

PSYCHOLOGY

# "Relax!"

## Psychologist Sees Value for Tight-Nerved Americans In Age-Old Methods Practiced in Far-Off India

By MARJORIE VAN DE WATER

**R**ELAX! Let yourself go!" These words of a popular song sum up the serious advice of a psychologist to the rushing man of business and his neurotic, high-strung wife.

It may seem a long step from the couch of the Hindu, practicing his religious art of semi-conscious contemplation of beauty, to the problems of the bustling American business man. But Dr. B. K. Bagchi, experimenting in the psychological laboratory of the State University of Iowa, has found that the Hindu method of relaxation has real value to the American who wishes to preserve his mental health and efficiency at its highest.

### Relaxation Not Easy

Physicians give good general advice to their patients about relaxation, Dr. Bagchi says, but neither they nor their patients know very much about how to relax.

You can't relax just by throwing yourself down in an easy chair. You can never relax by rushing off on a hurried vacation trip. You may not be able to relax in a month spent at some sanitarium for a "rest cure."

It is all in knowing how, Dr. Bagchi says. Persons who know how to relax can, after ten minutes of such relief of tensions, experience a freshness like that which follows an hour or more of good sleep.

Not that it is so difficult to learn. Not at all! Children can, and should, be taught to relax, just as they are taught to walk and to run.

Practice the art of relaxation each day and you will build up your mental as well as your physical health, Dr. Bagchi promises.

"Busy people of this country need not fear the onset of national laziness as a result; the climate and their social and national inheritance will take care of that (*Mental Hygiene*).

"What will occur will be a toning down of their hypertension, a relief from the evils that arise from it, and a stimulation of balanced activity."

Some East Indians, encouraged by the

warm climate and their background of tradition have overdone the business of relaxation, Dr. Bagchi admits.

"Relaxation should never replace action, but alternate with it," he explains. "This rhythm is paramount to our growth and adjustment. Those East Indians who are too much relaxed have not observed this rhythm and hence have suffered mentally, physically and in many other ways.

"The ideal of the most universally revered Indian book 'Gita' is action plus meditation. This ideal has always been followed by the best representatives of that country."

But if the Hindu need to be urged to greater action, the American on the contrary needs to be urged to let down and relax. The rushing, bustling American is just as capable of calm relaxation as is the placid Indian. If all races can go to sleep, they can all relax as well, Dr. Bagchi reasons but, as he says, it is a matter of knowing how.

First you must put yourself in the right mental "set" or attitude for relaxation. It won't do to go to bed on your expensive "beauty" mattress, close your eyes, and then go over and over all the problems of the day. While you are conjuring up ways to meet the mortgage, or planning a new campaign for the fall advertising, you are not relaxing. The first lesson in learning to relax is to learn how to set your mind at rest.

### Listen to Quiet Music

You may begin by listening to a quiet piece of music, or by looking at a beautiful painting or landscape. Think of what you personally associate with relaxation—slow soft speech, limp hands, sleepy eyes, placid face. Gradually, you will feel yourself slipping into a restful mood. But do not stop there. That is not enough. You must go on and put the images out of your mind, retaining only the feeling of quiet that they induced.

But don't go to sleep while you are doing it. You may, and probably will, feel like drifting off. If you do doze off, when you come to, rub your eyes, and begin again. But try to stay awake.

This first step of relaxation should be practiced for 15-minute periods two or three times a day. And have the children try it, too.

Restlessness in children is natural and their activity should not be dammed up, Dr. Bagchi says, but they can and should be taught to be quiet at times, as well. Let them relax twice a day, and they may become less nervous. If they are inclined to stutter, this method may help them. Clinical work along this line is already going on in several places, Dr. Bagchi said.

This general attitude of relaxation must be followed or accompanied by the second step in the process—the specific relaxation of the muscles. For this you lie or sit comfortably and relax the various muscle groups of the body, one by one.

