

**The treatment of sthenic conditions of the stomach : namely, hyperesthesia, hyperchlorhydria, and hypermotility / by Anthony Bassler.**

**Contributors**

Bassler, Anthony, 1874-  
Royal College of Surgeons of England

**Publication/Creation**

[Philadelphia] : [publisher not identified], [between 1910 and 1919]

**Persistent URL**

<https://wellcomecollection.org/works/xfpasg3t>

**Provider**

Royal College of Surgeons

**License and attribution**

This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. Conditions of use: it is possible this item is protected by copyright and/or related rights. You are free to use this item in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s).



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>



## THE TREATMENT OF STHENIC CONDITIONS OF THE STOMACH, NAMELY, HYPERESTHESIA, HYPERCHLORHYDRIA, AND HYPERMOTILITY.

By ANTHONY BASSLER, M.D., New York City,

PROFESSOR OF CLINICAL MEDICINE, NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL; CHIEF GASTROENTEROLOGIST, GERMAN POLIKLINIK; VISITING GASTROENTEROLOGIST, PEOPLES HOSPITAL.

The term *sthenia* is employed because only one of the above mentioned conditions is rarely present without one or both of the others. All three of them are commonly present at one time, and *sthenia* of the stomach is a better term to describe the condition than one in which any one of the trilogy of states is symptomatic of the clinical entity. For the sake of presentation of the treatment these can best be described under separate headings, combinations being possible as they are called for in a case.

**Hypersensation:** In the average case the treatment can be carried on while the patient is up and about. In the severe cases it should be begun by placing the patient in bed, and the institution of a milk or egg albumen diet together with systemic care until the major part of the symptoms are controlled. The most important feature of the treatment is to recognize and treat any of the causative conditions that exist. When these can be eliminated, and the severe types of the condition are separated for the bed treatment, the routine of care in the average case is about the following: According to the history obtained, all dietetic causes, matters of abuse, habits and so forth must be stopped. The diet is essentially that described under hyperchlorhydria, and this should be persisted in until the sensory symptoms are under control. There is a small proportion of cases in which even with the greatest care in the diet the symptoms do not abate, not even after lengths of time. In such, the stomach and other organ conditions of a pathological or constitutional nature must be searched for again, and

if found, attention to them must be given as a primary essential of treatment. Rest by retiring early and arising late as well as afternoon siestas in a quiet room are valuable. Rest can sometimes be carried out best by a short sojourn in the country. The condition which gives the most degree of confusion is the underlying obscure forms of neurasthenia, one in which the general symptoms as well as those in the digestive tract are not distinct. There are other cases, again, which have a sub-acidity in the stomach during gastric digestion, and as paradoxical as it may seem, they do best on the alkalis. A great majority, however, have an increase in the acidity. These can be separated by experiment for a short time with an acid or alkaline treatment. The condition is probably due to sensitiveness situated in the deep layer of the glandularis. High caloric feedings and the routine administration of iron are always in order in the anemic or undernourished patients. The drugs which answer to the best purpose to control distress are the bromides, and it is not unusual to have to employ these in very large-sized doses for a short time, and perhaps for one or two months all told. Among the prescriptions for these cases that can be recommended are the following:

R Natrii bromidi

10.0 to 25.0  $\text{3iiss}$  to  $\text{3vj}$

Aquæ menthæ piperitæ . . . . . 250.0  $\text{3viiij}$

Fiat et Sig.: Take a tablespoonful after meals in water.

Or,

R Natrii bromidi

Tinctura valerianæ . . . . . 10.0  $\text{3iiss}$

Aquæ chloroformi . . . . . 100.0  $\text{3iij}$

Fiat et Sig.: Take a teaspoonful after meals in water.



Or, when constipation exists:

R Tinctura rhei

Tinctura valerianæ . . . . .a.a. 10.0 3iiss

Fiat et Sig.: Take twenty drops after meals in water.

As supplements to the treatment, hygienic and hydropathic measures, cold compresses to the abdomen to relieve the distress, galvanism, occasionally the use of nux vomica in moderate-sized doses, and those for hyperchlorhydria and hypermotility are indicated.

