



# The individual approach

CLIENTS AND THEIR INDIVIDUAL NEEDS ARE AT THE HEART OF ALL THAT **BIOLOGICAL TESTING SERVICES (BTS)** OFFERS.

**F**or more than 25 years, the leading German micro-biological Dr Hauss Laboratory has been offering microbiological diagnostics. BTS was established as the exclusive UK service 10 years ago by Ute Allison, who still plays a valuable role in the business from Germany.

Dr Hauss Laboratory was founded in 1986 by microbiologist, Dr Reinhard Hauss PhD, and Dr Helga Hauss, MD, Consultant Dermatologist, and the philosophy is to specialise in microbiological diagnostics. As well as offering classic bacteriological analysis of clinical samples, early on Dr Hauss Laboratory diversified into the field of medical mycology. Much of the work has been the classic analysis of intestinal mycoses, where the company has a wealth of experience. Another area that the Lab and BTS is keen to promote is its adrenal test, which Head Scientist, Christiane Pies, is actively researching and giving talks about all over Germany.

The UK principal is Naturopath and Nutritional therapist Jacquie Lane ND, dipNT, NTC, CNHC, lecturer for College of Naturopathic Medicine, who explains that the USP of the company is to offer individual approaches.

“Our approach is to select the relevant tests for the individual patient, which is why we offer all of our tests as individual components, which can be bolted together to get a patient specific selection,” Jacquie explained.

In addition to the microbiological diagnostics, the company also analyses skin conditions, ear infections, vaginal health, nose bacteria, and hair and nail fungi, as well as saliva diagnostics for adrenal and sex hormones.

## CHOOSING DR HAUSS

Stool testing is a big part of what Dr Hauss is about, and as the UK provider, BTS works to educate on why practitioners should use stool testing in complementary medicine.

“Finding the cause of a health problem is a difficult task. Often very different conditions show identical or similar symptoms, causing time and money to be wasted on inappropriate therapies. This disadvantages the client and impacts on a practitioner’s reputation,” Jacquie explained.

“BTS supply a full explanation of any results and a practitioner support service. In addition, result specific therapy plans that include diet, supplement and hygiene recommendations to aid the practitioner in devising an appropriate therapy. However, these must be adapted to a client’s case history and remain the responsibility of the therapist.”

“Stool testing is a method with proven success in determining a number of parameters relating to digestive and immune health. The sample is easy to obtain in the patient’s own home without the need for specialist equipment, nurses or needles, the underlying cause(s) of a health problem can be found, aiding diagnosis and therapy success in difficult cases and tests results can improve compliance as some clients are more motivated to complete a therapy program if they see an objective result.

Jacquie also pointed out that stool testing is cost effective compared to many other forms of testing, with the added advantage of selecting as many or as few parameters as needed to meet therapeutic aims, and that therapy success can be quantitatively measured, eliminating the need for excess treatment and providing peace of mind to the client and practitioner.

## TESTING SPECIFICS

BTS offers UK practitioners a wide choice when it comes to testing, and from a simple stool test, BTS can test your clients for:

- Intestinal candida and other fungi (a full screen for all yeasts and moulds).
- pH of the stool (included in the fungal screening)
- Intestinal parasites
- Bacteria in different materials
- Resistance tests for pathogenic bacteria
- Bacteria which cause acute diarrhoea
- Complete status of intestinal colonization (bacteria and fungi)
- Pancreatic function test
- Leaky gut (alpha-1-antitrypsin)
- Intestinal inflammation (Calprotectin)
- Intestinal immune system (sIgA)

- Coeliac disease
- Skin and nail fungi
- Helicobacter pylori
- Intestinal bleeding
- Colo-rectal tumour markers
- Lactose intolerance

It is important to BTS to support practitioners’ education when it comes to testing, and for those new to stool testing, BTS suggests they would benefit from testing themselves, and it offers a further discount for this.

“BTS supply a full explanation of any results and a practitioner support service,” Jacquie said. “In addition, result specific therapy plans that include diet, supplement and hygiene recommendations to aid the practitioner in devising an appropriate therapy. However, these must be adapted to a client’s case history and remain the responsibility of the therapist.”

Jacquie also advised on the key to successful stool testing:

- Choose as many parameters as necessary, but as few as possible to help manage client finances.

