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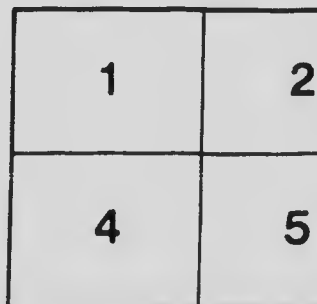
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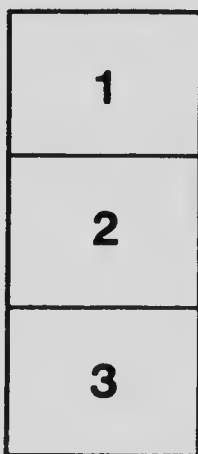
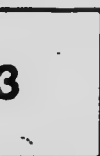
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# THE FEEDING OF SWINE.

BY

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In the consideration of feeds for the production of cheap pork, choice is largely influenced by locality, season and local conditions. By these factors economy of purchase or production is governed, provided the food is palatable, easily digested and nutritious—essentials in any successful ration. The complete ration must, further, be properly balanced, compounded of a variety rather than one or two constituents, and above all things contain some succulent food, winter or summer. To the latter or natural class of food, largely depends the continued health of swine. It is essential in the feeding of breeding stock.

## RATIONS.

### THE STOCK BOAR.

*Summer Feeding.*—Supply a pasture of clover, alfalfa, or fine grass with water and shade. If no pasture available, supply fresh green food liberally, clover, alfalfa, grass, green peas and oats or weeds as lamb's quarter, pig weed, dock, etc.

*Winter Feeding.*—Alfalfa or clover hay fed dry, in racks. Roots such as raw mangel or sugar beets, pulped; cooked potatoes and turnips, 5 to 10 pounds daily; or in the absence of roots, clover or alfalfa hay, cut fine and soaked or steeped.

*Feeding the Year Round.*—If skim-milk, buttermilk or whey are available, supply at rate of 3 to 10 pounds daily as needed. The meal ration may be made up of ground oats, ground barley, bran and shorts in any combination of two or more, fed at the rate of 2 to 5 pounds per day, as needed. Use judgment in feeding the boar. If over-fat, he will prove a poor or uncertain stock-getter, indifferent and sluggish at service. If too thin, he will transmit to his get, lack of vigour and vitality and poor condition generally.

*Exercise.*—Importance cannot be overestimated. Supply a roomy, shady pasture in summer, not a filthy, fly-infested pen or corner. In winter, arrange a paddock out-of-doors, close to the barnyard. If convenient give him the run of the yard for a few hours. As a shelter use, the year round, a cheap, portable, single-boarded cabin, about 6 feet by 8 feet. Supply lots of bedding. By feeding and earing for as outlined, crippling and rheumatism, so common in boars, will be avoided. (See further.)

### THE BROOD SOW.

*Summer.*—Pasture same as advised for boars.

*Winter.*—Roughage same as for boars. Meal mixture of bran two parts, short-oue part, except when nearing farrowing-time, when the mixture should be of equal parts. If necessary ground barley or oats might replace either. Avoid corn in more than one-quarter the ration. For the breeding sow it is debilitating and over-fattening. Feed meal at the rate of 2 to 4 pounds as needed.

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## DOMINION EXPERIMENTAL FARMS.

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EXHIBITION CIRCULAR No. 60.

*During Gestation.*—Flush, or bring the sow into good condition before breeding. Maintain this condition after breeding. Avoid over-fatness with the ensuing troubles—difficult farrowing, small, weak, and dead pigs. Too thin condition, particularly with the young sow, may permanently injure, in any case will likely mean small, thin pigs, a high percentage of runts, and small milk secretion. The in-pig sow must receive a cooling ration tending toward a laxative nature. The ration above advised qualifies in this regard. Remember, first and last, that constipation at this time makes very certain, serious trouble with the litter—small unthrifty, poor-doing pigs, due to constipation in both themselves and their mother. Such litters dwindle rapidly with no perceptible cause. (See further.)

*Exercise.*—Equally as important as with the boar. With the exception of that period spent in the farrowing-pen, house the brood sow outdoors the year round in a portable cabin, 8 feet by 10 feet, and as described, placing four or five sows in each cabin. Choose a dry site. Make the sow work to obtain feed. This has an unfailing influence on the vigour, size and numbers of the coming litter, and lessens liability to rheumatism and crippling. (See later.)