**Hyperchlorhydria:** The most important part of this treatment is the dietetic. The all-important plan of the diet is that the foods, in character, form or quantity, should produce as little irritation to the glandularis of the stomach as possible. The main reasons for this are, that the hyperesthesia of the stomach must be controlled as much as possible, and foods sufficient to maintain equilibrium, and if necessary cause an addition in nutrition be employed. The factor of combining the free acidity is really of secondary importance, only of value in the way of causing relief for the time being, and is an unwise plan of treatment to put in practice for all cases. The reason for the latter is that the stomach of hyperacidity is most sensitive in response to all stimulation, and the dietetic one of persistently maintained high proteid foods is liable to perpetuate the condition (adaptation juice of Pawlow) unless the condition is secondary to some devitalized state of the general body or functional disturbance in the general neurological system. Still, on the other hand, these foods in the fluid form and simple character are the best to use for a time in the beginning of treatment, because in that way the element of hyperesthesia is minimized, the subjective symptoms are controlled, most of them are naturally in fluid or semi-fluid forms (thus handy), and are of high caloric values in small bulks. But, at the point at which subjective symptoms are controlled, the proteid elements should gradually be withdrawn, the ultimate object being that the diet after that should be mainly carbohydrate in nature. This latter type of diet must be continued for

a length of time and test-meal analyses are called for to note that the acidity does not run down too far, or to arrive at the point at which the lowest continuous level that may be possible is achieved. Should it be found that the acidity becomes too low, such foods as the animal proteids can be gradually added until normal secretion is stimulated. But if it is noted that the acidity is normal or still rather high, the vegetable and fish-food diet must be continued indefinitely. The dietetic treatment in cases of persistent hyperacidity should continue for from three months to a year, the length of time in the average case being three months. In continuous hypersecretion the treatment should be continued longer and the number of cases that eventually are given the meat proteids much fewer. The plan of diet that I ordinarily persist with up to a month in the beginning of treatment is the following:

"This diet is a temporary one, and is to be continued until a change is made. The plan of the diet is not to partake of any solid foods whatsoever, and to take the foods that are suggested at regular intervals of three or four hours during the day, attention being paid that a strict regularity is preserved, and that the foods are divided up in character and amounts rather evenly for each time. A glass of plain fresh milk and perhaps a few crackers should be taken before retiring, and if there is distress in the stomach an extra glass of milk during the night. The diet consists essentially of only four foods, namely, eggs, fresh milk and cream, well-cooked cereals and bread or crackers, and nothing else in the food or fluid line (excepting plain water) should be taken. The eggs may be eaten raw or cooked in any form, or may be taken in the milk. The milk may be warmed if desirable, but should not be taken too hot or too cold. The 'ten minute' modern breakfast foods should not be employed, and the old-fashioned forms of well-cooked oatmeal, ground corn, farina, rice, tapioca or sago are the best. To these a little sugar, but as little salt as possible may be added. The bread should not be too fresh (one day old), any of the sweetened



or unsweetened crackers may be used, and also all forms of simple cake providing there are no nuts, raisins, currants, seeds, or preserved fruits in them. The total amount of food in one day should be four eggs; one quart (4 tumblerfuls) of milk; one-quarter of a pound of butter and an extra quart of milk; one-quarter pound of cereals; two rolls; four medium thick slices of white bread; one-quarter pound of baker's cake or crackers; and one-half pint of fresh cream.

