

REFLEX

THE KIESER TRAINING MAGAZINE

55



25 YEARS OF KIESER TRAINING GERMANY BODY CULTURE IN FRANKFURT'S RED LIGHT DISTRICT

**FRANKFURT 1990: 25 YEARS AGO,
WERNER KIESER OPENED HIS FIRST
STUDIO IN GERMANY: LOCATED AT
NIDDASTRASSE 76, IT WAS CLOSE
TO THE MAIN STATION AND IN THE
HEART OF THE CITY'S DRUG AND RED
LIGHT DISTRICT.**

Werner Kieser explains how it was that the story of Kieser Training in Germany began in the former red light district of Frankfurt. "That was pure chance," he says. "A good customer – a Swiss banker – was keen to set up in Germany as a general franchisee. He chose to start in Frankfurt, the country's financial hub. At the time, I was not that keen; I wanted to move to the country to breed horses," says the company founder with a wry smile.

Instead of retiring to the country, Kieser grasped the opportunity to expand and so it was that the first Kieser Training studio in Germany opened close to Frankfurt's main station.

"The studio was housed in an attractive brick building with enough space spread over two floors," he recalls. "I was immediately drawn to the industrial charm of the former furrier's workshop and the owner was a nice chap. At the time, I was unaware of the area's reputation."

His wife, medical doctor Gabriela Kieser chides him: "He had unerringly selected what was probably one of the worst addresses in Germany." Kieser laughs and responds: "The bad news is that I do everything wrong. The good news is that whatever I do, I do it properly."

Business was not good and two years later the general franchisee asked Kieser to buy back the studio and the rights for Germany. However, Kieser

was undeterred. "We could not give up; that would have been unethical. After all, we had 1,200 customers and I owed it to them to continue." A view confirmed by Harald Bendig, who was manager at the time: "We felt that we had an obligation to our customers. Many of them trained religiously and nothing was going to stop them." One memory sticks in his mind: "It was winter 1990; snow was thick on the ground and traffic at a halt. The studio was empty. However, at 9.15 pm the door opened and in came a customer. He shook the snow from his head and put his cross-country skis in the corner. He had used them to get to us."

And so it was that Kieser – who now has 115 studios in Germany bearing his name, three in Frankfurt alone – decided to give his all to kick-start the pilot facilities in Germany. He organized a series of events, including lecture evenings for existing and potential customers. At one of these evenings, he was really impressed by one of the temporary staff brought in for the evening: "Sonja Rogers welcomed the guests with such charm and eloquence and after we had dispatched Bendig to Hamburg to oversee the expansion there, we appointed Sonja as his successor. Within a

few months she had filled the studio. It was suddenly 'in' to train at Kieser in this somewhat unconventional location."

Today, Kieser is happy about those apparent mistakes. "I learned a great deal, e.g. how important it is to deploy staff in positions where they can use their strengths." Since then the district has changed and it is now "hip". For example, the New York Times put Frankfurt in 12th place in its list of "52 Places to go in 2014" – because of the vibrant nightlife in its red light district where numerous new restaurants and bars "offer a sexiness that isn't unseemly". ■



Harald Bendig (Kieser Training franchisee, Koblenz), Monika Brederick (customer at Kieser Training Frankfurt city since 1991), Werner Kieser and Dr. Gabriela Kieser (from left to right)

