Multiple new strains of bacteria discovered in the human belly button

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Image: Belly Button Biodiversity

(Medical Xpress) -- New research released this week may find you spending a few extra minutes in the shower scrubbing your belly button. Researchers from the Belly Button Biodiversity project, led by Jiri Hulcr from North Carolina State University, have revealed their first round of DNA results and reveal the discovery of some 1,400 strains of bacteria living inside volunteer's belly buttons, and 662 of those are unrecognized strains.

The team of researchers solicited samples from volunteer's belly buttons and then took the samples back to the lab to cultivate and analyze the

content. They extracted DNA from the bacterial samples and compared it to DNA information that can be found on public databases.

What they discovered was that 40 species account for about 80 percent of all the bacteria found in belly buttons. However, they discovered 662 that are currently unrecognized strains and are believed to be new to science.

Two of the volunteers that provided belly button swabs were *New Scientist* journalist Peter Aldhous and science writer Carl Zimmer. While Aldhous apparently is an avid belly button scrubber, revealing no bacterial colonies in his navel, Zimmer's swab revealed 53 species of bacteria. Zimmer described in his own column how the results showed that out of those 53 species, 35 were found in other participants of the study, but he had 17 different species in his navel that no one else had. One species, Marimonas, has only been seen previously in the ocean, and another, Georginia, has only been found in the soils of Japan.

In looking over the projects website, Belly Button Biodiversity, you can see that the purpose of this project is to raise awareness and interest in microbiology. The idea that our skin is covered in a vast array of life that very little is really known about is the purpose of the project. They chose the belly button as their target skin sample because it is isolated and a great place for microbes to take up residence. They compare this skin exploration to that of the first explorers reaching the sands of a new continent.

While this project was created to help learn and teach about the life found on your skin, the project's initial results are making a real contribution to better understanding microbial diversity.

This round was limited to bacteria, so who knows just what fungi, viruses, or other creatures could be calling your navel home.