

# GUIDE TO BUYING

## THE TRUTH ABOUT HAIR TONICS

BY JEROME W. EPHRAIM

Too often hair tonics are purchased without any conception of their proper function, or hair "treatments" are begun in the fallacious expectation that some sort of minor miracle is about to be performed. Unfortunately, such miracles are infrequent and do not stand up very well under investigation. A common fallacy is that the hairs of the head are living structures like a field of grass or a patch of young onions, hence to be fertilized and nourished much as you would a bed of plants in your garden. As Pusey points out, countless gallons of tonic are concocted on this theory; countless treatments are based on the same ineradicable superstition. It is closely allied to the skin food fallacy in the domain of cosmetics. It reaches the ultimate in absurdity in the "singe", a process supposedly designed to seal the ends of the hair against the loss of "sap." But there is no circulation in the hair and no sap whatever. The customer is the sap.

Everybody loses hair. It is quite normal. But when the rate of shedding speeds up faster than the rate of replacement, we have the beginning of baldness. The condition may be pathological or merely senile. Theories of cause and cure are multifarious. There is little authentic knowledge based on controlled experiment. But the situation is not quite as hopeless as popular cynicism might indicate. Many cases of baldness appear to be preventible, or at least postponable.

The hair shafts and other appendages,

such as the nails, are horny structures very similar in composition to the horny layer or epidermis of the skin. The hair follicle is a tiny tube of epidermis which extends downward into the true skin (derma); through this tube the hair pushes up and out, deriving its growth and sustenance from a so-called papilla at its root (which, however, has no analogy to the root of a plant). The hair-making apparatus is fed exactly as the scalp itself or any other tissue is fed—from the blood supply of the body; hence the futility of external applications as a form of "nourishment."

From these considerations, it is evident that a good growth of hair depends partly on general health and partly on a healthy scalp properly equipped with follicles and hair-making apparatus. The importance of a proper regimen of life as a preventive of scalp disorders is only coming to be recognized. The idea of "dieting for dandruff" once seemed too amusing to be taken seriously; yet most authorities now stress nutrition, elimination, exercise, open air and sleep as factors that should not be overlooked. Specific recommendations vary; many believe that fatty diets should be avoided, others restrict the intake of carbohydrates. Some warn against very hot, spicy or alcoholic beverages. But dietary asceticism is usually unnecessary. The common sense of the matter is that the hair derives its sustenance from the blood, and is likely to be influenced by any alteration in the character of the blood supply; it is largely for this reason that stimulation in the form of massage or irritant drugs may serve a useful purpose. Curi-

ously enough, the hair is also subject to nerve conditions. Tales of hair turning white in a single night are probably superstition, but there seems to be sufficient reason for believing that worry and nerve strain may be contributing factors in causing both grayness and loss of hair. Dr. Fishbein of the American Medical Association cites the case of a farmer in Wisconsin who lost his hair every time his wife gave birth to a new baby. This seems to have been due to nervous shock.

Here it may be noted that there are many other general factors presumably affecting the hair, concerning which no agreement exists. Among these are heredity, tight hats, city life, artificial illumination, endocrine deficiency, over-zealous barbers and the indiscriminate use of tonics. Recently, the sex hormones have been indicted. Women are obviously more resistant to baldness than men, and it is said that eunuchs and intermediate types likewise rarely lose their hair. But to follow these speculations would take us too far afield.

For practical purposes it is more important to discover, in any given case, which *type* of disorder actually exists. Here a skilled diagnosis is of value. Most hair tonics appear to be sold as universal remedies, good for any affliction of the scalp. Perhaps this is an inheritance from the day when the old-time barber diagnosed any case of falling hair as "mange", which he forthwith proceeded to treat with some evil-smelling concoction borrowed from an obliging veterinarian. Unfortunately diagnosis and treatment are actually much less simple. Following Goodman and others, we may distinguish three major categories of alopecia or loss of hair:

*Premature idiopathic alopecia*: the type very commonly observed in "bald-headed row." It is similar to or identical with sim-

ple senile baldness, though in most cases it begins to attack its victims before thirty. It is attended by no recognizable disease, and, according to one commentator, it is called idiopathic because "nobody knows the reason for it." Treatment is uncertain and may be entirely futile. The condition is probably hereditary, though it is sometimes ascribed to imbalance or disorder of the endocrine secretions. Cases of congenital alopecia in which the individual is born without hair are rare.

*Symptomatic alopecia*: "toxic baldness," usually temporary. It frequently follows diseases accompanied by fever, particularly typhoid, though it may be a symptom of other disturbances (e.g. syphilis). The hair usually returns after such disturbances are eliminated. Incidentally, the marvelous instances of regrowth of hair, as exhibited by some tonic promoters and treatment parlors, are usually found on investigation to be cases of symptomatic alopecia, though occasionally alopecia areata is involved. In the latter ailment, the hair comes out suddenly in small areas or from the entire scalp. It sometimes returns as mysteriously as it went, furnishing another instance of miracle-working for the "specialists."