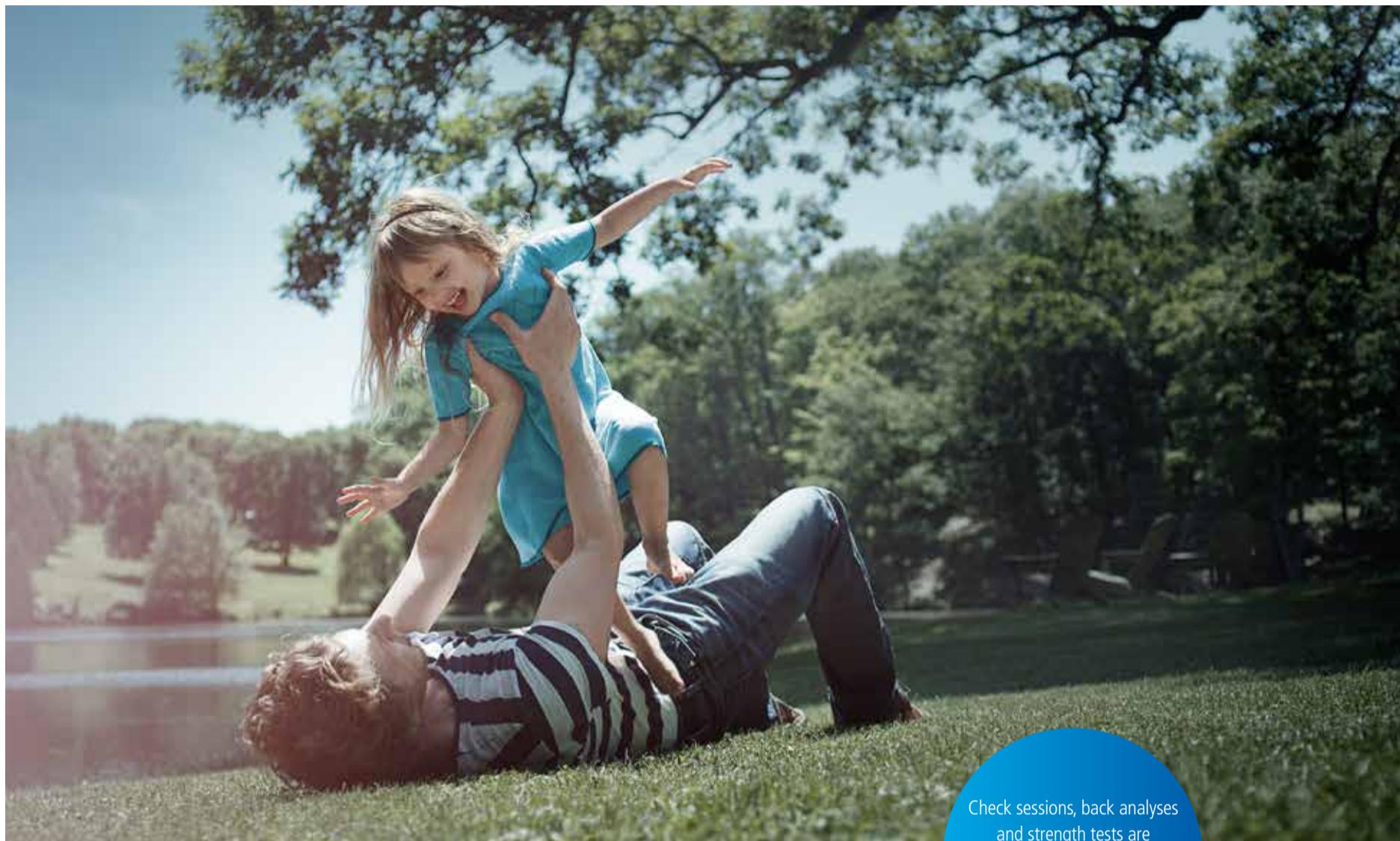
OPENING KIESER TRAINING AUSTRALIA

Our seventh Kieser Training studio in Australia opens its doors this spring.

Kieser Training Caulfield
1st Floor, 189-191 Balaclava Rd
3161 North Caulfield
Australia

TOTAL SUPPORT

WHY ISOLATED BACK TRAINING IS ESSENTIAL



Check sessions, back analyses
and strength tests are
valuable tools for
**effective muscle
build-up**

**STRONG, SUPPLE MUSCLES ARE
INVALUABLE: THEY MAKE US FEEL
MORE ENERGETIC AND READY FOR
ACTION; THEY ALSO MAKE US MORE
MOBILE AND FLEXIBLE: TARGETED
TRAINING OF THE BACK MUSCLES
IMPROVES BOTH.**

One thing is particularly important if we want a healthy, flexible spine: a strong muscle corset. In this context, our deep back extensor muscles play a major role. They connect the individual vertebral bodies and in conjunction with ligaments and tendons, give the spine the required support.

