ACIDOPHILUS YEAST

Acidophilus Yeast, which is a mycelium type yeast, owes its properties to a number of factors. To illustrate its function it may serve well to follow the process of digestion.

The stomach contains acids whose function is to break down protein foods, with the aid of pepsin, into peptones and proteoses which pass on into the small intestine.

In the small intestine, which is alkaline by nature, the protein digestion is completed, with the aid of trypsin. This is done by completing the disintegration of the partially digested proteins into the individual building blocks or amino acids which can then be diffused through the intestinal wall for use in the body processes. After this, the contents of the intestine must be acidified to kill the undesirable and toxic micro-organisms which are contained in the food waste derivatives and which can only exist in an alkaline medium.

This is where Acidophilus Yeast enters the picture, to supply lactic acid (through the action of the Acidophilus Yeast organism) to acidify this intestinal mass in the large intestine and colon. Acidophilus yeast contains no acidophilus bacilli but supplies valuable digestive enzymes, that aid in the assimilation of the minerals in food and improve digestion.

Acidophilus Yeast differs from acidophilus bacilli in that it does not require a specialized carbohydrate like milk sugar, but can and will form lactic acid from any of the ordinary starches or sugars. Whereas acidophilus bacilli can form lactic acid from milk sugar only. This would mean, then, that acidophilus bacilli would be of value only in proportion to the amount of milk consumed by the individual. This fact then emphasizes the superiority of Acidophilus Yeast over the plain acidophilus bacilli which is found in yogurt, buttermilk, raw sauerkraut, etc.

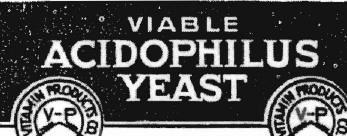
It has the further advantages over these lactic acid forming foods in that it is available in a stable dry form, and that it contains a much higher percentage of B complex factors than Brewers Yeast does.

In this manner it combines the benefits of Brewers Yeast with the benefits of lactic acid forming foods and exceeds them both in effectivness.

V-P 709 Acidophilus Yeast 100 wafers per bottle \$2.25

VJ - 191 (R)

VITAMIN PRODUCTS COMPANY Milwaukee 3, Wisconsin



A new PALATABLE Yeast that produces lactic acid by fermentation of carbohydrates, and thereby restricts the growth of undesirable microorganisms in the alimentary system.

This yeast differs from ordinary yeast in that It does not form alcohol or COz.

The daily use of two wafers before breakfast with a glass of hot water is suggested for halltosis of intestinal origin and to improve elimination.

To aid in the assimilation of food, chew one wafer after each meal.

100 WAFERS - \$2.25

VITAMIN PRODUCTS CO.

ACIDOPHILUS YEAST—A form of yeast that remains ALIVE in a dry wafer. When it is taken into the intestinal tract it grows, forms LACTIC ACID from sugars and starches, just as the sour milk bacteria make lactic acid from milk sugar.

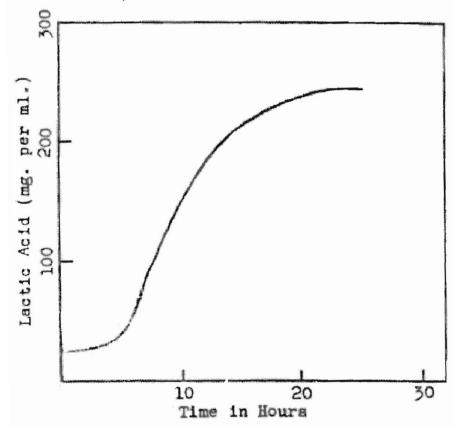
Has the superior advantage that it is available as a dry wafer instead of requiring refrigeration as the perishable cultures of lactic acid milk do.

The dosage is usually sufficient at one wafer after each meal. If it fails to accomplish results, the dosage may be increased one wafer per meal until it is effective. Once the intestinal tract is established with the lactic acid yeast, two or three wafers a day are sufficient, as a rule, to maintain the activity. LACTIC ACID IN THE BOWEL INHIBITS THE GROWTH OF TOXIC BACTERIA AND THEREBY PROTECTS AGAINST BODY AND BREATH ODORS THAT CAN OCCUR AS A RESULT. Your dog, because of his high meat diet, needs this product, and will afford an interesting test for you. Acidophilus yeast owes its properties to a number of factors.

It produces valuable digestive enzymes, which aid in the assimilation of food and improve digestion. The immediate effects of acidophilus yeast are due to the enzymes present. This is noticeable in its prompt action in indigestion or discomfort after meals.

