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A GOLDEN OPPORTUNITY

ANNOUNCING in August last that rationing of rice was to be introduced in the city of Madras in 2 or 3 weeks, Sir H. M. Hood, Adviser to H E the Governor, in-charge of the Food Department, informed the representatives of the Press who had assembled in conference, that the quality of rice supplied would be the "war variety." This led to considerable misgiving in the public mind at the time, and some people even went to the length of paraphrasing "war quality" as "bad quality." Rationing has since been introduced in the city and the quality of rice now supplied is of a passable variety. If the Government can continue to supply the same quality of rice till the next crop comes to the market, the citizens of Madras will have no reason to grumble.

But it is the fear of many people that the government will not be able to continue the supply for long. There are others who predict that either the quality of the rice supplied will deteriorate in course of time, or that Madras citizens will have to face a shortage by way of reduction in the quota now allowed, as has been done in Bombay and other places. The intention of the

government to purchase the forthcoming *Kuruwai* crop outright is cited in support of the first. There may be a few people, as the one who had the audacity to proclaim from the platform of the Tanjore Delta Mirasdars' Conference held recently, that the *Kuruwai* rice is much more nourishing than the *Samba* or other varieties and that the people do not take to it because of the prejudices and wrong notions that had taken deep root in their minds, that that variety of rice is as good if not better than others. If it possesses such superior qualities, it is worth asking if it forms part of the dietary of this nutrition expert! An ounce of example is better than tons of precept.

The total quantity of rice consumed by the people of this country has been estimated at 28 million tons, while the total production on an average is 26½ million tons, leaving us on the deficit side to the extent of a million and a half tons, which we were making good by imports from Burma, Thailand and other places. These countries have, unfortunately, fallen victims to the imperialist designs of the military junta that holds sway over the land of the rising Sun. We have therefore been

left to shift for ourselves with our own resources. This deficit has to a certain extent increased owing to the slightly improved economic conditions in the village-side which have induced many villagers to indulge in the luxury of consuming more rice than before. But rice is not the only staple food of the people. Millets such as jowar, bajri, maize and other grains occupy an important place in the dietary of a large section of the people of this land.

It is with a view to equalise production to cover the actual needs of the country that the "Grow More Food" campaign was inaugurated and is being carried on at considerable cost to the exchequer. But beyond providing safe and sound berths to a certain number of lucky people, it has turned out, in the words of Dr. Shyam Prasad Mukherjee, ex-Finance Minister to the Government of Bengal, a colossal failure. "The rations now allowed to the people under schemes at present in operation", says Dr. Aykroyd, "are all very low even when compared with the customary intake, and the food shortage is likely to have a bad effect on public health, particularly in certain areas." He considers the "Grow More Food" campaign a great waste of energy unless carried on on proper lines. We agree, and the basic plan should be conceived in a spirit quite different from the one which activates the sponsors of this movement, and the people now placed in charge of organisation should give way to others, brainy and activated by the spirit of service to their fellow country-men and country-women. But this is only by the way.

We are face to face with a large deficit in one of our staple food crops. Thanks to the indulgence in unusual luxury by the countryfolk as a result of slightly improved economic conditions and increased production in areas originally given to cotton and ground-nuts, we have more than our actual requirements of millets; the health of the nation is deteriorating as a result of the present rationing schemes. How to adjust ourselves to this new wartime condition, without in any way impairing the health of the nation? This might appear a riddle to

many people; others might be inclined to think that it is the government that should find the proper solution. We have had enough experience of the government's ways. The war has made them more autocratic than ever. It is no good depending upon others for what we can do ourselves. A little imagination, a little devotion to duty, a small sacrifice of the fondly held and long cherished prejudices, these will go a great way to solve the problem thoroughly satisfactorily.

Vegetables, fresh and leafy, have more nutritive value than staple foods and cereals which occupy a prominent place in our dietary. By consuming more of the former, we can insure ourselves not only against diseases but also help reduce the consumption of staple food-stuffs. It will be within the recollection of our readers that there was a hue and cry sometime back that the prices of vegetables had gone up by leaps and bounds, beyond the reach of the average citizen. The position has not improved since. Why cry for ghee when we have butter on hand? By becoming our own farmers, by digging for victory, as Great Britain did in her dark days, people possessed of even a postage-stamp or park-sized plot can help themselves to a great extent. "The reward in a few short weeks will be a household self-sufficiency of vegetables. And now that vegetable prices are ruling high, a house-grown crop will also represent a tangible saving." "The wide variety of vegetables in popular demand," says Mr. D. A. Thomas in *Mysindia*, "require little care and attention. Certainly less than more exacting flowers. A plot of land, an initial period of preparation with a little cheap manure, a daily douse with a watering can, the occasional use of a hoe, and it will be astonishing how bountiful nature can be in all seasons. A 100 pounds of peas will grow on a 1000 sq. feet plot, ladies' fingers springing up within six weeks will yield 100 lbs. for every 1000 sq. feet planted, a quarter of an ounce of tomato seed will do for a 1000 sq. feet to give 200 lbs. of fruit, a quarter of an ounce of brinjal seed does for 1000 sq. feet bring 400 lbs. of brinjal to your kitchen" and so

on and so forth. What is required is the will to do, and more greens will, according to authoritative opinion, contribute to a marked general improvement in the health of the nation and help also to minimise the consumption of staple foods.

There is one other direction in which we can not only help ourselves but also help others. We have more of millets available for use at the present time. But, unfortunately, many of us here in India, have become slaves to our usual dietary, that even the very thought of making a change in it makes us uncomfortable. But, as has been aptly said, necessity has no law or custom. We have to brush aside age-long prejudices and dislikes and take to wartime diet. If only we can overcome them, if only

we can help necessity assert itself, if only we can give a honourable and important place to millets in our dietary, we can be sure of immense benefit to ourselves. We can also help solve the problem of the shortage of rice to a very great extent.

The war has afforded us the unique opportunity to effect a radical and beneficial change in our dietary and make it a really balanced one. Can we let this golden opportunity slip from our hands? Let us avail ourselves of it, let us give our obstinate prejudices the go-bye, let us give the age-long and cherished habits a decent burial. By doing so, we can not only surmount the present difficulties but also lay the foundation for a strong, vigorous and healthy nation, safe and sound.

Religious Habits and Superstitious Beliefs Among Hindus

SCIENTIFIC PRINCIPLES INVOLVED

IT is a known fact that in the name of religious beliefs and superstitions certain habits are observed by the Hindus. They are very healthy ones based on scientific principles. Here an attempt is made to explain a few of them. More research in clarifying the meanings underlying these habits and customs is needed and is well worth the trouble and energy.

