

NEW DISCOVERIES ALL OVER THE EARTH

Why RAGE and JEALOUSY Make You UGLY

By William Lee Howard, M. D.

VERY recent discoveries of the activities and uses of certain little glands in the body show how the body and mind are injuriously affected when the functions of the glands are disturbed. These glands and secreting bodies are the thyroid, the adrenals, the pancreas, the pituitary body in the brain and one or two other secreting bodies.

That distressing disease known as goitre is due to the drying up or disturbance of the thyroid gland, situated around Adam's apple.

Any prolonged interference with the thyroid gland through emotions causes a very troublesome nervous disorder and may end in idiocy. Affection of the pituitary body may cause paralysis of the intestines or kidney disease. Violent anger can cause such a disturbance. In fact, a vast array of diseases is now known to follow disturbance or affection of these secreting glands.

The great importance of these discoveries lies in the fact that it is powerful emotions, anger, uncontrolled outbursts of temper and intense jealousy which directly affect these internal bodies and glands. Many times we can trace serious mental troubles and nervous disturbances to these causes.

The Little Glands That Emotions Poison, Spoiling Your Face, Form and Skin

"She became insanely jealous," you often hear said of a girl who had to be taken to an institution. True, but not in the way we have formerly thought. That is, it was not the insanity due to intense jealousy and the emotions following, but the effect of this temper and emotion upon the secreting gland which caused it to cease its daily work and so interfere with the health of the brain.

What's the difference? many will ask.

Just this: It shows us how rigidly we must control our strong emotions and temper so as not to affect these secreting glands, for if we do this then there can be no mental disturbance.

There is another very important fact to remember about controlling the emotions and temper, and this is that if they are not controlled they will in time show upon the face, in the form of a poor complexion, and give you a face that is harsh, tawny and repelling.

More and more we are commencing to realize the powerful influence of psychological conditions exert upon our lives. These psychic influences, emotions, thoughts, impulses, controlled and uncontrolled outbursts of temper, directly exert their powers for good or evil upon the health and appearance of the individual.

When a person "gets mad," shouts, lets the tongue spit and fire with accusations and suspicions, wants to strike and sometimes kill, we have a temporary insanity. The emotions have run away with judgment, sense and decency. The face becomes livid, the lips blue, the heart stops its regularity, and the hands and fingers become cold. Keep up this state of affairs by repeated attacks of loss of self-control, and the mind and body are certain to be affected.

Why? Because this anger brings on a tension of all the muscles—internal and external. All the blood vessels are contracted. They are put in the same dangerous state they would be in if you tied them by a thread or string. This is the reason you turn pale, have



Diagram Showing the Pituitary Body and the Thyroid Gland, Which Are Essential to Control of Temper.



When a Person Gives Way to Irrational Temper the Gland Secretions Are Inhibited and Distortion of the Face Results.

blue lips, cold extremities. You interfere with circulation, and this is always dangerous. This is the cause of sudden deaths in those old enough to have hardened arteries, but not old enough to know how to control their temper.

Anger, frenzy, send through the shocked nervous system impulses to the glands I have mentioned. These either pour out too much secreting substances, thus temporarily poisoning the body and brain, or prevent any secretion.

The frequent loss of self-control, causing paleness and blue lips, will end in a muddy complexion and mottled skin. The finger nails will lose their pink of good health; the neck and bust their plumpness.

The outburst of temper so powerful that the individual loses all sense of what he is doing, the youth who strikes to kill, the girl who bites and scratches, ends in crying and hysteria, simply open the thousands of tiny tubes in the glands and out pour valuable substances meant to provide for continuous good nervous and mental health.

These fits of ungovernable temper cause a sudden change in the character of the blood, and this is a dangerous state if frequently repeated. The bite of a human being under normal conditions is not poisonous—that is, the saliva is harmless. But a bite from the anger-mad man is very poisonous. The saliva has suddenly been made poisonous.

These being scientific facts, cannot you see that the brain, the nervous system, will become poisoned in time if you do not early in life learn to control temper and emotions? Because they do not learn to do this is the reason so many merge from ill-tempered children through savage youth to murderous states of frenzy, and finally insanity.

It is not, essentially, a moral question, the learning to control temper and anger, but purely a physical and medical one. Morality and good health are so closely

bound together that I do not believe they can exist separately. It is not sufficient to tell a girl that if she does not want a bad complexion and flabby bosom she must learn to control herself in every way—emotions, temper, impulses, jealous thoughts.

The good physician who is trying to help her will further state that outbursts of rage are repulsive, cause loss of good friends, prevent making valuable acquaintances. Flashes of undue temper, spiteful and ugly words are invariably signs of ill breeding.

If a girl grows up with complete lack of self-control, she is physically unfit to battle with life, morally unstable, socially an outcast.

Now you see how health and morals complement each other.

Certainly a strong temper, a self-respect which will not allow of insult and injustice, is one of the noble qualities of man and woman. The dignified control of a temper which resents any interference with personal rights is a factor which makes for bodily health, strength and mental power.

