

Almased®

# Scientific Research on Almased®

Scientific Information for Health Care Professionals



Almased UK Ltd.  
2nd Floor  
Berkeley Square House  
Berkeley Square  
London W1J 6BD

Phone: 020 7969 1886  
Email: [info@almased.co.uk](mailto:info@almased.co.uk)  
Website: [www.almased.co.uk](http://www.almased.co.uk)



The most important studies on the  
effects of Almased®

# Table of Contents

---

- 4 Editorial**
- 6 What is Almased®?**  
How all-natural Almased® can benefit the body, how it works and how it helps to control hunger for a long period of time
- 7 Over 10 years of research**  
All core claims about Almased® have now been scientifically supported
- 10 Effective weight loss with Almased®**  
Main studies about the superior diet success with the metabolism activator
- 12 "We know today that Almased® improves the fat burning process"**  
An interview with Prof. Dr. Aloys Berg of the University Clinic Freiburg, Germany
- 16 Almased® keeps you full longer**  
Studies show that Almased® supports healthy levels of hormones that influence the feeling of satiety
- 18 Almased® can help people with diabetes**  
Studies have shown that Almased® can help them lose weight and support healthy blood levels
- 20 "Supported insulin and blood sugar levels with Almased®"**  
Interview with Prof. Dr. Daniel König, University Clinic Freiburg, Germany
- 22 Almased® is "kidney friendly"**  
A study has shown that a protein-rich diet with Almased® may promote kidney function
- 23 How does soy protein affect the kidneys?**  
Interview with Dr. Peter Deibert, Consulting Physician for Nutritional Science
- 25 Soy as an antirheumatic**  
Soy has antioxidant effects and works as a natural antirheumatic agent
- 26 Almased® may promote beneficial effects that work against many of the components of the metabolic syndrome**  
Studies have shown that all metabolic biomarkers are supported by Almased®
- 28 The soy protein in Almased® can support a healthy blood pressure**  
International studies support the Almased® research
- 30 Almased® supports the youth hormone HGH**  
The amino acids arginine and lysine in Almased® promote a healthy level of the hormone HGH
- 32 A natural anabolic**  
For increased fat loss and improved muscle growth
- 34 Stress-free everyday life**  
Almased® supports a healthy level of the stress hormone cortisol
- 37 Osteoporosis protection**  
Positive influence of soy protein
- 38 Soy isolate does not cause gout**  
Harmless protein
- 40 This is how it works: Weight loss according to plan**  
The four phases of the Almased® diet
- 42 Additional information on Almased®**

# Why Almased® is conducting extensive research on the effects of Almased®

---

## Dear readers,

The Almased® success story began at a kitchen table in the German town of Bienenbüttel in 1980: This is where my father, the holistic therapist Hubertus Trouillé, blended a recipe that was intended to help his many patients with a slow metabolism. He wanted to develop a product that activates the metabolism biologically. My father's goal: People have to feel noticeably better when they take the product.

He realized that activating the metabolism of overweight people automatically results in the reduction of unhealthy body fat. This "side effect" is the main reason why many people use Almased® today.

Almased® has become Germany's best-selling diet product: A powder made from high-quality soy, probiotic yogurt and especially enzyme-rich honey. Blending the raw ingredients during a fermentation process creates a synergistic effect, the ingredients increase each others' effectiveness.

Since 1999, we have fostered scientific research on Almased®. Scientists have discovered that certain qualities of soy, natural raw honey and probiotic yogurt have positive effects on the metabolism and improve sleep and regeneration. Because of these findings, I decided to have more intensive research done on Almased® and the effectiveness of its ingredients.

Today we have study results from several renowned universities. They not only confirm the supportive effects of Almased® on body weight but also on the metabolism, performance levels and overall health. This brochure provides an overview on the status of our research. And I believe that it proves my thesis: Almased® has important benefits for our society. It is not a short-lived fad diet but has long been part of a healthy lifestyle for many people.