### Smooth Out Those Wrinkles

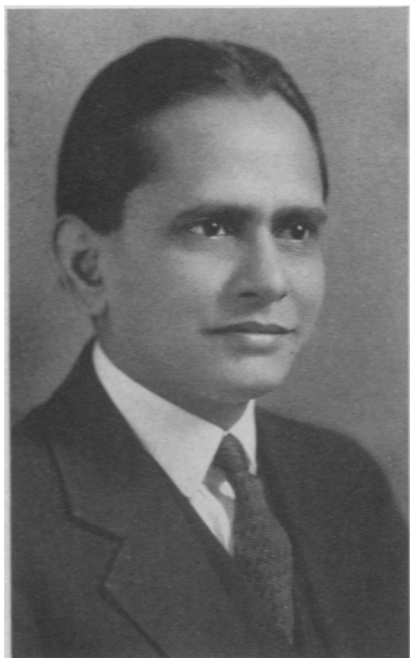
You may begin with the muscles of your forehead. Smooth out those wrinkles and the tenseness between your eyes. Let your eyes relax. Then your cheeks, jaws, lips, tongue, inside muscles of the mouth and the throat, outside muscles of the throat, right and left shoulders, back, right hand, right arm, left hand, left arm, and so on through your body down to your right calf, left calf and your feet.

Some psychologists say that in order to thus relax your muscles you must first become aware of them by tensing them. First "do" each muscle group so as to feel it, then "not do" it more and more until you can completely let go. This is the method as taught by Dr. Edmund Jacobson at the University of Chicago. It differs somewhat from the East Indian method.

According to the Hindu system, you would not tense your muscle, but merely give it your attention. Then let it go. Abandon yourself to the relaxing act. You may not be able to keep this feeling of abandon more than a fraction of a second. But then repeat it.

Or, you may pay attention to the "feeling" of your incoming and outgoing breath, the rising and falling of your chest, or some other rhythmical perception. Then quietly slip into a state of "attenuated awareness." This is the almost sensationless and imageless state of quietness sought by the Hindu.

"To attain it is not as difficult as it sounds," says Dr. Bagchi. "This state



DR. B. K. BAGCHI

may not last more than a few minutes or even seconds. If it does not, do not make any 'fuss' about it mentally. You may be in and out of this for some time at each sitting, but be sure not to desire too hard nor to exert any great effort to be in it. If ideas or sensations appear, gently put them out of your mind; do not be disturbed if you fall short of consistent success.

"There will be times when you will feel the oncoming of sleep or when you will actually fall asleep. As you come to, open your eyes, move slightly, and begin again, but try to remain awake. This form of awareness and relaxation is remarkably restful and recuperative, and shows its overflow effect in the form of poise when one is active and busy."

### Not the Same as Sleep

It is not the same thing as sleep. Physiologically, it is quite different. At his laboratory in the University of Iowa, Dr. Bagchi is studying the effect of prolonged relaxation of this type on the brain waves. Brain waves are those electric impulses directly from the brain that scientists have recently been able to "listen in" on and study. They have found that in sleep the rhythm of these impulses becomes very different from what it is during the waking hours.

When you have mastered these first two important steps of relaxation, Dr. Bagchi says you are ready to undertake the third. This is relaxation through quiet thinking.

"As a matter of daily practice or when you are tensed or overworked, sit or lie down in a comfortable place and read a book quietly, or with closed eyes go over a mildly interesting experience in a passive way. Think leisurely on what you read or on an inspiring picture, image for a few minutes a beautiful natural scene or ponder on a lofty abstract theme, on a sublime life, on a beautiful poem, a rippling brook, the gentle rustle of the woods, the echo of lonely wilds, the high mountain peaks, endless desert stretches, rolling green landscapes, and the like.

### Think on What Interests

"Think quietly on what interests you," Dr. Bagchi advises. "But be sure that your thinking is more or less relevant."

This is what the Hindu calls meditation. It's good for you—but only to a certain extent, Dr. Bagchi warns.

"The habit of quiet introspection and thinking should be encouraged to a moderate extent in children as part of their mental hygiene, and also in adults, taking care, of course, that it is not overdone," he says. "Persons with too much of an introverted leaning should abstain from it entirely."

This warning against too much thinking recalls Shakespeare's famous plea voiced in "Julius Caesar":

"Let me have men about me that are fat  
Sleek-headed men, and such as sleep  
o' nights:

Yond Cassius has a lean and hungry  
look;

He thinks too much: such men are  
dangerous."

