

# **Soil-transmitted Parasites In Vegetables Irrigated With Waste-Water In Fayoum Governorate, Egypt.**

## **Abstract**

No doubt, irrigation with waste-water became a painful reality in villages in Fayoum Governorate mostly because of water scarcity and improper sewage disposal. Ingestion of fresh raw vegetables imposes a great risk on the population. Protozoa cysts such as *Entamoeba*, *Giardia*, *Cryptosporidium*, *Cyclospora*, and helminthic eggs can readily be transmitted by contaminated water or vegetables. The study evaluated the contamination and infectivity of raw fresh vegetables in some Fayoum Governorate villages, which used waste-water for irrigation. This cross-sectional study evaluated 360 fresh vegetable samples from different areas for parasitic infective stages and potential infectivity. Also, 400 native patients suffering from gastrointestinal manifestations were examined for parasitic infection(s). Morning stool samples were microscopically examined for parasitic stages. Direct microscopy, concentration methods, staining with trichrome and modified ZN stain (MZN), Rapid immune-chromatographic assay for *Cryptosporidium*, *Giardia* and *Entamoeba* spp. were done. The results showed increased prevalence of parasitic contamination in the villages of Fayoum Governorate, due to water shortage and use of untreated sewage water for irrigation, also there is a corresponding increase in parasitic infection among the population of the same locations.

Keywords: Fayoum, Immunochromatographic, Irrigation, Parasitic, Sewage, Staining.

## **المجلة:**

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