

# Beware of glucose syrup! The glycoprotein syndrome - cause of many diseases?

Hartwig Carstensen, MD, 27.06.2011



*Glucose syrup has been used by the food industry for 40 years because of its mild sweetness and especially its stickiness. Whether jam, chocolate, yogurt, ice cream - it's in almost everything, even in organic products. According to the findings of Dr. med. Hartwig Carstensen, a large number of modern diseases from allergies to rheumatism and Crohn's disease to psoriasis can be traced back to it. Carstensen speaks of a glycoprotein syndrome and promises a cure, provided the trigger is avoided.*

Every educated layman knows by now that a focus of pus somewhere in the body can trigger joint rheumatism and worse by forcing the immune system to become perpetually overactive. What is amazing is that there are a number of natural substances that can have exactly the same effects on the immune system as a chronic focus of pus, but have so far been ignored by medicine as a possible cause. This is mainly due to the fact that they do not develop their harmfulness immediately, but only after years of exposure. The excessive use of such substances in the form of food additives is responsible for a number of diseases from which we have been suffering increasingly for the past 40 years and which we know under the term "diseases of civilization". Glucose syrup is made from raw corn and wheat starch and contains a

glycoprotein concentrate of these two types of grains. Glycoproteins are proteins with a carbohydrate content. Various glycoproteins are found in animal and plant organisms; in humans, for example, they are found in saliva and gastric mucus. However, one type of plant glycoproteins is problematic for us: they irritate the immune system, causing inflammation and bleeding. Because they attach to red blood cells and can cause them to clump together, they are also known as hemagglutinins and lectins. The best known is phasin, a lectin of the common bean, which must be destroyed by boiling for at least 15 minutes.

All plants contain lectins; they are incorporated in the seed and serve as a defense against predators. The target of lectins is the sugar binding sites in the cell membrane of many cells of the immune system. Their toxicity, which can be considerable, is based on blocking these sugar binding sites. Thus, they can very quickly cause great damage to the information transmission system of cells, especially the immune system. The surface membranes of the small intestine cells are heavily occupied with sugars, so the lectins react easily with them. They settle down and affect the metabolism of the intestinal cell. They can accelerate metabolism and cell growth to such an extent that the cells die after 12 hours instead of 72 hours and have to be replaced. This results in a surplus of immature cells and the intestine's absorption capacity for nutrients decreases. Lectins, which are transported through the protective wall of the intestinal wall into the bloodstream, can have a profound effect on the hormonal balance of the body and protein metabolism.

## With industrial food over the tolerance threshold

Such glycoproteins (lectins) are an unavoidable part of our daily diet. They are ingested in amounts of up to 300 mg/day and come mainly from legumes, wheat and corn. However, a diet that includes these food crops does not exceed the tolerance level above which adverse health effects would be expected. This is true even if more whole-grain bread and fresh-grain cereals are consumed.

The situation is quite different if you frequently consume industrially produced foods in whose manufacture glucose syrup was used. There are around 300 such products in an average medium-sized supermarket. 60 percent of jams and compotes contain glucose syrup, 80 percent of chocolates, 80 percent of ready-to-eat cereals, 95 percent of ice cream products and 99 percent of fruit gums and licorice. Syrup is also found in yogurt and desserts, as well as in most baked goods. It can be present undeclared in bee honey. Particularly shocking: the additive is also found in many baby milk substitutes, preferably in the so-called hypoallergenic formula of several manufacturers. In the pharmaceutical industry, glucose syrup is used in the production of coated tablets. This explains the fact that today many people who eat a completely normal, i.e. average, diet have the tolerance threshold exceeded.

During the fermentative saccharification process of corn and wheat starch, additional new lectins are obviously formed with the proteins present in the starch and the added glucose. If heating above 100 degrees does not take place either during production or use, significant amounts of reactive lectins may be present in the individual foods. This is why ice cream or coconut bars contain about 70 times as much lectin as a pastry made with the same amount of glucose syrup. Of all grains, corn and wheat, which are problematic for humans anyway, have been chosen by the food industry to add their lectins to foods as a binding agent in the form of a concentrate. 50 percent of food intolerances are due to these two very young grains. In addition, intolerance to cow's milk accounts for another 25 percent, but this is probably also attributable to the corn concentrate: Herbivores and grain-eaters absorb lectins with their food and store them in their tissues. If cattle are fed corn, their muscle meat and milk contain the corn lectins.