Those with back problems almost invariably have weak back extensors and so the spine lacks stability. This is more likely to result in facet joint dys-

function and the premature degeneration of structures. The nervous system tries to compensate for this loss of stability by increasing muscle contraction. However, this causes muscle tension and strain and with it pain. As a result, sufferers tend to reduce their level of activity and this establishes a vicious circle of pain and inactivity.

The right training works

In most cases, targeted strengthening of the back extensors can reduce, eliminate or prevent symptoms and in nine out of ten cases, it is even possible to avoid surgery. However, if you want to build up the key muscles, you must train on machines that immobilize the pelvis and allow isolated training of the target muscles. Without pelvic immobilization, the auxiliary

muscles will take on some of the work and the back extensors will remain weak.

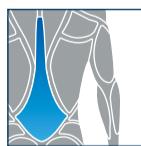
Keeping the back fit

To strengthen the lumbar muscles, you should train on the F3 or its new variant, the F3.1. The advantage of the new machine is that immobilization of the pelvis has been further improved and this provides an even greater isolation of the target muscles. For those with chronic symptoms, we recommend training on our computer-aided Lumbar Extension Machine (LE) under medical supervision. This machine allows fully isolated training together with an in-depth analysis of the back and measures the actual strength of the back extensors.

To train the cervical muscles, we recommend the G5. The Cervical Extension (CE) Machine – also computer-aided – is recommended for those with chronic symptoms.

Strengthen the entire body
At the same time, it is important to train the muscles that give the spine extra stability and flexibility. A back programme should also include, for example, exercises to train the straight and oblique muscles of the abdomen and the pelvic floor muscles. In addition, strengthening the rear thigh muscles and hips helps to maintain a good posture and give the back the support it needs. ■

BACK PROGRAMME*



LE / F3 / F3.1 LOWER BACK
The lower back muscles stabilize the spine and help avoid undue strain on the small facet joints and intervertebral discs.



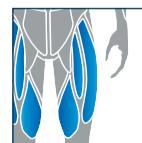
F2 / F2.1 ABDOMEN
The straight muscle of the abdomen stabilizes the position of the pelvis and so reduces the strain on the lumbar discs.



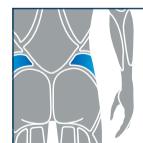
C1 BACK
The C1 machine trains the latissimus dorsi muscle, both extending and flexing the spine; these alternate movements also improve the supply of nutrients to the intervertebral discs.



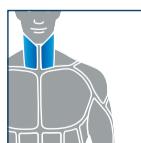
CE / G5 NECK (REAR)
Isolated strength training of the rear neck muscles can improve up to 80 % of all chronic problems.



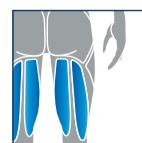
B1 FRONT THIGHS
The front thigh muscles stabilize the knee and hip when flexing the knee. This helps the body adopt a posture that is less prone to fatigue and so reduces the strain on the spine.



A3 BUTTOCKS
The middle and side gluteal muscles stabilize the hip and with it the lumbar spine. This reduces the risk of chronic back pain.



G4 NECK (FRONT)
Strengthening the front neck muscles alleviates the tension and pain caused by sitting for long periods or a rigid posture.



B7 REAR THIGHS
Training the rear thigh muscles helps maintain the pelvis in the right position and so reduces the strain on the lumbar spine.



A5 PELVIC FLOOR
The pelvic floor machine improves core stability. Well-trained pelvic floor muscles give the abdomen reliable support in situations of stress.

DO YOU WANT STRONG MUSCLES?

FIRST YOU NEED TO WEAKEN THEM!



THE ZURICH-BASED MUSCLE AND SPORTS PHYSIOLOGIST DR MARCO TOIGO TALKS ABOUT HIS NEW BOOK "MUSKELREVOLUTION" AND RECENT SCIENTIFIC RESEARCH INTO MUSCLE DEVELOPMENT.

Dr Toigo, your book has just been launched under the title "MuskelRevolution" (muscle revolution). Why are you instigating revolution?