I. Ekadasi Fasting and Dwadasi Parana.—Fasting (complete fasting) for one full day once in 15 days i.e., on every 11th day beginning from the New Moon or Full Moon day is a very healthy habit observed among the Hindus. Fasting cleanses the body of its impurities, by the extra fat of the body being used up (oxidised). It allows one full day's rest for the stomach, intestines and the organs of digestion. Those who observe the Ekadasi fasting are mostly rice-eaters. In them there is the possibility of liver cells being destroyed and the onset of diabetes by the continued overloading of starchy food, and the consequent derangement of the glycogenic function of the liver. This fasting once in 15 days from the early age acts as a preventive against diabetes after about the middle age. Even if some food is allowed in the case of weak persons and children on Ekadasi days, generally *uppumavu* (உப்புமாவு) (made of wheat) or *usuli* (உசுலி) (rice cooked with field gram dal, both being fried before being cooked) is taken. Probably this is because of

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the fact that mere rice diet should be withheld at least once in 15 days in the case of rice-eaters to prevent diabetes in old age.

The breaking of the fast by the early morning meal the next day and the use of *Agathukerar* (அகத்துகேர) in the meal is very important since that acts as a laxative. A mild laxative after the fast is good to health and is a necessity.

II. Bhoghi and Pongal.—The meaning of the thorough cleaning of the entire household by whitewashing, etc., as a preparation for the receipt of the newly harvested grains during the observance of the Bhoghi and Pongal festivals need not be elaborated as it is an age-long custom. It appeals to everybody's commonsense that the house should be made clean to receive the newly harvested crops.

III. The habit of performing *pooja* and *bhagana* very early in the morning during the month of "Margali" (*Dhanurnasa*—December) and the use of *Huggi* (ஹுக்கி—rice cooked with field gram dal) as *prasadam* is a healthy habit. Due to the frost during this month the body is to be prepared not only to fight the cold, but also to maintain body temperature. This is effected by the taking

in of more fatty food (as more ghee will have to be used for taking *Huggi*). This fatty food is taken in. very early in the morning (before the day dawns) after the morning exercise of walking through all the streets of the village with the early morning *Bhajana* party.

IV. That our ancestors had very clear ideas about electricity and had framed or chalked out their habits in such a way so as to preserve body electricity can be seen from the following:—

The religiously inclined people wear their dhoti (undercloth) in such a way that no corner of the dhoti is tapering towards the earth, and care is taken to see that every corner is girdled round the waist. i.e., *Panchalatha*. Generally the dhoti is of cotton, which is a good conductor of electricity. This device of wearing the cloth is to see that the body electricity is not conducted away, from the hip through the good conductor, i.e., cotton undercloth, and is gravitated to the earth, by avoiding the tapering of the corners of the cloth towards the earth. Moreover it is the rule that only silk bordered cloth is to be worn. Silk is a bad conductor of electricity and hence the silk border in the cloth will prevent the leakage of body electricity. It is only for the property of bad conductivity of electricity, that silk cloth is asked to be worn during religious functions as *Sandhyavandanam*, etc (Prayers).

The mechanical energy of the physiological working of the heart, lungs, etc., is converted into electrical energy. The positive pole of the electricity of the body is in the head and the negative pole in the foot. Hence it is the saying that one should not lie down, for sleep during nights, with his head towards the North Pole, since it is thought that the magnet of the North Pole may attract the body electricity from the head (positive pole). This will not be the case if the foot (negative pole) is shown towards the north during sleep at nights.

The idea of sitting on a plank or on a deer's skin during religious observations or when taking meals is explained as follows:—It is thought that more electrical energy is generated during the process of concentration of mind in prayers and religious functions and also during the process of eating food. In order that this electricity is not lost to the earth by sitting on the bare ground during these processes, the plank or the deer's skin or tiger's skin is used to sit over. If we look into the puranic stories we find that the rishis who went to perform penances in the forest were wearing clothes made out of the bark of the trees (*varq*), showing thereby that they were taking every care not to waste their body electricity (which they were getting by their penances) by protecting themselves with a nonconductor (wood being a bad conductor of electricity) immediately next to their skins. Even Sri Rama with Lakshmana and Sita went to the forest with *varq* showing not only simplicity but also as a protection from loss of body electricity.

Aswatha Pradakshina.—The going round a fixed number of times a day for a specified

number of days (48 or 24 days) the *Aswatha* tree (*Ficus Religiosa*) is one of the *wrathams* prescribed to be observed for the cure of a variety of ailments, etc. The worshipper of the tree is taught that Lord Sri Krishna is in the tree in the shape of "Aswatha Narayana," and thus the worship of Him in the tree aids the cure. All this power of this *Aswatha* tree is due to its capacity of attracting highly powerful electro-magnetic waves from the atmosphere and imparting it to man or woman who goes round and round the tree during its worship. The *Aswatha* tree is a big one with many branches full of leaves. Its leaves have got a great network of veins. Its dried fallen leaves will show its venation, by the body of the leaf being like a wire gauze. Each leaf has got a long tapering tail, the length of the tail (hair-like) being equal to the length of the body of the leaf itself, unlike the leaf of any other tree. It is thought that particular trees have got particular affinity to attract particular kind of electro-magnetic waves from the ether (atmosphere). It is found that the *Aswatha* tree is able to attract highly powerful electro-magnetic waves from the atmosphere and is able to store it in its barks, twigs, branches and leaves. By the time a person (male or female) goes round and round the tree 10 times (during worship) in the morning hours, the electric energy contained in the tree passes to the head of the worshipper through the long tapering tails of its multifarious leaves. The great network of veins in the leaves facilitates the passage of the energy through the leaves.

It is to be presumed that the electrical energy imparted by the *Aswatha* tree to the worshipper is too strong for him/her to bear and hence it is advised that a *Margosa* tree (*Carissa indica*) should be grown in close contact with the *Aswatha* tree so that the latter's electricity may be diluted a little. It is said that the *Aswatha* tree is to be married to the *Margosa* tree and we see that this marriage function is celebrated after the *Aswatha* tree grows a particular height. By the worshipping of this combination of *Aswatha* and *Margosa* trees the following advantages are gained. The electric energy imparted by the *Aswatha* tree is a good tonic to the muscular and nervous systems of the body. The air of the *Margosa* tree has got the antiseptic, blood-purifying and digestive qualities. These qualities together with the exposure of the body to the ultra-violet and all the other rays of the Sun, combined with physical exercise involved in the *pradakshina* (going round) and *namaskarams* (lying prostrate number of times) acts as a tonic to the circulatory, respiratory, digestive, nervous and muscular systems of the worshipper and effect a cure to the convalescent patient of any disease. There is the saying that this *Aswatha pradakshina* cures a woman of all her minor ailments and thus enables her to become pregnant.

We will not be far wrong if we understand that the use of the twigs of the *Aswatha* tree (*Aswatha samith*) in the sanctoral fire during religious functions is only to cause, to liberate the pent up or latent electric

power, stored in the twigs, and utilise them to the advantage of the person or persons who perform those functions in the presence of the fire. In fact every *Brahmachari* (bachelor) must have beside him and always carry the twig of Aswatha tree during his period of study of Vedas as a sort of protection. These great powers of the Aswatha tree can be comprehended, when it is explained that the fine filaments used within the electric bulbs if made of Aswatha bark or twigs, can withstand higher volts of electricity better than that of platinum filaments now in use. (Platinum is a metal precious than gold)

Our ancestors have not explained these scientific principles involved in their customs and habits but have handed them down to us only in the *Guru-sishya-bhavam* then prevailing (i.e., whatever the *Guru* teaches and orders, the *Sishyan* (disciple) will have to follow without questioning, the why and wherefor) But now-a-days, unless everything is explained in the light of scientific knowledge, the question of blindly following will have only a remote chance, though the custom or habit may be a good one. Hence in order to see that the very good things in some of the ancient customs and habits may not be lost, research should be made, and their scientific meanings explained to all.

