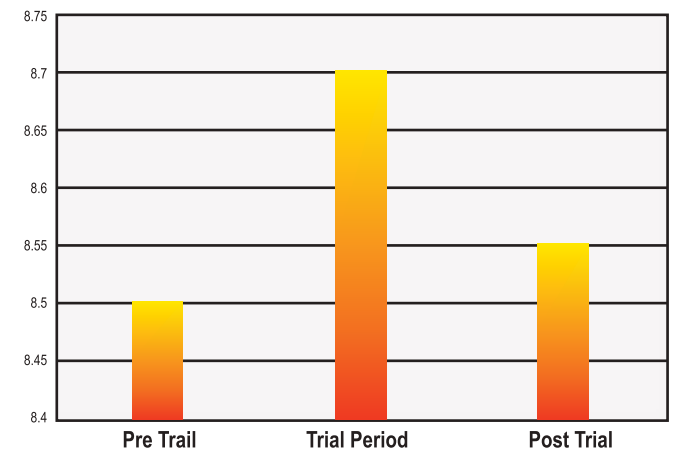
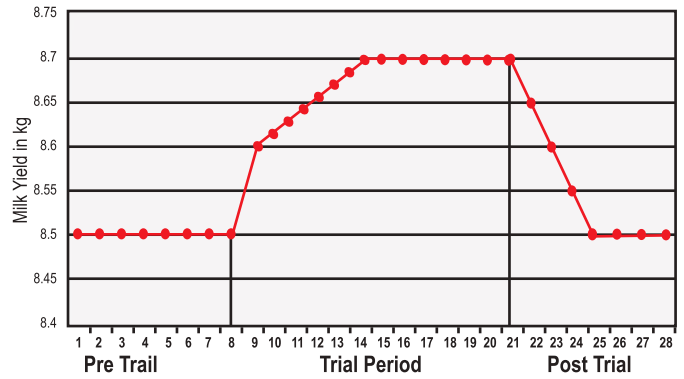
"INCREASED FAT"
Tabulated Results of "Field Trial conducted at Bangalore"



"INCREASED MILK YIELD"
Tabulated Results of "Field Trial conducted at Bangalore"



"INCREASED SNF"
Tabulated Results of "Field Trial conducted at Bangalore"



ENZYMES AND BACKSTAINING STAINCLEAR IS ANSWER FROM AETL



Denim is cotton cloth which has been dyed, usually blue, with the dye indigo. One desirable characteristic of indigo-dyed denim cloth is the alteration of dyed threads with white threads, which upon normal wear and tear gives denim a white on blue appearance. A popular look for denim is the stonewashed look. Traditionally stonewashing has been performed by laundering the denim material in the presence of pumice stone which results in fabric having a faded or worn appearance with the desired white on blue contrast appearance. Now it is being done using enzymes. This stonewashed look primarily consists of removal of dye in a manner to yield a material with areas which are lighter in color, while maintaining the desirable white on blue contrast, and a material which is softer in texture.

Enzymes, particularly cellulases, are currently used in processing denim. In particular

cellulases have been used as a replacement for or in combination with pumice stones for the traditional "stonewashing" process used to give denim a faded look. Use of enzymes to stonewash has become increasingly popular because use of stones alone has several disadvantages. For example, stones used in the process cause wear and tear on the machinery, they cause environmental waste problems due to the grit produced and result in high labor costs associated with the manual removal of the stones from pockets of garments. Consequently, reduction or elimination of stones in the wash may be desirable.

However, even though the use of enzymes such as cellulase may be beneficial as compared to stones alone, there are some problems associated with the use of enzymes for this purpose. For example, one problem with some ACID CELLULASES is what could be described

as an incomplete removal of dye caused by "redeposition" or "backstaining" (both terms used interchangeably herein) of some of the dye back onto the fabric during the enzymatic stonewashing process. Such redeposition or backstaining causes blue coloration of the surface, resulting in less contrast between the blue and white threads and abrasion points (i.e., a blue on blue look rather than the preferred white on blue).

The problem of redeposition of dye during stonewashing has been a concern of denim processors. Previous attempts to address the problem include addition of extra anti-redeposition chemicals, such as surfactants or other agents, into the cellulase wash to help disperse the loosened indigo dye and reduce redeposition. In addition, denim processors have tried using cellulases with less specific activity on denim, along with extra rinsings. This results in additional chemical costs and longer processing times. Another method attempting to address the redeposition problem includes adding a mild bleaching agent or stain removing agent in the process. This method affects the final shade of the garment and increases processing time.