## **Immune system needs three to four days recovery each**

If the immune system has three to four days after the lectins attack, it recovers and probably no permanent problems arise. However, since not only stimulants but also foods such as sweetened yogurt or sweetened ready-to-eat cereals are loaded with glucose syrup, the lectin-free interval, i.e. the time for the immune system to recover, becomes too short. Thus, the small individual amounts of glycoproteins, which are harmless in themselves, can develop their full effect through constant repetition and long-term consumption and lead to a pathological permanent activation of the immune system, just as a chronic inflammatory process caused by bacterial toxins would do.

An exemplary case of illness can illustrate this: The patient, now 65 years old, had psoriasis vulgaris at the age of 50. At the age of 60, an aggressive rheumatoid arthritis broke out, and at the same time the psoriasis worsened. Laboratory findings did not offer any special features: Rheumatoid factors were typically negative. In terms of dietary habits, an almost daily consumption of ice cream and industrially produced jam stood out, as well as a not-so-frequent consumption of coconut bars, chocolates, and caramel nut bars, all of which have a high lectin content. He was certainly exposed to an above-average lectin input for years and decades, so that one must speak of a permanent strain on the system. Due to strong aggravation of the rheumatoid arthritis, which already made him think of a wheelchair, the chemical therapy with maximum doses of cortisone and prostaglandin inhibitors had to be considered unsuccessful.

Drug intolerance caused the patient to discontinue all medications on his own initiative and to consistently follow a low lectin diet with complete avoidance of glucose syrup. Nine months later, he was symptom-free from the rheumatoid arthritis side. Even capsule thickening at the knee joint receded. After a year, the psoriasis also disappeared.

Now two provocation tests were performed: The first was with ice cream, the second with coconut bars. Both products contained glucose syrup in high concentration. After consumption of these foods for 14 days, highly acute new attacks of rheumatoid arthritis occurred in each case. The exacerbation of the psoriasis followed in each case with a time delay of one to two months later. Healing took about three months in each case.

## **The complaints appear only after years**

How can we imagine the development of this glycoprotein syndrome? We know that mucosal cells of the intestinal wall, which are fully occupied with lectins, perish. This apparently constantly necessary cell sacrifice causes the short life span of the intestinal cells. Our organism has adapted to this, so that in the long run it does not become ill as a result. This only happens when the performance of this

system is constantly overtaxed by the massive intake of glucose syrup. Then the lectins pass through the intestinal barrier into the blood together with bacterial toxins from the intestinal contents, which are increasingly interspersed with foreign bacteria and finally with fungi, and in which fermentation and putrefaction processes increasingly occur. At the end of such a process of mutual aggravation, in some cases the full-blown chronic inflammatory bowel disease such as Crohn's disease develops (see "The phases of glycoprotein syndrome" below).

If the overload of the immune system with lectins continues for years, maladaptation and regulatory rigidity can occur. In the permanent state of overactivity, the system begins to develop signs of exhaustion. These consist of the fact that recognition and degradation of foreign proteins no longer function reliably. In this way, proteins that are still foreign in character pass through the control barrier and, in their aggregate, can become a considerable disruptive factor. The body tries to get rid of them by simply depositing them in metabolically poor tissues. Thus, connective tissues become a veritable garbage dump of such macroglobulins.

This process can precede a manifest disease for years with few symptoms and unnoticed. However, as soon as the amount of antigenic macroglobulins exceeds a certain irritation threshold, an overreaction against the globulins occurs. Since these are not freely present in the tissue but are firmly incorporated in the fibrous structures, inflammatory cells must invade and carry out the degradation. The associated redness, swelling and painfulness then signifies the onset of acute arthritis or psoriasis.

## Successful therapy confirms the findings

Some important aspects of modern civilization diseases can now be explained from the origin of the glycoprotein syndrome (GPS) and, conversely, support the assumption that GPS is the essential common cause. Among other things, this is supported by:

- the relapsing course of rheumatoid arthritis and psoriasis,
- the connection of the complaints with food intake, which is often also described by patients
- the soothing effect of fasting
- the possibility of being able to trigger a rheumatic episode by ingesting the relevant products, and last but not least...
- ...the successes of the therapy especially in contrast to the failures of conventional therapy.

The five thoroughly researched and examined cases became symptom-free after six to nine months (about one month per year of the previous disease duration). Among them is a case of the most severe ankylosing spondylitis (ankylosing spondylitis), which after a last and also unsuccessful attempt with thorium X irradiation was predicted by his doctors to have a life span of two years. Now, after more than ten years, the patient has crossed the Atlantic for the second time on his sailing yacht.

In another case of thirteen-year-old severe rheumatoid arthritis, diclofenac had to be discontinued because of an allergy. This only succeeded in a six-month inpatient withdrawal because the patient had severe withdrawal symptoms (hypersensitivity to pain as well as neurological and psychological symptoms). Today, the woman is symptom-free without medication.