The Thulasi plant (*Ocimum sanctum*) is a precious one and the Varshnavites value it most. The Madhwa Brahmins after their pooja wear the Thulasi leaves in the pit of the helix of the ears. It is said that the rule is that 9 (nine) Thulasi leaves is to be taken internally every day along with the *thirtham* and otherwise. Thus it will be found that Thulasi leaves are to be used internally and externally also. Some wear the rosary, made of the beads of Thulasi, round their neck. These prove that they had known well the antiseptic and antiparasitic properties of Thulasi. The presence of Thulasi plants round a house prevents the high incidence of mosquitoes and thus of malaria. Dead-bodies can be preserved or the putrefactive changes in them can be far delayed if preserved in fields full of Thulasi plants.

So we find that the internal and external use of Thulasi protects the body as a talisman for health.

The practice of not permitting marriages of boys and girls of the same *Gothra* is a very

sound and scientific one, in as much as different bloods are classified in the name of *Gothras* from ancient times and the same blood is not permitted to be mixed to create weaker progeny.

The practice of forbidding one from having oilbath, or a shave or intercourse on an Amavasa (New Moon day), Pournami (Full Moon day) or Ashtami or Navami day is sound, healthy and scientific because of the following reasons:—The gravitational pull of one planet exerting over the other planet is greater on certain occasions when the planet is powerful. So also the Moon exerts its gravitational pull on the earth to a larger degree on the New-Moon and Full-Moon days and also on the 8th and 9th days of its progressing or declining phase. The effects of this gravitational pull is seen by the high waves of the sea on those days. Its effect on the human being is manifested in the form of commotion of body fluids creating a negative phase in the health of the individual. It is only for this reason that there is a negative phase in the physical health of the individual on those days that the above things, which will further increase the negative phase, are forbidden. These acts are also forbidden, during those days when there are changes in the course of the Sun as summer-solstice, winter-solstice, spring-equinox, autumnal equinox, etc. The same reason of one planet exerting its influence over another planet or over the earth and creating critical period in individuals has led to the saying that one should not undertake a journey or any auspicious thing on his *Janma-nakshatra* day (the day when his birth star comes).

The old habit of getting up from bed very early in the morning at 5 A.M. (I.S.T) (i.e., at 10.45 P.M. local time) and walking a distance of at least about 2 miles) to go beyond the village proper to distant fields to attend to nature's calls and after ablutions, having a river bath is a very healthy one. This walking early in the morning when there is much ozone in the air does much good. Then the river bath not only cleanses the body but also electrifies the same in as much as this water contains dissolved in it the electric energy of the ultraviolet, infra-red and all the other rays of the Sun throughout the previous day. This energy is lost if the bath is taken at a later hour.

Falling Hair

If the falling hair is not a hereditary familial transmitted tendency, then most probably it is due to poor circulation in the scalp. Most falling and thinning hair experience is due to this lowered nutritional state of scalp and hair roots. With some persons this condition is associated with lowered thyroid functioning. The best way of improving scalp circulation is to massage the scalp with a big handful of moist salt, followed by washing the salt out, and drying. Repeat this about twice weekly. The skin and hair must be nourished from the food we eat. If this food is short in supply of vitamins A and B group, together with the shortage of minerals, then it is not possible to have well-nourished hair. For this reason, it is advisable adding to the diet an extra supply of A and B group vitamins in the form of tablets or capsules. If the scalp is dry and scaly, use some fresh almond oil.—*The Oriental Watchman*.

HYGIENE and AGRICULTURE

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HYGIENE and Agriculture—this combination might rather at the outset seem paradoxical, but if we just probe deep, it will be apparent that it is not so and that both these subjects go hand in hand, and that one cannot exist without the reciprocity of the other.

The Public Health Department can be taken to be the preventive side of the chain, whilst the Education and Agricultural Departments the other side of it. This Department takes care to see that people are immune to diseases by teaching them the modes of prevention and precaution. To understand these principles of health, one should have some amount of knowledge and this knowledge has to be infused by the Education Department. Further, health cannot be assured unless one has sufficient food to eat and nourish his body, and this deficiency has to be filled up by the Agricultural Department. Thus, it will be seen how the activities of the Public Health, Education and Agricultural Departments are interwoven and that it is these departments that can contribute much for a healthy nation.

The problem of food control and the disposal of night-soil being the top and lower ends of a chain have to be tackled in right earnest by these departments as well. In India the large number of bowel complaints are mostly due to the promiscuous defæcation and contamination of water sources and food supplies. These complaints increase with the number of persons infected by drinking such a contaminated water. Leaving the food problem to agricultural experts to unearth, I would confine myself to the modes of disposal of night-soil, which would prevent these bowel complaints and would also be a remunerative enterprise. A number of forms of disposal of night-soil are adopted by local bodies to suit their own conditions. But there are generally three methods in vogue, namely: (1) By trenching (burying in the soil); (2) by complete burning (incineration); and (3) by water carriage system at dumping depots. Of these the most common method employed is the trenching system, that is by burying the night-soil in trenches dug out in the ground. The action involved in the trenching system is that the nitrifying bacteria which are abundant in the upper layers of the soil, split up the organic nitrogen in the night-soil into nitrates. Hence shallow trenches providing for half a foot of night-soil to be thrown and covered up with earth would answer the purpose very well. After a few months these trenches are dug out and the night-soil powder removed and sold as manure for lands. In certain other cases, the trenching ground itself is leased out to cultivators in plots, who utilise them for growing crops, so that while one plot is under cultiva-

tion the other is being trenched. This night-soil manure has been a good source of income to local bodies, especially in areas where lands are fed by canal water.

Of late a number of improvements on this system of disposal of night-soil have been made, to evolve the best kind of manure. As long ago, as the Year 1930, the Royal Commission on Agriculture, observed that proper attention was not paid to the improvement in the quality of manure, due to which there was a set-back in the agricultural produce, and opined that what is known as the "Nasik System" of preparing manure should be adopted everywhere which would improve the quality and quantity of agricultural products. Doctor Gilbert Fowler of Bangalore went further into this system and evolved an improved process of his method which came to be known as the "Fowler System". This system is being followed throughout the Mysore State with excellent results. Let us consider what this "Fowler System" is. By this method, all the rubbish and the night-soil from the town are taken to the trenching ground. There rubbish is placed on the ground in a circular form at several places, to some height, leaving the centre open. In this central place night-soil is thrown and covered with rubbish. Drain water or any other water is sprinkled over the heap to hasten decomposition and left there for a week without being disturbed. After one week these heaps are raked and again allowed to decompose for another week. By this process of raking and sprinkling of water, air is allowed in the stuff for the aerobic bacteria to act. Finally after six weeks, the best quality of manure, rich in nitrogen and phosphate contents, is got. This "Fowler System" of the preparation of manure is otherwise known as "Compost System" to which much prominence is being given now.

