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The Pulse Test

The Secret of Building Your Basic Health

LYLE STUART INC.

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Then count 1 on the next pulse-beat and continue counting the beats until the second hand has made a complete circuit and returned to 60, which will mark the completion of the minute. The number of the pulse-beats counted in one minute is the pulse-rate.

In the quarter of a century since this book was originally written, modern technology has produced a variety of gadgets now on the market that show your pulse beat in an instant. These include insta^opulse[™], manufactured by Biosig Inc., of Montreal, Canada, pulse meters, wrist-watches that show your pulse rate, etc. These range in price from about \$40 to \$200. They all seem to be equally accurate.

It will be necessary to count your pulse many times in the course of the test, but this task is not at all difficult, and the beneficial results which will follow the close adherence to the test-diet and pulse schedule will be more than an adequate return for your effort.

What you are buying is not merely relief from present ailment, but, if you are successful, also health insurance and life extension.

The diagnostic method outlined in this volume is fundamentally simple. It is based on the fact that allergens speed up the pulse. It consists essentially of testing isolated foods *in order to tell which ones accelerate the pulse.*

On the day the test is started, each "meal" may be limited to a single, simple food. The pulse is counted in the morning before rising and again just before the first meal. Thirty minutes after the meal the pulse is counted, and again at sixty minutes after the meal.

Immediately after the 60 minute count another single

food is eaten and again the pulse-count is taken after the two half-hour intervals; and so on through the day.

A record is kept of the foods eaten and of the pulse-counts. The injurious foods are recognized by the abnormal speed-up of the pulse. When these foods are dropped from the diet the allergic symptoms often disappear as if by magic.

That in essence is the procedure.

Later I will describe the "normal" pulse. The following preliminary facts are helpful to anyone making a first attempt to interpret a pulse-dietary record.

A number of competent medical scientists in this country and abroad (London, Zurich, Madrid), after applying this method of examination in hundreds of cases of many common ailments, are agreed concerning the following features of the *normal* pulse-rate:

1. The pulse-rate in the normal person is not affected at all by digestion, nor by *ordinary* physical activity, nor by normal emotional influences. It is remarkably stable.
2. If a person is not suffering sunburn or an infection such as common cold, any variation from his normal pulse-rate in usual activity is probably due to an allergic reaction.

The pulse, then, may be considered a dependable first watchdog of our health-citadel. It tells us promptly whenever we are in possibly injurious contact with our allergic enemies.

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First Steps...

It is my main purpose to describe to you a novel concept of the causes of a number of the most important diseases of mankind, including migraine headaches, high blood pressure, diabetes and heart attacks.

This new concept is nothing less than a reasonable and easily understood explanation of the single common *cause* of all of these symptoms.

This same single cause is responsible for a number of other relatively minor symptoms—indigestion, heartburn, hives, neuralgia, abnormal tiredness, spells of dizziness, constipation, nasal stuffiness and probably many others—which constitute so large a part of the human physical afflictions.

Having learned what provokes these illnesses, we can completely overcome them in most cases by mere avoidance of their causes.

I shall attempt with a minimum of technical language to show that it is not at all difficult for lay people of average intelligence, from the age of ten or twelve years

upward, to understand this procedure, and to take decisive responsibility for its technical application in their own persons under the direction of a skilled diagnostician. *Indeed, the new technic usually cannot be successful without the patient's faithful cooperation, and his understanding of every step of the investigation.*

I want to present now a bare outline of the history and the fundamentals of this new method of medical diagnosis.

Many years ago, my wife, who was actively engaged in medical research, and in the direction of an important medical service, was suddenly stricken with an attack of angina pectoris. This incapacitated her for three years. Two heart specialists gloomily predicted the end of her life within five years.

The immediate cause of the attack was a dose of a morphine derivative which usually quiets the pulse, but which in this instance caused it to speed up to three times the normal rate—the nurse reporting, “A pulse of 180—couldn't count beyond that—it just flowed.”

When, on my next visit to Mrs. Coca, I looked at her bed chart, I said: “That was quite a jump your pulse took.”

Mrs. Coca agreed. And then she added thoughtfully, “Now that you mention it, my heart races after some meals.”

“That's interesting,” I remarked. “Why don't you check your pulse following single foods?”

Mrs. Coca replied, “Why not?”

An examination of a pulse record taken in this manner showed *initially* that only three foods send her pulse above 68. (Potato sent her pulse above 180.)

Soon after this first attack there were others, and she noticed that the worst occurred within a short time (minutes) after the eating of certain foods (beef, potato). We then observed that after eating these foods she always showed a decided acceleration of the pulse, and I used this means of judging which foods were injurious and which were safe.

If ever urgent necessity has mothered an invention, this was such an occasion. After a long, often discouraging search the following small list of tolerated foods was found: Fowl, fish, peas, string beans, chocolate, milk, cheese, wheat, rye, rice, tea, coffee, figs, grapes, honey, cane sugar, yeast; just about enough to make her able—and willing—to live.

She became free from heart-pain so long as she observed the dietary restrictions, and she performed ordinary housework and gardening without becoming overtired. More important, she resumed her indispensable collaboration in my medical research.

We could have been satisfied with this happy outcome of the experiment, but, fortunately as it certainly was for the development of the new idea, my wife had suffered many years from a number of other afflictions which she had accepted as part of her maternal inheritance. These were migraine, colitis, attacks of dizziness and fainting, abnormal tiredness and indigestion.

As time passed after her many food-allergens were recognized and eliminated from her diet, she realized that all of those miseries also were gone. She did not tell me this until she was sure, and when she did I recognized at once the possible scope of application of the new method of investigation.

Van Leewenhoek, centuries ago, could not have been more deeply thrilled—and awed—at his first view of the strange new world of the microorganisms through his famous microscope than I was at this vision of the new medicine, which leaped to my mind with my wife's assured statement.

Recognizing then the allergic nature of all her symptoms, I quickly began to apply the accidentally acquired knowledge to the relief of migraine and indigestion in other persons.

Soon I was obliged to include many other symptoms in the category of allergy, since, after the "treatment," these disappeared with those already identified as allergic.

Here is the list of the symptoms which I have successfully treated as allergic:

recurrent headache
nervousness
migraine
dizziness
constipation
canker sores
heartburn
epilepsy
overweight
underweight
irritability
gastric ulcer
abdominal pain
gallbladder pain
gastric pain
nervous and emotional
instability (neurasthenia)

abnormal tiredness
indigestion
(vomiting, gas, nausea)
neuralgia
sinusitis
hypertension
hives
heart attacks (angina)
asthma
hemorrhoids
psychic depression
diabetes
chest pain
gastro-intestinal bleeding
conjunctivitis
nose bleed
colitis

Keep in mind that the allergic nature of these manifestations was not proved by the mere fact that they all disappeared after certain foods were kept from the diet, although this happy result undoubtedly stands as strongly supporting evidence. In most instances there were also three other kinds of corroborative evidence.

Firstly, many of the sufferers exhibited more than one of the above-mentioned conditions, and in most cases all of the existing symptoms disappeared.

Secondly, in most instances the symptoms could be brought on at will by merely restoring the offending foods to the diet.

Thirdly, *without exception*, the symptoms were accompanied by a speeding up of the heart-beat.

Representative Cases

Let us review some of these remarkable recoveries which will illustrate what I have been saying.

Mr. G. is the proprietor of an automobile-repair shop, who was suffering from severe three-day attacks of migraine at about two-week intervals. During the attacks he was confined to bed, wholly incapacitated. There was also indigestion, heartburn, swelling of the face, and a physical tiredness that was almost constantly present.

It was soon found that his chief food-allergens were wheat, cane-sugar and coffee. Strangely, wheat and cane-sugar caused headache without swelling of the face, whereas coffee did not cause headache but did cause swelling of the face and lips. All of these three foods caused an accelerated heart-beat. This man's attacks of migraine and the other symptoms stopped as soon as the

three foods were dropped from his diet, and in the succeeding many years he has experienced mild symptoms only when he deliberately ate one of those foods.

Mrs. B., a wealthy widow of 70-odd years, was almost bedridden by marked physical tiredness and migratory neuralgia. She had been troubled for "over 30 years" with overweight and constipation, and each winter suffered protracted colds.

She had withdrawn from social activity, and was in a state of psychic depression. In the pulse-dietary examination, which lasted three weeks, the following food-allergens were identified: Milk, orange, melon, peanut, lemon, carrot, beet, asparagus and onion. These foods were eliminated from her diet, and immediately all the symptoms disappeared. She has not suffered an attack of cold, and has lost 35 lbs. of her overweight since that time. She resumed her social life and became the active chairwoman of her local Red Cross unit.

B. B. is a young man who had withdrawn from college on account of frequently recurring epileptic seizures. A well-known drug, even in doses of five capsules daily, did not prevent daily minor seizures and frequent major ones. His mind had become "foggy." The following foods were found to cause an increased heart-beat; cereals (especially wheat), orange, pineapple and asparagus. Seizures ceased completely as soon as these foods were avoided, and he was able to obtain employment. The drug was discontinued.

One evening, three months after he had begun to practice that avoidance, he deliberately ate a quantity of bread. On arising the next morning he suffered a major seizure. In the next six months there was no attack until

he again ate wheat (spaghetti) one evening. On arising the next morning he experienced a major seizure, breaking a tooth.

Only then did he become convinced of the direct relationship of his food-allergy to the epileptic seizures, and of his ability to prevent them. With this knowledge he decided to return to college, and he has since graduated. Other allergic symptoms in this patient were headache, abnormal tiredness, neuralgia and nervousness. All of these ceased after elimination of his food-allergens.

The technic of the new method of diagnosis is fairly simple, and it can usually be applied without interruption of your daily occupation.

The interpretation of the pulse-record in the first few days of serial tests consists in a succession of tentative guesses to be confirmed or changed as the tests continue.

The first guess concerns the normal low count, and in this you may be very far from the truth. Rarely the lowest observed count in the allergic period is below the actual normal, as determined after all of the allergens have been eliminated. More often the normal low is never reached in the early days of the tests.