In food values the above diet comprises the following and can easily be raised or lowered to meet the clinical indications or those of weight and work:

<i>Foods.</i>	<i>Approximate Calories.</i>
4 eggs .....	290
1 quart of milk .....	650
$\frac{1}{4}$ pound of butter .....	1,116
$\frac{1}{4}$ pound of cereals .....	425
2 rolls .....	175
4 medium thick slices of bread...	175
$\frac{1}{4}$ pound of baker's cake or crackers	450
$\frac{1}{2}$ pint of cream .....	450
Total calories .....	3,731

The diet outlined above also meets the indication for atony in some of the cases, and answers to control the subjective distress in those of hypersecretion. It will be observed that the symptom of constipation commonly present in these cases is not given attention to in the dietetic way. Some authors recommend that in constipation the coarse foods be given, Cohnheim suggesting that in hyperchlorhydria following habitual constipation coarse foods should be used. In my opinion, in no instance of hyperacidity or hypersecretion should the early diet be solid or have any coarse foods. It is best to keep the diet bland in all cases and employ other means (like Carlsbad salts or enemata) for the purpose. A stomach that is liable to run acid from even a secondary cause is always sensitive to the cellulose-bearing coarse vegetables or solid proteid foods, the only difference being that with the first mechanical irritation is the cause, and with the second it is chemical or physiological in nature.

After a month or longer the diet can be changed, four meals a day being allowed, but milk, cream, eggs, crack-

ers, bread, cereals and butter should always be given the preference. Later on the carbohydrate and hydrocarbon elements should be increased, and the more heavy bearing proteids (eggs) and the total quantity of milk lowered. The foods which then answer to the best purposes are mashed potatoes, spinach, peas, beans, lentils, carrots, strained or eaten in purées, more sugar, cake and dextrinized foods, olive oil; possibly brains, tripe or chicken; vermicelli, toasted corn bread, pulled bread, zwieback, baked or stewed apples (no rind); stewed peaches, pears, apricots, or prunes (no rind); buttermilk, malted milk, milk with lime-water or vichy, milk flavored with tea or coffee, kefir, koumiss, junket, whey, cocoa, albuminous water, and the use of beverages, vichy, congress hathorne, or Carlsbad. In very successful cases when the acidity has been controlled or if anemia or sub-nutrition from the dieting develops, the very cautious use of the following may be made: Beef, boiled or broiled; raw scraped beef, roast mutton or broiled chops, roast lamb; boiled, broiled or roasted chicken, turkey or game, and the accessory meat foods, such as tripe, heart, spleen, sweetbreads, etc. Should these be given, it is better not to discharge the case from observation for the time being, because my experience has been that the freedom in food selection permitted often encourages dietetic indiscretions and a return of the condition. In the large majority of cases it is best to eliminate the meat foods entirely for long periods of time; this is certainly true in the long-standing cases of hyperacidity, the higher forms of increased secretion (gastro-suc-corrhea) and hyperesthesia.

General hygienic, physical and hydro-pathic measures should never be neglected in the treatment. Those who are fatigued from overwork should be ordered to rest, and those who have been under a mental strain should be ordered away to the country, seashore or mountains (it makes no difference which). Outdoor life and physical exercise are most wonderful attributes to the treatment. Those who cannot go away should be made to walk the equivalent of seven miles a day.



Walking to the place of business and home again with an additional walk in the evenings often makes this possible without much inconvenience. With the women, less carriage and street-car riding, fewer social functions and theaters, and more exercises and open-air life are important factors in the treatment.

In simple hyperacidity gastric lavage is malpractice. It stimulates the stomach to maintain or even reach higher secretion (even when alkaline solutions are used) and thus does harm. In gastro-succorhea, on the other hand, considerable subjective benefit can come from the use of gastric lavage, but the analyses of many cases have proven to me that this is not due to a lessened acidity but to a raising of the mucous content which is generally short in these cases. I have yet to see the case of gastro-succorhea in which stomach washing was practiced, benefit in a lowering of the acid content. In these, lavage four or more hours after a meal, late evenings, or the first thing in the morning, with a 1:1000 silver nitrate solution is often helpful but not curative. My experience here confirms Kaufman's observations.

In patients susceptible to the use of electricity employment of any form would be helpful for a short time. In a proportion of others intragastric galvanism with the positive pole internally, and if results are not obtained the negative pole with rather a strong galvanic current occasionally gives signal results. When atony or marked constipation exists, the faradic current with slow interruption or the sinusoidal current is the best to employ. In neurasthenia, high frequency to the spine often serves to good purpose. Of late, because of the success met with in the treatment of ulcer cases, I have employed the therapeutic use of the X-rays in cases of persistent hyperacidity and hypersecretion, and have had some striking results from it (due, I believe, to an atrophying effect of the rays on the cells in the gastric tubules which are proliferated in many of these cases).

