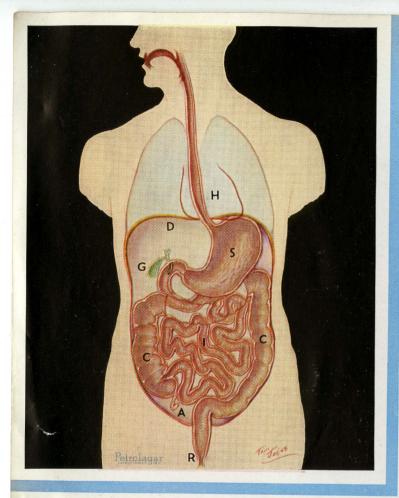
HABIT TIME

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The Normal Alimentary Tract

Small bowel has been shortened for convenience of illustration

H-Heart D-Diaphraam* I - Small Intestine

S-Stomach A-Appendix

C-Colon or Large Bowel

G-Gall Bladder R-Rectum

* Indicated by vellow lines Lungs shown in pale blue

HABIT TIME

of Bowel Movement

OWEL movement should take place at a definite time each day. This is a most important key to the entire problem of constipation. Food has its bearing, exercise and mechanical aids their places—but:

> For easy, complete, comfortable bowel movement, natural contraction waves of the colon must be brought about.

Bowel movement is a thing of habit, and the neglecting or cherishing of that habit determines whether individuals are constipated or not; this is fundamental in this much discussed and commonly neglected condition.

In searching for reasons why treatments have failed, it is found that a most common and important factor is failure of the individual to adhere to a definite time at which the bowels are to move.

Consider an average housewife, moderately young, healthy, good appetite, eating a balanced rational diet, getting plenty of exercise in her household duties and who has trained her bowels to a regular movement every morning directly after breakfast.

One morning a little incident kept her from her regular morning movement. Possibly an over-long conversation with a neighbor, a telephone call or what not, so that she was behind in her duties and the inclination to have a movement came, yet she put it off, thinking, "I will do this bit of work (possibly the dishes) before I take time." While she did this, the desire passed away and the fact that a movement did not occur was forgotten—the day passed without one. The next morning there was not the same urge, and she thought, "I will feel more like it after a while," allowing the time to go by. But she did not "feel more like it after a while"—two days elapsed and still no bowel movement.

To relieve this acute condition she took a cathartic. Forced, fluid movement resulted. Irritation of the intestines caused exhaustion of the bowel muscles for a time, the habit of daily movement was destroyed and this woman undoubtedly joined the large army of cathartic users.

There are other examples. Many patients come into the doctor's office with the statement that they have tried everything to cure their constipation, and on questioning them it is found that they allow the movement to occur at any time without making it a definite point to teach the bowel to move at a definite time and so fail to acquire a most important essential, namely

HABIT TIME OF BOWEL MOVEMENT

Illustrations by Tom Jones

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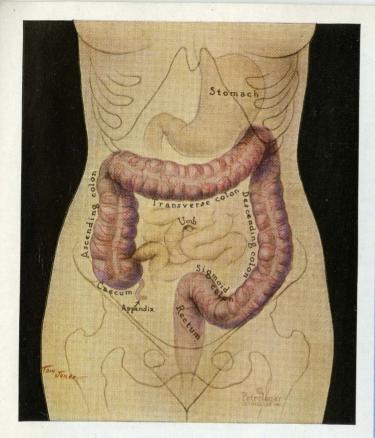
FACTORS THAT GOVERN HABITUAL BOWEL MOVEMENT

N the normal process of digestion, when food enters the stomach, the stomach muscles are stimulated to activity and the process of churning and mixing the contents with the digestive juices begins. Contraction waves soon follow and gradually expel the contents of the stomach into the small intestine.

The contraction waves continue in the small intestine and carry the products of digestion along to the large bowel or colon. Absorption of the various elements necessary to life, except water, takes place principally in the small intestine.

The residual products of digestion reach the sigmoid colon, which is the lower part of the large bowel, in about twenty four hours after the ingestion of food. Here water is extracted. When a sufficient quantity of feces has accumulated in this receptacle for excrement, sudden and vigorous contraction waves begin and the sigmoid colon raises up and forces the feces into the rectum.