Nevertheless this guess, even if wrong at first, must be made because the decisions concerning the test must be made with reference to that basic figure.

Usually the major food allergens reveal themselves in the unmistakable speeding-up of the pulse shortly after they are eaten; and as these are eliminated from the diet the general level of the pulse tends to drop, and with it the lowest count.

The drastic changes in one's estimate of the normal pulse-range that must sometimes be made can be discom-

forting to the diagnostician, and startling to the allergic patient. Initial ranges of 66 to 102, 74 to 116 and 76 to 106 have been seen to drop to normal ranges of 54 to 66, 60 to 72 and 58 to 76 respectively.

The outcome of the tests has been occasionally disconcerting. I could hardly credit my ears when one of the early migraine-sufferers reported a pulse rate of only 45. Since then I have seen three other instances of rates below 50. On the other hand there have been a number of records showing normal rates up to 80 or more, but not higher than 84, which is the allergy deadline. Any count above 84, in children or adults, if taken when the patient is quiet and has no infection such as a cold, has usually been a sign of allergy.

In two instances of strongly suspected allergy the test showed a normal range of the pulse-rate for several days. In both cases my confidence in the test wavered temporarily. However, I learned that in both individuals there were no symptoms during that period for the simple reason that by chance they had missed eating any of their few food allergens.

The younger one had suffered from distressing attacks of hives. These had ceased after the test was started and after the first day he had chosen his own diet. For five days his pulse remained level. At last he suffered an outbreak of hives, which he mistakenly attributed to orange. Believing that he had identified the cause of his trouble he discontinued the tests. He completely ignored his occasional abdominal discomforts which he had not mentioned, and which then recurred, and a few weeks later became acute, resembling appendicitis.

Surgery revealed that the trouble was not an infected appendix, but an inflamed large bowel, a condition which was recognized by the surgeon and the attending physician as being allergic in nature. The tests were resumed and his single food-allergen, ginger, was finally detected. He was fond of ginger ale; also in the two days just previous to the attack he had indulged in pumpkin pie richly spiced with ginger.

The young man now understands the importance of completing the food-tests. He also appreciates the hereditary significance of his allergy, since his father suffered from gastric ulcer, gastritis and hemorrhoids, all of which were proved to be allergic in origin, and were cured with the same tests.

Most disturbing is the patient whose pulse remains in the high allergic range, no matter what he eats. Unfortunately this result may have divergent causes; either the individual is allergic to all or nearly all foods that he has tested, or he is not affected by any food but by one or more air-carried dusts or vapors to which he is continually exposed. In the former case the difficulty can usually be resolved with the aid of a minor nerve-cutting operation (sympathectomy), which simply abolishes many of the food-sensitivities. In the latter, the problem of locating the elusive offender is sometimes heartbreaking and may be practically insoluble.

There is one still mysterious phenomenon of food allergy that confuses the allergic sufferer until he gets acquainted with it and learns how to use it. For example, Mrs. A. S. experienced symptoms and a fast pulse from her test with peas and beans which she was in the habit

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Nerve
Cutting

of eating frequently. After two weeks she retested peas, and on the next day she reported a completely negative reaction; no pains, pulse quiet.

Since the results of the first test had been unequivocal she was told that the sensitivity to pea had probably disappeared in the intervening two weeks, and that the present test would probably revive it; this could be proved by a pea test on the following day.

Intrigued by the experimental problem Mrs. A. S. carried out the test and was actually pleased over the rather painful confirmation of the prediction. She is allergic to fifteen foods, five of which, including cane sugar, she is unable to eat at all. (She is not allergic to beet sugar.) However, through methodical experiment she has found that the other ten can be eaten at about one week intervals with impunity. In the five years since the survey, her health has been perfect.

The stories that I have just told you are not "fairy-tales." They illustrate the sober truth that, by scientific approach, there has been discovered an almost mathematically accurate means of determining the cause of a long list of the most dreadful afflictions of the human flesh; and of course, the means of ending these miseries by meticulous avoidance of their identified causes.

Two objections have been raised against the practice of the patient counting his own pulse. One of these is that the layman is not capable of taking an accurate pulse-count, but this is completely refuted by the practical results of the procedure in hundreds of cases. It is easier to teach an intelligent child twelve years old or even younger to count the pulse satisfactorily than it is to

teach a diabetic person to administer insulin to himself as many are obliged to do.

Also, as mentioned earlier, there are several gadgets on the market that will show you your pulse rate in seconds.

The second criticism warns that counting one's pulse tends to aggravate a neurotic state, or even bring it on. It is thought unwise to encourage the sick to think about their health. This is true when the cause of their ailment is unknown. However, when the victim of hypertension or migraine-headache or dizziness learns that these conditions are curable, and that the cure lies at his fingertips, his fears vanish, and he finds himself confronted by a fascinating problem, the solution of which will almost certainly turn out to be unique—his personal answer. He learns that the procedure is a game with high stakes, present and future, in which the player has a wonderful chance of winning. It is nearly always the quitter who loses.

Many of you know that in some allergic conditions, especially hay-fever, the particular exciting cause or causes—that is, the pollens—can be identified through tests in the skin with properly prepared pollen-extracts. You may be wondering why I have not availed myself of this mode of examination. The answer to this query is that the skin-test has often been tried in many of the conditions that we are considering, but with regularly unsatisfactory results.

Curiously this failure of the skin to react in conditions that are under the strongest suspicion of being allergic in nature has had an opposite influence upon two groups of physicians. To the allergists the negative skin-test means

that the condition is not allergic. To many internists, other medical specialists and general practitioners such a negative reaction in obviously allergic patients discredits the concept, or at least the practice of allergy.

Some allergists have hoped vaguely for some kind of test that would extend the diagnostic function to cover symptoms which they suspect to be allergic in certain instances. However, the results of the pulse test that I have just described have necessitated so great an extension of the concept of allergic disease that only a few specialists have ventured to accept the test as the answer to their hope.

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The Allergy Mystery Solved

Allergies have their mysteries, but medical science has solved many of them, saving countless patients from lives of misery, and restoring many of them to a comfortable existence, if not always to full robust health.

Four armies of allergies are known to have been waging war on human beings. We now discover that there is a fifth column of allergies, more numerous and more dangerous than the others, whose very existence was unknown to us. These underground makers of ills and ailments have now been exposed, not as part and parcel of our normal individual make-up, citizens, so to speak, of our physical economy, but as unnecessary aliens to whom we have given passports that we can revoke.

Now that we know them we can deal with them.

The method is simple. If you are lucky you may learn the principal cause or causes of your ailments in a week or two. Sometimes longer time is required, and one in twenty persons needs a relatively minor nerve-operation, which abolishes most of the food-sensitivities entirely.

Let us now examine the four kinds of allergic diseases that have been mentioned.

1. The first of these is commonly known as the hay-fever group. Also in this group are asthma and eczema. The disease is hereditary, and only descendants of the "hay-fever family" are affected by any of these three conditions.

The familiar skin-tests used by allergists to detect the presence of allergic antibodies apply only to this group.

The hereditary factor which controls and unites this group affects about one-tenth of the people.

2. The second kind of allergic disease is known as contact-dermatitis, and it is most commonly caused by poison-ivy and related plants. It can be caused also by primrose, some pollens, various vegetable oils such as the oil of orange and turpentine, and by some chemicals.

Allergic antibodies are not present in the blood.

The skin is the only body-tissue that is affected by this form of allergy; thus poison-ivy leaf can be swallowed (in small quantity) with impunity by the allergic person provided the leaf does not touch the lips or skin.

About 70 percent of all human beings are susceptible to poison-ivy.

3. The third kind is the allergy-of-infection, which is typified by tuberculin-sensitivity. Since everyone who has been visited by the tubercle bacillus sustains some degree of infection (though most of us recover), the vast majority of us become tuberculin sensitive, and so we exhibit a "positive" reaction to the tuberculin test.

This sensitivity does no harm. However, the infectious allergy which many of us acquire toward those fungi that cause "athlete's foot" is directly injurious because it is only through the allergy that the fungi, growing in the outer layer of the skin, are able to harm us.

4. Serum sickness (skin-eruption, fever, joint-pains, etc.) sometimes follows injection of antitoxin.

The greater part of all people are susceptible.

The greater part of this book concerns itself not with any of these four recognized kinds of allergic disease, but with the fifth group which has recently been identified, and was given the specific designation "idioblapsis," a word derived from the two Greek roots; "idio," meaning an individual quality, and "blapsis," meaning spoiler. Thus, "a spoiler peculiar to the individual."

This group is by far the most important to men and women. It is the one that you and I should be most interested in because it affects more than 90 percent of the population of the United States. It is distinguished from the other four by the following features:

a. Allergic antibodies cannot be detected. Thus skin-tests are negative, and are not useful in discovering the harmful foods.

b. It is controlled by an hereditary character that seems to be distinct from that of the hay-fever group.

c. Its symptoms are characteristic.

d. Contact with the causes is regularly followed by the quickening of the pulse-rate.

This fifth group was originally called "food-allergy," which emphasizes the food-allergens as its most common and important excitants or causes. However, I had better mention some of the non-dietary allergens of this group which may be important, and sometimes even the sole excitants of severe allergic symptoms in some individuals.

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Among those most commonly found guilty is tobacco. In some people tobacco causes indigestion and diarrhea, abnormal tiredness and painful menstruation and many other symptoms. A large part of the population are allergic to the fabric-dust ("house-dust") in rugs, mattresses, upholstery, etc. Some persons have been found allergic to lipstick, perfumes, mentholated nose-drops, headache medicines, laxatives, soap-powder, coal-gas, fumes of paint and cement, and wood-smoke. In one case (a physician's mother) the cause of her constipation that was finally detected was her laxative containing cascara. As soon as she stopped taking the laxative she became and remained regular.

The harassed victims of food-allergy are painfully, or at least disagreeably aware of the fact that practically every part of the body is vulnerable to "food-allergy," and they never cease to marvel, however disgustedly, at the variety of the avenues through which their allergens may gain access to distant susceptible parts of the body.

