

A large proportion of service men successfully vaccinated against smallpox gave such false positive reactions, he found. Since large numbers of Americans are vaccinated against smallpox at least once in their lives, and since the Was-

sermann test is now "accompanying the average citizen from the 'cradle to the grave,'" Dr. Lubitz declared that many mistakes in diagnosis may be made unless physicians and health officers are aware of the possibilities.

Science News Letter, October 23, 1943

CHEMISTRY-NUTRITION

Tips for Coffee Makers

Only four ounces actually used out of each pound of coffee bought; expert gives advice on best methods of brewing and storing.

► HERE ARE TIPS from an expert on how to brew and store your coffee properly to improve its taste and give you full purchase value. Prof. Leslie H. Backer, professor of chemistry at the Stevens Institute of Technology in Hoboken, N. J., points out that of all the coffee we use, only 25 per cent is soluble in water. Thus in a pound of coffee, we actually use only four ounces. In order to obtain the fullest benefits of these four ounces, we should treat coffee with the delicacy it deserves.

Coffee should be well ground for use in a particular type coffee maker, and the ground coffee should never be in contact with water for more than five minutes.

Prof. Backer emphasizes that in making coffee with a glass vacuum coffee maker, water should be boiling before the upper bowl is put on. When the water rises into the mixture it should be stirred in one direction and then in the other for thirty seconds.

In the drip method, clear water should

be steadily poured through the coffee. One drip operation is sufficient, as his experiments have shown that actually five per cent less extraction is obtained when the water is poured through the second time. A pot should be obtained that fits the needs of the entire family, and then used to full capacity.

If you have a percolator, preheat the pot or start with hot water before putting the coffee into it.

Keep coffee pots scrupulously clean. Oils that remain on the pot from previous brewing decompose in air and after 24 hours emit a vile odor in addition to having a bad taste. If a filter cloth is used, wash it well in cold water and keep it under cold water until used again. This prevents the air from getting at any of the fatty oils that may have remained on the cloth.

Since 15 per cent of the coffee is fat, it should be treated as one would butter and other fats. Coffee should be kept in tightly covered jars or containers in a refrigerator. High temperatures tend to decompose the fats and destroy the coffee's value.

Moisture and odor are easily absorbed by coffee. Prof. Backer exposed a one-pound jar of coffee to air in hot weather and found it to be 17 ounces on reweighing.

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COFFEE BREW—To determine the percentage of extraction in a coffee brew, Prof. Backer first draws 50 cc. of the brewed coffee into a pipette, from a measured amount of the brew. The coffee is emptied into a porcelain dish and placed in an oven where the heat drives away the water. After it is cool, the coffee extract remaining in the dish in solid form after the evaporation is measured with a delicate balance to calculate the percentage of extraction.

PUBLIC HEALTH

Physical Fitness Improved Under War Conditions

► THE GENERAL physical fitness of American college men has improved under war conditions if the men studied by the department of physical education at Syracuse University are typical.

The average physical fitness score at the university this year shows a 23-point improvement over last year. This year's score of 114.2 is five points higher than the best for any year during which the record has been kept.

Out of every hundred men tested this year 88 are as healthy or healthier than the average of those tested last year, the college records show.

The physical fitness rating is essentially an indication of strength. Final averages consist of scores made on tests of arm, leg and back power, hand grip and lung capacity.

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A new type of piano contains only 35 pounds of metal, a saving of about 150 pounds; the heavy plate is made of laminated plywood instead of metal.