If you want to improve the performance of an engine, you first need to understand a) what screws are adjustable, b) which screws are worth adjusting and c) which way you need to turn them. This book provides the tools you need to revolutionize training and make it more effective and efficient. Based on the latest

scientific research, it describes the process of muscle build-up, muscle definition and muscle form. It also explains how you can influence them through training and nutrition.

To build up muscle you must train regularly and with sufficient intensity. Let's compare it to your bank account: If you deposit more than you withdraw over a certain period, your balance increases. If in the same period, you withdraw more than you deposit, your balance decreases. If you want to accumulate money, you need to ensure that your account has a net positive balance in the longer term. Muscle build-up works in a similar way: Our muscles consist mainly of protein (money). In order to ensure that this muscle protein is constantly increased, the so-called net protein balance, i.e. the difference between the increase in muscle protein (deposits) and the decrease in muscle protein (withdrawals), has to be greater than zero over a period of weeks, months and years.



How do I ensure that my muscle account remains in the black?

To achieve a positive net protein balance, you must either increase the rate of muscle protein build-up relative to the decrease and/or slow down the rate of decrease relative to the increase. For the healthy adult, it is the relative increase in the build-up of muscle protein that is the main contributor to a positive net protein balance.

And how does training achieve that?

The training stimulus must be enough to ensure that you recruit if possible every single motor unit in the relevant muscle. A motor unit is made up of a motor neuron, whose cell body is located in the spinal cord together with all muscle fibres innervated by this nerve cell. This is an important prerequisite for the build-up of muscle protein. Another important factor is the length of time during which the activated muscle fibres are under load until they fatigue. For the purpose of stimulating the build-up of muscle protein, this must occur within an appropriate period of time. In other words, muscle fibres should fatigue where possible in a relatively short duration.

Are there any other important factors?

The training must also be progressive. With each training session and with each exercise within that session, you should seek to increase the amount of time the muscle is under load until it fatigues. As soon as you exceed the upper specified limit, it is admissible to increase the training weight, etc. However, do not increase the period under load or the training weight if this reduces the quality of the exercise. It is also important that strength is produced throughout the range of motion, i.e. maximum extension to maximum flexion.

Why is it so important to train slowly?

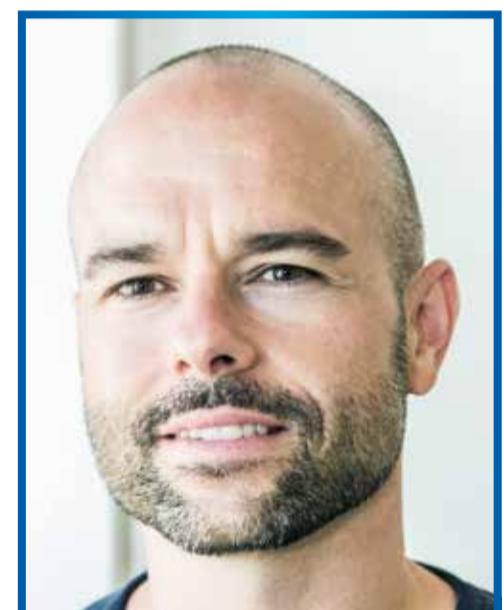
If you want to fatigue the muscle fibres, it generally makes sense to do each exercise slowly and in a controlled way – provided that in so doing you exert a reasonable level of strength. If you do an exercise slowly, it's easier to control the movements and maintain constant muscle tension at an adequate training resistance. This allows you to work the muscle to local fatigue safely, i.e. without the risk of injury.

You say that it is essential for the nervous system to control the muscle. Am I able to control that?

There is no objective measure of whether this control is maintained. To stress its importance, let me put it this way: When you train, make sure that you can really feel the resistance. Do not avoid the resistance but rather seek it out.

You mentioned that diet has an effect on muscle build-up ...

When doing strength training to increase muscle mass, we need to absorb protein through our diet. Dietary protein – or to be more accurate the essential amino acids in that protein – increase the muscle-building effect of individual strength training sessions – in the same way that the enlarger function on a photocopier increases the size of the original.



