

Intestinal Dysbiosis and “AIDS”

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The intestinal dysbiosis hypothesis asserts that severe alteration of the normal gut flora, with beneficial bacteria being depleted and pathogenic microbes favored, underlies much of what is called AIDS as it appeared among some subsets of gay men.

Gut flora, which some have called the “forgotten organ,” are important to our health in several ways.

- Beneficial bacteria compete with pathogenic microbes such as *Candida albicans* for space in the gut;

- Gut flora produce nutrients such as folate, vitamins B12 & K; and make others, such as zinc & selenium, more bioavailable. Gut flora also produce glutathione, the body's master antioxidant;

- Intestinal microflora help maintain and regulate the gut barrier function;

- Gut microbes directly stimulate and shape the immune system.

What happens when
beneficial intestinal flora are
severely reduced in number?

1. Ubiquitous microbes, fungi in particular, that are normally held in check by commensal flora emerge resulting in opportunistic infections;

2. Multiple, concurrent nutritional deficiencies arise affecting numerous aspects of host health;

3. The gut becomes more permeable than normal allowing antigens to enter into circulation causing hyperactivation of the immune system;

4. Immune abnormalities begin to appear, including changes in lymphocyte composition and number.

A large and growing body of research supports the connection between intestinal abnormalities and HIV/AIDS.

In 2006 researchers wrote “... circulating microbial products, probably derived from the gastrointestinal tract, are a cause of HIV-related systemic immune activation...”

A 2008 study asserted that the intestinal impairment in HIV-positive individuals “...is associated with alterations in gut microbiota...” and “...alterations at the gastrointestinal-tract level are a key factor in HIV pathogenesis.”

- 92% of the HIV+ individuals had *Pseudomonas aeruginosa* in their gut compared to 20% of the general population. What's more, the levels of *P. aeruginosa* was 10 times higher in the HIV+ people;

- 100% of the HIV+ subjects had *Candida albicans* in their fecal samples compared to 40% of the general population. The levels of *C. albicans* was nearly 10,000 times higher in the HIV+ individuals than in their negative counterparts;

- The amount of *Bifidobacteria* in the HIV+ group was between 25% and 50% of that found in the general population whereas the levels of *Lactobacilli* was "nearly undetectable" in the HIV+ subjects;

Is HIV causing this damage
to the gut, which
researchers claim occurs
within days or weeks of
infection? How do they
know?

Why should gay men be especially vulnerable to changes in gut microflora?

- Antibiotic usage to address STDs is conceivably higher in populations that are most sexually active.

- Rectal douching, a common practice among gay men in preparation for receptive anal sex, directly affects flora in the colon.

- A 1985 study concluded that “Our findings suggest that frequent enemas may predispose to infection and immunodeficiency in some homosexual males.”

- A 2008 study found that douching was a very common practice and was performed by 96% of the HIV+ gay men in that particular study.

- Sexual lubricants, many of which are hyperosmolar, are known to damage the intestinal epithelium and presumably affect gut flora.

- A 2008 study found that many commercially available lubricants dried out the lining of the colon. Astroglide, the top-selling brand worldwide and one targeted to gay men, was described as “highly hyperosmotic” and “...resulted in severe irritation and tissue damage.”

More extreme forms of anal sex come with greater risks.

Championing an awareness of the role intestinal microflora play in health and illness is a way for rethinkers to reach gay men in a meaningful way.