An extreme manifestation of small bowel involvement appears to be enteritis regionalis (Crohn's disease), which occurs in combination with rheumatoid arthritis in more than 20 percent of cases. A low lectin diet also led to cure in this case, which was already scheduled for surgery.

It may be a little unusual to see the diseases that were previously regarded as independent merely as symptoms of a profound disturbance of the immune system, but it corresponds to the holistic view of man and his diseases. The most important thing, however, is that there are now opportunities to avoid this huge number of serious diseases, together with their suffering and the costs of treatment, in the first place, by banning glucose syrup from our food.

It's hard to believe where the sticky sweetener is found - even in products that are praised as healthy or have been awarded prizes for being recommended for children.

## The three phases of the glycoprotein syndrome

Glycoprotein syndrome (GPS) encompasses a variety of diseases that probably all have a common cause: excessive dietary exposure to glycoproteins, especially glucose syrup. They can therefore be referred to as symptoms of GPS.

### Phase I

In the first phase, the overactivity of the immune system reveals itself in the frequent occurrence of allergies. It is quite conceivable that sensitization of the child can already take place in the womb through the mother's nutritional habits. After birth, this can be intensified many times over by the mother's milk or a contaminated infant formula. Thus, even the most severe and very early cases with neurodermatitis become understandable.

**Symptoms:** Allergies, asthma, neurodermatitis, inflammatory bowel disease.

### Phase II

The second phase is the phase of silent antigen storage. It may last longer than ten years and is characterized by sparse bridging symptoms. These may consist of occasional joint complaints, which are usually not taken seriously, the appearance of psoriasis vulgaris and formation of cicatricial keloid (growths).

**Symptoms:** Joint discomfort, skin itching, periodontal disease, recurrent gingivitis, gastritis, fermentation stools, cardiac arrhythmias, tendency to muscle soreness and cramps, psoriasis.

### Phase III

In the third phase, the disease breaks out acutely and leads to one of the known autoaggressive diseases, whereby localization and severity of the course are certainly also controlled by the genes. It is likely that the so-called collagenoses (lupus erythematosus, scleroderma and others) also belong to this group. There is much to suggest that multiple sclerosis is also maintained by processes of this kind.

**Symptoms:** Rheumatoid arthritis, ankylosing spondylitis, Still's disease, psoriasis vulgaris, temporal arteritis, cardiac arrhythmias, enteritis regionalis with or without arthritis.

## What helps with glycoprotein syndrome?

The most important thing is a lifelong and consistent diet! Anyone who eats a natural wholefood diet without convenience products and especially sweets is already on the safe side. However, one must always keep in mind that one or two diet mistakes within a week, for example with industrially manufactured products such as ice cream or cereal bars, can completely ruin the hoped-for success. Since glucose syrup is considered a harmless natural product, one is unfortunately not safe from it even with organic products, even if it is only declared as corn syrup or wheat syrup. Bee honey poses a particular problem. Glucose syrup is a feedstuff approved by the EC for which there is no declaration requirement. It is added to bee honey by many manufacturers. Anyone who wants to do more than avoid products with glucose syrup should use harmless grains such as rye, spelt, green spelt, rice and millet instead of corn and wheat in their diet.

Recent research shows that gluten-containing products such as wheat, rye, spelt, green spelt and rice also contain lectins that are harmful to humans and can lead to disease.

A second important prerequisite for a cure is the discontinuation of rheumatism medications such as Diclofenac or cortisone! In all the cases described, the therapy began with a consistent departure from unsuccessful conventional rheumatism therapy by discontinuing the rheumatism drugs. This is easily understandable, because the prostaglandin inhibitors destroy the protective mucosal layer of the small intestine and thus the intestinal barrier. In this way, they enable the persistence of the very disease they are used to treat. A similar situation applies to drugs that suppress the immune system and are

frequently used in inflammatory diseases. They further damage the already overburdened immune system and prevent the recovery of the system necessary for healing. However, discontinuation of medications must be clarified with the doctor in every case. Many preparations must not be discontinued immediately and without substitution! In addition, various therapies have proven to be elements of a holistic therapy, including fasting, systemic enzyme therapy, magnetic field therapy and complementary conflict management, the elimination of stress factors.

After interruption of excessive lectin intake, the immune system will recover and attack the macroglobulin depots more intensively, which leads to the well-known phenomenon of initial worsening. After three months, however, improvement should begin at the latest and freedom from symptoms should be achieved after six to nine months.

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