*Alopecia associated with local diseases of the scalp*, principally dandruff or seborrheic dermatitis. Under this grouping are included a number of disorders, among them fungic diseases, such as ringworm of the scalp (largely confined to children) and certain scaly diseases, of which dandruff is by far the most frequent in occurrence.

Aside from the idiopathic cases, then, the trouble is usually dandruff. For the average person the question resolves itself into one of controlling dandruff, not only because dandruff is objectionable in itself, but because at very least it is a concomitant factor in the majority of cases of baldness.

Dandruff is a skin disease just as much as acne, eczema or psoriasis (with which it has many points of similarity). It is primarily a disorder of the sebaceous or fat glands. The function of these glands is to supply oil to the skin. Seborrhea means "flow of sebum"; excessive oiliness is usually the earliest stage of seborrheic dermatitis. This phase is commonly followed sooner or later by excessive dryness, with scales and crusts or profuse greasy dandruff. Though normally confined to the scalp the disease may occur on other surfaces of the body or spread to them. There is general agreement that it is essentially an infection caused by a bacterial invader, though there is some difference of opinion as to whether the guilty organism has been properly identified. Three types of organism have been found; it is suspected they are one and the same. However that may be, very few individuals are able to escape infection, probably owing to the prevailing carelessness in the matter of combs and brushes. Unless controlled, the disease nearly always leads to loss of hair or baldness, some estimates attributing 80% or 90% of all cases of alopecia to this cause. *Why* dandruff should have such an adverse effect on the hair is unknown. The fact that the sebaceous glands have their exit at the same point as the hair follicles may be cited for whatever it is worth. A few skin specialists, it is true, will not commit themselves further than to say that dandruff is "concomitant" with baldness.

Being a chronic inflammatory process, the disease is stubborn. It can only be curbed by systematic effort. Occasional dousing with the first tonic that comes to hand is generally useless and may cause harm. Without doubt the best plan is to consult a qualified dermatologist. In the long run this will be cheaper and more effective than haphazard "treatments" in

commercial establishments. (But perhaps it should be added that a visit to almost any meeting of dermatologists might be disillusioning. I am informed, on high authority, that the number of bald heads visible from the balcony when the New York Society of Dermatologists convenes, is startling.)

Theoretically, at least, the first step (as in any other skin affection) should be a general physical examination. But assuming the general health is good, the outstanding requisites of a rational therapy are hygienic care of the scalp and elimination of the infection.

Hygienic care of the scalp involves frequent shampooing and systematic brushing (or massaging). These procedures are of the utmost importance both for the prevention and control of common scalp disorders. Dandruff may be of the dry scaly or moist greasy variety; in either case the scalp should first be rubbed with some suitable oil (sesame, almond or olive oil) and then washed. At the outset, particularly if the dandruff is heavy, the hair may be shampooed every day or two. Later, the interval may be extended to once a week or even once a fortnight. If the shampooing tends to dry the scalp, follow with one of the oils mentioned above (sesame preferred). It is not necessary to employ medicated soaps, which are of doubtful value; any mild toilet soap will do, though a good liquid shampoo will give a quicker, better lather. If the scalp is very sensitive one of the newer soapless shampoos made of sulphonated oils might be given a trial.

Daily brushing or massaging is generally of advantage, unless considerable irritation is present. The brushing should be thorough, and combs and brushes should be frequently washed and disinfected with chloramine or formaldehyde solutions. Boiling the brush, though rarely

feasible, is better still. Those who are in earnest about avoiding infection or reinfection will supply their own combs and brushes at barber shops and hair-dressing establishments, and will insist on wearing paper caps when trying on hats. At least such is the advice of experts.

For eliminating the infection, the two drugs most generally favored are sulphur and resorcin (or, preferably, resorcin monoacetate), and these are dispensed in the form of lotions or ointments. Scores of other drugs have been used, either singly or in combination; in fact, some compounders have apparently gone on the principle of using any plausible sounding remedy in the pharmacopoeia. Many a scalp lotion has originated in a kitchen "laboratory" or in the back-room of a barber shop. Probably a large percentage are harmless, but some contain arsenic and mercury, as well as other drugs which may involve unusual hazards. Cases of severe irritation have been reported following the use of arsenic hair tonics.

