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## Studies of a New Type of Yeast In Chronic Constipation

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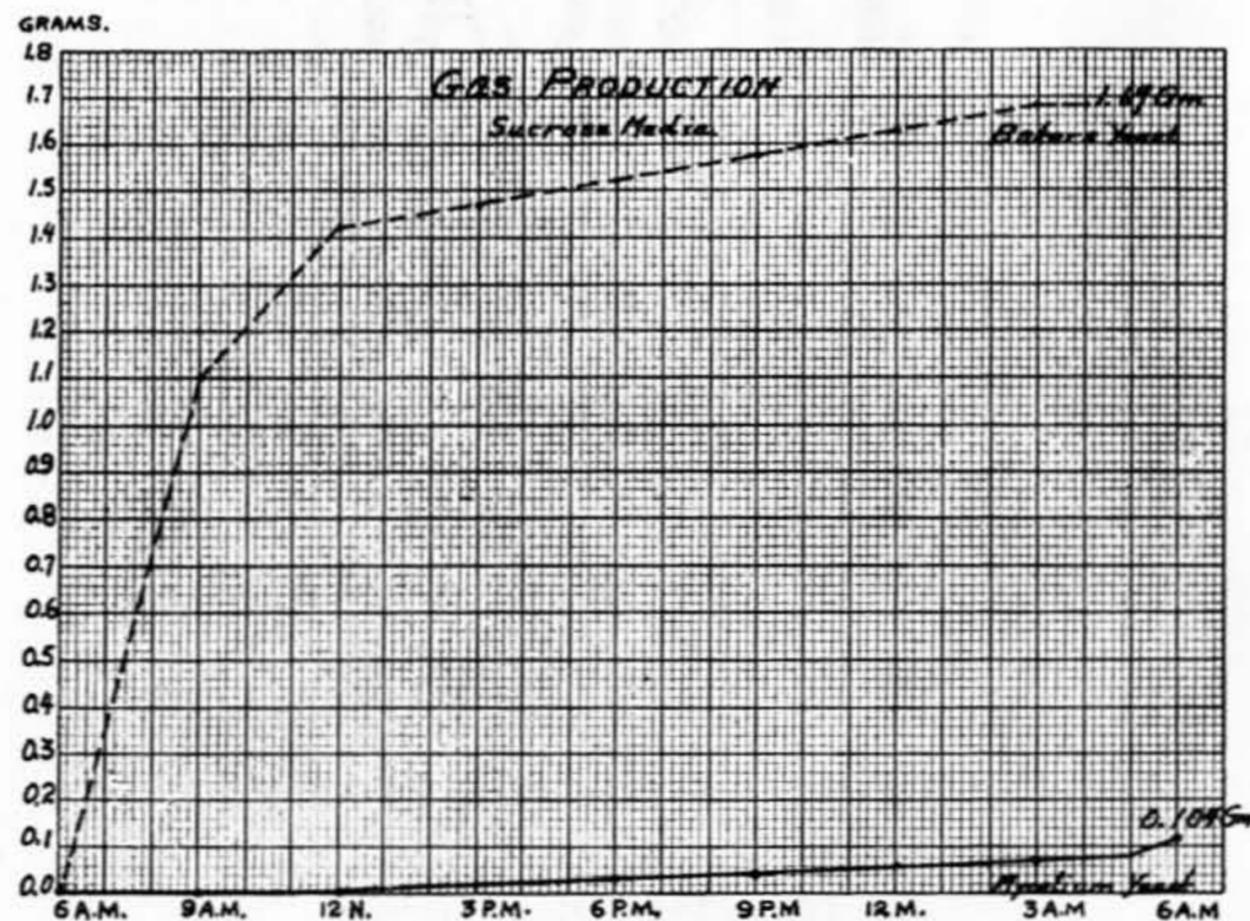
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The most frequent complaint the general practitioner meets in the office is chronic constipation. As in all other conditions in which there is a multiplicity of remedies, few are effective without producing residual damage in the gastro-intestinal tract or in other organs of the body. In this paper we shall discuss the use of a viable mycelium yeast (in dehydrated form) and our experience therewith in the treatment of chronic constipation.

