

pill. The bilious person is generally constipated, hence such a pill has a special utility. Fothergill's pill of ipecac, capiscum, and pil. aloes et myrrh, has done good service in such cases. Nitromuriatic acid and taraxacum have a reputation which is probably not altogether built on imaginary results. But bilious dyspeptics, while they should be attentive to the functions of eliminations (and doubtless the ancient predilection for purgatives has been justified by modern scientific research which finds in intestinal septicæmias and alkaloids of putrefaction many of the evils formerly attributed to peccant humors and atrabiliary disorders) should aim especially to be good hygienists and learn to live right; but this is counsel which everybody gives and nobody takes.—*Boston Med. and Surg. Jour.*

## THE DIETETICS OF PULMONARY PHTHISIS.

By ALFRED L. LOOMIS, M.D., ETC.

The dietetics of pulmonary phthisis is often the most difficult as well as the most important element in its successful management.

In the limited space at my disposal I can give only general rules and an outline of the practice which experience has led me to adopt.

Three things require consideration:

- 1st.—*The most suitable articles of food.*
- 2d.—*The time and quantity of its administration.*
- 3d.—*The use of artificial digestion.*

Since the object sought is the maintenance of the highest possible nutrition, and as this must often be done with feeble digestive and assimilative powers, the selection of food will not be determined solely by their relative value (chemically) as food products, but quite as much by the facility with which they are assimilated.

The best foods are those from which the system gains the most heat and force producing elements with the least proportionate expenditure of digestive and assimilative force.

Milk is undoubtedly the best food of all *per se*. but in many cases with weak digestive power more nutrition is gained from its weaker ally Kumyss.

Of the albuminoids, meats, especially beef, and eggs are the most valuable.

The best hydrocarbons are cod liver oil, butter, cream, and the animal fats. Sugars and starches should be avoided as far as possible, since they tend to fermentation, and cause both gastric and intestinal dyspepsia. Only occasionally will a patient be found who is benefited by their use. They should be employed therefore only for variety in diet and to avoid that disgust for all food so apt to be engendered by a monotonous diet.

Phosphorous, so important especially in tubercular cases, is secured in preparations of the phosphates, which should not be in the form of

syrups. Vegetables and fruits may be required in the earlier stages to avoid monotony, and later to satisfy a capricious appetite, but they should be restricted to the minimum and to such as contain the least saccharine elements.

Two very distinct classes of phthisical patients must be recognized, those under thirty and those over forty. It may be stated as a general rule that for the first class the basis of all dietetic treatment must be the hydrocarbons and phosphates. They are often the *curative* agents in young subjects.

On the other hand the albuminoids must constitute the principal food of the second class. It is worthy of note that often in phthisis the demands of waste and repair not only enable young people, who usually object to all forms of fat, to take and assimilate, but even cause them to exhibit a decided fondness for all forms of fatty food. Older subjects who in health use little albuminous food and more fat are able to digest large amounts of meat, while fats cause intestinal dyspepsia.

In selecting special articles of diet for these two classes it is important to remember that there are distinct stages which consumptive patients pass through as regards their digestive powers. The first covers the period during which digestion and appetite are unaffected. The second begins with the first indications of septic infection; is marked by intermittent pyrexia and gastric irritability. It extends to the time at which the stomach refuses solid food. The third covers the remainder of the patient's life. It is in the first stage that the best results are obtained.

*Systematic dieting* should be begun, therefore, upon the first suspicion of a developing phthisis. The diet can no longer be indiscriminate, but the rules given below should be strictly adhered to. For young patients meat must be and butter and cream are to be used freely. Milk should constitute the principal drink, in quantities of from two to four quarts per day. Other articles are to be taken sparingly simply to avoid monotony. Each meal is to be supplemented by a generous allowance of cod liver oil ( $\frac{3}{4}$  ss  $\frac{3}{4}$  ii). The phosphates, so valuable to this class of patients, can be supplied in sufficient quantity only by special preparations. For patients over forty, meats should be lean rather than fat, and be taken in large amount. Two or three pounds of beef, three to four quarts of milk, and three or four eggs may be given to such patients in twenty-four hours.

In the second stages, changes are required in the method of preparing the food rather than of the article's employed. All the food must be given in fine division and prepared in the most palatable manner. Beef may be scraped or chopped with a dull knife, only the fine which adheres to the blade being used, and eaten raw or lightly or quickly cooked, the essential points being the removal of all coarse fibre and rendering it palatable to the patient. Milk may be taken raw, boiled,