

FATIGUE AND OVERTIME WORK

(Written for "The Listener" by DR. H. B. TURBOTT, Director of the Division of School Hygiene, Health Department)



WE all know what it is to feel tired, pleasantly jaded, or flat out with fatigue. The balance between wear and repair in the body is upset. In exercise, lactic acid is disposed of almost as rapidly as it appears; it is oxidised by the oxygen brought to the muscles by the blood. If the exercise is kept up at a constant speed, the lactic acid in the muscle rises slowly from the low resting value to a level at which the rate of formation and removal are equal. During hard and violent exercise lactic acid is formed far quicker than it can be disposed of by the biggest oxygen intake of which the body is capable. We accumulate lactic acid in the tissues and blood stream. We overdraw our account during the exercise and repay the debt later. We rest. The muscles burn up their accumulation of lactic acid. Next, that in the tissues and blood diffuses back slowly into the muscles to be burnt up too. Fatigue disappears, and we feel fresh and rested.

Have you not noticed this as you work? A spell puts you right again. At the end of the week, you, a clerical

worker, may be really fatigued, yet can potter about in the garden on a long Friday evening, and do quite a lot of "work." Another set of muscles and body tissues are concerned. Or on a Saturday half way through the afternoon, your back is breaking with weeding—a spell—back to the task—afternoon tea—lawn or hedge cutting, digging, planting, it doesn't matter what. With little spells and changes of occupation much more work is accomplished than you'd thought possible. But it was the little spells that really let you get it all done.

Other Types of Fatigue

Muscular fatigue, explained above, is readily overcome by resting. But there are other "fatigues." Remember the short "bursts" of a footballer, the quick sharp changes of pace, the excitement—the body metabolism is temporarily upset, and the strain can be demonstrated by abnormal substances in the urine and increased cells in the blood. His fatigue is more complicated. Take the iron foundry worker or the dweller in the tropics. Fatigue at the end of their day will be more than muscular; body fluids and reserves of salt will be depleted, hindering muscle recovery. In factories, conditions should be pleasant, or there will be added to muscle fatigue the more wearing nervous and glandular over activity—there will be irritated employers and angry workmen, both piling up extra fatigue from these causes.

Fatigue becomes terribly important in war time. Employers, private and government, are apt to overlook the dangers of overtime work, and how important 'spells' are in maintaining production. The British Government, in its recent crisis, appealed for extra work. Factories began working 24 hours a day, seven days a week, cancelling all holidays. At first there was an increase in output, but after two months of extreme effort, absenteeism increased and men arrived late for work. Frequently men worked on Sunday at double pay and then took a day off in the middle of the week.

Fewer Hours, More Work

Sunday labour was then discontinued by the Royal Ordnance factories. Production was not reduced. One factory, after reducing hours, set a new record for one week's production. It is now recommended that a weekly maximum of 55 or 56 hours be observed. It is proved again that increased hours of work, above an optimal point, varying with different industries, do not increase production proportionately, or may even result in a decrease. When heavy overtime is worked for prolonged periods, the general health of the workers is undermined. Reducing hours where overtime has been prolonged increases output; but if overtime has gone on to the point of undermining health, reducing hours below the optimum

level fails to effect the required increase of production. These are the conclusions that an English committee has arrived at, following a close study of war industries.

Male worker, this story is apparently all in your interests. Fatigue occurs if bodily wear and repair are not in balance. A balance must be kept between work and discipline on the one hand, leisure and play on the other. Now think of your wife, tied to long hours in the home with the constant strain of the children. How about arranging spells for her, a holiday away from the children—for her, too, hard work tempered with play!

(Next week: "Vegetables," by Dr. Muriel Bell)

End Rheumatism While You Sleep

If you suffer sharp, stabbing pains, if joints are swollen, it shows your blood is poisoned through faulty kidney action. Other symptoms of Kidney Disorders are Burning, Itching Passages, "Getting up Nights," Backaches, Lumbago, Leg Pains, Nervousness, Dizziness, Headaches, Colds, Puffy Ankles, Circles under Eyes, Lack of Energy, Appetite, etc. Ordinary medicines can't help much—you must kill the germs ruining health. Cystex ends these troubles by removing the cause. Get Cystex from any Chemist on Guarantee to put you right or money back. Act Now! In 24 hours you will feel better and be completely well in one week. The Guarantee protects you. Now in 3 sizes: 1/10, 4/2, 8/3

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Oliver Twist Asks for More!

If Andrews Liver Salt had been known in the days of Oliver Twist, there would have been fewer glum faces around him!

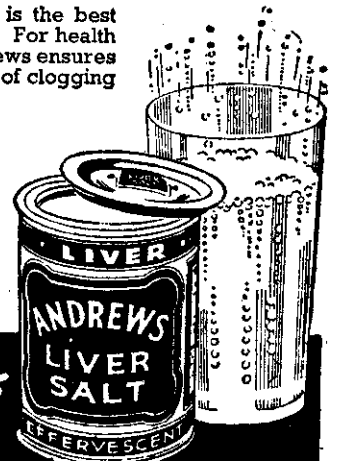
A bubbling morning glass of Andrews is the best way to the cheerfulness of good health. For health is based on Inner Cleanliness, and Andrews ensures Inner Cleanliness by clearing the system of clogging impurities. Andrews meets the needs of modern people in the most pleasant and effective way—it enhances pep and personality by promoting good health.

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A34



For Inner Cleanliness
be regular with your

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THE ITALIAN SPIRIT

(Continued from previous page)

ing her everything worth seeing in Naples, gave me a polished farthing once. I thought that it was a gold coin; it looked like it, it was so bright. I had never seen that blasted coin before. It is not worth more than an empty egg-shell. No, give me the English, they are the best of the lot.

* * *

Signor Maccaroni: Well, in that case, let us have the English. I agree too that they are the best. By the way, if they do not like their king they just chop off a head. That's the stuff that we want really.

Signor Spaghetti: Yes, that's what we ought to practise too. You know, we could learn practical patriotism from them also. They had a leader once, I have forgotten his name, who loved his country so much that he took half a dozen wives. He has really done his best for his country. You cannot expect more from a king.

Both: Eviva Il Inglese! Hail the English! Let us have of them, as many as possible. This is our resolution.

They both empty their glasses.

* * *

(Note: This story is not just a joke. A conversation like this, in a small pub, near Foggia, took place just before Italy entered the war. It was published among others in the anti-Fascist paper "Gusticia e Liberta" in Paris before the German occupation. This story has been based on it.)