While these methods aid to some limited degree in the reduction of redeposition, the methods are not entirely satisfactory and some objectionable backstaining remains. Use of enzymes and stones together may be advantageous in overcoming this redeposition problem; however, it leaves the processor with some of the problems associated with the use of stones alone. Based on the shortcomings of previously attempted methods for reducing or preventing redeposition, there was a need for more environmentally



favorable and more cost effective methods to address the issue of redeposition or backstaining of dye during stonewash treatment.

Accordingly, **AETL** has directed its research team to find an enzymatic composition or method that would enhance the removal of the dye during stonewashing when redepositing or backstaining celluloses or acid cellulases are used which, although exhibiting backstaining, have a high degree of specific activity on denim material. And AETL launched STAINCLEAR an ecofriendly backstaining removing (not preventing) enzyme based solution.

Users have found that treatment of cotton indigo-dyed denim with an effective amount of a backstaining cellulase and added STAINCLEAR improved backstaining over alone acid cellulases or backstaining cellulases. The result of this treatment with such a composition is an improvement in the contrast between white and blue threads, achieving more complete STAINED dye removal (more like that achieved with pumice stones). The improvement in the contrast is due to specific bond breaking by STAIN CLEAR between cotton and Indigo developed during cellulose





treatment of denims and also the deterioration of cellulose specific proteins responsible to cause backstaining.

One of the AETL lab demonstration details are as follows:

A lab scale 5 Kg garment washing machine was used for the trials. Approximately 1 Kg of desized denim garments were placed in the machine. The machine was filled with 20 L hot water and brought 55 0C. pH was adjusted to 4.5 using acetic acid. Once pH was established, acid cellulase DENICELL (AETL BRAND) was added at a rate of 1ml of product/L of wash liquor. STAINCLEAR was used in two ways in two different set of trials. In first trial, STAINCLEAR was used along with DENICELL (treatment time 60 min) and in second trial, STAINCLEAR was used in rinsing bath after DENICELL treatment (15 min). Dose used was 1 1.5 gpL After this, the bath was dropped, rinsed and finished.

It was observed that the denims treated with STAINCLEAR had better glaze, abrasion and whiteness compared to denims treated ONLY with DENICELL. STAINCLEAR used in same bath with cellulase yielded better backstaining and lesser abrasion. Whereas STAINCLEAR used in rinsing bath gave higher abrasion and marginally lesser backstain removal. But both

the cases were better than chemical based backstaining removing chemicals. The documented data and treated swatches shall be available on request.

STAINCLEAR is solution to problem occurred during the cellulase treatment and primarily for backstaining issues without much affecting the base indigo shades.

Hence, the ADVANTAGES of using STAINCLEAR are:

- Removal of backstaining rather than preventing it. Hence one can use cellulases freely for denim washing.
- Ecofriendly product
- Increased abrasion may lead to better cost to performance ratio
- Lesser wastage

STAINCLEAR is certainly an answer to hazardous / chemical based backstaining preventing agents.

Compiled by
Mr. Dipak Roda
GM Marketing

JOKES

A door-to-door vacuum cleaner salesman manages to bull his way into a woman's home in a rural area.

"This machine is the best ever" he exclaims, whilst pouring a bag of dirt over the lounge floor.

The woman says she's really worried it may not all come off, so the salesman says, "If this machine doesn't remove all the dust completely, I'll lick it off myself." "Do you want ketchup on it?" she says, "we're not connected for electricity yet!"

COMPANY UPDATE



Mr. C.L. Rathi and GM Mr. Deepak Roda discussing with customer at the stall.



Mr. Deepak Roda in discussion with guest from China.

CPh EXHIBITION



M.D Mr. C.L. Rathi with associates from China.



Mr. C.L. Rathi engaged in discussion with foreign visitor at the stall



Mr. Piyush Rathi discussing with Malaysia Clients



Mrs. Sarita Rathi and Piyush Rathi with distributors from Mumbai and Kolkata.

