ARABINOSE TEST FOR THE DIAGNOSIS OF INTESTINAL CANDIDIASIS

ARABINOSE

Arabinose is a five-carbon sugar with the function of the aldehyde called aldose.

It is suspected that the arabitol produced by the yeasts in the gastrointestinal tract is absorbed in the portal circulation, and is then converted into arabinose by the liver.

It is not metabolised endogenously and is eliminated by the urine, so consequently high levels of arabinose in the urine may be a good indicator of Candida infections.

Arabinose is often found to be raised in the presence of intestinal candidiasis, and is commonly found in autistic children; it is suspected that autistic children may have deficiencies of one or more enzymes that are involved in the metabolism of pentoses.

High levels of arabinose have been found linked to proteins in serum glycoproteins of serum of schizophrenic patients and in children with behavioural disorders. The alteration of the protein function through arabinose is yet another mechanism by means of which arabinose can affect biochemical processes.

High levels of arabinose have been found in urine samples from women with vulvovaginitis caused by candida.

Candida increases intestinal permeability and produces arabitol and arabinose, and any substance that uses the phenol-sulfide transferase system also increases the permeability of the intestinal wall (acetaminophen, citric fruit, chocolate, apple).

An effective mechanism in the treatment of candidiasis involves not only the use of antymycotics but also the restriction of sugars and carbohydrates.

REQUIRED SAMPLES:

- 100 ml. of the first urine of the morning in a sterile container.

RECOMMENDATIONS:

- For 3 days before taking the sample avoid eating pulses, cherries, apple, tomatoes, barley and oats.

INSTRUMENTACIÓN:

High performance Liquid Chromatography