This brings about the urge to stool. Until the feces enter the rectum there is no inclination to go to stool, but when it fills, pressure and distention induce a desire. If this urge is heeded and the contents of the rectum expelled, there is no constipation; but if it is suppressed, there is a voluntary contraction of the muscles of the



The Ideal Colon

The Large Bowel or Colon illustrated above is classically correct in its anatomical position and scale. Considerable variation occurs in the normal colon depending on the type of individual.

anus and the fecal mass is retained in the rectum or it is returned to the sigmoid where the moisture continues to be absorbed and the fecal material becomes hard, dry and firmly packed.

The most natural and favorable time for the bowels to move is shortly after breakfast for the reason that the excrement has accumulated in the sigmoid colon during the night and the morning meal serves to start contraction waves which ultimately lead to desire for stool. If the call to stool is repeatedly ignored, the bowel muscles become weak and fail to function, then follows the dull, heavy sensation accompanying constipation.

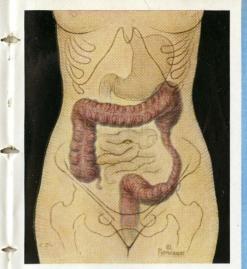
Constipation may seem a simple thing, but its proper treatment is a matter of great importance to the well-being of the individual. Success requires close cooperation between patient and physician.

PHYSICS AND CATHARTICS PREVENT BOWEL HABIT TIME

NSUITABLE doses of cathartics cause harsh action in the bowel, setting up severe irritation. Obliged to expel this cathartic irritant, bowel muscles are forced into abnormal activity; adjacent tissues are drained of moisture, which abnormally dilutes and liquefies the bowel contents, producing precisely the same physiological effect in the bowel as it would undergo in a defensive effort to eliminate the poisons in diarrhea. This disrupts normal functional activity; abnormal fecal consistency results and regular habit time is impossible.

As a result of excessive bowel activity, bowel muscles become fatigued, and according to Nature's rule a period of rest and recuperation must follow. This inactivity may extend for a period of twenty-four to forty-eight hours. During this time, accumulation again takes place. Another dose of cathartic is called for and the whole process is repeated over and over again until the normal, delicate and sensitive mechanism becomes chronically inflamed. Thus, accustomed to a severe irritant, it will not function by any stimulation less severe than the one to which it has thus become habituated.

In this way, continued use of the pernicious cathartic actually defeats its own object. Instead of benefiting, the cathartic aggravates the condition already existing or actually causes sluggish bowels and constipation.



Spastic Constipation
Pinching down of the Descending Colon

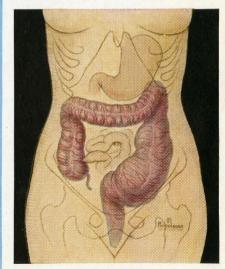
Spastic Constipation

Spastic constipation presents a history of flatulence and griping pains in the lower abdomen. Physicians have looked for this type in patients with a highly nervous temperament. The bowel muscles are pinched down and contraction waves are too severe.

Atonic Constipation

In atonic constipation the bowel is sluggish, has lost its tone and, to a large extent, its contracting power. Patients suffering from this type usually lead sedentary lives, lacking sufficient bodily exercise.

The above types may be present in a single patient at different times. The colon, in its efforts to adjust itself to abnormal conditions, may exert these various manifestations.



Atonic Constipation
Abnormally Distended Descending
Colon and Sigmoid Colon

PROPER FECAL CONSISTENCY

HE volume of feces from constipated individuals is only half the volume of that from normal individuals. The difference in volume is chiefly water. Due to delay in emptying the bowel, more fluid is absorbed from the bowel contents, which become dry and hard. In managing constipation, it would therefore appear as of basic importance to restore normal volume of fecal material and normal fecal consistency. As an aid to accomplishing this, Petrolagar has met with favor.

The normal stool is a formed mass, soft and yielding, and is easily passed. It is composed of about 25 per cent solids and 75 per cent moisture. As has been pointed out there is a deficiency in volume of the feces in constipated patients, and this deficiency is mainly moisture.

Many constipated people do not eat sufficient bulky, moisture-retaining foods. A highly refined, concentrated diet with a minimum of indigestible residue is a bad factor, except in special cases as directed by the physician. Certain foods such as vegetables, fruits, salads, jams, jellies, marmalades, honey, agar-agar and the like, provide bulky residue that will, at the same time, retain a maximum amount of moisture. In this regime, Petrolagar fits

perfectly. It augments the bulk of the feces because it is indigestible. It prevents the drying out and hardening of the stool because it supplies unabsorbable moisture.