It affords a convenient means of supplying lactic acid, the sources heretofore of which have been only such foods as acidophilus milk, buttermilk and sauerkraut. A high intake of milk sugar has been recommended by some dietitians to accomplish this result, as milk sugar is fermentable only by lactic-acid-forming organisms. Acidophilus yeast, however, does not require a specialized carbohydrate like this, but it will form lactic acid from any of the ordinary nutritional starches or cereals.

Many persons who have found the use of yeast beneficial to their health will welcome this product because of its greater palatability and convenience. The accompanying curve of lactic acid development in a culture at body temperature shows that there is an appreciable production of lactic acid in eight hours with a maximum at a little over twenty hours.



STUDIES OF A NEW TYPE OF YEAST IN CHRONIC CONSTIPATION

The most frequent complaint the general practitioner meets in the office is chronic constipation. As in all other conditions in which there is a multiplicity of remedies, few are effective without producing residual damage in the gastrointestinal tract or in other organs of the body. The following represents clinical findings in the use of "V-P" Acidophilus Yeast; (a viable mycelium yeast in dehydrated form) in the treatment of chronic constipation.

The mycelium yeast was instrumental in correcting the complaint by threefold action:

- Formation of lactic acid, with the resultant liberation of enzymes, vitamins and other potential factors.
- 2. Resultant changes in flora through increased hydrogen ion concentration in the colon.
- 3. Production of increased bulk in the lower portion of the gastrointestinal tract, with increased bowel tone and activity.

The production of lactic acid is an extremely important aspect in the treatment of chronic constipation with mycelium yeast. Our clinical tests have demonstrated actual production of 0.4% lactic acid during the growth phase. As this point is approached the growth of the organisms is retarded until this percentage is reduced slightly by oxidation, after which their development is resumed.

We are able to change an alkalin colon to one of acid reaction within a short time by the formation of lactic acid in the colon as the result of the growth of mycelium yeast. This, of course, destroys or inhibits the growth of many of the pathogenic bacteria thriving in an alkalin medium. The normal nonpathogens are permitted to return and flourish in this newly acquired acid medium, which is normal in healthy individuals. Cases have been noted where stools with a pH of 8.6 have been reduced in three weeks or less to a pH of 6.8 to 7.0, on mycelium yeast therapy alone. It has been demonstrated time and again that the stools of patients who are constipated are, in a very large majority, highly alkalin in reaction. The lactic acid acts as a stablizer of the hydrogen ion concentration of the colon.

In both clinical and laboratory findings we noted that there was practically no appreciable growth of the ingested yeast under twelve hours, while the maximum growth was reached in from eighteen to twenty hours. This obviously alleviates the distressing symptoms produced by reaction of ordinary yeasts on the sugars in the upper portion of the intestinal tract, with the customary formation of alcohol and carbon dioxid gas, as is so often the case with patients taking other yeasts. We have the added advantage of sufficient time to allow the mycelium organisms to reach the colon before their activity begins. This permits the formation of the lactic acid directly in the colon. The growth of the yeast produces additional bulk as it approaches the rectum; in other words, the fecal mass increases as it moves toward the rectum instead of diminishing with dehydration.

In a number of clinical cases a purge was administered to the patient eight hours following the ingestion of the mycelium yeast in small cotton bags. Microscopic and macroscopic examination revealed only slight activity, and the weight of the contents of bags, after dehydration, showed no appreciable increase. A similar procedure, sixteen to eighteen hours following the ingestion of the yeast, demonstrated an increase in bulk and weight of 80% to 150%. This definitely demonstrates the bulk production factor of this type of yeast, which is so neces-

sary to institute and aid normal peristaltic action in malfunctioning intestinal tracts. Similar tests demonstrated that ordinary baker's yeast is almost entirely digested in the upper portion of the human intestinal tract, only one per cent remaining as bulk.

These experiments have definitely demonstrated the bulk production factor of mycelium yeast. It may be contended that agar agar, psyllium seed, and other similar products in a mineral oil emulsion can be used. This is true, but we must take into consideration the fact that petrolatum is indigestible and is not absorbed. It acts merely as a lubricant, coating the absorption surfaces of the gastrointestinal tract, thus hindering both digestion and absorption of the foods. Furthermore, recent experiments have shown that fat soluble vitamins go into solution with this unabsorable oil and are therefore excreted with the oil, Plain agar agar is producing a definite avitaminosis. satisfactory as a producer of mere physical bulk, but it adds nothing further to the patients well-being. Mycelium yeast does produce a large amount of nonirritating bulk, and in addition, supplies quantities of vitamins and enzymes which we believe are responsible in part for the increased tone and activity, as well as the stimulation of normal secretions in the digestive tract.