*After Farrowing.*—Avoid exciting the sow during or after farrowing. Always be present at this time but give only such attention as may be required; no more. First feed should be a tepid slop of middlings. During the first ten days gradually increase ration to maximum. Particularly avoid over-feeding, causing scours and thumps in little pigs. Feed the sow for milk production such rations as ground oats, middlings. (equal parts), or ground oats, bran, shorts (equal parts), both combinations with milk products. In summer allow green feed or pasture only after pigs are two weeks old. In winter, feed roots, clover hay, etc., to keep functions healthy and blood cool. Empty a pailful of earth and wood ashes in a corner of the pen. *When weaning* cut down meal supply and remove young pigs for longer periods each day until the sow is dry. If pigs are over-fat, lazy and sluggish and the sow a heavy milker, force exercise. (See thumps.)

#### WEANING PIGS.

Teach the litter to eat three weeks before weaning. Use a creep which admits the pigs but not the sow. For best results milk products are practically a necessity, with middlings. A few handfuls of dry grain scattered in bedding ensures the pigs taking exercise. Avoid over-feeding and make exercise necessary. Gradually increase middlings until weaning. If skim-milk is available, and two litters per year are anticipated, wean at six weeks of age; otherwise, wean at eight weeks.

*Ration for Weaned Pigs.*—After weaning start grain feeding as follows: Daily ration for the two to three month pig weighing about fifty pounds: 1 pound of a mixture of barley, 3 parts; shorts, 3 parts; linseed oil meal, 1 part, with 5 pounds of skim-milk daily. Soak for twenty-four hours and feed. If in pen, add to this some dry grain, oats or corn, scattered in litter. This is not necessary if pigs are on grass paddock. As pigs increase in age, gradually increase the grain to three pounds or more daily, as needed, increasing also the proportion of ground barley or oats in mixture, until at six months the ration consists of ground corn or barley, 6 parts; shorts, 3 parts; linseed oil meal, 1 part. Shelter the pasture or paddock fed pig either with a portable cabin or a light open-sided shed. Avoid, particularly, turning the weaned pig outdoors to a shadeless paddock. Sunburn, skin trouble, temporary and often permanent stunting ensues. Have natural shade if possible, and supply clean, fresh water.

#### OTHER GOOD GROWING RATIONS.

1. Ground barley, 4 parts; shorts, 4 parts; gluten feed, 2 parts; skim-milk, 3 pounds.
2. Ground oats or barley, 4 parts; shorts, 4 parts; ground peas, 2 parts; skim-milk, 3 pounds.
3. Ground wheat or shorts, 2 parts; barley, 2 parts; ground peas, 1 part; skim-milk, 3 pounds.

Numbers 1 and 2 would be applicable to Central and Maritime conditions, while No. 3 would be more adapted to Western needs.

#### PASTURES.

Compared to pen feeding, the pasture affords 5 to 25 per cent cheaper gains. For growing breeding stock, pasture feeding provides for growth of bone and muscle and general vigorous health. For fattening and finishing pigs, firmer, better quality pork will result. With the latter class of stock, however, the range, must, of necessity, be more limited. Alfalfa forms the best pasture, with clover next. With both, however, avoid too close grazing. Rape and artichokes are best pastured in conjunction with clover or grass.

#### GREEN FIELDS.

For dry-lot or pen feeding fresh-cut alfalfa or clover are best. Rape is largely employed but is much lower in value than the two first mentioned and must be used before it becomes coarse and fibrous.

#### ECONOMICAL PRODUCTION AND HEALTH.

*General Rules for Feeding.*—(1) Never feed more than the pigs will clean up. (2) Make all changes in rations slowly. (3) Realize that the breeding pig is an out-of-doors animal. (4) Approximate outdoor conditions in the farrowing and feeding pen, i. e., supply fresh air, light, drainage, and above all avoid draughts and dampness. (5) Make exercise a prime factor with every class and age of breeding pig. (6) For economy and health see that green food, pasture, roots, and well-cured roughage are part of the ration. (7) Remember that the pig is a poor patient and particularly difficult to treat. Strive to eliminate the causes of disease—prevent rather than cure it.

#### THE HEALTH OF SWINE.

No attempt is made to enumerate swine diseases. The following descriptions and treatments apply to several ailments already alluded to, such as are usually caused by faulty methods of feeding.

##### CONSTIPATION.

*Particularly to be guarded against,* with pregnant and milking sows.

*Cause.*—Too little exercise, lack of succulents and bulky material, and too much concentrated feed in the ration.

