

# The people's illness, irritable bowel syndrome (IBS) — Pathophysiological context of causes of IBS — Treatment of IBS using bioresonance therapy, Bicom

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Chronic overloading of the gastro-intestinal tract due to an 'unhealthy diet' often results in functional problems which can lead to disease. One such condition is irritable bowel syndrome which is now widespread among the populations of affluent industrial countries. Patients suffering from the condition complain mainly about abdominal pains, feeling bloated and flatulence and also abnormal motions which is expressed as a tendency for diarrhoea or constipation or an alternation between the two conditions.

## **Main symptoms of irritable bowel syndrome**

### **Abdominal pain**

often experienced when emptying the bowels

### **Feeling bloated and flatulence**

after eating food

### **Unusual stools**

thin stools, diarrhoea, constipation

IBS has become more frequent with the development of a prosperous community and the constant availability of a varied range of food and it is classified as an illness of modern civilisation.

**Since the increase in IBS correlates well with modified eating habits — including a preference for processed food, fast food and soft drinks — the cause has to be regarded as related to or dependent on modern, and poor, eating habits.**

The specialist medical press is already referring to it as a very common complaint owing to the increased frequency of IBS which is occurring. According to recent statistical surveys, 15 to 20 percent of the population in Germany are affected. Accordingly, the number of patients in the surgeries of registered doctors is also very high. The clinical picture causes many and long-term restrictions on the quality of life with considerable socio-economic effects due to periods off work and early retirement.

Traditional medicine has not hitherto produced an adequate explanation of the causes of IBS, and many specialist publications simply repeat the same things:

- cause not known,
- pathological changes in organs cannot be detected in the case of IBS.

A number of possible pathological mechanisms which can trigger the symptoms is currently being discussed in the field of established medicine; these are given in the table below:

With regard to diet as a possible causal factor for IBS, traditional medicine says (taken here for example from Deut. Arzteblatt, 2000, p. 3263—3270, vol. 48): „Dietary factors (foodstuffs, diet, eating habits) can have an effect on the symptoms of IBS. The underlying mechanisms (such as allergies, intolerance, non-specific effects) are currently unclear.“

On the other hand, my experience over many years of practice has shown that patients with IBS suffer from an obvious food-allergic reaction of the mucous membrane in the small intestine. The evidence for this is:

**Possible primary pathophysiological mechanisms for IBS (traditional medicine)**

**Visceral hypersensitivity**

(hypersensitive mucous membrane in the bowels: increased sensitivity to pain)

**Psychosomatic problems**

stress

**Psychological illnesses**

**Aged intestinal flora**

**Follows an intestinal infection**

**Genetic disposition**

**Environmental effects**

**Problems with the nervous system,**

autonomic, central, enteral

**Motility problems**

(bowel movement)

**Problems with the immune system**

Hotz, J., A. Madisch, P. Enck, H. Goebell,  
I. Heymann-Mönnikes, G. Holtmann, P. Layer:  
Das Reizdarmsyndrom. Dt. Arztebl. 2000; 97:  
A 3262-3270 (Heft 48)

**Causes of IBS (experiential medicine)**

*PRIMARY FACTORS*

**Allergy to constituents of foodstuffs**

**Allergy to additives in foodstuffs**

*SECONDARY FACTORS*

**Food-intolerance**

lactose, sorbitol, etc.

**Irritants**

Irritants in foodstuffs, hot spices,  
beverages, etc.

**Pseudoallergic reaction**

biogenic amines (mediator substances  
histamine, tyramine, serotonin, etc.

Food acids: salicylic acid etc.

Additives in foodstuffs: benzoic acid,  
sorbic acid, sulfites, etc.