Consider, for example, the case of the woman who could not be exposed to the exhaust-fumes of a bus without suffering urgent colicky diarrhea; the young woman who suffered abnormal tiredness and sinusitis from the use of a certain lipstick; the two epileptic girls who suffered mild seizures after inhaling tobacco smoke (not of their own making); the woman who suffered an asthmatic attack within a matter of minutes after the application to her forehead of a solution of a drug to which she was allergic; and the physician who suffered migraine and an accelerated pulse soon after the injection into his skin of extremely minute amounts of milk, egg, and orange, to all of which he is very allergic, although the skin itself

showed no reaction. There is also the young woman incapacitated on account of painful swelling of feet and legs due only to chewing a gum containing aspirin.

All of the five groups of allergic disease, as well as a similar experimental condition known as anaphylaxis are found in lower animals.

Dr. Fred W. Wittich in Minneapolis beautifully documented the occurrence of hay-fever (ragweed) in dogs. My former colleague, Dr. Charles R. Schroeder, described allergic eczema, rhinitis, etc., due to cow's milk, in a young walrus. The British allergist Dr. Bray reported hay-fever in cattle. Allergy of infection (ringworm) is common in lower animals; and Landsteiner, with Merrill Chase, described experimental ivy dermatitis in guinea-pigs, the late Henry W. Straus making a similar report of experiments in monkeys. Serum-sickness was long ago observed in cattle and in horses, and more recently by Moyer Fleischer of St. Louis, in rabbits.

We see then that our allergic disease is not a special punishment visited by Nature upon erring mankind; it is merely another mark of our humble origin.

And only now are we beginning to understand it.

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The Pulse Test

The pulse-dietary system has become a special medical diagnostic art. It is based on a simple, easily-proven premise; that your pulse-rate is often accelerated by foods and other substances; that the reason the pulse is accelerated is because your system is allergic to that which is making your pulse race; and that life-spoiling and life-shortening conditions such as migraine, eczema, epilepsy, diabetes, and hypertension may be caused by your continuing to expose yourself to those foods or substances to which you are allergic.

A very small number of doctors have investigated this premise. Many of these have adopted its methods of preventive treatment; some of them in foreign countries.

When you telephone for your first appointment with a doctor who practices this technique, you should be given the following instructions:

1. You *must* stop smoking entirely until the cigarette test, which will be made later.

2. You count your pulse (one minute) a) just before each meal; b) three times after each meal at half-hour intervals; c) just before retiring; d) just after waking, before rising in the morning. All pulse counts are to be made (sitting) except the important one on waking. This is made (before) you sit up.

3. You record all the items you eat at each meal.

4. You continue the pulse-dietary records for two or three days with the usual three meals.

5. You then make *single-food* tests for two or more whole days in this way; beginning early in the morning after the "before rising" count, and continuing for 12 to 14 hours, you eat a small portion of a different single food every hour. For example, slice of bread, glass of milk, orange, 2 tablespoonfuls of sugar in water, a few dried prunes (or a peach), egg, potato, coffee, meat, apple, banana, carrot (raw), celery, cabbage (raw), onion, coffee (black), date, cucumber, nuts, other meats (plain), chocolate (sweet), grape (or raisin), corn (frozen), etc. You count the pulse just before each eating, and again one half hour later. Do not test any food that is known to disagree.

6. You bring the whole record with you for your first appointment, which may last two or three hours, and which is not spent in examinations (those having been made by other competent clinical diagnosticians), but in explanations of the pulse-dietary method.

A physician who is experienced in the interpretation of the pulse-dietary record can usually determine from the examination of your records, at the time of the appointment, whether the solution of your case will be relatively easy or difficult. A few easy cases have been entirely solved at this single appointment; the resulting instructions brought complete and lasting freedom from all the allergic symptoms.

After she had read this book, a New Hampshire woman wrote to me to express her gratitude. She had long suffered severe morning migraines. Both of the physicians in her small town had examined and treated her; both suggested she see a psychiatrist.

"I knew it wasn't mental and I knew I wasn't crazy," she wrote. "I came upon your book and immediately applied myself. I determined my normal pulse range. On waking, my range was normal. But a short time later my pulse had jumped from 78 to 104 and before I had put anything in my mouth, the headaches began.

"For three days in a row this occurred. I couldn't believe it. What was I missing? What was I overlooking?"

"I decided to (note every move I made). I woke with a pad and pencil next to my bed. I wrote the following: 'Awakened. Took pulse. Sat up and took pulse. Put robe and slippers on. Walked to bathroom. Used toilet. Washed face and hands. Brushed teeth—' and suddenly a chill went through me. I *was* putting something into my mouth (Toothpaste). The same brand of toothpaste I'd used for years.

"The next morning I switched to another brand of toothpaste. That was several weeks ago and I haven't had another migraine headache in all that time!"

Unusual? Yes. This woman may be the only person in the world allergic to that brand of toothpaste. But allergic she was and she paid a painful price for it.

Technic of the Pulse-Test

Each human individual differs from all others in his entirety and in at least most of his component characters, such as the "finger prints." It should not be surprising

then to learn that the "pulse-character" is also individually different—often widely so.

(The individual *normal*) pulse-character can be practically defined by the pulse-rate (beats per minute) in two or perhaps three respects. 1) the average level; 2) the range (or "pulse-differential," Sanchez-Cuenca), that is (the difference between the daily low rate and high rate); and 3) the slight variations in the daily maximal rate (not greater than two beats per minute).

Examples

	Individual A	Individual B	Individual C
Low rate	40	60	68
Maximum	52	52	82-84
Pulse-differential	12	2	14-16
No normal maximum above 84 has been observed.			

The pulse may be counted wherever it can be felt—usually at the wrist, but also in the neck, at the temple, etc. In some hospitals it is customary to count the beat through 15 seconds and multiply that number by four. For the "pulse-test" that estimate is not sufficiently accurate, since a difference of only one or two beats in the whole minute count is frequently significant for the diagnosis. Hence, the allergic person has been advised to count the pulse for a whole minute; and a glance at the record tells the examiner whether that instruction has been followed. For whole-minute counts frequently show odd numbers; half-minute counts multiplied by 2, of course, never.

The first object of the tests is to determine the individual's normal low pulse-rate, and one would think that that rate should be observed on waking after a night's

rest, as is often the case. However, that would not be the case if the individual happens to be allergic to the "dust" in his bedding, especially mattress or pillow; or if a powerful food-allergen, eaten before retiring or at dinner continues to affect the pulse through the night—a frequent occurrence.

From the beginning of the testing, then, the individual notes the lowest counts as they occur, and changes his estimate of the normal low as the count descends.

A second object of the test is to determine the individual's normal maximum pulse-rate, at least approximately. This can be done only on the basis of the record of counts made at least 14 times through 12 hours (at least) each day.

Examples

A.M.	allergic to tobacco only						Mrs. K. menstrual period							
DAY	0	1	2	3	4	5	6	0	1	2	4	6	8	10
BR	68	60	60	60	60	60	60	64	60	64	60	60	60	60
BKFST.	84	72	68	68	68	64	64	62	58	60	64	62	64	64
30 min.	88	72	76	72	68	68	68	60	80	64	64	64	64	64
60 min.	84	72	68	68	68	68	68							
90 min.	84	72	68	68	68	68	68							
LUNCH	84	68	68	68	68	68	68	60	76	70	70	66	66	
30 min.	84	76	72	72	68	68	68	66	78	74	68	70	68	
60 min.	84	68	68	68	68	68	68							
90 min.	84	72	68	68	68	68	68							
DINNER	72	68	68	68	68	68	68	68	76	84	68	70	68	
30 min.	76	76	72	72	68	68	68	70	80	80	70	66	66	
60 min.	72	68	72	68	68	68	68							
90 min.	72	68	68	68	68	68	68							
RET.	72	68	68	68	68	68	68	74	64	78	66	64	64	
								N	H					
BR—before rising	day 3, period begins:						day 7, period ends							
	N—nausea						H—severe headache							

Such cases as these are exceptionally easy of interpretation, each being allergic to only one excitant, tobacco and ovarian hormones respectively.

A.M. (victim of multiple sclerosis) smoked a cigarette and his pulse rose from 84 to 95 in five minutes. He stopped his smoking on the zero day and the lowest daily maximum of his pulse (68) was reached on the fifth day, on which day he was able to play baseball, for the first time in months. 68 remained his normal maximum.

Mrs. K., age 34, suffered frequent attacks of migraine. After she began to avoid citrus fruit, her only pulse-accelerating food, her migraine occurred only at the menstrual periods. In the present instance the maximal pulse rate returned to its normal (68) on the 9th day. The pulse record on her zero day was the same as that on the 10th day.

Interpretation of the Pulse-Record

Through the forty-six years since the pulse began to be used as a specific indicator of the allergic causes of ill health, the "pulse-record" has come to mean the record of pulse counts made either 14 times daily on the regular three-meal schedule or at about half-hour intervals throughout the day on hourly small feedings of single foods.

The interpretation of the record of this simple procedure is often complicated by non-dietary factors, some of which have been first suspected through the experience of observant patients. One young married couple recently reported marked pulse-reactions following "sniff-tests" of wood stored in their cellar and of the unfinished undersurfaces of tables.

sniff tests

A marked pulse-rise occurring after rising in the morning but before breakfast usually points to a sensitivity to some ingredient (perfume?) of toilet articles (shaving cream or lotion). One man was found to be allergic only to the menthol in the "nose drops" which he used in the morning.

Women are not infrequently allergic to their own ovarian hormones which are most active at the menstrual periods or half-way between the periods: Marked symptoms and pulse acceleration occurring at those times suggest a hormone sensitivity. *ovarian hormones*

Rarely, an unlucky person is found allergic to an unidentified something in the particular house in which he is living, and obtains complete relief by merely moving to another house in the same neighborhood.

Sensitivity to fresh newsprint (papers, magazines, carbon paper) can frustrate one's effort until it is discovered.