Petrolagar is composed of 65 per cent (by volume) mineral oil of the best grade obtainable, and, being modified by a scientific process of emulsification, it overcomes many of the disadvantages of and objections to plain mineral oil. Its superior properties are being more and more recognized. Petrolagar will mix with the intestinal contents and helps to make up the deficiency of moisture and mass and bring about a normal consistence of bowel contents. The emulsifying agent is agar-agar, quite useful in the treatment of constipation. Petrolagar is pleasant to take, acts mechanically and has a soothing effect on the bowel.

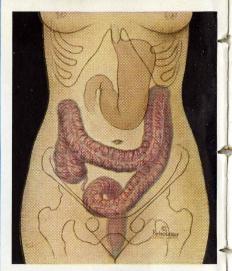
EXERCISE AND GENERAL HEALTH

E all know that everything that can be done to benefit the general health is useful in treating any particular ailment.

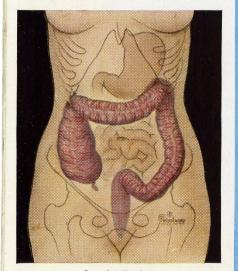
A great many people suffering from constipation do not get sufficient bodily exercise. If the general muscles are weak through inactivity, the bowel muscles are also weak. Exercise will benefit the general health of the individual and at the same time greatly assist toward cor-

Ptosis Displaced Transverse Colon

Illustrates effort of the colon to adjust itself to abnormal conditions. Correction brought about by carefully following the directions of the physician.



Ptosis
Displaced Transverse Colon



Bowel Adhesions

Bowel Adhesions

The abnormal joining of parts to each other as by a band. Arrow shows adhesions interfering with free passage of bowel contents.

recting constipation. Artificial exercise in the form of massage is helpful.

Some people find it difficult to follow a course of exercise, but many patients have been benefited by taking up golf, tennis, swimming, horseback riding, courses in gymnasium, etc. It would be sufficient in most cases to adopt the exercise of walking to achieve the same result.

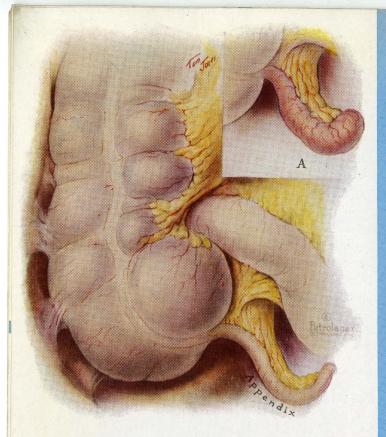
Gant says, "There is nothing that will do more toward helping the circulation, stimulating the appetite, improving the digestion, accelerating the spirits and exciting the intestines and all other organs to a greater activity than a brisk walk. Walking not only encourages the bowels to act more regularly and effectively but also sweeps the cobwebs from the mind, makes the world seem brighter and gives a more cheerful outlook upon the present and the future."

TRAINING THE BOWELS TO MOVE REGULARLY

HE physician at the head of a very successful institution states emphatically that he will not undertake the treatment of constipation unless his patients recognize and agree to apply the things he tells them about diet, habit time, exercise and the care of their bodies. He invariably obtains excellent results.

Why is he successful? First, he is a good physician. He

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The large illustration shows Normal Caecum and Vermiform Appendix

(A) Inset shows typical Acute Appendicitis

Deaths from appendicitis are chiefly due to delay. Abdominal pains or persistent nausea demand immediate medical examination. Early diagnosis saves lives. Consult your doctor.

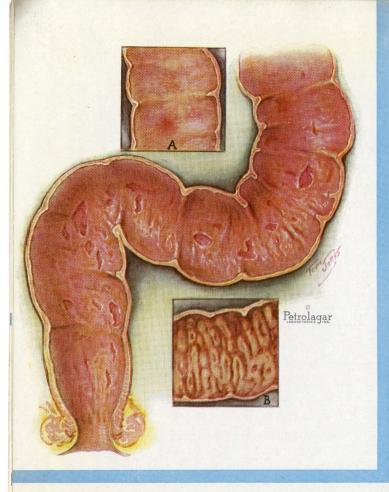
understands the necessary requirements. He forces his patients to listen to him and thoroughly appreciate the importance of a strict obedience to his instructions.

