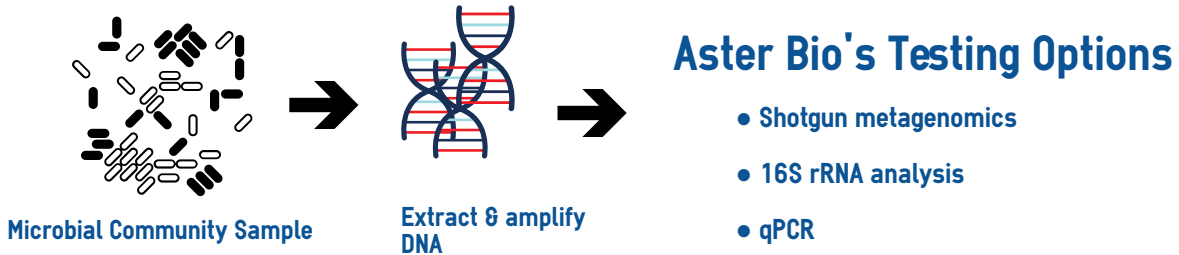




## Testing Process & Options



### Shotgun Metagenomics

Shotgun metagenomics looks all community DNA in a sample. Reads are compared with reference genomes. Delivers information on microbes present and gene pathways in sample

### 16s rRNA

16s rRNA uses genetic material from a select region most often used for strain identification. Data compares the 16s region with a database to determine relative abundance of OTU (Operational Taxonomic Units). Like all molecular testing, 16s rRNA identifies unknown and unculturable microbes not found in traditional lab isolation techniques.

### qPCR

Once "indicator" organisms or genetic pathways are identified using shotgun or 16s rRNA testing, rapid, true quantitative qPCR tests can be used for monitoring. The qPCR is the most accurate and sensitive method to identify select genetic sequences. Compared to traditional plate techniques, qPCR is more sensitive, faster, and accurate.