NEW JOINEES & BIRTHDAYS

NEW JOINEE DETAILS FOR JAN / FEB '07



Name: Ms. Mahalaxmi Shankar
 Designation: Executive
 Department: HR



Name: Ms. Sonal Dighe
 Designation: Application Development Executive
 Department: Non Pharma Lab



Name: Kafil Ahmed
 Designation: Research Scientist
 Department: Molecular Biology

BIRTHDAY LIST FOR JAN / FEB '07



NAME	DOB
Mr Sangeeth Mohan	Jan 12
Mrs Laxmi Iyer	Jan 16
Mr Prashanta Sahoo	Jan 22
Mr Milind Hirde	Jan 27
Ms Bhakti Manohar	Feb 1
Ms Neha Nair	Feb 22
Shilpa Risbud	Feb 23
Mrs S C Rathi	Feb 26

WISDOM FROM INDIAN KITCHEN



The food of India is a festival for the senses. It has brilliant herbs, spices and vegetables for the eyes, deeply fragrant aromas for the nose, even tactile pleasure from the custom of eating with your fingers.

Indian diet also offers nutritional benefits. The staples of Indian cuisine include foods that are recommended by health professionals to prevent heart disease, obesity, cancer, diabetes and stroke.

Vegetarian cuisine is widespread in India for religious reasons, and most dishes, particularly in southern India, heavily rely on grains, legumes and vegetables. These foods make up the base of our own Food Pyramid, and are ones we should include more of in our diets.

Some common dishes and foods of India and their nutritional merits include:

Lentils and dals: Dal is a dish that can include lentils and other legumes as well, such as peas and beans. Lentils provide a good source of protein, are very low-fat, and supply loads of fiber.

Dairy products: Yogurt, milk and cream are used in various dishes. When you prepare Indian dishes, substitute low-fat milk for cream when making your curry sauces. Yogurt provides immune system benefits and, together with other dairy products, is a good source of protein and calcium.

Nuts: Nuts provide good protein and a

healthier form of fat. Recent studies have found a link between moderate nut consumption and a reduced risk of heart disease. Nuts also contain folic acid, vitamins B2, B6, and the minerals iron, zinc, potassium and copper.

Rice and Wheat: Indian cuisine uses aromatic rices, such as Basmati white rice. Use them as a base along with vegetables, nuts, fruits and fragrant spices to create mouth watering, low-fat dishes.

Fresh ginger and other herbs and spices: The medicinal benefits of fresh ginger, garlic, onion and turmeric are an added bonus.

Fruits: Tropical fruits, like mango, pomegranate and melons, as well as apples, apricots and strawberries are used. Include plenty to gain the most from their anti-cancer-causing benefits.

Vegetables: Vegetables include cauliflower, eggplant, spinach, peas, potatoes, tomatoes, sweet peppers and mustard greens. These vegetables are packed with vitamin C, beta-carotene and phytochemicals (naturally occurring compounds, abundant in fruits and vegetables, which our bodies may use as part of their disease-fighting arsenal). The essence of good Indian food and cooking revolves around the appropriate use of aromatic Indian spices.

Compiled by:

Miss. Ahila Sriram

Application Development Executive - Baking

Lifestyle

HOW TO STAY YOUNG ALWAYS

1. Throw out nonessential numbers.

This includes age, weight and height. Let the doctors worry about them. That is why you pay them.

2. Keep only cheerful friends.

The grouches pull you down.
(Keep this In mind if you are one of those grouches)

3. Keep learning:

Learn more about the computer, crafts, gardening, whatever. Never let the brain get idle. "An idle mind is the devil's workshop." And the devil's name is Alzheimer's!

4. Enjoy the simple things.

5. Laugh often, long and loud. Laugh until you gasp for breath.

And if you have a friend who makes you laugh, spend lots and Lots of time with HIM/HER.

6. The tears happen:

Endure, grieve, and move on. The only person who is with us our entire life, is ourself. LIVE while you are alive.

7. Surround yourself with what you love:

Whether it's family, pets, keepsakes, music, plants, hobbies, whatever.
Your home is your refuge.



8. Cherish your health:

If it is good, preserve it.
If it is unstable, improve it.
If it is beyond what you can improve, get help.

9. Don't take guilt trips.

Take a trip to the mall, even to the next city, to a foreign country, but NOT to where the guilt is.

10. Tell the people you love that you love them, at every opportunity.

"A life spent making mistakes is not only more honorable, but more useful than a life spent doing nothing." - George Bernard Shaw

A Dead Thing can go with the Stream..... But Only a Living Thing can go Against It!!!

QUIZ ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?

