

## Al Najah National University Faculty Of Medicine and health sciences Department Of Medical Imaging

## Measurements of Radon Gaz Concentrations in Water Samples Using Rad7 in Palestine

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## **ABSTRACT:**

Radon is a radioactive noble gas that comes from the natural radioactive Breakdown of uranium within the ground. We are exposed to radon by two main Sources: radon in air and in water, to seek out the radon in water, we must Know, Radon gas can dissolve and accumulate in water from underground Sources (called ground water), like wells. Radon gas escapes from the water and Goes into the air, some radon also stays within the water.

The measurements were performed by RAD 7 radon detector to measure radon Concentration in water sample. In this research, the types of water concern well Water.

We have taken 22 samples from many places in Palestine and from many deep naturally occurring radon gas had come to be recognized as a potentially Serious health hazard. The decay of radon produces radioactive —daughters can be ingested from well water or Can be absorbed in dust particles and then breathed into the lungs. Exposure to High concentrations of this radon and its daughters over the course of many Years can greatly increase the risk of developing lung cancer. So, the radon gas is the greatest cause of lung cancer among non-smoker.

## **Keyword:**

Bq\m3: One radioactive decay per second (unit use to measure the radon gas).