This self-control keeps the blood and juices of the body properly balanced, gives just the right tension and stimulation. This condition makes you feel so self-contented when you have been under perfect self-control, yet have relieved your mind by strong words carefully considered. By a dignified self-defense, where you protect your rights yet suppress your anger, you strengthen both brain and tissues of the body.

Without a strong temper under perfect control you lose your will power. Without will power we can accomplish but little in a world where man progresses through will force. With a good, strong will power we can accomplish wonders, conquer ill health, obtain mental force, be happy and make others happy.

And do you know the great, big exercise which develops WILL POWER?

CONTROL OF YOUR TEMPER.

How Being DOMESTICATED Made MAN a DIFFERENT Animal

THERE is a frequent mistake made by many people when they compare the conditions of civilization with the conditions of savage life. As a matter of fact it is easier to understand modern conditions of human life by comparing man to the domesticated animals. The changes that have come about as a result of civilization are very largely the outcome of environment, and such environment has been of the same general sort as has caused changes in the animals which have been domesticated. Civilized man has diverged almost as far from savage man as the collie and the dachshund have diverged from its wolf-like ancestor.

The principal factor in civilized life is identical with that of the domesticated animal, namely, that a regular supply of food is assured. It is this which has made so great a difference in the tamed, flesh-eating animals, such as cat and dog, whose food in wild life is secured irregularly and with difficulty, and which has made less difference in the grass-eating animals, such as horse and cow, whose food supply has changed only a little. But in all cases there are marked bone differences, and even without considering specially adapted forms it is immediately seen that in wild animals the bones are smaller but more solid, in domesticated animals the bones are larger but of not so dense a structure. In the same way, the bones of the white race are considerably less dense than those of savage races, and even when a comparison is made of the negro, the bone is far denser than is the case in the

Your APE ANCESTORS Make You HIDE Your HEAD in BED

By William Lee Howard, M. D.

CHILDREN and often adults will, upon getting into bed, duck their heads under the coverings and remain quiet for some time.

This is not a form of play, nor a sign of fear. It is instinctive in man—a trait left us from the time our ancestors lived in their tree beds. The orang-outang of Borneo and the gorilla of Africa to-day do the same thing when they curl up to sleep. They have a pile upon which they place their heads, regardless of the other parts of their bodies. Sometimes they reach up and pull down the thick-leaved branches. It is not done for warmth, but probably with the ostrich-like idea that the head once covered so they cannot see, they believe their enemies are also kept from seeing the sleeping forms. Birds, also, sleep with their heads hidden entirely out of sight under their feathers.

Whatever is the reason, the point is that we still retain in our early mental life this ancestral trait.

But this is by no means all we can witness of this tree-living and tree-climbing life which still persists in spite of the tremendous evolutionary strides of mankind. Even children who are naturally timid delight in tree climbing. Even as babies we enjoy "climbing the stairs" at a time when walking is impossible, reaching out in a half-standing position to grasp something just above us. Boys and even girls enjoy their platforms built high up in trees, and what boy has not begged to be allowed to sleep at night on the tree houses or platforms? With yells

You Can GROW GLASS in Your FACE

A LITTLE boy, whom I will call Arthur Lovejoy, complained some time ago of "glass growing in his face." He had consulted a few family physicians, all of whom were very much puzzled by his trouble, but unable to achieve anything in the way of a successful remedy. Finally, after he had been treated by numerous excellent doctors, he was recommended to consult me by Dr. Hugh Randolph Potter. Arthur was then ten years old.

Upon examining the little fellow it was discovered that a most curious condition existed. Spread broad-winged across his cheeks and nose was a butterfly-shaped area peppered with what superficially appeared to be little sebaceous glands or ordinary pimples and blackheads. In fact, many alert but quick-glancing medical men had taken this skin trouble of Arthur's to be only a resistant, stubborn variety of acne—the chronic eruption that appears on the faces of many young persons.

Luckily, a painstaking search of the face this time proved that each so-called acne pustule, instead of containing matter and an inflammatory mixture of germs and pus, held within its cavity a very minute, almost invisible, crystal that closely resembled a diamond.

As a matter of fact, Arthur Lovejoy's face contained nothing as valuable as diamonds, yet the clear-cut crystals that were spread-eagled across his nose and cheeks, in separated pimples, were equally as strange and puzzling to the medical world as they would have been had they actually turned out to be of untold value.

The bits of crystallizable and sparkling things found concealed in the pretty, patient's skin were examined by the X-rays and by chemical analysis. They proved to be fragments of glass. That is to say, they contained sodium silicate in crystal form, which, as is well known, is the chemical substance of glass. Fortunately, his troubles were cured.

When it is remembered that many plants such as diatoms, sugar cane, and certain weeds, as well as many of the lower types of animal life, such as sponges, make during their normal growth, crystals of silica or glass, it should not, after all, be so startling to find that the human skin under certain pathological conditions might have restored to it the power of producing bits of glass, just as the ancestral forms did. It is, after all, only a state of affairs called by high-browed biologists "atavism." Atavism means merely a return to the primeval ancestral condition. Thus, when a civilized man partakes of the brutal instincts or habits of savages and gorillas, he is said to be atavistic.

