

On The Relationship Between Nutrition, The Intestinal Environment and Immune Problems

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ABSTRACT

A healthy life requires a healthy intestine. The immune system, which is localized to about 80% in the intestine, can only function properly in the presence of an intestinal symbiosis. There are many possible problems in the milieu of the intestine. When the milieu is normal, it manifests itself in the form of a bowel movement that does not smell and does not require paper for cleaning. Who can say this about themselves? This requires an individually proper diet. Hints for this are given.

Keywords

Nutrition, Immunology, Digestive tract, Allergies.

Introduction

Diseases often originate in the digestive tract [1,2]. If one suffers from flatulence, bloating, belching, and so on, one knows the problem must lie in the digestive system. However, if you have a skin condition, or joint pain, or headaches, you will hardly assume that the problem originates in the intestines. In fact, many diseases have their origin in a disturbed intestine.

It is a goal to help suffering, chronically ill people to regain more quality of life by normalizing the intestinal environment with an individual diet. Resources and self-healing processes of the body can only be activated with an intact intestinal tract. Since time immemorial, there have never been as many chronic diseases as there are today. Very often these chronic ailments arise because of symptom-related therapies, which eliminate the symptom for a certain time, but do not look for the cause and do not treat it. The intestine has been largely forgotten in this process.

The Masquerade of Allergies and Intolerances

It is a fact that in many diseases there is a food intolerance. The problem is that these intolerances often develop insidiously and are not associated with symptoms. Our immune cells react with an

exaggerated defense reaction, which can put our defense system in a state of wear and tear.

An immune cell dies after its defense reaction and has to be formed anew, which represents an additional consumption of resources for the body. This manifests itself in chronic fatigue and poor performance. Common signs of food intolerance are: Headaches, fatigue, skin rashes with or without itching, joint inflammation, mood swings, watery and itchy eyes, restless sleep, allergies, asthma, recurrent colds, angina, stomach and intestinal inflammation, flatulence, bloating, belching, irregular bowel movements with constipation or diarrhea.

Every person can only be as healthy as the food they eat. And the decisive factor is not what I eat, but whether and how I can digest it. Even a luxury diet such as seafood can be highly allergenic. It is not physiological for the defense system to defend itself against food components. Complex proteins and carbohydrates are attacked like the viruses, bacteria and fungi. This non-physiological defense process leads to self-damage of the body and chronic inflammation develops.

Histamine [3,4]

The defense process described above leads to the release of the tissue hormone histamine. As a result, various organs and organ

systems in the body initiate a reaction. First, small blood vessels are dilated, skin redness, hemiparesis, joint pain and nerve pain develop. Cardiac arrhythmias, palpitations and high blood pressure are often the result of increased histamine levels. Digestive disorders, intestinal cramps, asthma and chronic bronchitis may involve histamine. Itchy skin rashes and also neurodermatitis are caused by increased histamine secretion. In children, aggressive behavior, restlessness, anxiety and panic attacks develop. Our brain is also not protected from a high histamine release. Tantrums, depression and anxiety are the result. It is important to know that the food industry wants to sell its processed products. Accordingly, many products are subject to advertising campaigns that increase sales but are usually incompatible with your health.

Basics of Nutrition

There is no such thing as a standardized individual diet. Every individual has an individual digestive system. Time and time again, we find that people produce reactions to foods they have never consumed. So how can for example, an infant have a reaction to salmon that he has never consumed because of his age? The mother may transfer antibodies to the fetus or infant through the placental circulation and later during breastfeeding. On the other hand, the occurrence of cross-reactions must also be considered. Such reactions occur when foods have a similar structure.

Milk [5]

An important work of the media is to suggestively make people believe in the allegedly high value of milk. The fact is that already after weaning the infant's organism reduces the production of lactase in the infant. More than 60% of the world population has a congenital lactase deficiency. The digestive tract needs lactase to break down lactose. If lactose is not broken down into monosaccharides, intestinal bacteria take over the breakdown of lactose, resulting in bloating, fermentation, methanol production (liver stress).

Industrial milk processing - especially homogenization - releases what is known as xanthine oxidase, a uric acid-building enzyme that enters the bloodstream, which can lead to uric acid deposits. It is not only the milk sugar that can cause problems, but more often it is the milk protein that causes us difficulties. Only 60% of casein can be metabolized by the body. The remaining undigested casein fragments can cause allergies.

Gluten [6]

The same applies to the cereal proteins gluten and gliadin. Newer cereal varieties contain a lot of it because of the easier production in baking streets. In Italy this has been registered and goes back to the traditional Roman durum wheat ("grano duro").