1 Which of the following is a World Heritage site in India?

- a Pyramids of Giza
- b Rashtrapati Bhavan
- c Rock Shelters of Bhimbetka
- d Gateway Of India

2 Name of the holy book of Parsis

- a Zend Avesta
- b Holy Bible
- c Quran
- d Guru Granth Sahib

3 Who built the Qutub Minar?

- a Sher Shah Suri
- b Qutb-ud-din-Aibak
- c Shah Jahan
- d Bahadur shah Jafar

4 What metal must be present in an amalgam?

- a Nickel
- b Iron
- c Zinc
- d Mercury

5 The Afghan Church in S.Mumbai was built in memory of....

- a the Anglo-Afghan carnage of 17th century
- b St. John The Evangelist
- c Sir Cowasjee Jehangir
- d Dr.William Brydon, the lone survivor of the carnage

6 What do people with Progeria do faster than normal folks?

- a Eat
- b Reproduce
- c Bald
- d Age

7 What must sufferers of Xenoderma pigmentosum avoid?

- a UV light
- b Skin lotion
- c Fabric dyes
- d Perfumes

8 ' V Rod ' is one of the model name of which motorcycle manufacturer?

- a Yamaha
- b Indian
- c Harley Davidson
- d Hero Honda

9 What is the length of a cricket pitch?

- a 22 meters
- b 20.12 meters
- c 21 yards
- d 20.5 meters

10 What is considered as the 0th kilometer in Mumbai?

- a Church Gate of The Bombay Fort
- b Afgan Church
- c Flora Fountain
- d Shivaji Park

LAST QUIZ ANSWERS

- 1. c Rock Shelters of Bhimbetka
- 2. d Zend Avesta
- 3. b Qutb-ud-din-Aibak
- 4. d Mercury
- 5. a the Anglo-Afghan carnage of the 17th century
- 6. d Age
- 7. a UV light
- 8. c Harley Davidson
- 9. b 20.12 m
- 10. c Flora Fountain

WINNER

Mr. Alok Kumar

Executive Grain Division

GRAPE VINE

The Cracked Pot

A water bearer in China had two large pots, each hung on the ends of a pole which he carried across his neck. One of the pots had a crack in it, while the other pot was perfect and always delivered a full portion of water. At the end of the long walk from the stream to the House, the cracked pot arrived only half full.

For a full two years this went on daily, with the bearer delivering only one and a half pots full of water to his house. Of course, the perfect pot was proud of its accomplishments, perfect for which it was made. But the poor cracked pot was ashamed of its own imperfection. And miserable that it was able to accomplish only half of what it had been made to do.

After two years of what it perceived to be a bitter failure, it spoke to the water bearer one day by the stream. "I am ashamed of myself, and I want to apologize to you. I have been able to deliver only half my load because this crack in my side causes water to leak out all the way back to your

house. Because of my flaws, you have to do all of this work, and you don't get full value from your efforts," the pot said.

The bearer said to the pot, "Did you notice that there were flowers only on your side of the path, but not on the other pot's side? That's because I have always known about your flaw. So I planted flower seeds on your side of the path, and every day while we walk back, you've watered them. For two years I have been able to pick these beautiful flowers to decorate the table. Without you being just the way you are, there would not be this beauty to grace the house?"

Moral: Each of us has our own unique flaws. We're all cracked pots. But it's the cracks and flaws we each have that make our lives together so very interesting and rewarding. You've just got to take each person for what they are, and look for the good in them. Blessed are the flexible, for they shall not be bent out of shape. Remember to appreciate all the different people in your life.

In Technical collaboration with



Specially Enzymes and Biochemicals Co.

13591, Yorba Ave, Chino, California 91710, USA.
Phone : +1-909-613-1660 Fax : + 1-909-613-1663
E-mail : info@4enzymes.com Website : www.4enzymes.com



ADVANCED
ENZYME TECHNOLOGIES LTD

Where ENZYME is Life
(An ISO 9001 : 2000 Company)



One Of The Leading Biotechnology Company with
* State Of-The Art R & D Facility
* WHO- cGMP Certified Production Plant

Corporate Office: Advanced Enzyme Technologies Ltd., 5th Floor, "A" Wing, Sun Magnetica, Accolade Galaxy Complex, L.I.C. Service Road, Eastern Express Highway, Louiswadi, Thane 400604, India.

Tel. +91-22-2583 8350/51/52/53/54, +91-22-2583 4872, +91-22-2582 0188 • Fax No. +91-22-2583 5159/6197

Email: info@enzymeindia.com • URL: <http://www.enzymeindia.com>