

# EXERCISES FOR HEALTH VALUE OF DIFFERENT KINDS OF GREEN FORAGE FOR HOGS



Various causes can be attributed to the stomach and abdominal disorders which are so prevalent to-day. It can safely be said that one of the greatest is ill-fitting corsets and tight lacing, causing displacement of the various organs and not permitting them to grow as nature intended them to. Any woman desires a shapely form, but let her attain it in a natural way—eating properly, living rightly and by systematic exercise.

How few women have proper digestion? One great cause of sluggish digestion is the imperfect removal, both of waste and of residual.

Since motion of the organs is a necessary part of their function, no restoration of digestive power is possible that does not also include the restoration of this mechanical or muscular property.

Many motions may be given to one's digestive organs suited to different constitutions, conditions of disease, development of the region, strength of the individual, etc. The following exercises have been carefully selected, which, if not entirely applicable for a given case, may prove suggestive of some other that may act more to the purpose.

The first exercise is given in a standing position, the body slightly bent forward, with corsets and all tight-fitting clothes removed. The action is, the extended hands are made to strike the frontal regions of the body, striking alternately with each hand with such force and speed as to produce no unpleasant sensations.

If there be a point where pain is felt, the action, at each successive exercise, should for a period be given to surrounding parts, approaching the tender part gradually until the pain disappears.

The above may be continued until the entire frontal region has been traversed, and repeated as often as one deems practical.

A more vigorous treatment may be given by using the doubled fist instead of the flat hand in striking. However, it is better to begin by using the open hand.

This treatment is an unusually good one to assist in promoting absorption, or removing congestion.

Another good action to indulge in while occupying this position is, with your two hands strongly clenched, press upon the abdomen firmly, causing the subjacent parts to yield to the pressure. This action may be continued for several minutes over the whole region of the abdomen. This action excites the muscular contractility of the tube.

Another action having the same effect as the above is: With the pressure of the hands, follow the course of the colon, beginning low upon the right side of the abdomen, passing around beneath the stomach, and terminating on the side opposite. This circular stroking may be continued for several minutes. Follow this movement with the pressure exercise under the short ribs. The ends of the fingers are applied from below, and strong pressure made with a tremulous motion. This exercise excites muscular and nervous action in the organs reached.

The second exercise is one taken while occupying a kneeling position. The arms are in an angle position—elbow bent, while the upper arm is near the side parallel with the body. The knees are wide apart, and the trunk leaning back from the perpendicular.

The arms are slowly stretched upwards until they become parallel with each other, and in a line with the body. Retain this position for a short time—then allow them to slowly return to the commencing position.

Repeat this action ten or twelve times, using care that the arms are stretched so that they are exactly in a line with the reclining trunk.

This exercise may be varied, when the arms are stretched, by permitting the trunk to lean as far back as possible, then sway from side to side—bending only at the waist line.

The effect of this action is far reaching, noticeably in the arms, the top of the shoulders, the region beneath the shoulder blades, the sides of the chest, the diaphragm, the abdominal muscles, as well as the visceral organs, which are raised by it and moderately compressed. — Harriet Coates.

## PARISIAN MODEL.



Hat of white paille de riz, with high crown covered with platted lace; three large tea roses at one side.

Didn't Take to Rubber Overshoes. Much as it rains in England, there still prevails an indisposition on the part of both men and women to wear rubber overshoes.

## For the Hostess.

If making the coffee at the table remember there is a right and wrong way of making and serving coffee. Have the coffee machine and tea kettle on the table. Both should be placed on the tray at the foot of the table before the hostess, the tea kettle at the head of the plate and the coffee pot at the right of the plate. Fill the under part of the coffee pot with boiling water, put the necessary amount of coffee in the glass top and properly adjust it. Light the alcohol burner beneath and the coffee will be prepared in a few minutes. There are methods for making this by electricity, though the above method is more in use. Serve the coffee black with miniature pitchers filled with cream topped with whipped cream.

## Cretonne Parasols.

Cretonne is very popular this season for evening coats and vests, as an applique, and now cretonne parasols are prescribed for morning wear. The design must, of course, be reasonably small, and the only decoration is the heavy cotton fringe around the border. Of course the handle on such a very serviceable sunshade would be of plainest wood, leaving the more elaborate sticks for more dressy parasols.