Candida: The Problem of a Disturbed Balance in the Intestine [7]

Humans have more bacteria and fungi in their digestive tract than the total number of body cells. These microorganisms perform a very important function, the body lives with them in

a symbiosis. Various regulatory mechanisms ensure that these microorganisms do not develop to the detriment of the body as a whole. The symbiosis must therefore be guaranteed at all times. If this symbiosis is disturbed by the proliferation of certain microorganisms, dysbiosis occurs. Thus, the previously vital microorganisms can become threatening to the body.

One part of these microorganisms are the yeast fungi. *Candida albicans* is physiologically part of the intestinal flora. All yeast fungi are related to each other, including baker's yeast and brewer's yeast. If the immune system is weakened or the intestinal flora is altered by antibiotics, the yeast fungus will try to spread. The spread first takes place in the intestine, but it can extend to the mouth (oral thrush) and to the vagina (vaginal thrush) or even to the skin as skin candidiasis.

If our defenses are very weakened, a fungus that has once expanded can, if it has enough food, double in population every 20 minutes. We then speak of candidiasis when, due to the long-term struggle of the immune system against the mycotic further development, the immune system suffers weakening and therefore secondary diseases occur. The prerequisite for a healthy intestine, is an intact intestinal mucosa. The following factors are necessary for this: Intact immune system, correct intestinal environment, symbiosis within the microbiome.

Immune system [8]

Our immune system develops from birth. Through the mother's milk, the infant receives some of the mother's immunity. The infant's oral contact with its environment causes it to ingest a variety of microorganisms. The immune system now has to deal with these and learns to recognize and ward off harmful invaders. The immune system depends on its training. Infections, environment but also very important the childhood diseases are a field of activity for the training of the immune system.

Modern man with his modern medicine does everything to weaken the immune system of people so that chronic diseases arise. We can assume that anything that stresses the immune system in the long term will also weaken it over time. Persistent infections triggered by bacteria, viruses, parasites or fungi will burden the immune system over time. Food intolerances, psychological stress, environmental toxins, allergies, malnutrition, unhealthy lifestyle and stress weaken the body's defenses. The microflora of the intestine is damaged by antibiotics, antifungals and cytostatics, which causes the immune system to suffer and increasingly turn away from its proper task and develop allergies and autoaggressions.

Changes in the Intestinal Environment

A complex interaction of many different biochemical processes guarantee an optimal breakdown of food. One of the basic prerequisites is an alkaline intestinal environment. This prerequisite provides an optimal living condition for the intestinal flora which protectively coats the entire intestinal mucosa. A pH value in the small intestine of approx. 7.4 guarantees that fungi can

hardly spread in this slightly alkaline environment. If the intestine becomes overacidified through long-term consumption of too many animal proteins, alcohol, too many carbohydrates with a low glyx index, coffee, sugar, nicotine and much more, the intestine loses the ability to buffer the acids formed.

This creates an environment where *Candida* cultures can grow and spread. All the important microorganisms in the intestine that need an alkaline environment are inhibited in their growth when the intestine is acidification, while yeasts and other fungi are stimulated to grow. The intestinal mucosa is damaged. The intestine converts the important epithelial cells into goblet cells so that they produce an alkaline mucus to protect the sensitive layer of intestinal flora. However, this protective remodeling causes the intestinal mucosa is increasingly damaged and becomes permeable, so that undigested food can pass through the wall of the intestines. Here, however, is the police of the immune system, which recognizes these undigested foods and a defensive reaction against these foreign bodies begins. Antibodies (IgE and IgG) are formed and circulate freely in the blood.

The body now reacts in a similar way to a vaccination, immunizing itself against certain foods. Exposure to non-physiological metals plays a decisive role in the further development of *Candida* fungi. Mercury, cadmium, but also aluminum is partly ingested with food. For the fungus a found food, because it can feed on heavy metals. For example, candidiasis can be a direct consequence of amalgam supply or disposal. If the fungus is now treated with antifungal drugs, it releases the ingested metal and poisoning symptoms may occur.

Changes to the Microflora

If antibiotics or sulfonamides are used therapeutically, these drugs also destroy part of the intestinal flora. It is of great importance that these drugs are used absolutely sensibly, e.g. after a resistance determination. Due to the weakening of the intestinal flora, *Candida* fungi can spread, because these drugs cannot inhibit the fungus. Candidiasis occurs more frequently nowadays than in the past - the excessive use of antibiotic substances is causally involved. But also the antibiotic content in food such as meat, fish, eggs and dairy products, should not be underestimated in candidiasis.

Symptoms of Candidiasis

The *Candida* loves a dark and humid climate. This includes the digestive tract from the oral cavity to the anus, forehead and sinuses, genital and urinary tract areas but also skin regions that remain covered for a long time.