Evidently, every one affected by the newly discovered idioblaptic disease must become his own personal "allergy-detective."

It is intended here to present a few instructive pulse-records of idioblaptic persons whose illnesses were "cured" by mere avoidance of their pulse-accelerating allergens. These cases were all relatively easily solved, nearly always through interpretation of the first records.

The first two tables, 1a and 1b, are taken from my monograph, "Familial Nonreaginic Food-Allergy." (Page 100, case 8, Tables XIIa and XIIb.)

The patient Mrs. E. E., age 32, was a fully occupied housewife with a six-year old daughter. She had to care for a bedridden aunt. Her chief complaint was an annoying eruption about her mouth and chin.

Table 1a was made following a ten minute verbal in-

Table 1a
Pulse record on Mrs. E. E. on an unrestricted diet.

	May 11	May 12	May 13	May 15	May 17	May 19	May 20
Before rising							
BREAKFAST							
30'	pulse 61	pulse 57	pulse 64	pulse 56	pulse 70	pulse 74	pulse 66
60'	68	70	70	69	75	74	68
90'	75	74	73	78	71	77	76
DIET —	80	78	76	75	71	77	73
	76	71	81	73	62	72	68
	orange, coffee, wheat-cereal	pineapple, bacon, egg, bread, coffee, crab-apple jelly	apricot, bread, wheat-cereal, crab-apple jelly, coffee	applesauce, cinnamon-toast, coffee, sugar	wheat-cereal, coffee, (fudge)	egg, grapefruit, wheat-cereal, apple-butter, coffee	egg, coffee, coffee-cake
LUNCH							
30'	—	75	69	68	80	68	74
60'	—	89	65	—	—	76	—
90'	—	75	74	78	—	78	—
DIET —	69	71	82	—	—	74	—
	macaroni, tomato, beef, cucumber, vinegar, pepper, potato, butter, coffee	chicken, noodle, tuna fish, milk, bread, lettuce, mayonnaise, olives, chocolate, pickle	tomato, potato, carrot, peas, cake, cream wine	clam chowder, liverwurst	tomato, cheese, rye-bread, tea, cheese-cake	chicken, rice, cream-cheese, apple-butter, tea	beef, potato, tomato, tea, chocolate-pudding, marshmallow
DINNER							
30'	65	70	60	65	64	76	66
60'	69	73	64	66	68	78	68
90'	68	74	68	84	68	75	66
DIET —	63	69	62	65	64	72	—
	tuna fish, olive, tomato, celery, potato, mayonnaise, apple-juice	lamb, potato, barley, beets, pineapple, walnut-cake	lamb, barley, macaroni, spinach, celery, coffee, milk	beef, potato, milk, spinach, peach-cake, cinnamon, coffee, sugar	ham, potato, carrot, apple, peach-cream cake, coffee	mackerel, potato, tea, tomato, ice cream	beef, corn, potato, coffee, chocolate-pudding, marshmallow

Table 1b
Pulse record on Mrs. E. E. on selected diet.

	May 29	May 30	May 31	June 1	June 2
Before rising					
BREAKFAST					
30'	pulse 60	pulse 66	pulse 60	pulse 58	pulse 60
60'	66	67	68	67	68
90'	70	70	60	69	68
DIET —	66	66	62	70	—
	pep-cereal, coffee, bread	pep-cereal, coffee, sugar, bread	pep-cereal, coffee, cake	pep-cereal, coffee, cake	wheat-cereal, coffee
LUNCH					
30'	62	64	66	64	—
60'	65	66	66	66	—
90'	68	69	68	68	—
DIET —	66	68	70	64	—
	apple, lettuce, mayonnaise	beef, potato, carrot, onion, apple-pie	lettuce, bread, sardines, mayonnaise, rice, apple-juice	carrot, beet, lettuce, mayonnaise, apple-juice	—
DINNER					
30'	66	62	64	64	66
60'	62	64	68	68	68
90'	64	60	66	66	64
DIET —	66	60	66	64	64
	beef, potato, corn, coffee, apple-pie	lamb, tomato, potato, coffee, apple	tomato, lamb, potato, beets, coffee	ham, potato, carrot, apple, mayonnaise, coffee	beef, carrot, pepper, lettuce, potato, applesauce, coffee, mayonnaise
RETRING	60	58	60	60	62

struction. There was no consultation between May 11 and May 20, 1948, when the record was received.

Interpretation of such an original record *regularly begins with the noting of the lowest and highest counts*, which in this instance were 56 and 89—a range of 33 beats. The maximal normal range of the human pulse rate is 16 beats, hence the observed range of 33 indicates that E. E. is allergic.

If we take 12 beats provisionally as her normal range, her normal maximum would be about 68. On this basis if the pulse did not rise above 68 after a large meal, it could be assumed that no allergenic foods were eaten at that meal. It is seen that all the “dinners” of May 11, 13, 17, and 20 qualified in that respect. The patient therefore was instructed to limit her diet through five days to the combined list of items from the four dinners—which she did.

Table 1b was made through most of five days on the restricted diet and under otherwise the same conditions of physical and psychological “stress” that had prevailed throughout the ten days of the preliminary tests.

The low and high counts of table 1b are 58 and 70 respectively, a range of 12, which can be normal. Also the high count is *exactly* reached on each of the three days on which the full 14 counts were made. It should be noted by the beginner that a single count of 71 should have aroused suspicion of exposure to an inhaled allergic excitant, to be watched for thereafter.

The record teaches the highly important lesson that the normal pulse is not affected by ordinary physical activity nor by psychological influences, nor by digestion of nonallergenic foods.

E. E. continued the testing of other foods, looking for

any that would elevate her pulse above the normal maximum 70, but she found none. Her facial eruption soon healed.

Looking back, it can be seen that the foods which affected the pulse at breakfast on May 11, 12, 13 and 15 were respectively orange, pineapple, apricot and cinnamon.

Tables 2 and 3 are taken from my report in the Spanish journal of allergy, *Alergologia*, No. 20; March-April 1954.

Table 2 is that of Mr. J. R. B., age 74, whose eczematoid condition of his legs had resisted local “treatments” for ten years. He lived alone in a scantily furnished house. The pulse-test with cigar was negative. He avoided the cabbage family and onion, having himself found that they caused migraine headache.

It is seen that the low count in the four days from June 4 to 7 was 60, the highest 68—a range of 8 beats, which could be normal. This result showed that he was not allergic to any food that he ate in the four days. The record gave no indication of a sensitivity to house-dust; yet the exclusion of food and tobacco sensitivity compelled a suspicion of the third most likely allergen, the ubiquitous and almost unavoidable “house-dust.”

And so his meager furniture, rugs and bedding were Dust-Sealed as a conclusive test, on a hot, sunny June day on his lawn. They were quite dry a few hours later and could be replaced in the late afternoon.

Mr. B slept on his Dust-Sealed bed mattress that night, and in the morning for the first time found his pulse four beats lower than ever before. His maximum rate also dropped four beats and this lower level was indefinitely maintained.

Table 2

Showing the drop of the pulse-rate following the use of "Dust Seal" in the case of a severe eczematoid eruption, caused by sensitivity to "House-Dust." (See chapter 9.)

June	Pulse rate			
	4	5	6	7
Before rising	64	60	60	60
Maximum	68	68	68	68
Retiring	64	60	64	60
June 8, bed-mattress and furniture treated with "Dust-Seal"				
June	9	10	11	12
Before rising	56	56	56	56
Maximum	64	64	64	64
Retiring	60	60	60	60

The pulse was counted 14 times each day; just before each meal, three times after each meal at half-hour intervals, just before retiring and before rising in the morning.

The eczema was practically healed in two months and there has been no recurrence in the past seven years.

Table No. 3 is that of Mr. W., whose brief case-history is recounted on pages 124-5 of this book. His chief symptom was daily, painless vomiting.

Most beginners, on being handed this record, first scan the list of foods, looking for a likely cause of the frequent vomiting. The reader has, by this time, learned to look first at the figures of the pulse-counts, where he will find the answer. The low count is 70, the highest is 80, a range of 10, which can be normal.

This observation, by itself, shows that Mr. W. was not allergic to any of the foods he had been eating; his vomiting was not due to a food sensitivity.

Most idioblastic allergies are due to some food-sensitivity. The next most commonly incriminated allergen is

Table 3

Mr. W., ship's purser, suddenly suffered abdominal pain with frequent painless vomiting in November 1951.

Jan. 5, 1952	P.M.
A.M. Pulse	2:00 — 80
10:45 — 74 — before rising	2:15 — 76 — veal, potato,
	began smoking
11:00 — 74 — coffee, sugar,	tomato,
	cream
P.M.	cucumber,
	lettuce, tapioca,
	sugar, cream,
	coffee
1:00 — 80 — coffee, sugar,	
	cream
	3:00 — 74
2:00 — 76	<i>vomited</i>
2:30 — 78 — grapes cheese	3:45 — 80
3:30 — 73	5:30 — 78 — doughnuts, coffee
7:00 — 70 — ham, bread,	5:45 <i>vomited</i>
	6:00 — 74
	6:30 — 72
	7:40 — 75 — cheese-sandwich,
	pepper
8:00 <i>vomited</i>	lemon soda,
	brandy
	9:45 — 78
8:35 — 74	10:15 — 72
9:15 — 72 — coffee, sugar,	11:10 — 72
	11:30 — 72 — coffee, sugar
	<i>vomited</i>
	12:00 — 72
11:30 — 70	
Jan. 6, 1952	
A.M.	Pulse
3:00 — 74 — retired	
8:30 — 70 — before rising	
	began smoking
9:00 — 74 — bacon, egg,	Jan. 7, 1952
	A.M. Pulse
	1:00 — 70 — before retiring
	9:30 — 74 — before rising
	began smoking
<i>vomited</i>	9:45 — 74 — coffee, sugar
9:30 — 76	
10:00 — 80	

tobacco which affects about three-fourths of the population (Granville F. Knight). Mr. W. smoked constantly through the day from the time he rose in the morning.