- Uncover the underlying cause.
- Target the problem with a specific and effective treatment protocol

In terms of specific tests, below is a selection:

- **Complete status of intestinal colonisation:** This test analyses 11 bacterial strains, which scientists consider as representative for the gut ecology. These bacteria are physiological in normal numbers, but cause problems if their counts are out of balance. In this test, the stool pH is also measured and a full fungal analysis for all yeasts and moulds. This test has become the most important basic test.
- **Intestinal parasites:** This test is a

microscopic investigation for worm eggs and protozoa cysts. The analysis involves a complicated procedure of concentrating and filtering the stool, which is carried out by specialists. Due to the very hardy nature of worm eggs and protozoa cysts, worms which lay eggs into the intestine and protozoa, which forms cysts, can be detected in this way. The test can be useful in all cases of persistent diarrhoea or alternating diarrhoea and constipation, attacks of sweating or feeling cold, possibly with fever, colicky pains, hunger attacks which alternate with times of no appetite, persistent cough, weight loss, anal itching, anaemia and symptoms following foreign travel.

• **Inflammation markers: Secretory IgA;** this is a very useful marker, which measures the current functional status of the intestinal immune system (GALT). It can be useful when immune system involvement is suspected; **Calprotectin;** this is an enzyme released in granulocyte mediated inflammation from segmented leukocytes. It can be detected in the stool. Increased readings can indicate types of colitis of different origin, Crohn's disease, ulcerative colitis or some malignant intestinal tumours; **Alpha-1-Antitrypsin (leaky gut);** this enzyme is synthesised in the liver and it is a non-specific protease inhibitor in the serum. With inflammation, or when the intestinal lining has an increased permeability, this enzyme can be found in the stool, as it is basically not broken down in the GI tract. This makes it a useful parameter to measure leaky gut and also indicate inflammation.

### STRICT CONTROLS

In terms of the quality aspect to the Dr Hauss testing, Jacquie explains that, like all accredited labs in Germany, it performs regular and strict internal quality controls.

"All devices and substances used in the microbiological analytic processes are checked and validated with ATCC-strains (defined and standardised microbes of the American Type Culture Collection)," she explained.

"The laboratory also takes part in mycological inter-laboratory comparisons. Since the introduction of these controls in 2000, the laboratory has achieved a 100 per cent pass rate each year. The laboratory is also regularly inspected by the Public Health Department, Company Physicians and by the professional association."

## Candida focus



ONE AREA THAT BTS AND DR HAUSS LABORATORY HAS A LOT OF EXPERTISE IN IS WITH REGARD TO CANDIDA, AND HERE, JACQUIE LANE ADVISES ON THE APPROACH THE COMPANY TAKES.

Often, the advice is given to treat Candida overgrowth with a strict sugar and carbohydrate-free diet.

As these fungi live on sugar and carbohydrates, the diet will certainly reduce the number of cells, but, in most cases, it can't reverse the fungi's ability to cling to the intestinal walls. So, Candida will use its fungal ability to rest when it is starved and start replicating again when its food supply gets better. When conditions are favourable for these fungi, they can switch to protein digestion anyway, (SAPS) leaving us with an impossible dietary challenge.

In Great Britain and the USA, there are a lot of books about Candida diets, which suggest it can be eradicated by starving the fungi of sugar and carbohydrates. As a result, patients are not only advised to cut out refined sugars and starchy carbohydrates, but also fruit, as they are considered a dangerous source of sugar.

The paradox then frequently observed, however, is that patients very often deteriorate in their general

health and Candida becomes a persistent problem.

After intensive research into the subject, the Dr Hauss Laboratory has produced very clear results; laboratory experiments found that yeasts such as Candida grow as fast in a glucose concentration of 100 mg/dl as in one of 1000 mg/dl. For these, experiment solutions were tested which simulate the conditions in the human body. The concentration of 100 mg/dl equals the normal glucose concentration of the tissue and blood liquids in a healthy person (a figure we know from blood tests for diabetes).

Therefore, starvation of yeasts in the GI tract, with liquids that contain the normal body glucose concentration, is hardly possible. Even a decrease of the glucose concentration to 8 mg/dl, which is completely impossible in a living organism, reduced the yeast growth only by 60 per cent; this would be killing the host but by no means killing the Candida (detailed results of these experiments can be found: *Akt. Dermatol.* 22 (1996) 53-55).