In our own province during the year 1935, the Government in the Public Health Department desired that this Compost System should be adopted by each and every local body. Several municipalities took up to this order in right earnest, and the Compost System of manure was prepared. But, it was not encouraging to them, as no market value could be got for it, but, on the other hand, they found that they were foregoing what income they were getting from the trenching system and so had to abandon it. This was due to the fact that agriculturists were unaware of the utility of compost manure and further had some unknown superstitious objections as well.

The present drive for 'Grow more food,' in as short a time as possible has again given a flip to the Compost System. The Government have now come up with a scheme, for which

the Imperial Council of Agricultural Research has sanctioned a grant of Rs. 16,000, for the training of officers of the Agricultural and Public Health Departments for a period of four months in the Bangalore process of making compost out of town refuse. It is likely that this training would commence from October 1943. The object of the Government is to provide cheap manure on a large scale for food crops in this province. It is hoped that with this supply of manure there would be revolution in the production of food crops and that apart from our needs in Rayalseema and elsewhere, we would be

able to supply food in abundance to stricken Bengal, and relieve the food scarcity in India as well. The Public Health Committee of India which would also meet shortly will have a chance of watching our experiments and giving their opinion in this matter on the information they gather in the various provinces of India.

Thus, it will be seen how the subject, "Hygiene and Agriculture" is no other than our popular adage "Health is Wealth" and how these departments are inter-related and how any contrary impression formed is erroneous.

NITYA NAMASKARS.

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SHOULD we daily perform *Suryanamaskaram*? Can we eschew it without prejudice to our health? I shall answer the second question first "Can you at all guarantee 100 years longevity and health and efficiency?" This has been my first question to every gentleman I happen to meet. "Surely" was not said by any. We are prepared to hold out a guarantee to any public worker of honour with an earnest money, if so desired. There is none that loves not his own life. Many are afraid of death. What we guarantee may be absurd. But it is none the less true. Let every good soul begin the *Namaskar* practice at once to test our faith, if for nothing else. Can we pull on well without *Nitya Namaskars*? No. The Sun is the source of all energy for the whole world. Nay, it is the channel of God's energy to man. The worship of the Sun, if intelligently construed, makes the purest form of monism. Breath is the fly-wheel of the life-machine. The efficiency of breathing is the strength of human life. Breath is the oil of the lamp of life. In view of this primary secret our *Vedic Rishis* have given the place of honour to *Pranayama*. Every single *Namaskar* exercise begins with breath-control among others.

The *Byaksharam*, as loudly called out, tones up the internal organs from the brain down to the anus to the pitch of their highest efficiency. The various postures of each *Namaskar* do palpably wake up every muscle into evergrowing efficiency so that no foreign matter can take shelter in any corner of the flesh or blood. A refreshed life of

sprouting energy is the immediate reward. We, therefore, should not give up this ancient system, perfect yet simple exercise.

Soon after the *Namaskar*, appetite increases, stimulating relish even for the simplest of foods. This relish, while promoting the digestive efficiency, diminishes and expels foreign matter from the body.

It is therefore unwise for any man or woman to neglect *Namaskar* exercise any longer.

To establish an unassailable case for the *Namaskar* exercise I cannot do better than invite people's attention to the good example set by the elderly ruler who has published a splendid treatise which is worth its weight in gold. He sells it for the ridiculously small price of Rs. 1-2-0 each. As a ruler of a State, this pious Brahmin has developed early in life all the graces of a ruling Kshatriya, while as an orthodox Brahmin he amply exemplifies the virtues of a Brahmin as the Blessed Gita-covets. He is a graduate and a great scholar in Marathi. He is an utter stranger to even a passing shadow of head-ache. Not only himself, his wife and sons, his ministers and officials, but all the people of his State, all girls and boys of the State schools daily perform *Suryanamaskarams*. What makes them do so? Are we wiser? Are we above rank and status in health and efficiency than this whole galaxy of people.

Begin *Namaskar* exercise at once. Live in peace for a century and gently sleep away to awake at a higher and nobler birth.

Things that Make for Health

"Food-Reform is only a part," writes W. A. Sibly, M.A., J.P., in a noted vegetarian journal; "albeit an important and personal one, in the great crusade for the attainment of more natural, healthful, peaceful, and just conditions of life everywhere. Let us obey the laws of exercise and rest, delighting ever in cleanliness and beauty and sunlight and pure air. Let us cherish laughter and contentment and good fellowship, and above all enduring faith in God."

—Good Health.

THE NORMAL DURATION OF LIFE

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VARIOUS formulæ have been advanced to estimate the normal duration of life.

Many of these formulæ are based upon the length of time required to attain complete height, usually 21 years, or upon the male and female climacteric, about 45 years. Some scientists have taken Shakespeare's seven ages of man as their starting point, while others have made arbitrary divisions in the cycle of life. Some have made the comparative size of individuals or a comparison between the average size of humans and lower animals the basis of their calculations. Most, however, use the relation between growth and length of life in the lower animals as their basis for estimating the normal duration of life in man.

There is one intrinsic error in all estimates based upon the period of growth in height in the human individuals. Cessation of growth in length in man is not cessation of development, and the commonplace observation that we need a larger hat, larger coat, larger gloves and shoes at 30 than we did at 20 is evidence that we continue to grow in all directions except height till 30. We stop growing in height about the twentieth year because the spinal column, which is almost straight at birth, is forced into curves. There are irregular pillows of cartilage between the bones of the spine and in the erect position the downward pressure throws the spinal column into a series of curves. We know that we are taller upon arising in the morning, when this downward pressure has been released, than when we have been standing all day. If we were quadrupeds without the downward pressure upon the intervertebral cartilaginous discs, we would probably continue to grow in what would then be length until about the thirtieth year. There are other evidences that development continues until about the thirtieth year. The heart attains its maximum normal size, so also the lungs, which at thirty have their maximum normal respiratory capacity, and metabolism is stabilized. The development of mentality follows a different, more complicated, individualized course but, aside from this, which has little influence upon the normal duration of life, the biological changes from birth to the completion of development are quite uniform throughout the human race. About the middle of the period there occurs a major climacteric or critical period called puberty, during which profound biological changes take place. They are, however, anatomical and physiological changes intended primarily to activate functions concerned in reproduction and incidentally stimulate the progress of development.