The allergic pulse-reaction to tobacco has been found regularly to occur within 15 minutes after the individual begins to smoke, and fortunately Mr. W. always recorded his pulse just before smoking and 15 minutes later. Thus on January 5 his pulse at 10.45 A.M. "before smoking" was 72 and at 11:00 it was 74, which was well within his normal range. Again, on January 7, at 9.30 before smoking his pulse was 74 and 15 minutes later it was still 74. Therefore Mr. W. is not allergic to tobacco. These dependably negative tests of food and tobacco leave "house-dust" as the most likely suspect as the specific cause of the vomiting. In fact the record contains significant data pointing to dust-sensitivity. Let us examine these data.

We find that the pulse-record says "Not guilty" to foods and tobacco. However, note that the low count does not occur always "before rising" after the night's rest. This permits a suspicion of dust-sensitivity (rule 7).

The explanation of this phenomenon is a little involved. First, the phenomenon can occur only in the absence of the reactions of common food-sensitivities and reactions to tobacco smoke; because these are relatively strong "major" allergens, whereas dust-sensitivity is nearly, if not quite always a weak or "minor" one. Secondly, the dust-allergen is generally 10 or 20 times more concentrated in used bed-mattresses than it is in rugs and carpets. Thus the exposure to "dust" while in bed can be greater than it is elsewhere in a house that is not Dust-Sealed.

Mr. W.'s "before rising" pulse on Jan. 5 was not 70 but 72; and on Jan. 7, his pulse before retiring was 70 (his lowest), but it had risen to 74 as he was resting after the night's sleep.

Mr. W. accepted the interpretation, Dust-Sealed his apartment and purser's quarters and was immediately and permanently relieved of his distressing condition, which, by the way, had been classed as "psychosomatic" in two Marine hospitals.

The following tentative rules of technic and interpretation of the pulse-dietary record may be helpful to those who are beginners in the art. One must not, however, forget the occasional exceptions to these rules.

- Rule 1. If your pulse-count taken standing is greater than that taken sitting, this is a positive indication of present "allergic tension" (Sanchez-Cuenca).
- Rule 2. If at least 14 pulse-counts are being made each day, and if your daily maximal pulse-rate is constant (within one or two beats) for three days in succession, this indicates that all "food-allergens" have been avoided on those days.
- Rule 3. If your daily maximal pulse-rate varies more than two beats; for example, Monday 72, Tuesday 78, Wednesday 76, Thursday 71, you are certainly allergic, provided there is no infection.
- Rule 4. If the ingestion of a frequently eaten food causes no acceleration of your pulse (at least 6 beats above your estimated normal maximum) that food can be tentatively considered non-allergenic for you.
- Rule 5. If exposure to "house-dust" causes irregularity of your pulse, this regularly excludes the commonly eaten foods as allergens, since "housedust" is, at least usu-

ally, a "minor" allergen; hence it does not affect persons who are protected by the stronger reactions that would be caused by foods.

— Rule 6. Your pulse-reaction to an inhaled allergen (particularly "house-dust") is more likely to be of short duration than that to a major food allergen.

— Rule 7. Pulse-rates that are not more than 6 beats above the estimated normal daily maximum should not be blamed on a recently eaten food but on an inhalant or a recurrent reaction.

— Rule 8. If your minimum pulse-rate does not regularly occur "before rising," after the night's rest, but at some other time in the day, this usually indicates sensitivity to the "house-dust" in mattresses or pillows.

— Rule 9. If you are not susceptible to common colds, you are probably allergic to only few, if any, commonly eaten foods; though you may be allergic to some inhaled substances, for example "house-dust," which may even cause respiratory symptoms.

Now I come to an interesting point.

— Good intentions are not enough if you are serious about discovering the cause of your ill health, present or future.

— You must decide to devote yourself to pulse counting for the required number of days. You must give up smoking immediately, at least for the duration of these tests.

— It all seems simple. And yet I know people who are bedridden with nothing but time on their hands, who would not devote the time and energy necessary to complete a survey.

I know automobile owners who, if told they were pouring a corrosive chemical into their car engines when

they used a specific type of gasoline, would spend days testing the truth of my statement. But these same people if told that they are pouring what are to them poisons into their own body engines, would not take one hour to test the truth of my statement.

For five or ten days of testing, you may be rewarded with five or ten years, or more, of additional illness-free life-span.

You are being given a roadmap to the fountain of youth. Use it.

Since there is no way to foretell whether you are destined to be among next year's thousands, you may be curious to understand how a heart-attack occurs. Here is the pertinent life-story of one typical case.

Soon after he was born Mr. X. became allergic to milk and to tobacco smoke. However, neither of these substances affected his health noticeably, although his medical acquaintances remarked upon his fast and irregular pulse due, they thought, to his "strenuous life."

"Coming of age" he began to smoke "heavily" in spite of vague suspicions that smoking was not "good for him." His blood pressure was always normal.

At the age of 45, with no premonition whatever, he suddenly fell to the floor in his office in a heart-attack, which completely incapacitated him for two years, after which time a second major attack carried him off.

In this man the heart was the most important organ which was to become *susceptible* to his allergic reactions. However, the local susceptibility was not *established* in him till he reached the age of 45. If he had stopped smoking and avoided milk one week previous to the date of his attack, the attack would not have occurred. The heart *had not been damaged* by his long indulgence in his allergens. But after the critical age of the cardiac susceptibility had been reached, a resumption of smoking at any time would have been quickly followed by the allergic catastrophe. This has happened in one of my cases.

The allergically fast pulse is caused by an allergic reaction in the nervous system controlling the heart beat, which does not directly affect the heart muscle. The rapid pulse of allergy does no lasting harm, even after

many years. It is the local susceptibility of the blood vessels that nourish the *heart muscle* which is responsible for a heart attack.

You owe it to your heart then to learn how it is behaving. And if it is beating too fast, you owe it to yourself to learn why, and to remove the causes of that too-fast beat or acceleration *in time*.

The first question from an allergic person seeking relief through the pulse-dietary survey is usually "How fast should my heart beat; what is my normal rate?"

To this there is only one answer, "That cannot be determined with certainty until at least four or five days after you have begun to avoid *all* of your dietary and other allergens (tobacco, dust, fumes, perfumes, et cetera)."

As I have said earlier, the reason for this is that there is a great variation of normal pulse-rate among different individuals. Text books usually state that the normal pulse-rate is about 72 beats per minute, but the truth is there is no "normal" pulse-rate.

Considered in its course over a sufficient period (possibly a week is enough), the normal person's pulse may be sufficiently individualized to be as unique in its character as are the finger-prints. And there is no "normal" fingerprint.

The pulse-character is expressed for practical diagnostic purpose in its general level (low or medium or high), and in its daily range (interval between the lowest number of beats per minute and the highest number of beats per minute). Other things that may be individual are possibly variations in the daily minimal low and maximal

high rates, although the latter are constant enough (not varying more than two beats per minute) to serve as dependable indicators of the success of the dietary course.

I mean that when the patient's *maximal* pulse-rate has been brought, by a selection of diet, to a variation from day to day of not more than two beats per minute, the survey has been successful, and the allergic symptoms should have disappeared. There are rare exceptions to this rule.

Gross differences of the pulse-character are found in different nonallergic persons when the pulse is counted fourteen times daily for two to five days.

	<i>Lowest count</i>	<i>Highest count</i>	<i>Range</i>
1	62	72	10
2	62	72	10
3	66	76	10
4	69	76	7
5	70	78	8
6	72	80	8
7	72	82	10
<i>Average</i>	68	76.5	9

The table above shows the essential data obtained from seven pupil nurses, all of whom, as well as their parents, were free from allergic symptoms. It is seen that although the highest count of nurse 7 was greater than that of nurse 1, the range from low to high was the same in both—10.

It is astonishing to learn through the report of Dr. George C. Deaver of New York University that the outstanding runners, Leslie MacMitchell, Glenn Cun-

ningham and Paavo Nurmi have the low pulse-rates of 38, 42, and 47 respectively. Although such low rates are unusual—among 104 persons, I encountered only four with minimal rates below 50—they are found in perfectly healthy people; they are not abnormal.

The range of the pulse rate varies greatly in different normal individuals. This is illustrated in the table (on pages 70–71) showing a survey of fifty persons. All of these people had been brought out of their various allergic miseries, as you may be, through the pulse-dietary method.

The one patient, a man of 30 years, with the range of only two beats, regularly reported a count of 60 taken before rising in the morning. As soon as he was up the count was 62, and remained at that rate throughout his busy work-day, irrespective of his meals—so long as he avoided his pulse-accelerating foods. During the past ten years in which he has adhered to this regime he has been free from his allergic symptoms, including the major one, epileptic seizures. Previously his pulse-rate had ranged from 78 to 102.

The dependability of the pulse as an indicator of allergic reaction is illustrated in the case of C. G., age 15, whose symptoms were chronic urticaria (hives), recurring headache, abnormal tiredness, occasional dizziness and "canker sores."

It was the urticaria that annoyed her most, both physically and cosmetically, and drove her to the tedium of the daily 22 pulse counts. Her normal range was found to be unusually low—52 to 61; the sole cause of her hives was wheat, and there were only two other food allergens, strawberry and beef.