**Stress and other psychological problems**

**Infections**

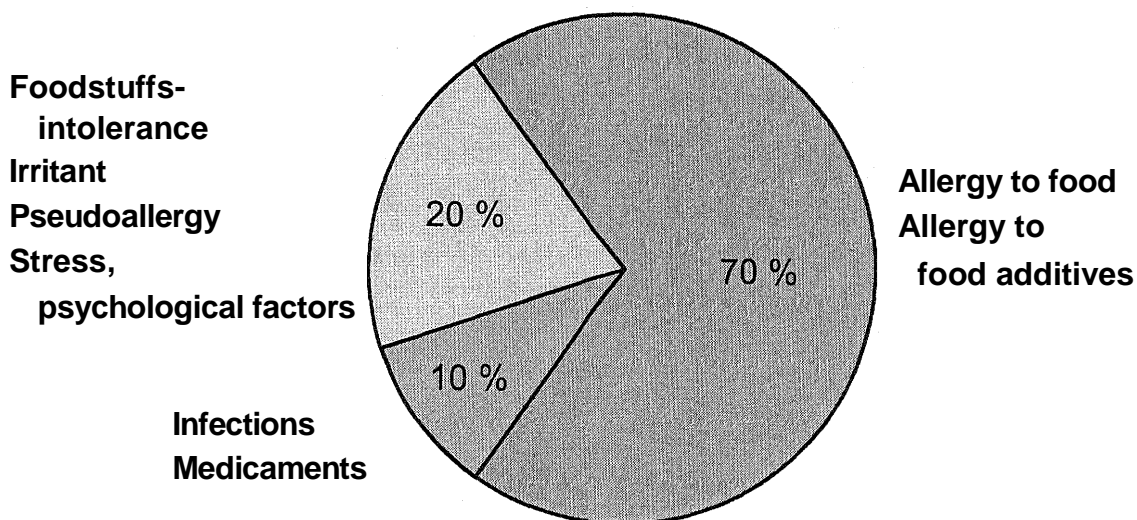
pathogens, pathogenic toxins

**Medicaments**

Orlistat, Acarbose, etc.

from K. J. Mielke

**Factors which have an effect in the small intestine and which maintain IBS**



from K. J. Mielke

- the results of allergy tests which have been performed which indicate constituents of food-stuffs as allergens, and
- the absence of symptoms and the speedy recovery of patients after treatment for allergies.

(I will give details about allergy testing and allergy treatment later)

Other factors which affect the clinical symptoms, such as stress, psychological problems, intolerance, irritants, medicaments and infections generally have a less pronounced effect, and this also lasts for a shorter period of time, following allergy treatment. The intestinal problems are then only present when the polluting factors take effect, in contrast to allergy-untreated patients who suffer from chronic bowel problems.

#### NOTES ON PHYSIOLOGICAL CHANGES IN FUNCTION ALONG THE INTESTINAL TRACT

In order to be able to understand the pathophysiological relationships of IBS, I will go into a little detail about some of the functions of the intestinal tract.

The small intestine and large intestine are distinctly separated from each other, both functionally and anatomically (ileocaecal valve).

Exclusively a chemical-enzymatic process for digestion and absorption takes place in the small intestine, while microbial fermentation of the contents of the intestines by intestinal flora takes place in the large intestine.

The pasty food suspension passed from the stomach in portions into the duodenum is neutralised and provided with enzymes by the exocrinal distribution of secretions from the pancreas. The volume of liquid secreted is considerable; together with gastric juices and bile it amounts to about 7 litres a day, which gives the contents of the bowels a very runny consistency. This consistency is required in order to make good contact with the fine surface structure of the small intestine, the microvilli, to ensure effective digestion and absorption. All-in-all, the very runny food suspension passes rapidly through the approximately 4 metre length of the small intestine. Fibrous substances which swell up regulate the passage of food through the intestines.

In contrast, the residual food material (normally fibrous substances) which flows into the large intestine remains for several hours in the initial section of the large intestine (caecum and colonascenens). This is achieved by waves of

contractions in this section of the intestine which run opposite to the general direction of flow and also thoroughly mix the contents of the intestine. This long residence time is based on physiological factors because the microbial process to break down the fibrous material is completed here. The carboxylic acids (short chain fatty acids) formed by the metabolic selectivity of the intestinal flora gradually acidify the contents of the intestine and this produces irritation of the large intestine which then results in onward transport of the food material by means of corresponding waves of contractions.

Since there is a large difference between the modes of transport and use of the digestion broth in the small and large intestine, it can be understood why the two sections of the intestines are strictly separated from each other by a one-way valve closure (ileocaecal valve). The movement of intestinal bacteria from the flora in the large intestine into the small intestine has to be prevented because bacteria would cause enormous problems in the digestion and absorption process.

