

and the age thereby lowered, by treatment and other measures.

To get your biologic age you will have to pay a visit to your doctor. After he has examined you, he can estimate the age of your heart and blood vessels, your nervous system, your mental functions, your digestive system, skin, eyes, ears and other of the 20 items in Dr. Benja-

min's health inventory. Your heart and blood vessel system could change your calendar age by five to 30 years. Heredity, living habits and nervous system could modify it by five to 20 years. Skin, eyes and ears would modify it by only five to 10 years. Details on estimating biologic age appeared in the *Journal of Gerontology*.

Science News Letter, February 14, 1948

all strains of staphylococci will become resistant to penicillin in the near future "must be reconsidered."

Science News Letter, February 14, 1948

MEDICINE

Check Resistance in Germs

Penicillin sensitivity is restored to resistant disease germs by briefly associating them with germs of another family such as streptococci.

► THE frightening idea that penicillin will become useless as a remedy in a few years because the disease germs it now checks will all have developed resistance to its action is somewhat dispelled by a discovery of Dr. A. Voureka, British Council Research Scholar working in the Wright-Fleming Institute at St. Mary's Hospital, London, where penicillin was discovered.

Germs that have developed resistance to the famous mold remedy can be made sensitive to it again in a few minutes. All that is necessary is for the resistant germs to associate briefly with germs of another family. Resistant staphylococcus germs, for example, were made sensitive by associating with streptococci or with diphtheria, typhoid and pneumonia germs.

Dr. Voureka started with the idea that sensitivity to penicillin might depend on some chemical or physical factor. In that case, resistant germs, he reasoned, might be able to borrow some of the factor from sensitive germs. So he grew resistant and sensitive germs together. The resistant ones duly became sensitive.

Then he found he could achieve the same result by letting the two kinds of germs stay together for five minutes. Mere association in the same tube was enough. It did not matter about temperature, either. Resistant germs acquired sensitivity in the refrigerator, the incubator or at room temperature. They even acquired it from germs which themselves were resistant to penicillin, and from substances produced when other germs were destroyed by bacteriophage.

The penicillin-sensitivity restored to germs that had grown resistant lasts a long time.

The work is still preliminary and so

far only seven out of 20 strains of germs tested have had their penicillin resistance reversed. Dr. Voureka does not say, in his report to the *Lancet*, (Jan. 10), British medical journal, how his discovery will be applied in the case of a patient for whom penicillin has become useless because his germs have developed resistance to the mold chemical. But, he points out, germs often grow in association with other germs in the human body. And he believes that the idea that

PLANT PATHOLOGY

One Moldy Lemon Ripens 500 Others Too Soon

► THE old adage about one rotten apple spoiling the whole barrel holds true, in modified form, for lemons. One thoroughly green-moldy lemon can cause 500 others to ripen before they are wanted—which is equivalent to spoiling them.

Lemons are commonly kept in storage for five or six months before ripening, states Dr. Jacob B. Biale, University of California horticulturist, but if one of them becomes infested with green-mold fungus it will produce enough ethylene gas to speed the ripening and yellowing of the sound fruit to as short a period as ten days.

To prevent molding, Dr. Biale recommends storage at lower temperatures, also under an atmosphere containing only 5% of oxygen instead of the 21% present in ordinary air.

Science News Letter, February 14, 1948



GIANT TUBER—This root of a perennial wild cucumber dug up on the campus of Occidental College, Los Angeles, Calif., is 27 inches tall, 36 inches in diameter, 74 inches in circumference and weighs about 200 pounds. Dr. Frank J. Smiley, botany professor at the college, estimates that it is at least 20 years old. Not only is it unusual in size but shape also, for the usual wild cucumber root looks like a turnip.