*Treatment.*—*Remove cause.* Give 2 to 4 ounces raw linseed oil, once daily, in slop, for mature animals. If no effect, give as drench, 4 ounces Epsom salts. Use laxative feeds, bran, oil meal, flax-seed, etc. Avoid drastic purgatives with the milking sow. Try to induce the desired condition through feeding cooling, laxative feeds.

##### DIARRHŒA (SCOURS).

Common and fatal with young pigs particularly.

*Cause.*—Over-feeding the sow after farrowing, with corn or other rich feeds. Sudden changes in feed. Use of decomposed or sour slop. Nervousness and irritability in the sow.

*Treatment.*—*Change feed.* Give 15 to 20 grains iron sulphate to the sow in slop, night and morning. Mix lime-water with slop, or supply where sow can reach it a mixture of iron sulphate, sulphur, and salt (equal parts), with four times quantity of ground charcoal. Limit supply if sow is greedy. For young pigs give 2 ounces castor oil.

##### INDIGESTION.

*Symptoms.*—Unthriftiness, poor feeding, arched back.

*Cause.*—Over-feeding; feeding decomposed slop or swill containing injurious substances.



*Treatment.*—Remove all food for twelve hours; give 4 ounces castor oil; feed lightly on bran and shorts slop with green food or roots.

#### THUMPS.

*Symptoms.*—Usually seen in young pigs; dullness; constipation or diarrhoea; short breathing with a peculiar thumping noise.

*Cause.*—Disordered digestion due to too much concentrates in ration or too much feed in combination with lack of exercise.

*Treatment.*—Preventive largely. Provide exercise, forcing it where necessary in cases of heavy milking sows, by removing pigs to another pen for an hour or so daily. Restrict feed of sow. Apply these measures at first sign of over-fatness or sluggishness and thumps will not appear. With weaned pigs reduce concentrates, increase skim-milk and force exercise. In individual cases use castor or linseed oil. Difficult to treat.

#### CRIPPLING.

*Symptoms.*—Often confounded with rheumatism. Stiffness and lameness generally of hind legs. Animal lies most of time until walking becomes impossible. Finally refuses to come to trough. Appetite disappears and death ensues.

*Causes.*—Strong food and too much of it; lack of exercise; damp quarters due to poor ventilation; wet floors; filth. Usually a combination of all.

*Treatment.*—Prevent by supplying right conditions. Exercise outdoors; feed as already outlined. If condition is advanced, force exercise, give 2 to 4 ounces Epsom salts in pint of water, repeated in twenty-four hours. Feed, in small quantities, milk, bran and shorts with roots or green feed. Give two tablespoonfuls, daily, of sulphur, Epsom salts and charcoal, equal parts.

#### RHEUMATISM.

*Symptoms.*—Lameness, stiffness, pain and swelling in joints.

*Causes.*—Almost invariably due to damp quarters due to wet floors, filth or damp walls and impure air, the result of poor ventilation. Heavy feeding, in conjunction, complicates matters.

*Treatment.*—Difficult in advanced cases. See treatment for "crippling." Give salicylate of soda three times daily in feed, 20 to 30 grains to the dose. Use liniments or blistering ointments on affected joints. Give dry quarters and plenty of bedding. Prevent, by adopting outdoor methods for all but fattening and very young stock.

#### INFLAMMATION OF THE UDDER.

*Treatment.*—Milk two or three times daily. Give small dose of Epsom salts and feed on sloppy diet. Apply ointment as follows, kneading well: Extract belladonna, gum camphor, 1 dram each; vaseline, 3 ounces. Apply hot fomentations.

#### PARASITES (INTERNAL).

For intestinal worms, give turpentine, 1 teaspoonful for every hundred pounds, in raw linseed oil, as a drench, after having removed all food for at least twelve hours; or administer in slop. Follow by physic of Epsom salts. Prevent, by allowing pigs access to mixture of charcoal, wood ashes, and salt.

#### LICE.

Apply crude castor oil, crude petroleum, a mixture of raw linseed oil 2 parts, kerosene  $\frac{1}{2}$  part, or fish oil 12 parts, creolin or coal oil 1 part. Disinfect and clean quarters, if infested.

#### TO DRENCH A PIG.

Use care. Go slowly. Back it into a corner, raising the head slightly. Attach a piece of hose six or eight inches long to a small, long-necked bottle. Insert hose into pig's mouth and pour contents slowly. The pig chews the hose, receiving the dose naturally and lessening danger of choking.