It has been found, in cases of chronic constipation treated with all the known factors isolated as vitamins from various forms of yeast, that in only a few patients results were secured equal to those produced by the mycelium yeast itself. We feel justified, therefore, in recommending mycelium yeast instead of the isolated crystalline vitamin factors or the synthetic substances so often substituted for the natural vitamin factors in the treatment of chronic constipation of the atonic type.

Recent experimental work has shown that rats fed on Vitamins A, B₁, G and B₆, in crystalline form, all of which are found in yeast, fell far below the normal growth curve. When fed various types of yeast without the

addition of any vitamins, these same animals showed growth surpassing the normal curve. Tests on rats have demonstrated greater growth curves with mycelium than with any other type of yeast. Tests on dairy cattle demonstrate greater butter fat production with mycelium yeast than with any other. We believe this is due to certain synergistic factors, either enzymes or natural vitamins, or possibly both, developed by the mycelium organisms during their growth phase, and which are liberated both during and after their activity has ceased. In a large number of cases of chronic constipation in clinics and private practice, disappearance of symptoms were noted soon after treatment with mycelium yeast were instituted. Many of the patients reported increased vigor, better appetites, sounder sleep, and the disappearance of vague pains. When the yeast is administered a half hour before meals the patient tends to lose weight. This we believe is due to the high satiation value of the mycelium yeast. When taken with meals we found that there was no appreciable change in weight. When patients were told to take the yeast a half hour following meals there was a definite increase in appetite, and a resultant increase in weight of five to ten pounds in two to three weeks.

Our experiments have demonstrated to us that the average patient will react in a satisfactory manner to mycelium yeast therapy alone; but in a great majority of cases in which some simple form of setting-up exercises were suggested, the patient reacted more definitely and much more quickly to treatment.

CONCLUSIONS:

Numerous checking of cases have been followed with uniform good results both in clinical and private practice, most of them resolve into those cases of chronic constipation due to intestinal atony. Other types of constipation have also responded to this form of therapy, but not so dramatically as the atonic type. The sugges-

tion of some form of light setting-up exercises seems to greatly benefit, especially in restoring normal tone and peristaltic action and with bulk production of the mycelium yeast.

Caution should be exercised where there is any evidence of impaction. It is a good rule to advise colon lavage before using the yeast in cases where there is any doubt about the colon being open. Evidence of impaction is pain in the cecum after administration of the yeast, apparently due to the rapid growth of the yeast when restricted to this region by small or insufficient opening into the transverse colon.

SUMMARY

In studies of the use of mycelium yeast in chronic constipation the following changes were demonstrated:

- 1. Mycelium yeast showed definite retardation of growth during the first twelve hours in the intestinal tract, thus acting chiefly in the colon.
- 2. This yeast produced increase in both weight and bulk of 80% to 150% in sixteen to twenty hours.
- 3. By its lactic acid production, this yeast changed the pH of the colon with an analogous beneficial change in the intestinal flora.
- 4. Mycelium yeast is found to be a source of effective enzymes and vitamin factors.
- 5. The use of mineral oil bulk producers is dangerous, due to the ever present possibility of avitaminosis.
- Patients with a multiplicity of ailments, many of which can be traced to chronic constipation, are materially helped by mycelium yeast therapy with a direct decrease in complaints as the constipation is corrected.
- Distress due to fermentation in the upper gastrointestinal tract is not present in the use of mycelium yeast.

The foregoing represents studies made with "V-P" Acidophilus Yeast which is much higher in the complex factors of Vitamins B and G than ordinary yeast. Complex is mentioned due to the fact that the difference between "complexes" and the pure vitamins is very well indicated by their value in supplying nutrition to yeast. The yeast plant requires vitamins of the B and G groups to live. It takes up these vitamins from the media it lives in, and concentrates them to some extent thereby. We can furnish you with graphic charts that will show you the great difference in the life-giving properties of our "V-P" Complexes as compared to the chemically pure substitutes, unit for unit.

"V-P" Acidophilus Yeast is offered in wafer form of 15 grains each.

Packed in two sizes: No. 2 size--100 wafers, \$2.25, No. 3 size--1000 wafers, \$20.00

Vitamin Products Company