Since bacteria in the small intestine find an optimum source of nutrition, they would grow and multiply there in an explosive manner. In addition, the metabolic products of the bacteria would attack the mucous membrane in the intestine, initiating inflammatory reactions which could lead to perforation of the intestine.

The apparently helpless approximately 4 m long small intestine, which is embedded in the abdomen like a tangled ball, is protected from bacteria, other pathogens and their toxins by receiving an almost sterile gastric broth, diluting this greatly with digestive juices and allowing the broth to flow rapidly through the intestine. To fend off any bacteria which continue to develop, the specific and non-specific immune system comes into action and this eliminates antigens and checks unknown substances for acceptance (*Peyer* plaques).

Any irritation to the mucous membrane, provoked by a variety of interference factors such as irritants, allergens and bacteria, is counteracted by the sensitive small intestine by immediately flushing out with secretion, a process aimed at self-protection. The food broth then flowing into the large intestine and which is not

available for absorption, however, has a negative effect on the bacterial fermentation taking place there; damaging fermentation and putrefaction of the inflowing nutrients occurs and this has a health-hazardous effect on the mucous membrane in the large intestine and on the total organism.

These circumstances explain why the small intestine, in comparison with other organs, has one of the lowest rates of disease: malignant tumours are very rare in the small intestine, in contrast to frequently occurring carcinoma of the large intestine.

A few bacteria do grow during passage through the small intestine, these having survived the acid gastric medium in a „biological niche" and are able to resist the intrinsic immune defence system in the intestine. If, under any circumstances, there is an obstruction to passage, subileus or ileus, the bacteria multiply in an explosive manner in the backed-up intestinal broth under ideal nutritional and temperature conditions. The metabolic products formed by the microorganisms, some of which are toxic, damage the intestinal wall. The inflammatory reactions initiated, which can lead to perforation of the intestine, rapidly produce the clinical symptoms of an acute abdomen which requires immediate emergency treatment by a surgeon.

In contrast, the conditions in the large intestine are precisely the opposite. The intestinal broth „stands", that is resides, in the intestinal tube. The intestinal bacteria from the intestinal flora, with a moderate rate of growth, make use of fibrous materials which are difficult to break down. In addition, the physiological intestinal bacteria colonise the mucous membrane in the large intestine, adhere tightly to this alongside each other and shield the mucous membrane from pathogens. The intestinal flora live in symbiosis with the large intestine, they make use of fibrous materials to provide absorbable energy carriers, provide butyrate for metabolism in the cells of the mucous membrane and receive in return the „right to live on" (colonise) the mucous membrane,

#### **Location of intestinal flora**

**No bacteria, in the sense of intestinal flora, live in the small intestine, while these are essential in the large intestine.**

**Bacteria would multiply in the small intestine in an explosive manner and would consume the nutrients which are intended for absorption. Acidic and toxic metabolism products from bacteria would irritate the mucous membrane and trigger flushing out of the intestines; in the event of an obstruction to passage, inflammatory defence reactions in the intestinal mucous membrane lead to acute abdomen.**

**The hitherto widespread assumption that intestinal flora are found in the small intestine has to be rejected as mistaken.**

#### FUNCTIONAL PROBLEMS WITH DISASTROUS CONSEQUENCES

As described above, the mucous membrane in the small intestine reacts to irritation with the secretion of mucous and accelerated passage of the contents of the intestine in order to flush out the problem-causing agent. Irritants present in foodstuffs are many and varied: allergens, spices, mediator substances, pathogens, toxins etc. Depending on the degree of irritation of the mucous membrane and the intensity of flushing out and thus accelerated passage through the intestine, the small intestine passes absorbable nutrients into the large intestine. The use of macronutrients by the flora in the large intestines leads to the clinical symptoms of IBS.

#### **Consequences of acid fermentation in the large colon**

All carbohydrates entering the large intestine are subjected to rapid utilisation by the bacteria in the intestinal flora. This rapid reaction is based on the fact that sugar and starch are much easier to break down than are structurally rigid fibrous materials. Gases and carboxylic acids are produced by microbial metabolism (see the table).