### Don't Think Too Much

But, if not overdone, such quiet thinking, accompanied by pleasant feelings or emotions, has restful and beneficial results, Dr. Bagchi says. Scientists do not understand exactly why pleasantness should influence the body processes, but even the layman realizes the contribution that quiet pleasant music or light entertaining conversation makes toward the digestion of a good meal, for example.

So sit down and think over your vacation trip or your evening at the opera—but don't think too much.

And that brings us to the fourth and final step in this Hindu method of relaxation. Dr. Bagchi calls it "Relaxation through Uni-Directional Attention." You might call it concentration. In India it is combined with many different kinds of intricate practices such as breathing very rapidly to increase

the amount of oxygen in the system. To quote Dr. Bagchi:

"The Indian claim is that through the operating medium of pran (life energy) quiet attention can create astounding effects in the body. Unfortunately, much of this subject has fallen into the hands of charlatans or vulgarizers. The time has now come to check scientifically the major results that are supposed to follow from such practice and to determine whether or not there will be any general use for some aspects of it in the everyday life of the average man."

You are not to undertake this final step until you have gained a certain amount of mastery over the first two steps. Here are the directions in Dr. Bagchi's own words:

"As before, sit or lie down comfortably, seeing to it that no part of the body is tensed; be relaxed mentally—free your mind of worries or too many wish fancies. This time, with closed eyes, do not entertain many images, however pertinent to one relevant subject matter, but focus your attention quietly, without straining yourself, for a short time on one thought."

### Concentrate on Small Thing

Concentrate on some small thing like the memory you have of a single musical note, a light, or a word such as "joy" or "dawn." You should not attempt to make the picture in your mind vivid, for vividness is not what is important according to this theory. Just attend to it without effort, and then let it go and cling to the feeling it has induced.

The difference between this advanced step and the second step is that now you are trying to achieve what Dr. Bagchi calls "attenuated awareness," by means of quiet attention. In the former step you were cultivating this quiet attention for its own sake.

"This attention should be quiet, not intense—just a steady flow of your mind, as it were," explains Dr. Bagchi. "It is like the flame of a candle undisturbed by wind, like the steady stream of oil pouring down from a higher into a lower jar. When you practice this method, do not build mental castles, or try to 'see' or 'hear' things. Nor should you try to 'suggest' anything to yourself. Such efforts are positively distracting."

If you can once master this art of losing yourself in concentration on a single thought, it will give you more than just the ability to seek rest when you are tense, Dr. Bagchi promises.

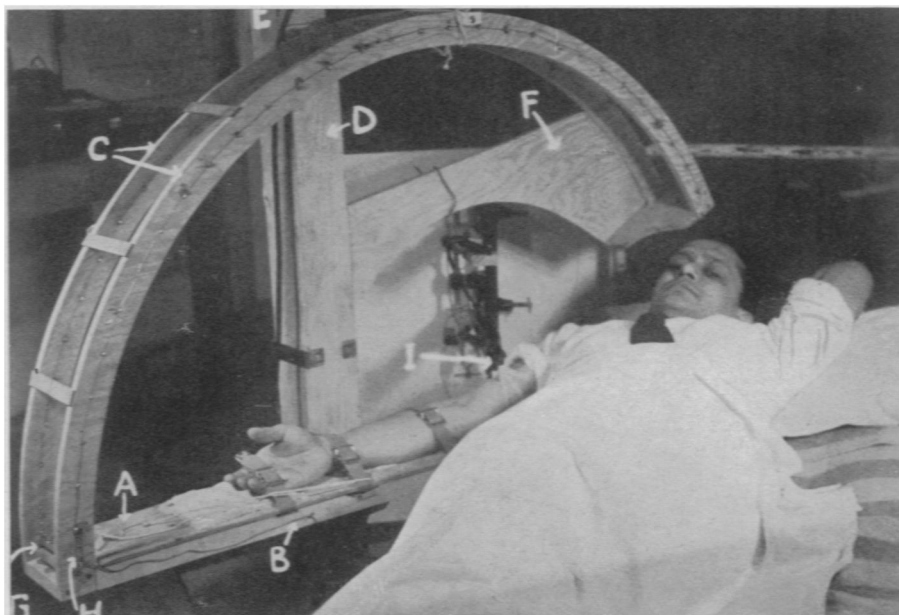
Quiet, forced attention can be used in every situation in life, he points out. Useless thoughts, movements, tensions can be dispensed with and the right of way offered to the problem in hand. Emotional upsets can be forestalled or their effect mitigated, not only by general relaxation, but by quiet attention to some definite task.