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

1. 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.



Gas Production of Baker's Yeast Compared With That of Mycelium Yeast

- Production of increased bulk in the lower portion of the gastro-intestinal 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 alkaline 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 alkaline 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 alkaline in reaction. The lactic acid acts as a stabilizer 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 dioxide 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 necessary 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 gastro-intestinal tract, thus hindering both digestion and absorption of the foods. Furthermore, recent experiments have shown that fat soluble vitamins go into solution with this unabsorbable oil and are therefore excreted with the oil, producing a definite avitaminosis. Plain agar agar is satisfactory as a producer of mere physical bulk, but it adds nothing further to the patient's 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.

We 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 were we able to secure results 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, B<sub>1</sub>, C, and B<sub>6</sub>, 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 the clinic and in private practice, we noted the disappearance of symptoms soon after treatment with mycelium yeast and osteopathic manipulation was 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 the cases in which osteopathic manipulation of a more or less general stimulative nature was used, the patient reacted more definitely and much more quickly to treatment.

### Case Reports—1

*Patient:* Mrs. E. P., age 23. Height, 5'3". Weight, 130 pounds. *Present Complaint:* Unable to move bowels without enemas or laxatives; recently even these have been more or less inadequate. Pain in region of occiput and in neck and shoulders; also radiating down both legs, particularly on dorsum of legs. Pain in region of umbilicus and distention of abdomen. *Onset and Course:* Condition has steadily grown worse for the past eight years, in spite of all medical and surgical intervention. *Physical Examination* revealed stone of the intestinal tract, the presence of a fecal impaction in the transverse colon which transmitted a definite aortic pulse to the examiner's hand. This mass was movable in both horizontal and vertical directions. There was pain and tenderness over the sciatic nerves and the epigastrium; rigidity of the upper portion of the neck, tenderness over the shoulder and arms, and marked discoloration of the sclera. All X-ray and laboratory tests were negative. Colon pH was 8.2.

*Treatment:* The patient was subjected to routine medical and physical measures for the restoration of tone to the intestine. Mineral oil and laxatives were used without results, as were exercise and electrotherapy. Colon lavage resulted in the passage of large quantities of hard concretions. Patient was then placed on a daily schedule of 90 grains of mycelium yeast for two weeks, with osteopathic manipulation twice weekly. These manipulations consisted of steady pressure to splanchnic area and intermittent pressure to the suboccipital triangle and sacrum. After four days the patient started having daily stools following breakfast, without the use of enemata. Her general health improved steadily, and at the end of two weeks the dosage of yeast was reduced to 60 grains daily. At four weeks, all treatment was discontinued. At this writing she has had no further symptoms, and although three months have elapsed she is still gaining in strength and vitality.

### Case 2

*Patient:* Mrs. E. R., age 51. Very obese. *Present Complaint:* Menopausal symptoms, with constipation of ten years duration. Recently underwent hemorrhoidectomy to correct the latter, with no appreciable results. *Onset and Course:* Trouble started about five years ago to become gradually worse. The general symptoms of chronic

constipation have steadily been becoming more apparent. X-ray and laboratory reports were negative.

*Physical Findings:* Some lower thoracic lesions and atony of the colon, with some dilation in the cecum and transverse colon. Descending colon and rectum were atonic and filled with feces which was hard and foul smelling. The pH was 8.1.

*Treatment:* Mycelium yeast, 60 grains daily. Osteopathic manipulation consisting of pressure over splanchnic area and intermittent pressure on suboccipital triangle and sacrum. Also correction of lower thoracic lesions, which tended to recur during the first two weeks of semiweekly treatment. *Results:* Definite decrease in the menopausal symptoms after 10 days of treatment. After first week, patient had two normal stools daily. After second week she was free from recurring thoracic lesions. Treatment was continued for eight weeks. No further complaint of constipation since that time.