The gases inflate the intestine and cause the patient to feel bloated; this may extend painfully throughout the abdomen and, by expanding the diaphragm, promote a feeling of the heart being restricted. The gases have to escape; some are absorbed via the intestinal wall, most escape via the anus as unpleasant flatulence. If the large intestine has already been damaged, and thus

obstipated, by protein putrefaction and other toxic contaminants, the gases are retained and patient suffers from the symptoms of meteorism.

**Pathological fermentation and putrefaction in the large intestine**

**Gases:** CO<sub>2</sub>, H<sub>2</sub>, CH<sub>4</sub>, NH<sub>3</sub>, H<sub>2</sub>S, etc.

**Carboxylic acids:**

acetic acid, propionic acid,  
butyric acid, lactic acid,  
formic acid, etc.

**Toxic amines:**

cadaverine, putrescine, agmatine,  
tyramine, cresol, phenol,  
tryptamine, indole, scatole, etc.

Due to the bacterial use of readily degradable carbohydrates, an excess of carboxylic acids is formed in an anaerobic medium and this rapidly acidifies the contents of the intestine. The degree of acidity is an irritant in the large intestine which triggers emptying of the intestine. The corresponding peristaltic movements start prematurely and very thin stools which have an acidic odour are produced. This procedure takes place rapidly as long as there is no obstipation present to prevent emptying of the intestine. The patients concerned then complain of long-lasting abdominal pain.

Permanent and repeated acidification of the contents of the intestine in the caecum, which may take place for several months, and increasing colonisation over-irritates this section of the intestine. The intestine gradually becomes hypersensitive. This hypersensitivity increases the feelings of pain (visceral hyperalgesia). Even a slight expansion of the wall of the intestine due to the formation of gas is then accompanied by increased abdominal pain.

Overacidification is now a widespread, food-dependent and fermentation-caused metabolic contaminant. As a result of compensatory tissue buffering, an essential emergency measure to maintain the correct pH, there are no unusual blood parameters, although latent tissue overacidification may already be present. Due to the high amount of acid produced by carbohydrate fermentation in the large intestine, a pH drop in all mucous membrane secretions, and thus a shift in the pH optimum of the digestive system, may occur, resulting in partial

malassimilation, which then also promotes IBS (circulus vitiosus). More details relating to acid contamination may be found in my book: „Droge Wohlstandskost: Chronisch krank durch Fehlernahrung“ [„Drugs, the diet of prosperity: chronically sick through wrong nutrition“], part 2 of the book „alkaline or acid, walking a tightrope between life and death“, ISBN 3-00-002927-3.

**Consequences of toxic putrefaction in the large intestine**

The passage of proteins into the large intestine as a result of provoked small intestine flushing out has much more serious consequences.

Proteins are degraded by subordinate bacteria in the intestinal flora (which proliferate in the presence of proteins and suppress the normal flora), some of which produce toxic compounds.

These toxic amines (see table) affect primarily the intestinal mucous membrane and also the intestine-associated nervous system. If this type of damaging effect lasts for a long time, then failure of the nervous system may occur, resulting in loss of motility in the intestinal wall which leads to intestinal inertia and finally to obstipation.

In addition, these toxins get into the portal vein blood and flow to the liver. If liver detoxification is performed for any reason at all, these toxins in the circulating blood reach all the cells in the body and, by crossing the blood-brain barrier, even reach the nervous system. This is why patients with IBS frequently exhibit neurological symptoms such as loss of concentration, tiredness, sleep problems, headaches, etc., which are attributed, inter alia, to auto-intoxification in the large intestine.

Delayed emptying of the intestine due to the condition known as obstipation (traditional medical definition: fewer than three stools per week) has no further pathological consequences. The pasty contents of the large intestine represent a biological living material containing millions of bacteria. If the contents of the intestine remain in the intestine with the constant removal of water, mass destruction of the bacteria takes place and this releases enzymes and other active substances, as the cells die, which can attack the intestinal

mucous membrane. Given this scenario of uncontrolled enzyme activity, bonded poisonous substances excreted by the liver via the gall bladder may become loosened and also have an effect on the mucous membrane.

