

## Q&A with David Medin, CEO of SnapDNA enabling DNA Analysis for Clinical Diagnostics, Food Production and Agricultural Industries while providing Test Results in Less than One Hour



**David Medin**  
Chief Executive Officer

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**Interview conducted by:**  
Lynn Fosse, Senior Editor  
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**CEOCFO: Mr. Medin, what is the concept behind SnapDNA?**

**Mr. Medin:** We're making a fundamental shift in the way the most sensitive DNA and RNA tests are performed. Food tests, for example, can detect as few as 4 pathogenic bacteria cells in biodiverse samples often containing trillions of other cells. To achieve this level of sensitivity, the first step in every current food test is to grow the number of bacteria, in a process called culturing. Even under ideal conditions, culturing bacteria is a slow process, so food processors wait up to 3 days for test results. SnapDNA has

developed advanced technologies to provide test results in less than one hour, with the same sensitivity as a culture test, without the need to culture bacteria. The need for culture-independent testing spans multiple markets from food to agriculture to clinical diagnostics.

**"Every aspect of food processing has been streamlined; operational efficiencies in are measured in minutes, so the idea of waiting 3 days for pathogen test results is untenable. With block chain, a retailer should be able to trace a single receipt to all of the food processing details from how and where food was grown to how it was processed, where it was tested, when it was shipped and where it is on the shelf. If there's an outbreak in a food product, SnapDNA technology, in a block chain system, can make the difference between pulling a few tainted packages and recalling all of a product from hundreds of stores and from consumers." - David Medin**

**CEOCFO: How are you able to do so? What is the science?**

**Mr. Medin:** We create three-dimensional DNA structures called aptamers, designed specifically to capture the targeted bacteria cells, isolate them from the rest of the sample and extract DNA or RNA for amplification, detection, and analysis. To facilitate this, SnapDNA created new surface chemistry applications that enable extremely high cell capture efficiency, robust cell binding and DNA processing technologies.

**CEOCFO: Have there been attempts to get a faster process? What led you in the direction? How do you know it works?**

**Mr. Medin:** There have been multiple attempts but they've all fallen short in one or more key requirements. Large food companies told us a two hour test could impact their operational model can change how they do business. In the event of possible contamination, a two hour test would enable food manufactures to identify, isolate, and remediate the problem before product ever leaves the production floor.

**CEOCFO: Are you testing for the same things that were tested for before?**

**Mr. Medin:** Yes. The pathogens that concern us today are the same bugs that made us sick yesterday. The good news is that the US food supply is among the safest in the world. The bad news is that pathogens such as listeria, E. coli, and