A BRIEF DESCRIPTION OF THE TECHNIQUE OF THE HINTON TEST

Two indicators (antigens) are used in the Hinton Test: One is an ether insoluble, alcohol soluble fraction of dried beef muscle (round steak), and the other is an ether insoluble, alcohol soluble fraction of dried beef heart. Both are fortified with cholesterol.

The serums must be inactivated at 56°C for one-half hour, preferably just before the test is done. Four serum tubes are used for each specimen to be tested. Into the first is pipetted .3 cc of serum; into the second, .5 cc of serum; into the third. .3 cc of serum; and into the fourth, .5 cc of serum. Then the glycerinated muscle indicator is mixed as follows: One cubic centimeter of cholesterinized muscle extract, 2 cc of a 5% solution of sodium chloride in distilled water; next, 12 cc of the same 5% salt solution, and finally, 15 cc of 50% glycerin (CP). Next, the glycerinated heart indicator is mixed as follows: .8 cc of the 5% salt solution is pipetted into a flask, and 1 cc of the cholesterinized heart extract is added; this is shaken and allowed to stand for five minutes; then 13.2 cc of the 5% salt solution is added, and lastly 15 cc of the 50% Glycerin is added. Five-tenths cubic centimeters of the first glycerinated (muscle) indicator is added to the first and second tubes, and .5 cc of the glycerinated heart indicator is added to the third and fourth tubes. The rack containing the tests is then shaken for three minutes and then the tests are incubated in a water bath for sixteen hours at 37°C, after which they may be placed in a refrigerator for one hour--which usually makes reading easier. Finally, the tests are then read and recorded.

In the first two tubes, treated with glycerinated muscle indicator, agglutination is the phenomenon observed in positive reactions, and slight clearing or no change denotes a negative reaction. In the last two tubes, that have been treated with glycerinated heart extract, a flaky ring at the top of the meniscus of the fluid and slightly adherent to the tube is the first sign to be noticed in a positive reaction. In some cases, this may be accompanied by complete clearing of the fluid and the formation of a few large pellicles near the meniscus. In either case,

shaking the tube discloses a definite precipitate which may be suspended in a very clear fluid or a relatively cloudy one. Tubes which show no change, or at most a scum at the meniscus, are recorded as negative. For an interpretation of results, one should consult the paper by Hinton and Berk.

See--Hinton, W.A. & Berk, A., The Hinton Glycerol Cholesterol Reaction for Syphilis. Second Modification.