I am putting forward the hypothesis that toxic contamination during obstipation, as described above, should be considered as an essential factor in the carcinogenesis of large intestinal carcinoma. In addition, the localisation of the carcinoma correlates closely with the intestinal sections associated with stool retention: 62 percent of carcinoma are in the rectum, 20 percent in the sigma section.

ALLERGIC REACTION OF THE MUCOUS  
MEMBRANE IN THE SMALL INTESTINE AS THE  
PRIMARY CAUSE OF IBS

The patients treated for IBS in my practice, with a few exceptions, exhibited allergic reactions to basic foodstuffs and to additives in foodstuffs. The range of allergies extended from foodstuffs which are eaten daily such as grain proteins, milk proteins, hen's egg proteins, and frequently to additives, right down to the ingredients in rarely consumed foods.

The following table gives a list of frequently encountered allergies in order of frequency.

**Frequently consumed foods and additives  
which cause allergic reactions, arranged  
in order of frequency of test results**

<p><b>Wheat</b></p> <p><b>Rye</b></p> <p><b>Gliadine</b> (fraction of gluten)</p> <p><b>Cow's milk</b></p> <p><b>Lactose</b></p> <p><b>Egg yolk</b></p> <p><b>Egg white</b></p> <p><b>Hazelnuts</b></p> <p><b>Yeast</b></p>	<p><b>Carrots</b></p> <p><b>Tomatoes</b></p> <p><b>E339—E341,</b> <b>E450—E452</b> (phosphates)</p> <p><b>E621—E623</b> (glutamates)</p> <p><b>Apples</b></p> <p><b>Lemons</b></p> <p><b>Oranges</b></p> <p><b>Walnuts</b></p> <p><b>Soya</b></p> <p style="text-align: center;">from K. J. Mielke</p>
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I designate allergies to basic foodstuffs as the primary causal factor for IBS because they continuously maintain the clinical symptoms and lead to the chronic illness which is characterised as IBS. Secondary factors (see table), on the other hand, cause problems only occasionally or for a period of time which depends partly on the amount of problematic agent actually consumed.

N O T E S O N  
FUNCTIONAL INTESTINAL PROBLEMS WITH  
NON-ALLERGIC CAUSES  
(SECONDARY FACTORS IN IBS)

In order to avoid intestinal disturbances with the symptoms of IBS due to specific non-tolerated ingredients in foods, the attention of the patients is drawn to frequently encountered dietary faults.

Thus, the eating of lactose, mostly taken in small amounts, is inadvisable because this can initiate flatulence and diarrhoea. The same applies to the sugar sorbitol, but less so to fructose. These sugars are poorly absorbed by the small intestine due to a natural enzyme deficit (for lactose) or a delayed enzyme reaction, so they remain in the intestine, bind water and accelerate the rate of passage. They pass into the large intestine, along with some of the contents of the intestine. The excessive degree of fermentation and putrefaction of the macronutrients initiated therein then causes typical symptoms.

Some constituents of foods trigger pseudoallergic reactions. These may be present in fermenting, but also in no longer fresh foods in health-impairing concentrations, e. g. in sauerkraut, cheese, wine, bad fish. If they cannot be tolerated during their consumption with any retained irritants such as raw onions, hot spices, coffee, etc., the individual tolerance threshold is reached; if the intestine is sensitive their consumption should be avoided as a precautionary measure.

Stress can also greatly disturb the intestinal function when, due to psycho-neurovegetative coupling, the blood is redistributed from the intestinal tract to the skeletal muscles and to the brain and then intestinal motility and the secretion of digestive juices decreases to a large extent. The small intestine then, for its own safety, rapidly flushes the contents of the intestine into the large intestine.

Only autonomic bacteria in the intestinal flora in the large intestine behave in a stress-independent manner, they rapidly react with the easily digesti-

ble macronutrients and cause flatulence, thin stools or diarrhoea.

Medicaments, in particular those used to treat weight reduction such as acarbose (alpha-glucose inhibitor) and orlistat (lipase inhibitor) cause intestinal problems of the same nature as those described above.

Occasionally, IBS may be triggered by an intestinal infection. Campylobacter bacteria are responsible in particular for problems with intestinal function. Generally, the very competent immune system in the intestine rapidly combats any infection so that the symptoms of the disease occur for only a short time. The bacteria are sometimes found in „immune-cold“ niches, e. g. the pancreas-gall bladder ducts and may act in a damaging manner from there on the intestinal mucous membrane. Targeted treatment, optionally with the incorporation of surgical measures or allotherapy, may then be required.