**DR
MARCO TOIGO**

As part of his research work in the Laboratory for Muscle Plasticity at the University Clinic Balgrist in Zurich, Dr Toigo looks at the mechanisms responsible for the build-up and breakdown of muscle. In addition to his research activities, he lectures at ETH Zurich on muscle and sports physiology and is also a published author. Under the pen name "Dr Muscle", he writes for the Swiss online publication "20 Minuten Online" and his weekly Tuesday column covers all aspects of training and diet.

Admittedly, there are several variables that influence the efficacy of dietary protein such as the quantity and quality of the protein together with when and how often it is consumed. ■

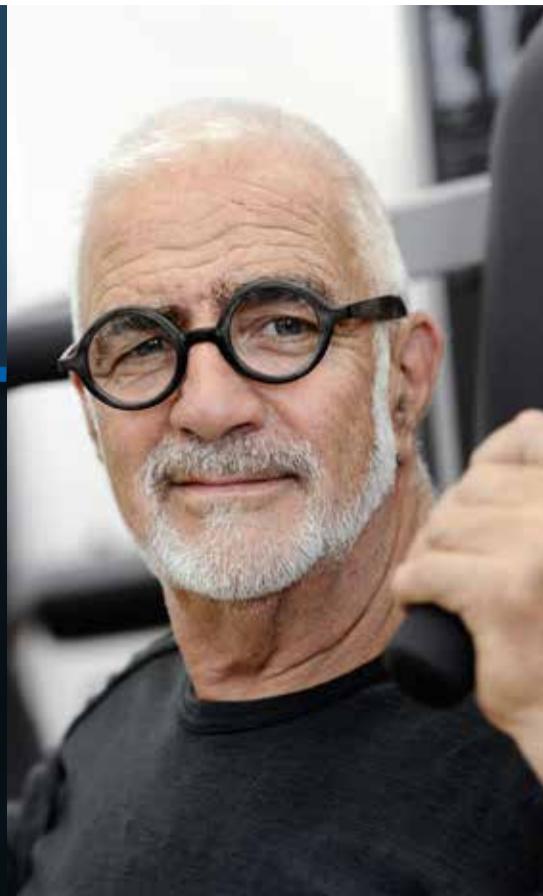
The following are important:

1. If training is poor in the first place, the training effect is zero and a zero effect cannot be augmented by dietary protein. It is strength training that "ignites" the muscle build-up.
2. Food on its own cannot increase muscle mass.
3. Without strength training the only effect of a reasonable consumption of protein is to prevent unnecessary loss of muscle mass.

"Give it a try! Age and gender are irrelevant. It's never too late to start muscle training", says Dr Marco Toigo.

WERNER KIESER'S CORNER

THE POWER OF FAILURE



First of all, and I jest not, almost everything that I have ever started has failed. This applies to most entrepreneurs. I failed as a boxer because of injury – I suffered pleural contusions. My first studio failed because the landlord wanted the premises for himself and gave me notice. My first franchise facility failed because I was jointly liable for its debts. The franchisee had no money and so I had to pay up. And so it continued – for the last 48 years. Most of my decisions

were wrong or by chance were found to be right in hindsight. The list of my failures is almost endless. You have to wonder, therefore, how it is that the company still exists.

There are two important reasons:

1. Failure is valuable

It is not until you fail that you know that an idea "won't work". That in itself is valuable knowledge, albeit with a price to pay. If you then find out

why it failed, this provides additional insights and these you can use. It would be a waste of time simply to sweep failures under the carpet. It's far better to analyse them and to learn from your mistakes. Failure means: Starting again and finding a new way!

2. The direction must be right

As I have said, some of my decisions turned out to be correct. In the final analysis, it does not matter whether this was luck or not. However, what really matters is the product. If the product strategy prioritizes customer benefit, then the general direction is right. And if the general direction is right, you can be allowed to make a mistake or even many mistakes; you will be sustained by the strength of the product. However, if the strategic direction is wrong, then it matters little if the implementation was flawless or perfect.

