

THE EFFECTS OF ALCOHOL ON HUMAN BODY.

A lecture given by Dr. O'Brien. Mrs. Don in the chair.

The Doctor said probably his audience had been disappointed at the late election, but it was not a good thing to force a law upon an unwilling people. We are educating the public, and there can be no two opinions upon the question that the community would be better off without the beverage use of alcohol. The Prohibition voters were thinkers, but with the exception of a few astute minds leading them, the unthinking vote was wet.

Alcohol is not a necessity. It interferes with the vital processes. These are food, warmth, circulation of the blood, and reproduction.

Food: God knows His own business, and in milk has given a perfect food. Milk contains no alcohol, but it contains all the necessary elements for growth, development, and reproduction. As we grow beyond infancy, we replace the albumen of the milk with meat, fish, fruits and cheese; its fats by milk and butter and its sugar by cane sugar and starches. These three classes are all that are required. Sterilising food destroys its vitamins.

Alcohol is not a food. When we take more food than is required—and most of us do this—the body stores it all up for future uses. It stores sugar in the liver, fat in the fatty tissues, and albumen in the blood. The body never throws out food in health. In diseased conditions, like diabetes and Bright's disease, it may do this, but never when in a healthy state. But let a person take alcohol, and immediately the body does its best to get rid of it. Not one drop is stored up; it is breathed out, and in from 12 to 24 hours it is all thrown out. When food is taken, the stomach digests, but does not absorb it; the digestive fluids liquify the food, turn starch into sugar, and in other ways prepare it for absorption into the blood. These food stuffs are poured into the blood as they are needed, and never more at one time than the body can deal with. No digestive fluid will digest alcohol; it is absorbed into the blood from the stomach as alcohol, and we cannot stop the absorption of alcohol. The body only absorbs sugar as it requires, but it goes on absorbing alcohol until the person dies. One-tenth

of 1 per cent. of alcohol in the blood causes drunkenness, the half of 1 per cent. of alcohol in the blood causes death. The body stores up food, and can then go without food for days, but it cannot store alcohol, it cannot digest alcohol, it cannot convert alcohol into body tissues. It gets rid of alcohol as speedily as possible. Alcohol is not a food. But alcohol, while circulating, damages the tissues, such as the brain and kidney cells. It contains no nitrogen, so it cannot replenish the body.

Alcohol and the Heart. The heart beats all day and night right throughout life, and this beat must not be interfered with. The normal beat of the heart is equal to the work of lifting 120 tons one foot each day. If two ounces of alcohol is taken it increases the heart's beat by 8000, and thus increases the heart's work an increase equal to lifting 15 tons one foot a day. The heart is controlled by the lower brain, called sometimes the subconscious, and this never sleeps. Two nerves control the heart's action, the accelerator and pneumo-gastric. Alcohol puts the pneumo gastric nerve to sleep, removing the control, and allows the accelerator to run away with the heart. The heart never sleeps, and its control nerve should never sleep. Alcohol puts this nerve to sleep, and allows the heart to be tired out. When we lie down at night to rest the heart does 10 beats a minute less. But if alcohol has been taken before retiring, it causes fast beat, and so the drinker wakes up tired.

Heat and Cold. The limits of temperature within which man lives are very narrow. Life ceases below 97 degrees and above 105 degrees. The vaso-motor centre in brain controls the temperature of the body. It never sleeps. If subject to extreme cold, it allows extremities to cool, but keeps vital organs warm. Alcohol puts the vaso-motor to sleep, and the man who drinks radiates the heat from his body instead of the vital organs being kept warm.

Reproduction is interfered with by alcohol. Stockard made extensive experiments with guinea pigs—about 8000 of them. The guinea pig won't drink alcohol, so Stockard caused them to inhale it. He mated a male guinea pig alcoholised with a normal female, a drunken female with a normal male, and both guinea pigs drunk when mated. The results were always the

same. He got premature births and deformities. He took some of these offsprings, who looked alright, and bred them with normal guinea pigs, giving no alcohol after the first pair. The second and third generation were deformed, and it was the fourth generation before the offspring were normal.

Having shown how perniciously alcohol interferes with vital principles, should its sale be continued because some like it?

When is a man drunk? No man who drives a public conveyance should take liquor in business hours. Alcohol paralyses the higher faculties, judgment, self-esteem, and self-criticism, puts them to sleep.

Alcohol can be done without. It endangers self and loved ones, injures one's offspring. Teach the young never to touch alcohol, and set them the example.

OUR ADVICE TO TEMPERANCE WORKERS.

1. Don't be down in the mouth. Remember Jonah. He was down in the mouth, but he came out all right.
2. Don't quit because of squalls. Try and be like the hospital steam-kettle. He's nearly always up to his neck in hot water, but he keeps on singing all the time!
3. Opportunity is like a street car with few stopping places. Jump on quick when you see one. There's many a grand opportunity of winning over a voter or two to our Cause, and just remember V-O-T-E spells V-E-T-O.
4. Yesterday is only a Dream; Tomorrow is only a Vision; but Today is Yours. Help the cause NOW.

"Grandfather History, what have we here?"

"A pirate, a slave, and a bottle of beer—Three old outlaws behind the bars!"

"Make room for a fourth one—Old Man Mars!"

—Harry Bundy Wells.