The morning cold spray or plunge bath, or the morning rub with a cold, wet towel are serviceable adjuvants. Warm poul-

tices or Priessnitz bandages are frequently useful for the relief of pain, and a spinal hot douche before retiring may be a most grateful procedure in cases of insomnia.

Alkalies for a long time have properly played an important role in the symptomatic treatment of these affections. In all of the forms mentioned, positive and almost immediate benefit comes from their use, and no harm develops from their continued employment over long periods of time. As a rule, they should be administered after the taking of foods, the time gauged according to the time that subjective symptoms develop, which is generally at the height of digestion (from one to three hours after meals). The forms of prescriptions that are to be recommended are the following:

For hyperchlorhydria:

R Magnesii usta  
Bismuthi subcarbonatis  
Sodii bicarbonatis  
Sodii carbonatis exsic.  
Sacchari lactis .....a.a. 10.0 3iiss

Fiat pulv. Sig.: Take one-half a teaspoonful in water one, two or three hours after meals.

Or,

R Magnesii usta .....10.0 3iiss  
Bismuthi subnitratidis .....20.0 3v  
Syrupi acaciæ ..... q.s.  
Aquæ destillata .....q.s. 200.0 3viij

Fiat. et Sig.: Take one tablespoonful (as required in time) after meals, plain or in water.

When constipation exists:

R Magnesii usta ..... 5.0 3iiss  
Mistura rhei et sodæ .....200.0 3vij

Fiat et Sig.: Take a tablespoonful (as required in time) after meals in water.

Or when a powder or mixture is not desired:

R Magnesii usta  
Bismuthi subcarbonatis  
Pulv. rhei. ....a.a. 25.0 3vj  
Fiat tablets no. L.

Sig.: Take one or two tablets (as required in time) after meals.

The second drug of importance, and which is particularly of value in hypersecretion is belladonna or atropine. This drug effectually inhibits excess secretion, but unfortunately a non-physiological



stage may be acquired, or its unpleasant physiological effects that are brought about may be such that its employment would have to be discontinued. The hypodermic administration of atropine has been suggested by Riegel, but its use by mouth is sufficient for all practical purposes. The tablets or pills of extract of belladonna, 0.016 ( $\frac{1}{4}$  grain), or atropine sulphate, 0.00065 ( $\frac{1}{100}$  grain), may be given after meals, or these may be added to any of the foregoing alkaline combinations, or given in the following:

R Ext. belladonnæ ..... 0.32 gr.v  
Bismuthi subcarbonatis .... 15.0  $\text{̄iv}$

Fiat tablets or powders no. xx.

Sig.: Take one before meals. (And possibly one of the antacid mixtures mentioned above after.)

The bismuth salts, calcined magnesia and cerium oxalate have a mechanical sedative effect on the mucosa. Bismuth subcarbonate, being a better antacid than the subnitrate, is the most serviceable, and combinations have been mentioned. The following of Stockton's is helpful:

R Cerii oxalis ..... 1 part or 10.0  
Bismuthi subcarbonatis

2 parts or 20.0

Magnesii carbonatis .. 4 parts or 40.0

Fiat pulv. et Sig.: Take one-half a teaspoonful every four hours.

Nux vomica in ascending doses has been strongly recommended by Musser in hyperchlorhydria due to a sensory neurosis. This author claimed uniformly good results from its use. Other bitter tonics are to be avoided.

Nerve sedatives, like the bromides, valerianates and sumbul, are the most valuable of all drugs to control the symptoms of hyperesthesia. It must be remembered that gastric hyperesthesia is commonly present in these cases, and the symptoms of this are most pronounced when irritation from free hydrochloric acid takes place. A prescription to be recommended is the following:

R Sodium bromidum  
Tinctura valeriana  
Ext. sumbul fl. .... a.a. 15.0  $\text{̄iv}$   
Syr. simplex ..... q.s. 90.0  $\text{̄iij}$

Fiat et Sig.: Take a teaspoonful after meals in water.