### Case 3

*Patient:* Mrs. J. C., age 39. *Present Complaint:* Pain in the joints, especially hands and feet; chronic constipation; gall-bladder disturbance after eating any food containing fat. *Onset and Course:* During the past ten years, constipation has grown steadily worse, with arthritis following a parallel course. Gall-bladder symptoms have been present for the last few years. Roentgenograms negative; laboratory reports negative.

*Physical Examination:* Patient of the thin nervous type, with spastic type of constipation; descending colon spastic and torturous; pH 8.0. There were no palpable masses.

*Treatment:* Patient was given 90 grains of mycelium yeast daily for one week and then reduced to 60 grains daily. Osteopathic manipulation consisted of steady pressure over suboccipital triangle for 30 seconds, steady pressure over sacrum for 30 seconds, light percussion over the 5th thoracic to the 3rd lumbar, correction of middorsal lesions, and massage of the liver area. These were administered three times weekly.

*Result:* Nervousness decreased, arthritic pains became steadily less, and the constipation was completely overcome, the patient having at least one copious movement daily. A slight gain in weight was noted. She states that she is feeling better than she has in the past five years.

There has been no change in the gall-bladder symptoms. Patient is still under treatment.

#### Case 4

*Patient:* C. H. Female, age 17. *Present Complaint:* Acne lesions over face and back. Repeated questioning revealed history of constipation since start of menses. *Physical Examination:* Rectal examination revealed no marked retro-displacement of the uterus. Abdomen was distended and firm. Deep pressure over transverse colon elicited pain. No laboratory tests were made.

*Treatment:* 90 grains of mycelium yeast daily for two weeks, then 60 grains daily for four weeks. General osteopathic manipulation was given, vertebral lesions were corrected, with lymphatic stimulation once weekly. *Results:* The results in this case were dramatic. At the end of ten days of the treatment there was a definite involution of the acneform lesions, and by the end of the treatment (six weeks) the skin was clear of all blemishes. At this writing, five weeks since conclusion of the treatment, there has been no return of the complaint. There has been no tendency toward constipation since the first week of treatment.

#### Case 5

*Patient:* D. R., male, age 38. *Present Complaint:* All the symptoms of chronic constipation. Laxatives failed to work, and enemata were resorted to, with little success. Pain at base of skull upon arising in the morning, which persisted for hours. Loss of appetite, eyes dull with marked discoloration of the sclera. *Physical Examination* revealed a badly distended abdomen and dilation of the entire colon. Extensive and hard fecal impaction in the region of the hepatic flexure. *Laboratory findings* were in accord with the physical findings.

*Treatment:* Colon lavage to remove concretions and mucus, of which there was much. This was followed with sine wave and massage. Bowel movements were irregular, occurring about every second or third day. Osteopathic manipulation was then added and the administration of 24 grains of mycelium yeast daily was instituted. The next day, movements started on a daily schedule and there has been no further complaint. *Results:* Highly satisfactory. Patient has gradually become free of all symptoms and is now feeling in excellent condi-

tion. He continues to take the mycelium yeast at the rate of 24 grains daily.

### CONCLUSION

Numerous other cases have been followed with uniform good results both in clinical and private practice, but they all fall more or less into the same classifications as the foregoing, which tend to resolve themselves 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. Osteopathic manipulation appears to be of exceptional benefit in restoring normal tone and peristaltic action, especially with the bulk production factor of the mycelium yeast.

Caution should be exercised where there is any evidence of impaction. We have made it a rule to administer colon lavage before prescribing the yeast in cases where there is any doubt about the colon being open. Evidence of impaction is pain in the cecum after the administration of the yeast, apparently due to the rapid growth of the yeast when restricted to this region by a 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.

6. Patients with a multiplicity of ailments, many of which can be traced to chronic constipation, are materially helped by mycelium yeast therapy in conjunction with osteopathic manipulation, with a direct decrease in complaints as the constipation is corrected.

7. Patients who do not respond to normal therapy are definitely benefitted by the use of mycelium yeast therapy and osteopathic manipulation of a stimulative nature. Distress due to fermentation in the upper gastro-intestinal tract is not present in the use of mycelium yeast.

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