Following the period of development comes the period of maturity which should last as long as the preceding period, thirty years. During the developmental period the repair

processes exceed the processes of waste; anabolism exceeds catabolism. At the peak or close of the period of development the processes counterbalance each other, and metabolism remains stable during the period of maturity. But while the relation between waste and repair remains fairly constant, the high biological level reached at the close of the period of development is maintained for only a short time. After a few years evidences of bodily and functional regression appear which in time and extent may be extended or retarded by our mode of life, by disease and probably by hereditary factors beyond our control. However, the anatomical and functional decline in the early period of maturity is not the same as observed in the third period, that of decline which closes in senility and ends in death. We cannot determine, with the present means at our command, at what point in the individual the peak of complete development is reached nor at what point decline begins. Some scientists declare that there is no stop in the normal cycle, that having reached the zenith, life begins instantly its downward journey toward the end. Those who take this view divide life into two periods, development and decline, and while some fix the culminating point at about 35, others make the menopause in the female and the male climacteric, about the 45th year, the turning point.

Many persons appear to continue to gain throughout the pre-climacteric period of maturity. This is not a gain in vital structures or functions as occurs during development but in the accumulation of fat in regions where the fat deposit produces a more rounded figure and the appearances of continued growth and development. It has been shown that heart and lung activity is diminished in thin and obese persons alike, soon after the peak of development has been reached, and that the accumulation of fat in maturity is due to excessive intake of fat-producing foods and not enough physical activity to consume the excessive fat produced. We must remember that throughout life there is tissue waste produced by physical activity and the greater the activity the greater the waste. This is well illustrated in the loss of weight during a strenuous race. Even in deep sleep there is the continual activity of the heart, lungs and blood vessels and the occasional activity of the legs and the rest of the body when twisting or shifting the position of the body. In early life when the repair processes are more active than the waste processes, except during the short time when extraordinary work like a race causes excessive waste, the repair material replaces the waste material in kind and adds additional material required in the process of growth.

The period of maturity is broken, about the

45th year, by a major critical period, the menopause in the female and the male climacteric in the male. During this time profound changes occur, much more rapidly and extensively in the female but, as with the changes in puberty, affecting primarily the organs and functions concerned in reproduction. In the normal cycle of life, the metabolic processes are fairly stable until this climacteric occurs, but after the menopause the waste and repair follow a different course. The waste of the reproductive organs is not repaired in the same kind of tissue, and the diminished muscle waste due to lessened activity is replaced by excessive fat production. There is usually little to indicate the climacteric and post-climacteric changes in the male during the period of maturity. The individual himself feels that he is slowing down though unwilling to acknowledge it to others and even to himself. This slowing down diminishes the waste but the repair processes are also slowed down and the normal relation between the two processes is still maintained. Along about the sixtieth year this relationship is broken and the period of maturity comes to an end. From now on there is a definite decline in the rate of anabolism, there is no longer complete repair of the waste, and repair material may be of a lower order of tissue. Here is a specific example familiar to every housewife. The lower end of the breast-bone of the fowl is soft in a young fowl and becomes hard in the older bird. An identical change occurs in the sternum or breast-bone of the human being. The xiphoid process consists of soft cartilage in youth. In this as in all other tissues continual waste and repair are going on, the repair material being of the same organic tissue as that which has been undergoing disintegration or waste. But toward the end of the period of maturity some of the waste cartilaginous cells are no longer replaced by new cartilaginous cells but by bone cells. This continues throughout the period of decline until the xiphoid process has been converted completely into bone. We cannot test the hardness of the breastbone as the housewife tests the hardness of the bone in the fowl but we test it by trying to press back the xiphoid process. As the individual becomes older the bone becomes harder, there is less "give," and finally it becomes part of the bony structure. Changes like this go on throughout the period of decline.

This period of decline lasts or should last as long as the preceding periods and is broken about the middle by a demonstrable critical period called the senile climacteric. Now metabolism is no longer stable for while the processes of waste continue as before or become more active, the repair processes are diminished and some tissues are repaired by a lower grade of tissue. Muscle waste may remain unrepaired or is repaired by fat or cartilage. The waste of fat remains unrepaired or is repaired by a small amount of fat which is sometimes deposited in unusual places. Cartilage hardens and may become ossified or turned into bone, as in the xiphoid process. Ligaments, too, harden and these with the hardened cartilage on the ends of bones cause stiffening of joints, which is so evident when old persons move about or when arising from

a sitting or lying position. There is unrepaired waste in vital organs and glands and consequent lessened functions, while the blood vessels become hard through the deposit, as repair material, of fibrous tissue and later lime. This hardening sometimes begins in early life, when blood vessels should have the softness and elasticity of a soft rubber tube. Late in life the hardening and consequent loss of elasticity, cause a diminished flow of blood to the organs and tissue, impairing their nutrition and determining their consequent waste, which is part of the process of aging. In bone the impaired nutritional supply to the osteoblasts or bone corpuscles in the minute structure of the bone causes their waste and the bone becomes more brittle and is easily broken, such breaks healing with difficulty.

Thus from the time that metabolism is disturbed at the close of the period of maturity there is a slow, gradual and constant disintegration of tissue which is not repaired or is repaired by lower grade tissue. This tissue waste and consequent diminished functions cause the phenomena of old age.

About the middle of the period of decline there occurs the senile climacteric which is followed by senility. The senile climacteric does not present the profound objective changes seen in puberty and the menopause and male climacteric but soon after it occurs there is noticed a marked change in mentality, a rapid diminution in strength and activity and often in weight. There is also a distinct approximation of the sexes in appearance, thought and some biological factors. In the male there is loss of hair and an increase of fat in the face producing a coarser facial expression. There is usually a deposit of fat about the breasts of the male. The accumulation of excessive fat in the abdomen of the male and upon the buttocks of the female during the early period of decline disappears after the senile climacteric. The gradual weakening of the body and mind during senility is due to lessened innervation. What changes in nerve structure occur in the process of aging is undetermined but we know that the functions of the nervous system are gradually weakened to the point of complete inaction when cessation of all vital functions results in death.

Little has been said about mentality as a factor in determining the normal duration of life. The brain, like other organs, degenerates, its functions deteriorate and its physical control of all organic functions, through the control of the central nervous system, gradually weakens.

We can deal with the mental functions only in broad generalities for there is no uniformity in the growth, character, extent or scope of the various faculties and no order in their development, and the same applies to their progressive deterioration in old age. Mentality gives no clue as to the normal duration of life and the absolute idiot who leads a purely vegetative existence could complete the normal cycle if his life could be regulated as perfectly as the person of normal intelligence who leads a hygienic, temperate life.

There are many factors which hasten, retard or close each period. Some of these factors are well understood, others are inexplicable. Disease and a vicious mode of life, especially insufficient recuperative periods and improper food, will hasten the period in which they operate and may hasten or close the cycle altogether. Hereditary factors, not well understood, may retard the entire cycle. The rare condition known as progeria may complete the cycle with all its biological changes in less than twenty years. There are many theories based upon logical assumptions to explain similar traits, characteristics and

rate of development, length of maturity and rate of decline in parents and their progeny, but so far they are only theories. In a subject like the determination of the normal duration of life we must allow some leeway because race, climate, the character and supply of food, form of occupation and recreation, all influence the length of each period. However, as a general proposition, we can divide the normal cycle of life into three periods, development, maturity and decline, each lasting about thirty years and each broken about the middle by a critical period or climacteric. —*Medical Times.*

TOBACCO

Master ISWAR, T. A.,

Cotton Textiles Directorate,
Bombay.