Relaxation need not be confined to your rest periods. It can be combined with action. If you are relaxed when you write, think, talk, walk, those activities will be better performed and they will tire you less than if you were tense.

People of this age spend more energy than is necessary, more than their systems will healthfully permit, Dr. Bagchi believes. Relaxation, he claims, will help to conserve this energy.

"Americans," he says, "want to relax, and will relax, not so much perhaps, for the sake of satisfying a religious need as for the sake of health, mental and physical, and for greater and better accomplishments in life."

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#### SCIENCE MEASURES TRADITION'S METHOD

*Measuring the effect on the muscles of relaxation. With this apparatus, which measures speed of movement in thousandths of a second, Dr. Bagchi is studying the effect of relaxation on the electrical condition of the muscles.*

#### PUBLIC HEALTH

## New Food and Drug Bills Fail to Protect Public Fully

**W**EAKNESSES, from the medical viewpoint, in the two bills now pending in Congress dealing with foods, drugs and cosmetics are pointed out in the *Journal of the American Medical Association* (Feb. 6).

Each of the two bills is an improvement on last year's bills, the medical journal states, but the public needs still further protection, it holds.

A few of the points with which the medical profession takes issue are as follows:

1. The "free-for-all standards for official remedies." Each bill permits the drug manufacturers and dealers to fix their own private standards of strength for such drugs as are defined in the U.S. Pharmacopeia and the National Formulary.

The Senate bill goes even further, says the American Medical Association, and "permits similar tampering with established standards of quality and purity as well as with standards of potency."

2. Little protection to consumers of "patent" or proprietary medicines. Neither bill requires a manufacturer or dealer to name the ingredients on the

label, provided he has disclosed them fully and correctly to the Secretary of Agriculture.

"The obvious purpose of such legislation is to facilitate secrecy," says the *Journal*. "The fact that an invalid who resorts to self-medication and ought to know what he is taking is kept in the dark seems to have been regarded as immaterial."

The House bill, notwithstanding its exemption of formulas on labels, requires that the label must bear statements of the quantity, kind and proportion of alcohol.

"The phraseology leaves it extremely doubtful," says the medical journal, "whether barbituric acid, chloral, morphine or any other of the important group of narcotic and hypnotic drugs named in the bill, if it happens to be an active ingredient of any patent medicine, must be declared on the label."

3. No standards required of devices used in diagnosing, treating and preventing disease.

"Neither bill undertakes to lay down any standards of structural safety, of

accuracy or of potency for any such device. Provisions with respect to the misbranding of devices seem inadequate," the journal charges. "Devices are not required to be marked so as to show origin, purpose or manner of use."

4. Adulterants in cosmetics. A poisonous or harmful substance in a cosmetic is not considered an adulterant unless its presence renders the cosmetic injurious to users under the conditions of use as prescribed in labeling and advertisements, the journal declares. Makers and dealers in coal tar hair dyes are protected if they label the dyes with a "caution" wording.

The American Medical Association believes the two bills reach a happy solution of an old difficulty by having enforcement in the hands of the Secretary of Agriculture, outside of the field of unfair trade competition.

*Science News Letter, February 13, 1937*

## ● RADIO

Feb. 16, 5:15 p.m., E.S.T.  
NEW NAMES FOR OLD PLACES—  
S. W. Boggs, Department of State.

Feb. 23, 5:15 p.m., E.S.T.  
WAKING FROM WINTER SLEEP—Dr.  
Hartley Jackson of the U. S. Bureau of  
Biological Survey.

In the Science Service series of radio discussions led by Watson Davis, Director, over the Columbia Broadcasting System.