## Results of Experiments with Six Lots of Hogs—By H. J. Waters, Director, Missouri Agricultural College.

Perhaps the largest single waste occurring at the present time is that which comes from the too exclusive use of corn in growing and fattening hogs. The cheapest and most easily applied remedy is a more general use of the proper forage plants in summer and the use of some home grown protein in winter. It is not of course to be denied that the hog is primarily a grain consuming animal, at the same time forage plays an important role in economical hog production and deserves far more attention than it has yet received. To secure accurate information on this point, the Missouri station undertook some time ago to compare the value of various forage

plants when combined with corn for the growing and fattening of hogs. Six lots were fed. Each lot contained six high grade Poland China pigs, weighing about 50 pounds each. The rations were as follows: Lot I. Corn meal three parts; ship stuff two parts. Lot II. Corn meal; fresh rape. Lot III. Corn meal; fresh alfalfa. Lot IV. Corn meal; fresh red clover. Lot V. Corn meal; fresh bluegrass. Lot VI. Corn meal one part; skim milk three parts. The feeding experiment covered a period of 102 days, beginning July 25, 1902, and continuing until November 4, 1902. The results were as follows:



Average daily gain per head, .67 lbs. Grain required per pound of gain 5.18 lbs. Cost per 100 pounds of gain, with corn at 40 cents per bushel, ship stuff, \$18.00 per ton, \$4.07.



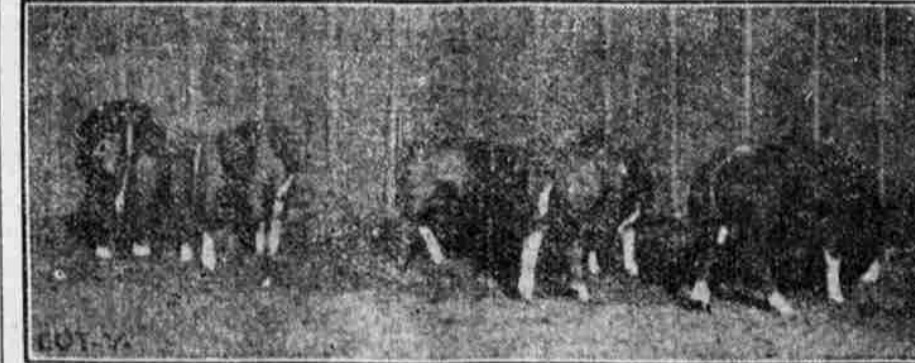
(First 40 days of experiment only.) Average gain per head, .58 lbs. Grain required per pound of gain, 4.41 lbs. Cost per 100 lbs. of gain with corn at 40 cents per bushel and Green Rape at \$3.00 per ton, \$3.34.



Average daily gain per head, .83 lbs. Grain required per pound of gain, 4.01 lbs. Cost per 100 pounds of gain, with corn at 40c per bushel, Fresh Alfalfa, \$3.00 per ton, \$3.00.



Average daily gain per head, .77 lbs. Grain required per pound of gain, 4.35 lbs. Cost per 100 pounds of gain, with corn at 40c per bushel, and Fresh Clover at \$3.00 per ton, \$3.25.