Range of the Pulse-Rate in Fifty Food-Allergic Persons Before and After Dietary Treatment

Patient	Sex	Age	Range of Pulse-Rate	
			After Treatment	At Start of Treatment
E. F. C.	M	49	68-80	to 180
A. F. C.	F	65	58-70	66-100
M. M. D.	F	27	70-80	70-100
A. R.	M	28	70-84	66-108
C. T.	M	26	72-78	65-112
J. G.	F	36	66-80	66-100
H. E.*	F	49	58-76	76-106
W. W. F.	M	57	56-68	66-100
M. W. F.	M	52	58-72	72-100
A. W. F.	M	17	60-72	70-90
F. C. F.	F	16	58-70	58-84
M. B.	M	22	64-76	64-100
P. W.	F	47	62-78	68-100
R. M.	F	22	62-78	68-100
A. P.	M	70+	70-74	72-100
S. I. H.	M	40	68-80	68-108
H. A. S.	M	58	60-74	60-105
J. F.	F	53	68-80	68-108
W. S. C.*	M	41	46-62	46-70
J. V.*	F	34	48-64	44-78
E. B.	M	50	72-76	82-108
Dr. R.	F	26	70-76	70-90
R. F.	F	34	62-76	64-114
A. F.	F	10	74-78	82-124
N. V. W.	M	38	62-76	64-86
Dr. I. P.*	F	46	72-78	84-104
L. H. B.	M	20	58-70	60-90
J. J. V.	F	38	62-74	70-94
C. B.	M	23	67-72	72-100
K. S.	F	48	70-80	70-110
M. D. B.	F	50+	52-60	62-90
G. H.	F	17	54-66	66-102
E. K.	F	27	58-66	60-96

Patient	Sex	Age	Range of Pulse-Rate	
			After Treatment	At Start of Treatment
A. S.	F	50	62-76	66-96
J. K.	M	30	60-62	78-102
G. B.	F	55	64-74	64-92
J. B.	M	35	68-78	68-100
O. W. L.	M	52	68-80	70-98
Mrs. E. B.	F	36	48-60	47-79
M. P.	F	11	60-72	74-116
M. S.	F	31	64-74	64-100
W. G.	F	21	66-78	66-86
L. S.	M	24	56-68	56-88
B. B.	M	20	58-68	58-78
T. C. F.	M	50	54-68	54-90
E. H.	M	50	60-68	66-88
C. A. E.	M	50	60-68	66-90
E. A.	F	63	56-68	75-100
A. C. M.	F	50	64-78	62-100
G. C. N.	M	55	70-78	74-88

*These patients did not complete the dietary diagnosis and undoubtedly are mildly affected by unidentified minor allergens, although completely relieved of their major symptoms.

Wheat was suspected on the second day, and thereafter avoided, but the hives and the elevated pulse continued for two and a half days.

Beef was then tested (highest count 84), and caused no hives, but affected the pulse in the subsequent six days! (The daily highest counts were 67, 72, 67, 65 and 62). Then followed six days in which the count reached 61 (only 60 on one day), but no higher excepting the tests with strawberry in which it reached 66 and 67 respectively (a very feeble sensitivity). The low count on all those six days was 52.

Then she retested wheat at breakfast, and in 30 min-

refused to print any reports involving the use of the pulse-dietary procedure.

There is too a standard objection with some medical periodicals against a report concerning only a "few" instances of successful "treatment" of previously "incurable" or intractable conditions.

The medical practitioner is thus practically relieved of the privilege of exercising his private judgment about some new ideas of the cause and prevention of chronic disease. It can be reported here that not all family physicians approve this tradition, which is equal to censorship.

Diabetes

Diabetes is a serious disease. It has long been known that the cause of diabetes is some continual interference with the body's normal production or utilization of insulin, which goes on in the pancreas.

If you are a diabetic, your pancreas may not produce enough insulin to take care of the quantity of carbohydrate which is needed to keep you warm and active.

The discovery of insulin was a fine accomplishment. It provided a way to treat the chief *symptom* of diabetes.

However, insulin injections do not *cure* the disease. The original cause remains. It continues to act. So, in spite of the insulin, many people die of their diabetes.

I began to wonder if diabetes might be due to "food-allergy" affecting the pancreas. This thought occurred shortly after I became convinced that hypertension is caused by "food-allergy" affecting the kidney, another internal organ. Not only were my own observations con-

vincing, but I noted similar independent observations by Dr. Sumner Price.

And then, the first two cases of diabetes came to me, and asked to be put to the tests.

Dr. and Mrs. C. wrote me as follows:

"If you are interested in testing any theories on two diabetics with pronounced food-allergies, we would be glad to cooperate with you by serving as guinea-pigs. We don't react positively to the skin-tests, but noticed, however, that pulse and blood-pressure were normal after fasting."

To this I replied to Mrs. C., "You and Dr. C. seem to be mind-readers! I do not remember having publicly expressed the idea that diabetes may be an effect of food-allergy, but that idea has seemed to me entirely plausible."

The pulse survey revealed a number of food-sensitivities in both of them, although cereals seemed to be chief offenders. I suggested sympathectomy, but they decided to try simple elimination of the cereals.

In September, not having had word from them since July 1, I wrote for news, and received this reply from Mrs. C. "We have improved tremendously simply by doing without cereals. We use potato instead. I can tolerate *one cup of sugar* at a time. I tried it two weekends. Ran no sugar, took no insulin! My husband's insulin dosage gets lower as he improves. We look better than in years."

The "sugar-tolerance" test for diabetes is usually done by having the patient eat about a half-cup of grape sugar (glucose) at one time. If the individual is diabetic his body is not able to store up that entire amount, and the

excess is thrown out through the kidneys with the urine. He "runs" sugar.

When Mrs. C. ate a whole cup of sugar at one time without taking insulin and "ran no sugar" this result proved that her pancreas had resumed its duty of insulin-production, and that the artificial assistance of injected insulin was no longer needed.

Three years later they wrote that they are still well. At that time I heard from Dr. Milo G. Meyer of his own independent control of diabetes with the use of the pulse-survey.

Eczema

Eczema is another serious and rather vexing ailment.

The medical treatment of eczema includes the use of x-ray, ultraviolet ray, ointments and injection of various vaccines.

Mr. P's physician, after a two months' unrewarded trial of medical treatment of his tormenting eczema, advised him to take the pulse-survey. The pulse reacted to cereals, orange, honey, fowl, lamb, a popular shaving cream (pulse up to 108), and soap powder; and the itch increased markedly soon after he had eaten or used some of these. Three weeks after the elimination of these allergens he was practically well, and for good measure his somewhat elevated blood pressure (140/84) had become normal (about 120/70). At a subsequent visit to his physician something like the following conversation took place:

Doctor: "How are you?"

Mr. P.: "I'm well."

Doctor: "Did Dr. Coca use rays?"

Mr. P.: "No."

Doctor: "Did he give you injections, or something to put on or to take?"

Mr. P.: "No."

Doctor: "Unbelievable!"

Mr. K. was not only covered with an itching and unsightly scaly eruption of several years' duration; he was also about 25 pounds under normal weight, and his blood pressure was disturbingly high, 180/108 in August, and 176/100 in October.

Hearing from a neighbor about the new allergy test which had relieved the neighbor's high blood pressure, he obtained a three-week leave of absence to have the survey made. At the first interview he announced that he was spending the first three days at Atlantic City to quiet his mind, and get some "good fresh air." I wished him a pleasant trip, but I assured him that he would be wasting valuable time, and that he was probably not in a frame of mind to benefit from the survey; in blunt fact that I did not wish to see him again.

By the next evening I had forgotten about him when he telephoned. I expressed astonishment; he replied, "I fooled you and stayed home counting pulses."

In three weeks' time we had identified egg, fowl, fish, pork, beef, lamb, potato, corn, onions, asparagus and coffee as pulse-accelerating allergens, which were then excluded from his diet.

By the fourth week on the greatly restricted diet he had gained 8 pounds in weight, and the eczema had healed on the body, face, ears, legs and one arm, still persisting on the other forearm and one ankle.

By six weeks the eruption was entirely healed, he had gained 12 pounds, and his company physician reported a nearly normal blood-pressure of 128/78. Three months later he reported dejectedly that "the mess" was back again.

It was almost as bad as ever, and his blood pressure was up (160/84). At first he asserted that he had stuck to his "diet," but after a mild third degree he confessed some indulgence in wine without a pulse-test. I jokingly told him that he could "jump in the lake" and hung up.

After another three weeks I called him. "How are you now?" I asked.

"Oh, I'm well again, it *was* the wine," he replied. His pressure too had returned to normal.

It amazes one to consider that a man of 54 can avoid all the protein-rich meats, also egg and potato, can do harder physical work than ever, yet gain back, as he now has, that 25 pounds of lost weight. That is, he is up to his normal, according to the Thomas D. Wood standard.

Ulcer

Now look at the "treatment" of ulcer of the stomach. Why, by the way, has no one thought of the similarity of that condition to ulcer of the mouth (the canker sore), which is already recognized as allergic!

First the sufferer usually receives a bland diet such as milk, gelatin, junket; he is given antacids and sedatives; then he is briefed about his anatomy and the "nervous factors." Finally, if all simpler measures fail, surgery is the only apparent solution, and he must submit to an operation known as gastric resection (removal of the ulcer and surrounding parts of the stomach).

This may or may not bring relief to the sufferer. Certainly it seldom cures the underlying cause.

I had not run across my old friend, the chemist, Dr. P. for months when he stopped me and casually remarked that he had an ulcer.

"My dear fellow," I exclaimed, "why the secrecy? Maybe I can help; what are you doing?"

"Well," he replied, "my surgeon is feeding me only milk, and if that doesn't help me he intends soon to operate; and, in fact, I am ready for it because I am worse than ever."

I counted his pulse—104. He found 103. "You have eaten nothing but milk today?" I asked. "Nothing else." "Will you believe in me and do what I say for one week?"

"Yes, but what shall I do?" he asked.

I explained that since he had taken only milk and was running a fast pulse, he was probably allergic to milk. What effect this allergy had on his ulcer remained to be seen. I suggested that he count his pulse before and after meals, eating anything at first *except* milk.

He was skeptical but agreed to give it a try.

At lunch he had a liberal assortment of dishes containing no milk, and his pulse thereafter ranged only from 74 to 78. The result was the same at dinner and at breakfast the following morning, by which time his ulcer-pain had vanished.

Three days in succession this trained scientist tortured himself with a glass of milk at lunch before he was convinced that he could always produce both the pain and the pulse-rise with that food, and that alone—a lucky man!

Another case tells a similar story, but the patient in this instance was not so fortunate. Mr. C. learned about

the new test too late to save himself from the gastric resection. Also he learned too late that the operation, if it did not worsen his state, at least did not better it. In fact, six months later he had developed a severe gastritis (inflammation of the stomach-lining) which his physicians had previously assured him was a most unlikely occurrence. A year later, at the age of 46, he was making arrangements to retire from his successfully developed business, physically debilitated to the point where he felt he must take to his bed.