The functions properly served by hair lotions and ointments are *antiseptic*, *counter-irritant* and *emollient*. In so far as a tonic may have value, it is largely by virtue of eliminating the infection and stimulating a more adequate blood supply to the scalp. They are of no value when applied simply to the hair; they must be worked into the scalp, and this may require at least twenty minutes a day if properly done. Generally the medicament must be applied every day or every few days to be of value, and treatment must be continued for weeks or months.

Except in unusual cases, persistence in the measures described will be rewarded by checking and controlling the disease, though there is always a tendency to recur. It should be noted that any vigorous effort to control dandruff may at some stage

cause irritation or inflammation. If this occurs, all treatment should be suspended, and soothing preparations applied. Any bland oil or ointment will suffice.

In general, the treatment of falling hair or baldness uncomplicated by dandruff is very similar to the treatment when dandruff is present. The professional dermatologist will search for general or local disease; will investigate the patient's regimen of living; will give attention to securing a hygienic condition of the scalp, and, finally will prescribe a drug or drugs dictated by his own individual ideas. How much can be accomplished depends on many factors, but it may be taken for granted that hair once lost is usually impossible to restore, especially if the follicles and hair-making apparatus are absent or atrophied. Clendening gives a classic picture of this catastrophe: "Everyone but the victim sees the inevitable. Yet nothing seems so difficult as to convince one of them that hope is gone. . . . He becomes a peerer from unnatural positions into mirrors. There is more joy over one spear of delicate down than over ninety and nine raccoon coats. Finally the long struggle ends—at about the age of forty. A nude swath extends from the eyebrows to the external occipital protuberance, the beauty parlors see him no more, and he begins to worry about some dignified way of keeping flies off the sensitive skin covering his calvarium. The unforgettable picture of the brothers Bryan photographed in their skull caps illustrates the common ancestral quality of the condition."

Clendening professes to believe it is all a question of the germ plasm. Oddly enough, when alopecia sets in, the remaining hair tends to grow faster around the fringes or periphery, so that as a man grows older he is likely to have to go to the barber shop more and more frequently

to have less and less hair cut off. Among treatments sometimes used with more or less success are ultra-violet radiation (not the "violet ray" of the barber shop), heat pads, pituitary and thyroid extracts, and injections of pilocarpine into the affected areas. But therapeutic adventures of this character are the province of the doctor. The high-sounding claims of treatment parlors are almost invariably based on luck in selecting patients who, as noted above, would have regained their hair, treatment or no treatment. In seemingly hopeless cases, sufficient stimulation may sometimes produce a little down, and occasionally, though rarely, potent drugs will produce a growth of hair which, however, is likely to fall out as soon as the drug is withdrawn. These procedures are, of course, accompanied with at least some hazard. For the layman, hygiene, massage and the use of simple remedies ought to be about the limit of self-treatment. In so far as treatment parlors do not attempt to go beyond such measures, they need not be condemned, if you can afford the price.

On the burning question of whether or not to wear a hat, it may be said that authorities are somewhat divided. The best modern opinion seems to be that hats have been unjustly incriminated. There is probably no objection to light hats, not too closely fitted. However, moderate exposure to the air and sunlight is likely to be of value. But the hot midday sun of summer may be injurious.

Hair turns gray or white when the hair-making apparatus fails to supply the necessary pigment. It is more than doubtful whether a fully grown hair ever loses its pigment or color (except through artificial bleaching); grayness occurs when hairs possessing pigment are replaced by hairs without it. In the present state of knowledge nothing can be done to correct this

condition; "color restorers" are without exception merely dyes, some of them far from harmless.

### *Products and Treatments*

*Lotions or "tonics."*—Commercial preparations are likely to be more or less irrational mixtures. Some are innocuous concoctions of borax, water and a little perfume. Efficacious drugs are in the main chemical irritants, though some may be antiseptic as well. Remedies frequently used or prescribed are sulphur, resorcinol, betanaphthol, cantharides, mercuric chloride, capsicum (cayenne pepper), formic acid and pilocarpine. The supposed value of quinine is open to question. A few widely sold tonics contain arsenic and should be avoided by those who value their scalps.

*Ointments.*—A salve is sometimes preferred to a lotion, especially in cases of excessive dryness. It is less convenient to apply. The only essential difference is that the medication is incorporated in an ointment base.

*Treatments.*—Varieties of "treatment" offered by barber shops, beauty parlors and other commercial "specialists" are legion. It is important to remember they have no secrets to accomplish magical results. The scalp parlors often go in for strenuous methods, whether chemical or otherwise, on the theory that, given sufficient irritation, the scalp must react in some way. It usually does. But not necessarily with hair.

*Mechanical devices.*—Many of these are dubious, a few are pure fakes. Finger-tip massage is probably preferable to the use of vibrators, which are likely to be too strenuous.