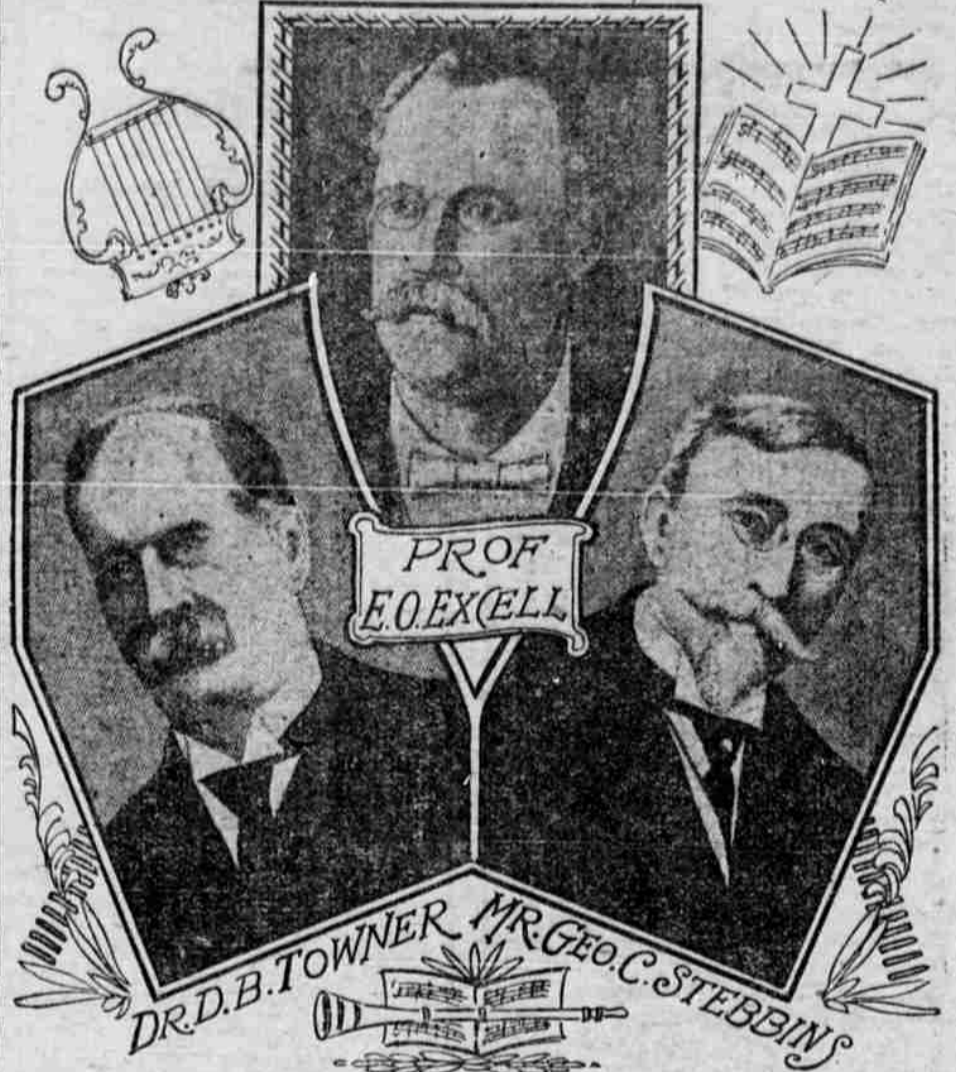
Average daily gain per head, .63 lbs. Grain required per pound of gain, 5.31 lbs. Cost per 100 pounds of gain, with corn at 40c per bushel, and Fresh Bluegrass at \$3.00 per ton, \$3.96.



Average daily gain per head, 1.61 lbs. Grain required per pound of gain, 2.43. Cost per 100 pounds of gain, with corn at 40c per bushel, and skim milk at 15c per 100 lbs., \$2.83.

# GOSPEL HYMN WRITERS OF AMERICA

MEN WHOSE SONGS HAVE SOUNDED ROUND THE WORLD



Since the day on which Miriam sang her song of triumph over the destruction of the hosts of the Egyptians, and thus gave expression to the first hymn of which we have any record, myriads of sacred songs have been penned by devout men and women—songs that are sung wherever people meet to worship and praise the King of Glory. But while hymns and psalms of praise stretch far back across the centuries, one department of it is of comparatively recent origin. Gospel song is a modern institution, and America is its birthplace and its home.

Competent authorities regard this last mentioned hymn as one of the finest in the English language. It is certainly one of the best hymns of the present generation. The words contain beautiful pictures, and the music is in perfect harmony with them. Though intended to be sung as a solo or a duet, the hymn is well adapted for congregational use, and I have seen it produce a wonderful effect on a large gathering. The words were written by the blind poetess, Fanny J. Crosby, the author of many beautiful verses.

No one, I suppose, would venture to assert that American hymnology contains anything to be compared with the masterpieces of English collections, and yet, when we come to the field of Gospel songs, the American writers have it all practically to themselves. The explanation of this may lie in the fact that while those in England have been fed and nurtured on stately and majestic hymns, Americans have been trained in the use of Gospel songs and have thus become more accustomed to them. Whatever the cause, however, the fact remains that Americans have taught England most of the Gospel songs with which she is familiar.