It was from his wife, one of my former laboratory associates, that he heard about the new test, and as a last resort, and with her encouragement he devoted himself conscientiously to the routine counts.

Incidentally, previous routine skin-tests had revealed no allergens. Like Dr. P., he too discovered cow's milk to be his major food-allergen. Moreover, the simple avoidance of cow's milk not only set his sick stomach in peaceful working condition after twenty years of pain and discomfort; but unexpectedly it solved another painful disorder, his hemorrhoids.

Mr. C. is restored to health, to an eight hour day of laborious occupation, and to a serene view of the future in which retirement is too far off to be thought about.

Hemorrhoids

Hemorrhoids are usually treated at first with neglect, and even their bodily protrusion is viewed only with annoyance so long as they do not become too painful or bleed too freely.

The doctor can recommend only symptomatic relief

induced with suppositories, postponing as long as possible the inevitable resort to surgery.

It is remarkable how many of these allergic conditions of previously unknown cause have been "treated" literally according to the biblical counsel, "If thine eye offend thee pluck it out." But here again surgery often fails, just as it does with the different yet comparable instances of adenoids and probably also enlarged tonsils, which also may be the result of allergy.

When the allergic swelling of the nasal mucous membrane extends into the sinuses we call the condition sinusitis. When it involves the membrane covering the ceiling of the posterior cavity of the mouth, the swollen membrane may be thrown into pendulous folds called adenoids. The difference between these and hemorrhoids is that in adenoids there are no swollen veins such as characterize the hemorrhoidal mass. They are similar in that they are both allergic swellings, and that the removal of the presently existing ones does not prevent the formation of others.

Mr. C. had undergone surgery because of painful, bleeding hemorrhoids that protruded. The first operation failed, and a second was advised. Later there occurred an alarming protrusion of a part of the rectum. Even if one admits its possibly food-allergic origin, a dislocation such as this rectal protrusion would not be widely thought reducible through the regulation of the diet. Yet, that's exactly what happened.

It was at this juncture that Mr. C. discovered milk as his sole disturbing food-allergen, and began to exclude it from his diet.

Subsequently improvement was marked and progres-

sive until by now protrusion has become negligible. Neither has there remained any further bleeding or discomfort.

Mr. M's case was much less serious than that just recounted, but it is illuminating in that after the condition had been miraculously cleared up by mere avoidance of the allergens pea, bean, peanut and tobacco, it returned promptly when bean unknown to him, was slipped into his diet. It was his migraine headaches and his nagging tired feeling, not his hemorrhoid, that brought him to the pulse-survey.

He did not mention the hemorrhoid until, together with his major complaints, it departed. Indeed several weeks passed before he was sure that it was gone for good, and then its possible connection with his allergy struck him. This result of the new procedure seemed to impress him more than his relief from the other symptoms; it impressed me also, for at that time I had made only one other similar observation.

Mr. M's hemorrhoid did not bleed or protrude, but the pain and discomfort spoiled his night's rest, necessitating the regular use of a suppository. His physician did not wish to risk operation.

In the summer following the disappearance of the condition, Mr. M. took a vacation in good spirits with his restored health. Soon after his arrival at the resort he was disheartened by the recurrence of the hemorrhoidal discomfort.

But the setback was only temporary, because the cause of the trouble was discovered in the soybean and its oil which made its unsuspected way into his diet.

Recently his physician examined him and reported that the hemorrhoid has completely disappeared.

Hemorrhoid by its mass gives the impression of a growth. Yet it is not a growth but a swelling composed largely of distended veins (the conveniently named hemorrhoidal veins).

Now the remarkable disappearance of such a mass following the mere avoidance of pulse-speeding foods spells allergy; and that word is underscored by the prompt recurrence of the mass when one of those foods is unwittingly restored to the diet.

But how explain such a swelling as allergic? This is easily done with the use of common analogies in this amazing field. Let's see.

Young Farmer Jones, against his better judgment based on experience, indulges in some of the first picking from his strawberry patch.

"They won't hurt you," assures his new bride. Next morning Mrs. Jones is wakened by a groan.

"What's the matter, Sam?"

"My head is pounding, and I can't see."

And with obvious reason, for his eyelids are so tensely swollen that they cannot be opened. *Allergic fluid impounded under pressure in the tissues.*

The same phenomenon is apparent in hives, in the tensely swollen, impassable nasal membrane of allergic rhinitis, and in the painful internal pressure of the glaucomatous eye (Berens).

So the original cause of the hemorrhoidal swelling is a collection of allergic fluid localized in the hemorrhoidal area *and restrained* there under pressure. It is this pressure

which interferes with the outflow of the blood in the veins, causing them to become distended.

When the "food-allergens" are excluded from the diet, the local allergic process is resolved, the allergic fluid is released, the pressure obstructing the venous circulation is thus removed, and the whole mass disappears like a snowball in an April sun.

Overweight

Of all the problems that beset modern American man and woman, none consumes as much wasted effort, causes as much talk, or generates as much self-scorn as overweight.

If you are overweight, not merely vanity, but your total state of health is at stake.

Overweight, the bane of so many self-conscious women of tidy instincts, is often "treated" medically, either with controlled starvation, or with a dangerous medication that helps to burn up excessive fat faster than even the obese person can plough it in.

The fat woman is told that she eats too much, especially sweets, or that she is lazy or, more often, both. But medical science has found a fairer judgment, and a pleasanter way of relief for many such women.

There is now convincing evidence that many cases of overweight are due to food-allergy, and that when the food-allergens are withdrawn from the diet the weight falls to the normal level for the individual, and remains there without any restriction of the safe foods, including starches, sugars and fats.

Little Miss M., age 50, found her physical activity un-

comfortably limited by her moderate overweight of nearly 140 pounds. But her daily struggle to negotiate the three flights of steps to her apartment was not due alone to those excessive pounds.

She suffered migraine (climaxed with vomiting), marked tiredness, constipation, occasional dizziness, sinusitis, and, strangely, (split finger-nails) which she did not mention until, after the pulse survey was completed, they had rapidly healed.

Cow's milk was her worst allergen, but the others included cereals, all meats but pork (she can eat egg and also goat's milk), citrus fruit and cane sugar.

In the first week of avoidance of these allergens all symptoms disappeared, and she lost four and one-half pounds weight (probably water of allergic edema).

Gradually, in the next four weeks, there was a further loss of three pounds, and ultimately her weight became stable at 129-1/2 pounds.

One's first thought will be starvation (no cereals, no sugar). But there was not any starvation; Miss M. (never felt hungry), as she often had when she was fat. She ate to her appetite's content of her many safe foods including potato, sweet potato, dates, peas, beans and (notice this, reader) beet sugar, which she could and did eat freely because she is not allergic to beet. ★

So Miss M. is proud of her health and her young figure. Those three flights of stairs are to her merely a welcome means of exercise, and her advancing age holds no fears for her, because she knows that she has found the key to the prevention of its chief infirmities.

Several other younger women have found the relief of their annoying overweight in the avoidance of their pulse-

speeding food-allergens. These, like Miss M., turned to the new procedure primarily on account of more urgent ailments, such as eczema of the hands, migraine and neuralgia. Their return to normal weight was merely an extra dividend happily incidental to the disappearance of the other major and minor allergic symptoms.

Even older women may be grateful beneficiaries of the reducing effects of the nonallergic diet. Two such cases are instructive because the foods that they had to shun were not the fat-producing foods.

These women were over 70 years of age. Both were victims of tiredness and long-standing constipation. Other symptoms in Mrs. P. were heart attacks, fainting, chronic cough and chronic outbreaks of hives ("dollar-size"); in Mrs. B. there was indigestion and migratory neuralgia, with annual six-week bouts with common cold.

After the successful pulse-survey Mrs. P. was free from all listed symptoms, and there was a 15 pound reduction of her weight to a constant normal level.

The quantity of her diet has since been regulated only by her appetite. The food-allergens that she must avoid are beef, cow's milk, egg, corn, orange, olive, banana and yeast. She eats all other cereals, potato and sugar without restriction.

Mrs. B's food-allergens are cow's milk, citrus fruit, carrot, beet, spinach, asparagus, onion and nuts.

Again, no ban against the "fattening" starches and sweets! And no restriction in quantity. Yet this woman lost 35 pounds of excessive weight to the great betterment of her well-being and physical activity; not to mention the total recovery from her psychic depression, as well as all her

other symptoms. This was fifteen years ago, since which time there have been only occasional dietary lapses, which have quickly brought their own punishment.

Overweight is thought by some medical scientists to predispose to such serious conditions as heart attacks (*angina pectoris*), high blood pressure and diabetes. But now we see that such a theory amounts to charging one symptom of allergy against another.

Overweight does not *cause* hypertension; these two allergic conditions simply are often associated in the same allergic person, and the pulse-dietary survey stands a worthwhile chance to dispel the fraternal ailments together.

A disheartening pronouncement for women of excessive girth comes from the archives of psychiatry. They are told that overweight is a manifestation of a personality disturbance; a neurosis to be "treated" according to psychiatric procedure. Thus another allergic condition is being added to the list of "psychosomatic disorders."

If you are a fat man or a fat woman who may be tempted to consider that proposition, I strongly urge *caveat emptor*; first try counting off the pounds with your finger tips. Discover what thing or things are causing your body to retain the extra weight. Avoid them. And watch the pounds go by.

Epilepsy

The medical treatment of epilepsy is a sad chapter in modern medicine. You read of such symptomatic treatments as regulation of the bowels, "mental hygiene," and depressant or antispasmodic drugs, which lessen the seizures in some, but fog the mind in many others.

Relatives are advised to keep the sufferer at home as long as economically and otherwise possible, and when the breaking point is reached there is left only the hope-abandoned refuge of those institutions where 40,000 others wait either for the mental blackout or for death.