#### Pathophysiology of IBS

**The cause of IBS is based solely on functional problems in the small intestine.**

**The small intestine reacts in a very sensitive manner to allergens and irritants from foodstuffs and additives in foods.**

**The small intestine protects its own mucous membrane by flushing out, by secreting mucous and by accelerating passage through the intestine.**

**The absorbable nutrients then passed into the large intestine produce a perturbation in the fermentation process of the intestinal flora. Carbohydrates are subjected to excessive acidic fermentation, proteins to toxic putrefaction.**

**The symptoms resulting from this, such as feeling bloated, flatulence, abdominal pain, diarrhoea, thin stools, changes in stool behaviour, obstipation, neurological problems, characterise the clinical symptoms of IBS.**

**If there is an allergic reaction to a basic foodstuff, continuous functional problems occur which produce a chronic illness, which is what characterises IBS.**

ALLERGY TEST

The experiences in my practice show that, in the case of patients with IBS, the first task is to look for allergic reactions to basic foodstuffs. I use experiential healing test methods (see table) in which expert application of the method provides the correct results. These energetic test methods are easy to deal with, require very little time and do not require semi-invasive procedures (such as skin injuries, blood sampling).

Traditional medical test methods such as the prick test or the scratch test too often give incorrect negative results, RAST (Radio-allergo-sorbent test) performs a little better. Since the allergies being looked for are in the small intestine mucous membrane, these obviously cannot be detected by direct tests. This fact may explain why doctors who practice traditional medicine rarely recognise allergic reactions to the small intestine mucous membrane and thus give too little importance to allergic reactions when deciding on the source of IBS. Proven, alternative and reliable test procedures are therefore formally offered.

#### Experiential healing test methods

##### **Kinesiology**

Muscle test

##### **Reaction-Interval-Test**

Test using double-handed switch (modified by Mielke)

##### **Biotensor**

Test using single-handed switch

##### **EAV**

Electroacupuncture according to Voll

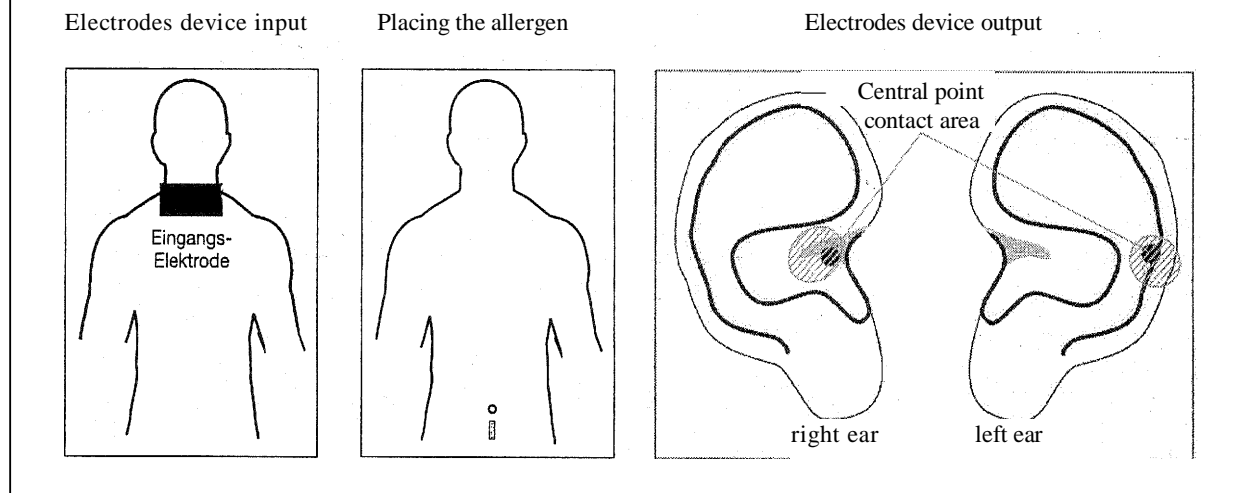
and others

#### ALLERGY THERAPY

In order to restore normal intestinal function, foodstuffs, in particular basic foodstuffs, have to be tested for tolerance. The main purpose is to look for food allergy reactions, to be precise for foodstuffs ingredients and additives which are part of the daily diet.