THE usage of tobacco in various ways and forms is so rampant in India that a good many diseases are being contracted by our people. Cigarettes and cigars are doing their worst. Every day, the sun starts with the invention of a new type of cigarette, its advertisement occupying the most conspicuous and prominent place in all leading magazines and news sheets. Cigarette has come to be considered as an unavoidable necessity to life by the present generation. But it is not known and nobody is in a position to elucidate, where exactly lies the utter necessity of smoking. This malpractice started as a mere fashion, has finally attained a place in the daily life programme. As such, the cigarette naturally has become a greater necessity in life than both food and attire to many. That is only because civilisation has the upper hand in our minds, and we, with all our zeal and readiness, sacrifice our precious health at the altar of civilisation, satisfying ourselves that we have done a great service for the uplift of the society. We squander money over cigarettes and thus nourish this malpractice, only to become victims of umpteen diseases, which will deprive us of our health, vigour and vitality. It is high time that steps are taken to put a stop to smoking so that our youths may not fall in the ditch of unhealthiness and diseases.

Umpteen articles appear in all sorts of magazines imparting delectable admonitions regarding the various bad effects of tobacco on our system, only to be treated with acute indifference. It should be the endeavour of one and all to do what little they can to eradicate this bad habit among our people. Indubiously repeated advice will certainly have its effect. Disappointed taciturnity will only augment the progress of the smoking lot.

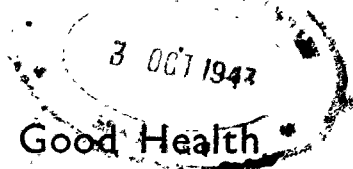
Tobacco, as is known to all, contains a substance familiarly known as nicotine whose extremely poisonous nature has not so far

been denied by anybody. What amount of nicotine is sufficient to kill a life is contained in a packet of cigarette. The fact that smoking ten cigarettes at a time does not prove fatal is because a certain amount of nicotine sublimes off with the cigarette puff. Therefore, chain-smokers should note that their health will be very much impaired and their lease of life shortened if they continue smoking. The limited period they live will be a life of hellish suffering wrought about by innumerable diseases caused by smoking.

Besides heart, nerve and stomach troubles, night-blindness is also caused by tobacco smoke. With the passing of time, women are also resorting to smoking as a mere fancy and naturally fall victims to the many havoc done by tobacco smoke. Recent experience has shown that ladies are the worst smokers. They should be warned that they are not only impairing their own health but also that of their issues. Therefore necessarily women should and must without demur or hesitation give up smoking immediately not only for their own safety but for the safety of their sons and daughters.

Recent investigations have proved that stomach troubles are the result of heavy smoking. If people are to be saved, it can be done only by the adoption of bold and stringent measures to prohibit the cigarette smoking practice altogether. This recalls to my mind the fact that, in an American theatre, smoking has been strictly prohibited inside the theatre and those who try to infringe the law are liable to penalty and imprisonment. If such a step were to be taken here also, I am sure, the average health of the people can be improved. Without health what is life after all? Therefore, I earnestly entreat all smokers, in the name of 'health' to give up this vicious practice.

Health is the second blessing that we mortals are capable of—a blessing that money cannot buy.—ISAAC WALTON.



Good Elimination Means Good Health

Alan Moyle

ONE of the great—perhaps the greatest—secret of vital health is the efficient functioning of the eliminatory system. We know that food is first digested, absorbed and then assimilated. After the body has taken all that it requires for its maintenance and repair, the residue has to be eliminated. Then there is the acid waste-matter from active cell life which has also to find an outlet from the system. The air in our lungs is constantly being changed, and impurities are carried away every time we exhale. All the units of the eliminatory chain—lungs, bowel, kidneys and skin—have to be in perfect condition if true health is to be maintained.

Whenever we breathe, oxygen is introduced into the system *via* the lungs, from which it passes into the blood-stream from whence it reaches the cells of the body. During the exhaling process, carbon dioxide, which forms when the oxygen carried by the blood is used up by cell life, is eliminated. Thus the lungs perform the double task of supplying the body with vital oxygen and then throwing off the waste product.

Most people suffer, or have suffered, from constipation, and are aware of its evil effects. The effects of constipation mean nothing more or less than self-poisoning. The bowels perform the task of ridding the body of food residue and toxic waste-products. Unless this waste is evacuated by at least one good motion per day, poisonous waste-matter may be absorbed by the system. Artificial aids to bowel function are dangerous because they impair the natural peristaltic movement of the colon, if indulged in over long periods. Once this natural movement becomes difficult, greater reliance has to be placed on purges, with consequent harmful effects. Only proper Nature Cure treatment will arrest this devitalization.

Ample Proof.—Active cell life produces a great deal of acid waste-matter. The major part of this is eliminated in liquid form from the body by way of the kidneys, and is known as urea (urine). Ample proof of the value of a day of fasting as a means of eliminating excessive poisons from the body can be observed in the urine. The test is simple and consists of taking a sample of the urine, say in the evening, on the normal day previous to the fast, and on the evening of the fasting day. Label the two containers distinctly and after allowing the fasting day sample a few hours to settle, observe the greater quantity of sediment in it. This sediment will usually be found to contain uric acid crystals, etc., which have been clogging the tissues and poisoning the system.

The skin has a very important duty to perform. It is the skin which eliminates, in the form of perspiration, some of the waste

products picked up by the blood and lymph from the cells. The millions of pores the skin contains are all tiny outlets for poisons collected in the blood-stream.

The eliminative functioning of the average person is far from perfect, the numerous advertisements for laxatives, purges, lung tonics, kidney remedies, etc., are ample proof of the inefficient working of the whole eliminative system.

Four-Fold Reasons—The reasons for this imperfect working of elimination are four-fold. First, there is the fact that people invariably eat more than is necessary for body requirements. Secondly, the habitual diet of this country, and of practically the whole civilized world, contains too much starch, protein, sugar and fat, and insufficient of the purifying foods—fruit and vegetables. It is the latter food-stuffs which are the primary source of the alkaline, mineral salts so essential to the process of elimination and healthy cell life. The over-abundant and unbalanced diet of the average person throws a great burden on the eliminative functions, a burden which frequently causes a breakdown in some part of the elimination system.

The third factor is the tragic way in which the lungs are allowed to deteriorate from disuse. Only full use of the lungs by deep-breathing can bring them into perfect functioning for the efficiency of the body as a whole. The fourth point in inadequate elimination is the manner in which the natural working of the skin is permitted to decline. Hampered by tight and heavy clothing, infrequently exposed to sun, air and water, the skin activity of modern man and woman is not a fraction of what Nature intended it to be. In the last decade there has been undoubted improvement in clothing and in bathing facilities, but there is still room for much greater improvement.