Hence the new disease which has appeared under the sun is really atavistic in the sense of sponges and diatoms being predecessors of the aboriginal man, the monkey and man. The new malady has been aptly named the "Disease of the Philosopher's Stone," which is a sly dig by the practical, experimental scientific physician at the cloistered philosopher who tried to dream out truth instead of seeking it with his muscles, eyes and ears. The case is a very rare and curious one.

HATCHING Chickens from SHELLED EGGS

D. M. STEWART PATON, a biologist at Princeton University, has found out how to take a hen's egg out of the shell and make it develop artificially.

For this purpose he uses a sterilized solution of water containing 7 per cent of common salt, to which a little calcium chloride and potassium chloride are added. With this he fills a glass dish. Then he takes an egg, wipes it off with a sterilized rag saturated with pure alcohol (so as to make it germ-free), and, with the aid of a forceps (likewise sterilized), opens the egg in such a way that the cut edge shall be smooth.

Then the contents of the egg are allowed to slide gently into the dish, whereupon it quickly rights itself, so that the embryo of the future chick is on top. The egg thus treated is taken from an ordinary incubator after undergoing about twenty-six hours of incubation.

When this process is carefully performed it is accomplished without injury to the embryo or the surrounding egg material. But it is important that the solution shall be of the same temperature as the egg. Even if there be a slight difference in temperature, it is fatal to the success of the experiment.

The dish containing the fluid and the egg is thereupon covered with a glass lid, which rests upon a cotton collar—the latter being held in place by a string. The cotton allows free access of air, while shutting out germs.

Thus the experimenter has in his glass dish an embryo chicken which is alive, supplied with the food it wants by the egg material, protected against germs, kept at exactly the normal temperature and provided with the oxygen it requires.

The dish is put into the incubator, and while the embryo continues to develop, it can be watched through the cover of the dish. In a word, the chicken can be seen starting to grow. The first movements of its heart are observable, as well as many other interesting phenomena.

Quite possibly by and by Dr. Paton may be able to raise a chick by this method to a point where it will be ready to step up on the edge of the dish, walk out and pick up its own food. But he has not got that far yet.

This discovery is likely to be of great value in increasing the supply of chickens for commercial purposes and reducing the cost of living. At present hens are very unreliable at the work of hatching out chickens from their eggs, and even when incubators are used the number of eggs lost is very large.

If there were some method by which we could be sure of having a chicken from every fertilized egg the present supply of chickens would be doubled. The country consumes nearly twenty million chickens a day, and the cost of them ranges from twenty-five to sixty cents apiece. A gain of about \$1,000,000 a day in food supplies will be effected when the new remedy is perfected.

Why a WOMAN Can OUTTALK a MAN



they can talk with far less effort than those who take a deeper tone and have to use more air to utter their words.

Here lies the real explanation of the ease with which a woman can out-talk a man. She has the advantage of using from one-seventh to one-sixteenth less lung power, and even though her lungs may be smaller in volume, the difference is never so great as that between the amount of air required.

What chance, then, would men have in debate with women when at last she receives the suffrage? The clocks in legislative halls would have to be put back so far that they would never keep time at all.

Woman possesses the further advantage of being able to make a more penetrating sound with a smaller use of power than the man. The smaller calibre of the woman's throat, combined with the higher rate of vibration of the vocal chords, yields a voice that is twice as easily audible as the man's when produced by the same amount of effort. Most people who have listened to the voices of men and women over the telephone will agree with this.

It has long been known that the tenor or soprano brings the vocal cords close together and keeps the edges only vibrating by the emission of air. The bass or contralto leaves the space between the cords wider open, and has to vibrate very much more of the membranes so a considerably larger amount of air is required, and much more force is expended.

You may have frequently noticed that those persons with high, squeaky voices seem to be very loquacious—they never stop talking; and the reason is now plain.

A WOMAN can talk longer than a man, and does so because she uses up less force by a large percentage than the man does. A German professor has proved by actual and very delicate measurements that the baritone singer uses far more energy than the tenor and that the bass singer uses more force than either. The range of voices differs greatly, so the percentage varies to the same extent, but as a general result it was proved that the tenor uses only from one-seventh to one-sixteenth of the lung power of the baritone or bass. The difference between the force used by the contralto and the soprano is quite as marked, and the contralto who sings in very deep tones uses at least ten times the force of the trilling soprano.

The explanation is so simple that it is surprising that the investigation was not made

BEET JUICE for LONG LIFE

ONE of the most interesting discoveries of recent research by the Japs is the value of the red garden beet. The Japanese love the beet, and declare it contains that which will produce long life in the human race.

They tell us the beet is full of iron and other substances which will act on the human system when administered as a tonic.

The beets are cut up and boiled for several hours, when they are removed from the water, and then the liquor is boiled down until it becomes a syrup. This is taken in doses ranging from a small wine glass to one-half a pint, two or three times a day, usually before the person eats a good meal.

This is pronounced by some of the best physicians as one of the most effective tonics that can be taken.

Large doses such as a half pint at a time is declared by the Japanese to be a preventative and a cure for gravel of the kidneys and bladder. It should be taken until relief is certain, which is said to come in a few days.