## Allergy therapy using Sicom, example

Programme 530, therapy time 3 minutes. Set-up, see below:



Since IBS is a continuous illness which occurs at close intervals, a causal pathological effect has to be correlated with the progress of the illness. Suitable for this purpose are the very frequently tested allergic reactions to grain proteins, milk proteins, egg yolk, egg white, phosphates (E339—E341, E450—E452) and glutamates (E621—E623) in the daily diet (see table).

The allergy is treated using the well-proven Bioresonance methods. In my practice, I use the BicOm device. It provides a choice of several programmes and therapy set-ups. I prefer programme 530. Here, the input electrode is placed in the shoulder-neck region, the allergens to be treated (test ampoule or native preparation) in distance of 1 to 4 cm below the navel (region of 2" chakra). The output electrodes, two rod electrodes, one on each ear, are pressed gently down on specific acupuncture points (see drawing above).

Therapy for each allergen lasts for 3 minutes (time setting on Bicom device). Immediately after therapy, it is tested whether the allergy has vanished, that is to say whether „allergy extinction" has occurred. Occasionally, a post-treatment of 1 to 2 minutes is required. During therapy, the patient sits down in a relaxed manner. It is recommended that he close his eyes in order to avoid unnecessary perceptual irritation. Any electrical devices and lighting in the vicinity are temporarily switched off.

## RECOVERY

The success rate for treatment of IBS in my practice is more than 70 percent. By this is meant the absence of functional intestinal problems and the absence of symptoms for a period of a few days to three weeks. The symptoms of clinical chronic constipation are excluded from this rapid recuperation.

After therapy for foodstuffs allergies, in the first instance flatulence and the thin stools or diarrhoea accompanying this, no longer occur.

If there is chronic constipation, recovery takes a longer time because recuperation of the enteric nervous system in the absence of auto-intoxication requires a relatively long regeneration process. Also, only partial regeneration may take place, depending on the extent of the previous damage which has taken place.

As a prerequisite for maintaining a normal intestinal function and the possible avoidance of any renewed occurrence of allergies, it is necessary to maintain a „physiological diet" (see the recommendations in my book, mentioned above). The eating of natural, unadulterated foodstuffs which comply, in type and amount, with the capacity of the intestine and the requirements of the metabolism is recommended. Good grain products (less wheat flour and cakes, less bran), fresh vegetables, a few varieties of fruit (no allergy-linked exotic types, none with a high sorbitol content), salads (few tomatoes, many types are allergy-linked),



good vegetable oils, nuts (almonds are best), a few milk products (casein-predigested hard cheese is most beneficial), very little meat, fish or eggs (altogether 5 g protein per kg body weight daily are sufficient) and very little of mucous membrane-irritating additives such as hot spices (it is best to avoid these altogether). Processed food, fast food and soft drinks should be avoided.

Since most patients suffer from high acid contamination due to the many years of pathological large intestine fermentation processes, in almost all cases deacidification therapy is required. For this, it is best to use bicarbonate in daily doses of 5 to 8 grams (see my recommendations in my book, mentioned above).

In addition there is frequently fungal colonisation of the large colon with *Candida albicans*. Although, due to the absence of carbohydrates passed into the colon as a reaction to a digestive problem, the fungi are deprived of their basic nutrient, the fungi can feed via the mucous membrane and cause irritation of this. A fungal diagnostic test and

possibly therapy for this is obligatory for IBS patients.

If the treated patient sticks to „physiological feeding“, other health problems and diseases vanish along with the IBS because the treatment is performed from a holistic point of view. In contrast, traditional medicine isolates the disease and, although the prescribed medicaments can alleviate or suppress the symptoms, they return after the patient stops taking them.

Bioresonance therapy opens up new routes for therapist for the causal treatment of allergies, not only those associated with IBS, as described in this paper, but also allergies on the skin and on other mucous membranes, in particular allergies of the respiratory tract.

#### **Correspondence address**

See Annex at the end of this book.