Symptoms include

Forehead and sinuses - stuffy nose - itching in the nose

Digestive Tract

Flatulence – heartburn - irregular bowel movements - constipation or diarrhea - Itching in the anal area - abdominal pain - bad breath – belching - dry throat

Genital Area and Urinary Tract

Vaginal discharge - burning and itching in the vaginal area - increasing premenstrual symptoms – prostatitis – impotence - frequent urination - bladder infections in women - burning during urination

General Condition

Chronic fatigue – headaches - concentration problems - mood swings – depressions – irritability - ravenous appetite for sweets - behavioral problems..

Further Symptoms of a Dysbiosis in the Intestine

Susceptibility to infections - joint swelling – arthritis - muscle pain - skin eczema - nail and foot fungus - watery eyes - various allergies - increasing sensitivity to chemicals and GMO's - hypersensitivity to technical electrosmog - an increase in weight up to obesity.

Iron Deficiency and Liver

It is found that in chronic candidiasis, iron deficiency can often develop. Liver stress: Fungi may be involved in the production of fusel alcohols. With many sweet carbohydrates, it is possible that fungi cause them to ferment, resulting in what is known as "homebrew syndrome." This usually long-lasting unwanted alcohol exposure can lead to non-alcoholic fatty liver. This "brewing" in the intestine becomes the symptomatology of fatigue especially in the morning, dullness, headaches and a real "hangover" feeling. In CFS (Chronic Fatigue Syndrome), candidiasis must always be considered.

Psyche and Candidiasis

Certain hormones such as dopamine as a precursor of norepinephrine seem to contribute decisively to the development of psychoses. *Candida* fungi have the ability to produce cinnamic acid derivatives. These hormone-like substances resemble catecholamines in their chemical structure. Such substances similar to catecholamines can have nerve-damaging effects, causing neurological disorders and behavioral abnormalities.

Nutrition in the Treatment of Candidiasis

Basically in all candidiasis its validity is the following: Care must be taken to maintain a balance between alkaline and acidic foods. Acidic foods: Three acids do not overacidify: citric acid, acetic acid and right-turning lactic acid. Other acids are generally acidifying to the body. The more protein a food contains, the more acidic it acts in the intestines. Foods rich in protein are: Meat, fish, legumes, corn, rice and most grains, all dairy products except butter and cream, nuts, soy products, etc.

Dinner: In the evening, avoid raw foods such as salads. Root vegetables, soups, potatoes and millet are fine. Soup should be cooked without bouillon containing yeast and glutamate. Bread and fruits are harmful in the evening.

Lunch: Various salads are fine here, perhaps with a side of meat and fish. But also with vegetables and potatoes.

Breakfast: Fruits and berries are good for breakfast. If raw fruits are not tolerated well, they can be warmed up. It is not recommended to combine cereals and fruits. In general, fruits should not be consumed together with protein-containing foods together.

Yeasts: If recurrent mycotic diseases occur, such as flatulence, bloating, vaginal fungus, diarrhea or constipation, brewer's and baker's yeast must be eliminated in the diet. Flavor enhancers such as glutamate must be omitted.

Sweets: Sweets are absolutely forbidden in the "mushroom diet" as a snack. If one consumes little of a sweet after a lunch, and not daily, it should not be a problem.

Feeling of Hot Hunger

If one does not eat according to the above recommendation, the candida fungus will ask for food, that is, strong feelings of hunger may appear. One should not give in. If the attacks of ravenous hunger become unbearable, one should drink herbal teas, do sports or one does an enema.

Possible Deteriorations

Not only can hunger attacks occur, but through the elimination and expulsion of the fungus, the body gets into possible re-intoxications. These can manifest themselves in headaches, nausea, fatigue, joint pain and sleep disturbances. Thus, intestinal detoxification must be carried out in parallel, preferably with intracellular enzymes [9], which primarily - as long as the intestinal environment is not in symbiosis - can lead to explosive diarrhea. This must be accepted. Depending on the predisposition, psychological symptoms such as listlessness and mild depressive moods may occur and, like the above symptoms, are part of the healing process. One cannot claim that such a metabolic change is easy. Especially not if many foods have appeared as allergenic in the IgG and IgE test.

Conclusion

Hippocrates is credited with the sentence: death is in the gut. In any case, the Russian immunologist Metchnikoff, who founded the intestine-related immunology, said it [10]. In 1908, he was awarded the Nobel Prize in Physiology or Medicine jointly with Paul Ehrlich for "Work on Immunity." Since then, little has changed for the better. If one follows the recommendations given above, one will find that the new diet has a positive effect on the well-being. After about three months one should have found the individual-good nutrition form and should keep it. The immune system will then have recovered and the number of allergies and food intolerances will decrease significantly.

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