

Method of Obtaining Saliva for the Saliva Test

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THE practice of using drugs as stimulants to race horses became so general that means had to be taken to discover treated animals and disqualify them. The examination is of course essentially a chemical one and the saliva has been found to be the best excretion in which to find the various chemicals used for the purpose. Consequently the collection of samples of saliva has become a general practice at race meets. These samples are forwarded to Dr. G. H. W. Lucas, Department of Pharmacology, University of Toronto, who carries out the chemical examination. Below is indicated the method followed for the collection of saliva.

Objective.—The objective is to obtain a quantity of saliva sufficient for the chemist to make precise determinations. Approximately an ounce of saliva has been found suitable for this purpose.

Equipment required.—Surgical forceps (ten inches in length); absorbent gauze; porcelain basin; number of pairs of white cotton gloves¹; number of pint sealers; bottle containing 0.75 to 1 per cent solution of acetic acid.

The horse from which the sample is to be taken is escorted from the Judge's stand to the required place by a representative of the Royal Canadian Mounted Police.

Six ounces of the acetic acid solution is poured into the basin and two pieces of 8-ply gauze cut about 6 inches long, are placed in the basin. If gloves are used, a glove is made ready and placed on the hand of the operator. When the horse is presented it usually is held from the left side, one hand being placed under the jaw and the other over the nose. This is for the purpose of steadying the head. A piece of gauze is securely fastened in the forcep, soaked in the acetic acid solution then passed well back in the mouth. This is repeated several times with the object of introducing sufficient solution to stimulate the salivary secretion. The swab is then again soaked in the acid solution and inserted between the molars and the cheeks. The animal commences to chew and champ on the foreign object.

This stimulates the rapid excretion of saliva which flows freely and is caught in a porcelain basin held by the constable who takes charge of the saliva from this point on. The sample also the gauze and glove used are put into a previously sterilized sealer, labelled for identification, sealed in a manner which makes tampering impossible, and forwarded to the University of Toronto.

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¹White gloves have recently been discarded.