Self-Poisoning—It can be readily imagined that with excessive feeding, lack of alkaline mineral salts and inefficient functioning of lungs and skin, rendering the elimination system unable to cope with the demands thrown on it, how the body must inevitably suffer. The self-poisoning that ensues as a result is none the less deadly because it may be slow, insidious and a stealthy, depressing influence on the "tone" of the system. The accumulation of toxic waste-matter encumbers the body—seeping deeper and deeper into the tissues and clogging the blood-stream. The results of this internal poisoning are an acid system, with headaches, catarrh, rheumatism, nerve troubles, constipation, kidney troubles, and nearly all the various ills of man. The tone of the body is lowered and the body's defence against infection and disease is considerably diminished.

It is imperative for one's health sake that elimination should be made 100 per cent. efficient. The best way to initiate an improvement is to have a one-day fast, taking vegetable soup only. Fruit juices are now scarce—but vegetable broth contains all the alkaline minerals necessary for proper elimination. If bowel action is poor, then the first drink on the fasting day should be a small dose of Epsom salts. The broth (hot or cold) may be taken as often as desired, preferably at two-hourly intervals. Good bowel action, using an enema if required, is essential to the success of the fast. A warm bath will also help. Do not lie in the bath, but take it in the form of a sitz-bath, sitting up in the water, allowing it to reach only to the abdomen. The diet on the day after the fast should be almost exclusively of vegetables, fruit and milk.

The general diet should consist of whole-wheat bread, whole grain cereals dairy produce, vegetables and fruit, with the latter two predominating because they contain the most alkaline minerals. Plenty of raw food must be eaten and all vegetable water utilized.

This diet will eradicate constipation, and improve the general health by increasing the rate of elimination.

Much can be done apart from diet. The lungs and skin must be brought to a state of perfect functional activity. Deep-breathing exercises at an open window will help the lungs. Swimming, walking and games also materially improve them. Skin activity is greatly assisted by self-massage; rubbing the naked skin with a cold, wet towel, followed by brisk rubbing with a rough dry towel, and sun and air bathing. Hot baths should always be concluded with an application of cold or cool water to really benefit the skin; this also tones and hardens the skin and does much to prevent initial burning when first sun-bathing. The value of sun and air baths cannot be too strongly emphasized. They benefit the lungs, skin and the whole eliminative system.

By sensible dieting, regular exercising, skin culture, etc., internal cleanliness is achieved and maintained. This state can only be brought about through raising the standard of elimination, and thus a great improvement in general health is effected.—*Health for All.*

Harikathamrita Sāra: Bhojana Sandhi

The text, and the annotation of Sri Sankarshana Tirtha, are:—

Chaturvīdha Bhojana Padaartha: the four kinds of articles of consumption which are *Khaadya*—those to be attacked with the teeth; *Pehya*—liquids to be drunk or absorbed; *Choshya*—cooked with fire and water; *Lehya*—those upon which the tongue can act easily. Of these four, the vegetable kingdom lives on *Peshya* alone. In each one of these *Bhojana Padaartha*, God manifests Himself through the four rasas assuming in each its particular form. These four are not to be confounded with the *Shad Rasas* or six *rasas*. *Ruchi* is the essence of the combination of two, three or more tastes which go to form a single *Akhanda* (indivisible) *Padaartha* or object. Permeating such rasas in such four kinds of objects, Hari feeds the *Sthoola Dehas* through the 72,000 *Naadies* making the resident local *Devatas* the medium of communication to and fro, *Samhananake Upachya maani*—contributing to the solidity of the *Sthoola Sareera* or physical bodies and the joy of life to the *Jeevas* and giving to the *Devatas* His *Aatma Pradarsana*, the *Bimba Roopa* or His inner reflected being mingling with His external glory.

What is meant by the first stanza is that even in the process of feeding the material body with the four-fold objects of consumption through the 72,000 *Naadies* (or blood-vessels) in the human system with the four-fold tastes (not to be confounded with the six rasas), each part of the body is looked after by respective *Abhimana Devatas* (like the governors of garrisons through whom the supreme general acts), communicating and

receiving intelligence every second of their existence. According to the *Brikadbhashya* Sri Paramatma enjoys the four kinds of food and communicates the pleasure to the *Jeeva*. According to the *Mandooka Bhashya*—He is *Visva* in the eye and consumes the *sthoola rasa* in the wakeful state; from His place in the throat as *Tayasa*, He takes in the dreamy *Pravivikta Rasa*: in the heart as *Pragna*. He exults in the *Ananda Rasa*. From His place in the *Brahma Randhra* or the supreme opening in the cavity of the cranium or head-bone as *Turya*, according to *Chandogyā*, He enjoys *Ananda* drawn from the purest or *Saatweeka Rasa*. Thus in these four forms—*Visva*, *Tayasu*, *Pragnya* and *Turya*, He enjoys and imparts to the *Jivas* the four-fold rasas. Thus is beautifully summarised by Sri Purandara Dasa in his *Suladi* beginning:—*Nitya A-nitya Vendoo Ananda Divirdha Varya*.

As regards the 72,000 *Naadies* found in man and woman, the explanation is that there exist in man and woman, 36,000 in the left side known as *Siree Naadi* and another 36000 in the right known as *Purusha Naadi*, *Sreee* and *Purusha*, not being used with reference to sex but with reference to the weaker and the stronger, the left being usually regarded as weaker and the right as stronger. We have this idea in expressions like, "He is his right hand man."

The six-fold rasas or *shadrasas* with their respective *Abhimana Devatas* are: *Niruruthi*, *Gowri*, *Dakshaprajapathi*, *Indra*, *Yama* and *Baghirathi*. The respective *Bhagavadhroopas* are *Janaardhana*, *Damodara*, *Narasimha*, *Vasudeva*, *Aniruddha* and *Hari*.

—*The Madhwa Messenger.*

Topics from Medical and Health Periodicals

Practice Air-Raid Victim's Lament

*Farewell cruel world, I am departing
To where, I really don't know,
But where must be some cool place in heaven
Where air-raid victims can go.
With lipstick smeared on my forehead
I would rather depart from this life.
Than try to explain how it got there
Tonight when I meet my wife.
The ants have nibbled my fingers
And jitter-bugged in my nose.
You'll find a grasshopper's children
Playing leapfrog over my toes.
My disposition is blistered
My nose is burned cherry-red,
I started out with a broken arm
But now I'm deadlier than dead.
So handle me gently, first-aid'er,
And drape my stretcher with braid
For I died as a first-aid victim
In the midst of a practice raid.*

—Anonymous victim in
"Civilian Defence."

Remorse

*When to patients I've been unkind
To say a thing that is smart;
Although it stimulates my mind
It later hurts my heart.*

—"The Texas State Journal
of Medicine."