Read for yourself.  
Sincerely,

*André Trouillé*

**André Trouillé,**  
Owner, Almased UK Ltd.



# What is Almased®

**How all-natural Almased® can benefit the body, how it works and how it helps to control hunger for a long period of time.**

**A**lmased® is made from high-quality soy, probiotic yogurt and natural raw honey. Honey enzymes, protein, bioactive phytochemicals from the soy, and yogurt cultures are the most important ingredients.

Almased® provides the body with essential nutrients that regular food often lacks in sufficient amounts. Combining the raw ingredients creates a synergistic effect: The components of one ingredient intensify the effects of the other ingredients. An innovative food item is created: Almased®.

All-natural: Almased® is made from high-quality soy, probiotic yogurt and natural raw honey.



- Optimizes the metabolism
- This increases the fat burning process while retaining muscle mass
- People who drink Almased® have more energy and strengthen their immune system as well as their muscles
- Almased® can be combined with all popular diets and helps to increase their effectiveness

Studies conducted by renowned researchers suggest that Almased® can do more than just support weight loss: Almased® fights obesity, supports healthy blood pressure as well as insulin resistance and promotes fat metabolism. Consuming just 50 g of Almased® daily already promotes healthy metabolic biomarkers.

Scientific studies have also been conducted about the effects of Almased® on hunger and satiety, blood pressure, kidney function as well as the level of the growth hormone GHG, which fosters a youthful look.

# Over 10 years of research

**All core claims about Almased® have now been scientifically supported: Eight scientists formulated 10 statements.**

**A**lmased® can do more than just support weight loss. This is the conclusion of eight German scientists that have researched the effects of the powder. They have unanimously formulated the statements on the following pages. From fat loss and muscle mass retention to the supportive effects on hormone levels and blood pressure and therefore the metabolic syndrome - they confirm all core claims made about Almased®.

The metabolic syndrome is a combination of medical disorders, which – when coinciding – are sometimes referred to as the “deadly four”: Overweight, lipid metabolic disorder, high blood pressure and insulin resistance. Each of these conditions is a major risk factor by itself, when combined, the health hazards can be even worse. Almased® may support beneficial effects on each of these factors.



All important claims are supported by over 10 years of extensive scientific studies on Almased®.

This is what these scientists say unanimously:

**How Almased® can support effective weight loss, healthy blood pressure, cholesterol and blood sugar levels.**

- Almased® contains pure soy protein, yogurt and raw honey. A special processing method preserves the essential amino acids in Almased®.
- Obesity is associated with a severely increased leptin level, which in turn is linked to insulin resistance and considered a cause of metabolic disorders, such as diabetes mellitus. Almased® supports a healthy leptin level, thus influencing risk factors favorably.
- Almased® supports healthy insulin levels while stimulating fat reduction and inhibiting fat storage.
- The tissue hormone ghrelin, which is produced by stomach cells, is an indicator of the sensation of satiety. Almased® supports the ghrelin level, thereby reducing appetite sustainably.
- Almased® has a positive effect on the body fat vs. muscle mass ratio. If combined with physical activity, it can significantly reduce fat deposits in the abdomen and hip area.
- In a weight loss program, Almased® helps to exclusively burn body fat without reducing muscle mass.
- Weight loss achieved with Almased® is helpful in changing nutritional behavior and keeps the weight off long-term.
- 50 g of Almased® per day support healthy blood levels (e.g. blood sugar, HbA1c value).
- A weight loss program using Almased® supports healthy cholesterol and triglyceride levels.
- A weight loss program using Almased® supports a healthy blood pressure.

These eight scientists drafted the theses on the left.



