

Is your biofilm the real problem?

Every day we learn more about the importance of our digestion. Not only do most people suffer from digestive problems, many of which become true diseases, such as IBS and diverticulitis. Digestive weakness also is a key factor in many other illnesses, from chronic allergies and autoimmune disorders to diseases mediated by inflammation, such as heart disease and cancer. And digestive strength is the key variable in healthy immune function.

Conventional medicine is waking up to this reality. But Biological Medicine has recognized the connection for decades. Gastrointestinal health has been one of the pillars of Biological Medicine since I started working at the Paracelsus Clinic. As the second pillar of the Paracelsus model, intestinal health is one of the strongholds of our therapy. But even our view of its importance is increasing in light of new science.

The new understanding is based on research on the so-called "biofilm", a kind of ghetto of digestive dysfunction. The biofilm develops over years of digestive weakness, and becomes a problem unto itself, impairing most efforts to reverse years of damage. But Biological Medicine has a way forward. Let's start with understanding the problem.

How digestion first goes wrong

We know that digestion is important for the optimal supply of nutrients for every cell and usually it is here where the problem starts. Most people in the so-called civilized world are exposed to unhealthy processed foods and eating habits. The consequences of our modern diet and lifestyle, such as preservatives, additives, too little chewing, eating too late, eating under stress, etc. are a range of intestinal problems ranging from dysbiosis to the destruction of the intestinal mucus membrane (leaky gut).

In chronically sick patients who visit Paracelsus, I often see with a dysbiosis and leaky gut (compromised protective bacterial layer of the mucosa), a proliferation of candida and putritive pathogens, an inflamed intestinal mucosa and a slackness of the intestinal muscles.

The known gastrointestinal conditions that result are ulcerative colitis, Crohn's disease, IBS, the many different intolerances and allergies to certain foods, infectious diseases resulting from bacterial overgrowth and immunocompromised diseases. But this is only the beginning of the problems.

The biotope in our gut

Trillions of microbes populate our intestines, and we have evolved a profound interdependence with them. We have 10 times more bacteria than cells in our body. It could be said that we are externally controlled, since our microbes have more DNA than our cells. Their enzymes calibrate our immune system, process our food, provide us with crucial nutrients we can't make for ourselves, and dispose of pollutants.

This means that a healthy balance of microbes is crucial to our overall health. However, it is often the case that parasites and pathogens sneak in and benefit from this internal ecosystem to our detriment (1). They protect themselves in a biofilm which allows them to exist undetected for many years.

There are many reasons why intestinal biofilm can cause damage in our gut:

- The intestinal villi, which are responsible for the absorption of nutrients, become flat and dried out
- The intestinal mucosa becomes permeable to substances that do not belong in the body (leaky gut)



- The intestinal mucosa becomes inflamed and absorption is hindered
- Candida, parasites and pathogenic bacteria can accumulate and use our ingested nutrients and excrete toxic waste products.
- Abdominal bloating and gases can develop and cause other intestinal problems

Intestinal parasites

Parasitic diseases are a woefully neglected subject in medicine. Just 40 years ago it was common for children to have worms and for pet owners it is rather normal to deworm their animal friends once a year. But when it comes to adults we think parasites do not exist anymore in civilized countries. After all, we are 'hygienic' now. Unfortunately, studies have shown that at least two thirds of the population have parasitic diseases including so-called developing countries (2). Even in adverse environments like Siberia 82% of the population is infested with at least one type of parasite, while there are at least 196 different kinds of parasites known to host humans (3,4,5).

Parasites or their eggs can be ingested from drinking impure water and many forms of food – smoothies, salads, sushi, and many more (6)! The difference to past years is that nowadays due to 1. increased toxic exposure e.g. utilisation of manure and slurry as fertilisers and 2. dietary changes and the industrialization of food e.g. increased meat and fish consumption, parasites are able to thrive like never before and hide within a thick, slimy mucous film called biofilm and become unnoticed to their hosts. Furthermore, our impaired digestive function and the increase of preservatives and toxins like aluminium in our food favors the production of this biofilm and so creates an ideal environment for parasites to inhabit the intestines. In this new home, parasites are almost impossible to diagnose, hiding in the deep layers of thick mucus and developing their egg and larvae in a safe environment. Many parasites also harbor pathogenic bacteria and viruses which are an additional burden for us. Not only do the parasites eat the good nutrients intended for us (Gut Grand Hotel!) but that they excrete toxic waste products, which stress our bodies even more.