*Shampoos.*—It should be noted that some liquid soaps have a high water content and are thus relatively expensive to use. So-



called olive oil shampoos rarely contain more than a small amount of olive oil soap. There is no objection to tar soaps if you like the odor. The addition of white of eggs is similarly harmless and gives gloss, but has no therapeutic advantage.

*Brilliantines.*—These are usually harmless mixtures containing chiefly mineral oil or odorless kerosene. For dry scalp sesame oil is probably to be preferred. Some dermatologists recommend castor oil in alcohol. Wave sets are usually solutions of gum karaya, quince seed or gum tragacanth.

*Hair dyes.*—With the exception of pure henna, there are probably no hair dyes that are entirely safe. Some are aniline derivatives; others contain lead or silver salts; while a third group contains pyragallol, usually in connection with salts of copper. The metallic compounds are most likely to do harm. In any event, hair dyeing should be generally left to a competent operator. The aniline derivatives are most widely used in the beauty shops. They should not be applied without first making a sensitivity test.

*Home care.*—For local treatment in minor cases of dandruff a 2 to 3% resorcin solution may be applied to the scalp

daily. This tends to stain blond or gray hair, hence resorcin monoacetate (2% to 3%) in at least 70% alcohol will often be preferred. The addition of a small amount of glycerine will tend to counteract the drying effect of the alcohol. As a supplement to this treatment, the *occasional* use of a sulphur preparation may be desirable. Pusey suggests an ointment consisting of 60 grains of sulphur to an ounce of petroleum jelly (vaseline). But in general, self-medication, even if it is only a question of a tonic, is not to be recommended.

*Literature.*—"Care of the Skin and Hair" (1929), by Dr. William Allen Pusey, is a book for the layman. "Cosmetics and Allied Preparations," a pamphlet published by the American Medical Association (Chicago) and obtainable from them for 15 cents, contains many analyses of commercial preparations. It is worth the money. Other works that may be profitably consulted are "An Introduction to Dermatology" (1932), by Sutton and Sutton; "A Practical Treatise on Diseases of the Skin" (1934), by O. S. Ormsby; "Treatment of Common Skin Diseases" (1932), by Herman Goodman; and "Diseases of the Hair and Scalp" (1928), by S. Dana Hubbard.

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## *The New Deal Disemboweled*

THE ECONOMIC CONSEQUENCES OF THE NEW DEAL, by Benjamin Stolberg & Warren Jay Vinton. \$1. 5½ x 7½; 85 pp. New York: Harcourt, Brace & Company.

OF ALL the books which have been written about the New Deal this is clearly the most profound and the most brilliant. Its onslaught upon the policies of the Brain Trust, which in essence are "nothing but a well-intentioned synthesis of errors," is devastating. But the book is more than a withering critique of the colossal fraud now being perpetrated over the land by the Roosevelt administration. It is a terrific polemic against the present social order, and against all the college-bred ignoramuses and seminary-trained cowards who are trying to make pie out of what is and always was mud. Messrs. Stolberg and Vinton have composed, in the space of what is little more than a pamphlet, an analysis of American and world capitalism and of its sycophants and placemen, which for sheer power of invective and trenchancy of argument marks a new advance in the polemic literature of the United States.

The basic trouble with Mr. Roosevelt is that he "has the kind of open mind which accepts with equal hospitality the most contradictory views and the most irreconcilable facts." He wants to bring peace and plenty to the common people, and he also wants to keep the profit system intact. He does not see that "under capitalism, not man but property is free and equal," that "the vital concern of Big Industry is to

prevent an abundance of goods from flooding the market," and that "depression is the necessary consequence of capitalist prosperity." In other words, we cannot have both the profit system and a decent communal life. No real New Deal is possible "unless at every moment and at every move the arrogance of Big Ownership is deflated, its morale beaten down, its economic power defied, and its social control implacably resisted. . . . Big Business has to be 'distributed' if the rest of us are to make a living." There is no other way out. The battle going on in capitalist society all over the world is an open one, for all to see. It is between Big Ownership and the rest of us. It is the class struggle, and he who denies it denies his mind. No enduring comradeship between the infinitesimal minority of owners and the vast and silent majority of workers, manual or professional, is possible. The dreadful futility of social work, now patent even to social workers, has proven that for all time. But apparently Mr. Roosevelt, that boy scout with the chorus girl grin, has not learned the lesson. Say Messrs. Stolberg and Vinton:

The New Deal is merely the capture of government by "scientific" social work. It is merely a remodeling of the White House into a new Hull House. And the Brain Trusters are nothing but settlement workers who want the big bad bankers and the good little workers to play together in peace.

No such peace, to repeat, is possible. "Monopoly capitalism in its straining for profits undermines our economic life. It is inexorably driven to make anti-social decisions." It is forever robbing the pub-