Uniquely among the hymn-writers of the present day is Dr. D. B. Towner, the head of the musical department of the far-famed Moody Bible Institute in Chicago. He is unique in this respect, that he is doing a work to which there is no parallel either in this country or England. He is a singer, a teacher, and a composer. Every day of the year men pass through his hands as they prepare for their life work—the singing of the Gospel with the fixed aim of winning souls. He trains them to take their place in church and mission work as accomplished leaders of praise, and, besides that, he gives instruction in composing, showing how to write hymns on a scientific basis. Some of his former pupils are to-day among the best writers of Gospel music. Dr. Towner is undoubtedly the greatest teacher of Gospel music in the world, and as a teacher of teachers he is accomplishing a work the vastness of which cannot be overestimated.

Ira D. Sankey was little else than a singer, but he composed one or two pieces that were deservedly popular, and will always be indissolubly associated with his name. Among his earliest efforts at composition was his air to "Yet there is room," the words of which were written by Rev. Dr. Horatius Bonar. They were written, too, at Sankey's request. He had been singing Tennyson's great poem: "Late, late, so late, and dark the night and chill," at the mission meetings in England; but the owners of the copyright would not permit him to use it in his collection of hymns. Thereupon he asked Dr. Bonar to write words that would cover the same ground, and "Yet there is room" was the result. Other melodies have been put to the same words by other composers, but Sankey's air holds its own place in the affections of the majority.

The author of the world-famed "Glory Song," Mr. Charles H. Gabriel, is one of America's most prolific writers. He has not to look around for words; he is a poet as well as a musician, and thus between the words and their musical setting there is a sympathy that adds materially to their charm. Mr. Gabriel has a wonderful faculty for picture-drawing. His rich imagination enables him to make every line vivid and real. He grasps a phrase that gets the attention of the people, and this he works out into a chorus. His melodies are easy to carry in the head. I have heard many a musician speak in disparaging terms of the "Glory Song," but yet there is something in that wonderful hymn that defies analysis.

One of the most popular composers was James McGranahan, the successor of that sweet singer, P. P. Bliss—who, with his wife, was killed in a railway accident—as the colleague of M. J. Whittle. McGranahan was a prolific writer, and his work is of a very high standard. "Are you coming home to-night?" the words of which were written by a young lady in Scotland, possesses a strength of appeal which sinners find hard to resist, and has been used with striking blessing in every part of the world. Among his other successful compositions may be mentioned "Christ receiveth sinful men," "There shall be showers of blessings," "Thy God reigneth," "Come!" "Banner of the cross," and "I'll stand by till the morning." The words of this last hymn were written by Bliss.

Another writer whose methods closely resemble those of Mr. Gabriel—the two men, in fact, are like brothers—is Prof. E. O. Excell. He, too, is a singer, and he can write both words and music. He has written and edited many Sunday school books, and has published many anthems for church choirs. No man knows better than Mr. Excell what to give to the public. He studies their wants and provides them with what they like to have. Equally alert is he in getting ideas for his hymns. A phrase in a sermon or a remark in a conversation sometimes forms a peg on which to hang a sacred song.

But while these writers have been mentioned, the purpose of this article is more with the men who are hard at work to-day, and who have the ear of the whole English-speaking world. Among these I mention, first of all, George C. Stebbins, who has been a steady and a consistent writer for many years. When the output of some others is considered, Mr. Stebbins cannot be regarded as prolific, but all his work is of high merit, and his standard is perhaps higher than that of any of his contemporaries. Ever in his mind is the aim to direct the thoughts of the people more to the message of the music than to the music itself.

There are numerous other writers in America who are producing excellent work, but of these mention cannot here be made. Peter B. Bilborn, however, deserves to be noticed. He is the composer of "Blessed Jesus, keep me white," "Holy Spirit, come in," and "The best friend to have is Jesus," all of which have met with kindly appreciation.

Mr. Stebbins takes time to his work. When his verses are given to him, he makes the music a matter of earnest prayer, and the result of this communion is seen in the refinement of