The gut as the main regulator of our immune system

The intestinal tract is often depicted as the root of the tree of life because it determines health and disease, strength and resilience. That's why Biological Medicine is so focused on diagnosis of its health and therapies to heal it. One of the key roles of our digestion is the regulation of the immune system. The internal regulatory forces can only be revived when the intestinal mucosa, freed from the biofilm and its pathogenic inhabitants, is able to perform its complex tasks optimally again (7).

At the Paracelsus Clinic we are specialized in searching for the various causes of chronic disease in order to combat them. In this regard the intestines are always the main focus. We observe again and again that patients with chronic diseases (often not related to intestinal diseases) benefit dramatically from intensive intestinal cleansing and rebuilding.

The patient regains the ability to nourish the body, restores a healthy immune system, and the ability of the body to regenerate itself is optimized.

The autonomic nervous system as interface

The digestive system is very closely linked to the autonomic nervous system, which is also called the "abdominal brain". Via the gut-brain-axis there is close communication and feedback mechanisms between the intestinal tract, our complex hormonal systems, and the central nervous system.

Newsletter_Sep21_EN.docx page 2 / 3 @Paracelsus Clinic



Therefore, emotions and mental performance can be positively influenced by restoring intestinal health with the elimination of the biofilm. The nerve pathways of the gut-brain axis are reactivated and nutrient absorption is optimized. In addition, by eliminating parasites, their harmful excretions no longer toxify the body, which in many cases are responsible for emotional fluctuations, concentration disorders and low resilience in everyday life. Depression, brain fog and stress syndromes usually improve within a short time.

The Paracelsus BioFilm & Gut Cleanse

Paracelsus offers an intensive intestinal cleansing week to eliminate the biofilm and subsequent parasitic treatment. This <u>program</u> has proven to be successful in restarting the immune system and completely alleviating a range of problems, from asthma, fatigue, abdominal pain, brain fog, inflammation, dysbiosis and every type of digestive disorder.

There is no better situation than to perform an intensive intestinal cleansing combined with an intestinal revamp in a professional environment and with the guidance of a medical doctor. Health is improved from the root of the problem.

Paracelsus Clinic has all the necessary diagnostic and therapeutic instruments of Biological Medicine at its disposal, so that each individual can derive the greatest benefit from the intestinal cleanse. We are looking forward to your visit and hope to contribute to your health and quality of life.

Yours Sincerely,

Renate Liu, MD

References

- 1. Toro-Londono, Miguel A et al. Intestinal parasitic infection alters bacterial gut microbiota in children. PeerJ vol. 2019 Jan;7 e6200.
- 2. de Lima Bessa G, de Almeida Vitor RW, Dos Santos Martins-Duarte E. Toxoplasma gondii in South America: a differentiated pattern of spread, population structure and clinical manifestations. Parasitol Res. 2021 Sep;120(9):3065-3076
- 3. Müller E. et al. Grundriss der gesamten praktischen Medizin. 2nd Edition, Springer-Verlag GmbH Berlin Heidelberg 1931, page
- 4. Johannes Ranis-Heins, Vortrag: "Parasiten im Menschen" in Vaduz, 21.07.2018
- 5. Dönges J. «Parasitologie: mit besonderer Berücksichtigung humanpathogener Formen», Thieme, 1988
- 6. Chan S, Pullerits K, Keucken A, Persson KM, Paul CJ, Rådström P. Bacterial release from pipe biofilm in a full-scale drinking water distribution system. NPJ Biofilms Microbiomes. 2019 Feb 22;5(1):9.
- 7. Partida-Rodríguez O et al. Human Intestinal Microbiota: Interaction Between Parasites and the Host Immune Response. Arch Med Res. 2017 Nov;48(8):690-700.