I frequently receive offers from people wanting to sell me an "idea". Now almost everyone has an idea, even great ideas – it's simply what comes out of the brain. Nothing more! It is only when an idea is implemented that there is a risk of failure. In order to learn – whether from success or from failure – you must be prepared to take a risk. I cannot express it any better than Samuel Beckett: "Ever tried, ever failed. No matter. Try again. Fail again. Fail better".

Werner Kieser

CITRUS FLIP — SERVES ONE

100 ml freshly squeezed orange juice
100 ml freshly squeezed grapefruit juice
2 tbsp. lemon juice
1 very fresh egg
2 tbsp. yoghurt
1 tbsp. honey
1 pinch of cinnamon
1 almond-size piece of ginger

This is an extremely easy drink to prepare:

Place all ingredients in a blender or mixer and blend for 45 seconds at maximum speed.

1 serving of Citrus Fruit Flip contains:

ca. 243 kcal
17 % protein
31 % fat
52 % carbohydrate

This flip has only 75 kcal per 100 grams.

Source:
Nicolai Worm:
"Glücklich und schlank".
Published by Lünen 2011.

IMPRINT

Reflex is published three times a year, including online. Stay informed!
To subscribe to Reflex visit kieser-training.com

PUBLISHER / COPYRIGHT
Kieser Training AG
Hardstrasse 223
CH-8005 Zürich

CEO
Michael Antonopoulos

EDITOR
Claudia Pfülb
reflex@kieser-training.com

EDITORIAL OFFICE
Tania Schneider
prschneiderei.de

TRANSLATIONS
Sue Coles

PROOFREADING
Dr Philippa Söldenwagner-Koch

LAYOUT
Kunde & Co
kunde-co.de

PICTURE CREDITS
P. 1, cover image: © istock;
group picture: © Harald Bendig
P. 2, image: © Kieser Training
P. 3, images: © PaoloVaccariello.com
P. 3, image muscle: © istock
P. 4, image: © Kieser Training;
protein picture: © istock

THE BUILDING BLOCKS OF MUSCLE GROWTH GOOD SOURCES OF PROTEIN FOR VEGETARIANS AND VEGANS

Two things are absolutely essential for muscle growth: Training to build up the muscles (hypertrophy training) and an adequate supply of the vital essential amino acids. Dietary expert Professor Nicolai Worm explains how to obtain an adequate supply from vegetable and plant-based foods. "For protein and muscle build-up, the body needs nine essential amino acids and they can be obtained from both animal-based and plant-based protein," says Professor Nicolai Worm. "Admittedly, animal-based proteins usually contain more of the required amino acids and the relationship between individual acids is also better. As a result, they have a higher biological value than plant-based proteins."

Similarity with human protein

This is because the amino acid profile of animal-based dietary protein is more like the profile of human protein. This is not so with plant-based protein and so the body is less efficient at converting the latter into the protein it needs. "One of those nine essential amino acids is lysine. However, the lysine content of cereals such as rice, wheat or maize is low," explains Worm. "Even if the body has an adequate supply of the other eight amino acids, its ability to make protein from cereals soon reaches its limit. The body needs

all nine amino acids and the amount of protein that the body can make depends upon an adequate supply of all nine.

Clever combinations

However, there is a way out of this dilemma: If you are smart in the way you combine foods, you can top up the biological value of dietary protein. Professor Worm explains how this works: "During the day, eat as many different high-grade, high-protein foods as possible. Not necessarily in the same meal but at each meal, simply eat a different food that is rich in amino acids."

Best vegetable-based sources

High-grade protein can be found in dairy, milk and milk products. The

main plant-based sources of protein are soya beans, soya products and other pulses and nuts.

However, Worm stresses that if you consume no or very little animal-based protein, you will need to significantly increase the percentage of protein in your diet in order to ensure an adequate supply. "If your diet contains little milk, milk products or eggs, you are at a much greater risk of nutritional deficiency unless you are careful to eat a mixture of foods that are appropriate in terms of nutritional physiology. In addition, this risk is increased at times when the need for protein is high, e.g. if you do strength training for muscle build up." ■