Vitamin Deficiencies and Flour-Milling

THE evidence is now convincing that there is a deficiency of vitamin B₁ in modern diets. Unlike vitamins A, C and D, vitamin B₁ though occurring in many foods is not greatly concentrated in any particular plant or animal tissues. Interest in the cereal content of vitamin B₁ has developed because cereals form so large a part of the diet and vitamin B₁ removed from them in preparation is not easily replaced economically. The author discusses in detail the vitamin B₁ content of the various parts of the wheat kernel and shows how this is affected by various milling processes. Milling is discussed historically and the author shows that man has always tried to get rid of those parts of flour richest in vitamin B₁ because refined flour has so many advantages in superior keeping and baking qualities. If all the germ were put back into the milled flour, the increase in vitamin B₁ content would not be great. Although the concentration of this vitamin is about 7 times greater in the germ than in the whole grain, the germ constitutes only 2.5 per cent. of the whole kernel. About two-thirds of the

total vitamin B₁ content of the kernel is in the bran. Adding synthetic thiamin alone is not a really satisfactory method of meeting the problem as it makes no provision for the deficiency of the other members of the vitamin B complex. The author suggests that educating the public to demand the type of bread most valuable nutritionally, is the only completely successful way of solving the problem of retaining the bran coat and germ as human food.—RICH, C. E., J. ROY. SA. INS. Vol. 61, Pp. 187-193.—*Calcutta Medical Review*

Tuberculosis is an Old and Dangerous Enemy

IF lies in wait particularly for the young adult, whose services to-day and after the war must be of supreme value to the nation. Tuberculosis always increases in war time, and measures must be taken now if the increase that we may expect in the near future is to be stemmed. Existing tuberculosis services deal with those who have symptoms of disease, or who feel ill. A new advance is now needed. This means finding cases in which the disease has started but not yet caused the patient to feel ill. Often nothing may be necessary other than careful watching; in some, short treatment is required, but in all cases there is better hope of eradicating the disease.—*Bul. Na'l. Assn. Prev. Tuberc., Eng.*

Piles

PILES are frequently due to circulatory impairment in the liver or the blood circulation in these veins which convey the blood between rectum and liver. A block or resistance in this chain will result in distention of the vein at a point where it has least muscle support. Such a weak point is in the walls of rectum. This accounts for frequent appearance of piles in persons whose liver is not in normal condition. Fomentation over the liver and abdomen, also alternating hot and cold applied to some areas, will often do more to relieve the enlarged vessels of rectum than any amount of local treatment. Constipation, producing pressure and thus interfering with rectal circulation, is another very prevalent cause for piles. Hot sitz bath followed by cold dough to rectum is also a useful measure. The best plan for increasing body weight is to improve the digestive function. The above applications will also be useful for this. There is no useful purpose served in eating more than we can digest. We are only over taxing the vital digestive functions. Have patience and work to improve digestion. Certain enzymes as pancreatin, papain, pepsin diastase and bile extracts are very helpful for assisting a crippled digestion.—*The Oriental Watchman.*

Proper Shoes

PROPER shoes and foot hygiene are essential foot insurance. A shoe should be made on a straight last and should have a round toe and a heel of moderate height. It should be narrow in the heel and through the waist of the foot, but wide through the ball. The shank must not be too wide or too narrow. The rigidity and flexibility varies with the person and his defects. The contours should not cause irritation. Little difficulty is experienced in obtaining properly shaped shoes for children and men, but girls and women are the victims of style, vanity, and the shoe salesman. They prefer to fit the eye rather than the foot. Corrective modifications may be made to suit individual needs by use of the Thomas or reversed Thomas heel, elevation of outer border of sole, use of metatarsal bar or crescent, Häuser metatarsal comma bar, or Lewin tilted notched, rubber metatarsal crescent, all of which require a flexible shank to produce the correct relation of sole to heel. Painful heels may be relieved of pressure areas by splitting or cutting out necessary sections. The internal modifications of shoes include inserts, steel bars, rigid uppers, the removal of toe caps, the removal of counters, use of patch pockets, and pressure pads. Felt pads of numerous designs may be used to support and to relieve pressure.—*Minnesota Medicine.*

A Quick Treatment of Scabies

THERE is no question that there are many very efficient treatments of scabies. We have, however, not sporadic cases only to deal with, but an epidemic spread over the entire country. In many towns whole families, whole houses and quarters, and even whole streets are infested. Under these circumstances it seems to me that the time of three to four days, which we usually need to cope with a single case, is too long. In most instances the families affected include father, mother and children, but owing to war conditions and the adult members being on shift work it is impossible to treat them as one family in one session. Danger from reinfestation therefore occurs owing to the adult members being either untreated or partly treated. Unless we are able to reduce the time required for treatment to a few hours we cannot exclude the possibility and probability of this reinfestation. It is a Sisyphean job. If, however, we reduce the time needed for a cure then we can treat all the members of one family together, thus diminishing the danger of contamination and recontamination. Further more, certain patients need a quicker treatment because they are called up suddenly, or have to rejoin units, or are evacuated at short notice.

I found a treatment of the late Prof Oppenheim of Vienna, slightly modified by me, very useful and efficient. It enables us to cure scabies in two and a half hours. I treated in this way, at the minor ailment clinic of the Public Health Department of the county borough of Barrow-in-Furness, 260 cases, eighteen of which had to be treated twice and

six three times in the same manner. So far this procedure has been very successful. It is as follows: (1) All members of the same family infected with scabies start treatment at the same time if possible. (2) Potash soft soap is rubbed for a quarter of an hour over the whole of the body, except the face and scalp, each member helping the other. (3) Then follows a hot bath of five minutes, the soap is washed off, the skin being rubbed with a brush. (4) The whole body is rubbed with Whitfield's ointment (potash carbonate 10 parts, precipitated sulphur 25 parts, petroleum jelly 125 parts) as described above and allowed to remain on the body for two hours without covering. (5) Then follows a warm bath with soap. (6) The body is dried and covered with ichthyol 1% in pasta zinc oxide comp. B. P. as soothing ointment. (7) After the treatment body clothing and bed clothing are changed, the blankets, and the wrongside of coats, dresses and trousers, are pressed with a hot iron.

Impetigo and furunculosis complicating scabies are by no means contraindications to this treatment, they appear to subside quicker than usual. Cases of sulphur dermatitis were negligible. The treatment is cheap.—Ladislav Lichtenstein in *The British Medical Journal.*

Voice of Authority

"DRINK," declared the late Lord Josiah Stamp, "is the predominant cause of secondary poverty—the poverty of families whose total earnings would be sufficient for the maintenance of merely physical efficiency. were it not that some portion of them is absorbed by other expenditure, either useful or wasteful. It may cause as much as eighty-five per cent. of such poverty. It causes ten or eleven per cent. of primary poverty, and about forty per cent. of the common offences dealt with in the police court, twenty-five per cent. of violent crime, fifteen per cent. of cruelty to children, twenty-five per cent. of matrimonial cases, fifty per cent. of assault and wilful damage."

Wit and Humour...

ACCORDING to a case history in the records of Dr. T. F. Bunkley of Temple, one of his lady patients was granted a divorce when she testified that since she and her husband were married, he had spoken to her but three times. She was awarded the custody of her three children!—*Texas State Journal of Medicine.*

THE time was midnight and Dr. C. G. Swift of Cameron was enjoying a well-earned rest. The phone rang violently.

"I can't sleep, Doctor," came the plaintive wail. "Can't you do something for me?"

"Hold the phone," snapped Dr. Swift, "and I'll sing you a lullaby!"—*Texas State Journal of Medicine.*