Mr. F. came to me for relief of his headaches, indigestion, stiffening joints and marked abnormal tiredness. He had an epileptic sister, and as a young man he had suffered grand mal seizures. But he was not aware of the numerous brief petit mal episodes which had been observed in him by his wife in the past 20 years. His major food-allergen is orange.

About a month after he had stopped eating orange, his wife told me for the first time about the epilepsy, and stated that the seizures had ceased. He has remained free thereafter, and all of his other symptoms departed at the same time. Incidentally, he lost 25 pounds of his overweight.

The next four cases came to me in the following year. These are described elsewhere in this book. The dramatic outcome in one of them (B.B.) is touchingly conveyed in the letter from his nurse to my friend S.

November 18, 1941

Dear S.:

But I have wonderful news to report. B. B. is cured under Dr. Coca's treatment. It seems like a miracle, but he really acts like another person. He had a "mumbling" of speech at times, and it was difficult to understand him. That has disappeared entirely, and he speaks very distinctly. He gets up in the morning happy and singing with a clear mind. He says he used to get up feeling confused. The other night he said he entered into a debate and found he

could think very quickly and clearly, which he could not do before. It was hard to think quickly.

He also played football the other day—he hasn't done this for years—and felt no ill effects—he says he is "as happy as a lark," and I am equally happy as I love the boy very much. He is a fine person; but he was doomed—and now he is well. It seems too wonderful to believe.

K.R. (nurse)

Note from "S":

"This epileptic boy has had a rather wide experience, having had brain-wave charts, etc. made, with many experts in New York and Boston before this food-allergy idea was tried."

Eight epileptic persons have been given this full anti-allergic "treatment," five having had the conservative sympathectomy, and these eight have satisfactorily observed the indicated restrictions. One of these, a "mentally retarded" boy of seven, after a year's daily consultations must be counted at present a failure.* In six the seizures are prevented by avoidance of the identified allergens, and they are controlled in the seventh by a small daily dose of dilantin, which was not tolerated previous to the sympathectomy.

Epileptic seizures can be prevented in the large majority of cases. But by far the more important conclusion from these experiences is that the cause of that dreadful affliction has at last been brought to light. It is "food-allergy."

*The failure of the pulse-dietary procedure in this case found explanation or parallel in the complete failure of the method in all of 14 cases of epilepsy that were thoroughly studied in Rockland State Hospital, N.Y. All of the 14 were also afflicted with a psychosis. The pulse-dietary method failed also in 6 other patients in the same institution who were subjects of dementia praecox and not epileptic. The damage caused by the psychotic localization in the brain thus appears to be irreversible. Such a condition, then, may be preventable but not curable.

Hives

Hives, the plain English word for urticaria, is one of the most widely known allergic conditions. Its medical treatment, as described in some standard text-books, reveals the general lack of knowledge of its cause.

Among the listed excitants of hives we do find foods mentioned, but only *certain* foods. One author warns especially against shellfish, strawberries, mushrooms, pork, nuts and, less urgently, cereals. Neither will he allow his patients to eat egg, "meats except lamb and poultry" (why these exceptions?), tomato, sweets, jellies, alcohol, tea or coffee. But such a list represents only a hit-or-miss shotgun selection.

Incidentally, his list of possible excitants includes table-salt (sodium chloride), which cannot cause any kind of allergy.

The books approve grandmother's castor oil treatment. They also offer vaccines, "alkaline diet," bicarbonate of soda and various drugs. But the most remarkable measure is the withdrawal of blood from the vein of the patient, and injection of it into his buttock. (And strangely this sometimes helps!)

One author concludes that the medical treatment is purely symptomatic and unscientific, and that every effort should be made to determine the cause.

Well, the pulse-method is the tool with which the cause or causes of hives *can* now be discovered, and the results of its use have been gratifying and sometimes astonishing.

Mrs. P., age 70, was the first sufferer from hives (dollar-size) to make her escape from this misery through the

pulse-counts. The pulse-speeding foods, all of which, one after the other, caused outbreaks of hives were beef, orange, banana, egg, olive, corn and yeast.

It is a mysterious fact that not all of an allergic person's food-allergens cause hives. J. C.'s allergens are wheat, sugar and coffee; but his hives were caused only by coffee. Wheat and sugar caused only migraine and indigestion. C. G.'s allergens are wheat and beef, but only wheat causes hives.

Foods are not the only excitants of hives. A. McC.'s rest was ruined night after night by outbreaks of huge itching welts. It is noted elsewhere in this book that as soon as dust-proof coverings were applied to her bedding the nocturnal attacks ceased.

Food-allergens

Long ago, the allergist Warren T. Vaughan reported that most allergic people blame their digestive troubles on the onion and cabbage. If his patient was allergic to egg the meal would "repeat" as he called it; but it was not the egg he tasted in that event, it was the harmless onion or cabbage he had eaten with it.

Now when we look through the records of 100 food-allergic patients and list the foods to which each was found allergic with the use of the pulse reaction, we find that the most frequent excitants of the food allergies are just the commonly eaten foods. This is indicated in the table on page 102.

Since these figures tell the number of affected persons among 100 tested, and since about 90 percent of the population are victims of food-allergy, the figures represent

tary additional "pulse pressure" on the system, which increases the basic diastolic pressure up to 110 to 116 millimeters (4# to 4% inches) of mercury. This is called the systolic pressure.

These two pressures are those found in the heavy-coated arteries. The pressure in the more thinly walled vein is usually unaffected by the pulse, and is much lower.

The blood pressures recorded in medical practice are those of the arteries in the upper arm, and taking as an example the figures of Dr. Howell, they are noted like this—116/75.

The figures of Dr. Howell are surely within the normal range, yet the limits of that range have not been determined. The reason for this is that abnormally high blood-pressure is found in so large a proportion of adults, and even in some children.

Thus there have been no standards against which to judge whether a systolic pressure of 140 may actually represent the maximal figure of the normal range as some assume, or is a truly abnormal pressure. That is, whether it is always evidence of early hypertension.

It is not important to the individual's immediate health to decide whether a systolic pressure of 140 means the beginning of hypertension or not; because that and even considerably higher pressures can be tolerated indefinitely in almost all persons without the slightest risk. Nevertheless, the allergic patient with a pressure of 140 who is seeking relief from his itching eczema and migraine is agreeably impressed to see that pressure drop to 120 or even lower as his other symptoms disappear after he has eliminated his food-allergens from his diet.

"Average" blood pressures have been determined by numerous physicians in large groups of individuals; but no practical use for such averages has come from those studies. This is because hypertension was found in all groups in all circumstances of age, sex and season. And even opinion concerning the significance of pressures greater than 140 in student groups was evaded with the remark "only time will tell what it is." Well, time has now caught up with the question, and the answer is in your pulse rate.

The idea that high blood pressure can be a consequence of "food-allergy" did not come to me out of the blue. It did not come as a "hunch" which I proceeded to investigate. It arrived as a kind of *fait accompli* out of routine examinations of the blood pressure before and in the period of the dietary treatment of allergic symptoms in two patients.

The first readings were not high enough (136, 140) to rate as indications of hypertension; but the pressure in the first case was distinctly higher than it had been on all the many occasions of earlier examination in that individual through his adult life of about 40 years.

That fact stirred his curiosity, but only faintly, until after the exclusion of all his food-allergens of the moment the pressure dropped about 20 points, and remained there. When the same sequence occurred in the second patient the idea was born, and the chase for proof was on.

These two cases might be significant, but more definite proof was required.

First, the pulse-dietary procedure had to be applied in an undoubted case of hypertension; that is, one of suffi-

cient duration, in an elderly person with a blood-pressure greater than 150/90.

I found such a case in Mrs. E. A., 60 years of age. Her physicians for some time had warned her of her high pressure, which sometimes reached 198/120. Sixteen days after avoidance of her major food-allergens the pressure was 112/78.

Second, resumption of the eating of the food-allergens must be followed by a rise in the pressure. This happened also in the case of Mrs. E. A. who abandoned her dietary restrictions on the 23rd day. On the 26th day the pressure was 138/104. Return to her restrictions was again followed by a fall of the pressure, which gradually arrived at 114/74. Then she began eating one of her allergens, wheat, and again the pressure gradually increased to 142/84.

She finally decided to be "good." She stopped eating wheat, and in the next month the pressure sank gradually to 124/72.

Third, the relief of the hypertension that follows the anti-allergic regime must hold as long as the treatment continues, and for at least three to five years. The treatment of Mrs. E. A. began decades ago, and in spite of the steadily increasing demands on her energies in the making of fine candies, she feels and looks better than ever, and her pressure remains in the lower range, subject only to occasional minor lapses in her restrictions.

The latest figures taken are still 124/70.

Fourth, the treatment must be regularly effective depending on the identification of all the allergens. This requirement was met in six other cases. It was not met in

the two persons in whom the allergens were not all identified.

Fifth and finally, the proof which was gathered in the foregoing experiences had still to be tested by other competent unprejudiced observers. This also has been done. At first independently, by Dr. A. Sumner Price, whose report appeared in the *Review of Gastroenterology*, and later by Dr. Milo G. Meyer, reporting before the New York Academy of Sciences.

How can allergy cause hypertension?

For one-half of the answer to this question we turn to the classical experiments of Dr. H. Goldblatt, which have been solidly confirmed. With the use of a specially designed small metal clamp Dr. Goldblatt compressed the artery supplying the kidney of the dog so that the flow of blood through the organ was not stopped but only slowed. The clamp was left in place for the remainder of the period of observation.

If the flow was moderately retarded, the animal's blood-pressure was moderately increased. If the flow was still further retarded the blood-pressure rose still further, and there followed arteriosclerosis (hardening of the arteries) in different parts of the body, which is seen so regularly in the late stages of human hypertension.

Hypertension could also be produced in the dog if the blood current was slowed by compression of the kidney itself with a sac placed about the organ.

Now this promising line of research ended temporarily in a blind alley because laboratory scientists could not imagine any natural, physiological cause of the compression of all the blood-vessels of both kidneys in the hyper-