Proper understanding by the patient of the necessity for and importance of the fundamentals of *habit time*, diet and exercise should help to bring relief in constipation, functional in cause, when Petrolagar is prescribed.

Patients should thoroughly appreciate and adhere to the instructions given. They will understand that Petrolagar is not a cathartic. Petrolagar will help to make up the deficiencies in moisture—bring about a normal consistency of the stool—and assist the patient to form habit time of bowel movement.

Dosage suggested is two tablespoonfuls the last thing at night or the first thing in the morning, or both if it is needed. Some prefer to take a tablespoonful a half hour before each meal.

Select a definite time for a movement to occur. Let the time never vary, even five minutes, from day to day. Go to the lavatory at the definite time and strive to have a movement. If it does not occur, and in order to successfully begin the training of the bowel to habit time, a small enema is suggested. A pint of water to which has been added two to four tablespoonfuls of Petrolagar, taken as an enema, will produce an easy movement and thus begin habit time. The enema is usually unnecessary after the second or third day of treatment.



The large illustration shows Lower Bowel in Advanced Colitis

Upper Inset A — Appearance of Mucous Membrane in early stage of Colitis

Lower Inset B — Ulcerative Colitis.

COLITIS

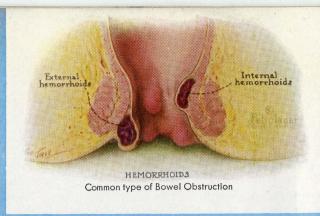
PHYSICIANS who have carefully studied the group of symptoms commonly called "colitis" agree that spastic constipation is a forerunner of this condition.

Unfortunately, those who become afflicted with colitis have disregarded the importance of the early signs, usually described as "irritable bowel." Had they presented themselves to their physicians for careful examination and diagnosis, much suffering and expense would have been avoided.

Over-stimulation of the bowel by self-medication with irritating, rough foods, purgatives and enemas may bring about serious injury to a colon that is temporarily functioning improperly.

Abdominal pain, alternating attacks of diarrhea and constipation, indicating colonic irritability, demand immediate investigation by the physician. Delay is dangerous. In their first stages, most chronic diseases are easily corrected.

The medical art is possessed of the accumulated knowledge of centuries. The doctor is qualified to help you. The years of study and experience that comprise his life work belong to you for a relatively small fee, but he cannot be of service unless you go to him. Trust him to help you towards a long life, health and happiness.



OBSTRUCTIVE CONSTIPATION

● The plans of management of the bowel outlined thus far in this treatise on functional constipation do not apply to the obstructive type of constipation, such as Cancer of the Bowel, Hemorrhoids, Strictures, Hernia, Adhesions, Foreign Bodies, Fissures, Displaced Organs and Inherited Deformities. These conditions require specialized treatment, and in such treatment the softening action of Petrolagar is useful in bringing about comfortable easy bowel movement.

IMPORTANT CONCLUSIONS

been pointed out and a bowel movement is brought about every day at a regular time by the method suggested, including, if necessary, a small enema with Petrolagar, the rectum is kept empty, the muscles return to their normal degree of responsiveness to the presence of fecal material and within a few days or a few weeks—depending on the severity of the case—a normal, regular movement will occur and the dose of Petrolagar may be decreased. After the bowels have moved regularly for a few weeks, discontinue Petrolagar but keep up the

definite time. A lapse would bring about a return of the constipation just as it caused it in the first place.

It should be stated here that only a certain amount of Petrolagar—just the quantity needed to give a soft, formed, yielding and easily passed stool—is necessary. Dosage must be modified to suit the need.

The beneficial action of Petrolagar is not diminished by continued use. This is very important for those unable to exercise and conform to a reasonable dietary and mode of living, because the dosage may be harmlessly continued.

Some persons lack powers of determination and perseverance sufficient to overcome their trouble by any plan of management. For these patients and for elderly people and those with constitutionally lessened functional activities of the bowel, necessity often compels the continued use of some agent to bring about a bowel movement, just as it is necessary for others with defective vision to wear glasses in spite of all other remedial measures. Petrolagar is useful for such individuals because, unlike cathartics, it is not necessary to increase the dose.

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