Olive oil and other forms of hydrocarbons have been highly recommended. Cohnheim has written much and always highly advises the use of olive-oil. The plan of this author is to administer 100 or 200 cubic centimeters of olive-oil (through a stomach-tube) each morning, or it may be given in smaller quantities before meals. The oil coats the interior of the stomach and inhibits the secretion of acid. As a general routine of practice in hyperacidity, this treatment is not satisfactory. Many patients object to the use of the tube, and others again are nauseated by taking the olive-oil in such quantities before meals. Still, when it is easily taken it may be used, because it may be efficient in the desired way, is a good reconstructive to undernourished patients, and may keep the bowels regular. However, no addition of salt to the olive-oil to make it more palatable should be allowed, and it should not be used in cases of fat intolerance or those who complain of headache and eye symptoms after its use. While not so much benefit in controlling acidity comes from the plan of taking fats with the meals, still the heavy indulgence of the more palatable forms (butter, cream, or milk) often serves to good purpose in these cases.

A morning dose of Carlsbad salts in a glass of warm water is an excellent practice in cases of very high acidity or hypersecretion. This salt possesses the double value of neutralizing the acidity present and moving the bowels, and when given well diluted in water it acts as an internal lavage of the stomach. The Carlsbad salts can also be used in small doses at meal-time, the dose being about 1 gram (15 grains) in vichy after the meals. In all cases of hyperacidity or hypersecretion of a chronic nature, search for cause must be made and if after six months' steady observation the condition persists, one of two decisions are in order, namely, the long persistency of medical treatment to afford subjective relief, or surgery. Among the surgical conditions that may be present can be mentioned gastric ulcer, gall, kidney or pancreatic stones, chronic appendicitis and peritoneal adhesions.



**Hypermotility:** This is more commonly a neurosis, but is often seen in the irritated stomach such as would accompany dietetic indiscretions and associated with hyperesthesia and hyperacidity. Those cases which are a distinct neurosis cannot be recognized as a clinical manifestation and must be treated accordingly.

In the neurological form of hypermotility, the main indication of the diet is for the employment of solid foods. Fluid or semi-solid substances may be taken in the midmeal interval, but overlapping with solid foods or too high caloric feedings should be guarded against. Of course, the foods should be simply cooked and as free from condiments as possible. The taking of soups, broths, tea, coffee, alcohol and tobacco should be stopped, and in severe cases the assumption of the left-side prone position after meals may be desirable. Lavage, douching or electricity should never be employed, not even when a large flaccid stomach exists. The bromides in large-sized doses or the regular use of codeine are the most efficient medications. In my experience, the acids usually increase the symptoms, nuxvomica does not benefit them, but olive-oil taken before meals may be helpful for a short time but should be stopped as

soon as improvement sets in. The purgatives should not be used, and if constipation exists the use of simple enemata would be the safest plan to install. An anemia should be combated by the use of foods high in the proportion of iron or the non-astringent forms of iron.

#### Percentages of Iron in Foods.

White bread.....	1.4	Potatoes .....	6.2
Apples, sweet.....	1.7	Green peas.....	6.8
Apples, sour.....	2.1	French beans .....	8.5
Pears .....	2.2	Carrots .....	8.9
Cow's milk.....	2.3	Lentils .....	9.3
Goat's milk.....	2.5	Asparagus .....	10.5
Brown bread.....	2.5	Yolk of eggs.....	18.3
Red currants.....	3.6	Green chicory.....	22.0
Rice .....	4.5	Cabbage .....	30.5
Barley .....	4.7	Spinach .....	40.0
Black grapes.....	5.8		

The general hygienic measures or a sojourn in the country are most substantial to control an underlying neurosis, and if the symptoms of neurasthenia are present these should be combated in the usual ways. The diet, however, in caloric values must be held down for the first month or two, and after that only very gradually increased. The low degree of enteritis that is usually present in these cases passes off if the dietetic indications are observed.