**Professor Aloys Berg, MD** Department of Medicine, University of Freiburg



**Professor Ulrich Borchard, MD** Institute of Pharmacology and Clinical Pharmacology, University of Düsseldorf



**Wolfgang Grebe, MD** Board member of the Association of German Specialists in Internal Medicine (BDI), Frankenberg



**Professor Günter Linss, MD** Medical Director of Henningsdorf Medical Center, University Teaching Hospital of the Charité Berlin



**Peter Sauermann, Medical Consultant** Chairman of the Financial Committee of German Association of CHI Physicians (KBV)



**Professor Jörg Schulz, MD** Consultant of HELIOS Medical Center, Berlin-Buch



**Professor Gerhard Uhlenbruck, MD** Director of the Institute of Immunobiology and Sports Immunology, University of Cologne



**Professor Burkhard Weisser, MD** Director of the Institute of Sports and Science of Sports, Christian Albrechts University, Kiel



# Effective weight loss with Al mased®

The metabolism activator is a superior food item, reduces fat and retains muscle mass.

**H**ubertus Trouillé, holistic therapist and inventor of Al mased®, wanted to help his patients improve their metabolism with the Al mased® powder. At first, he categorized all other positive effects under “side effects”, including the reason most people purchase Al mased® today: Al mased® makes it easy to lose weight because it keeps you full for a long time while being low in calories and because it supports the fat burning process.

The first scientific studies requested by André Trouillé, son of the Al mased® inventor, researched and validated the superior effect of

Superior diet success with Al mased®: High fat loss without loss of muscle mass.



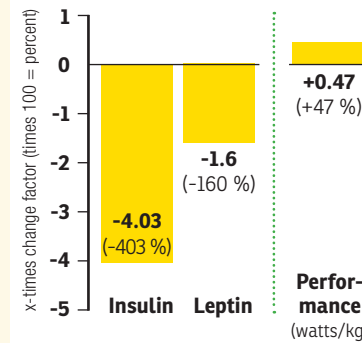
diets that include Al mased® compared to regular weight loss programs. In 2000, a study conducted at the University of Freiburg, Germany, showed the effectiveness of a diet with Al mased® on body weight and body contour: Twelve overweight participants had Al mased® for breakfast and dinner as well as a regular, low-fat lunch for four weeks. The participants lost an average of 4.8 kg (10.6 lbs). Researchers attributed the fat reduction to supported levels of the regulative variables insulin and leptin.<sup>1</sup>

In 2004, another research team from the University of Freiburg, Germany, examined the effects of the Al mased® diet on body composition.

## Significant advantages through intervention with Al mased®

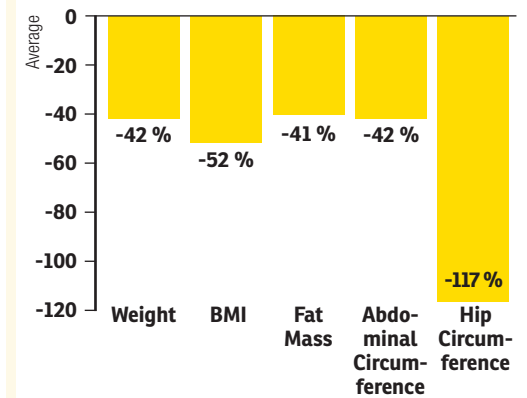
After 6 months on the Al mased® diet program compared to a diet program without Al mased®

### Hormonal Regulation



Insulin Reduction  $p_{(exact)} = 0.012$  Performance Increase  $p_{(exact)} = 0.054$   
 Leptin Reduction  $p_{(exact)} = 0.012$

### Physical Reaction



A/D*	0.011	0.012	0.018	n. a.***	0.002 $p_{(exact)}$
A+S/D**	0.015	0.023	0.018	n. a.***	0.018 $p_{(exact)}$

\*A/D: Diet program including Al mased® compared to a diet program without Al mased®

\*\* A+S/D: Diet program including Al mased® and exercise compared to a diet program without Al mased®

\*\*\* n. a.: not analyzed

<sup>1</sup> "Using Al mased in an Enriched Soy Diet for Weight Loss"; Berg A et al.; German Journal of Sports Medicine, 2000, 51: 39.

The six-month study showed that the participants lost fat and, unlike with other diets, also retained muscle mass.<sup>2</sup>

A 2005 comparative study documented the superior success of a diet including Almased® compared to several conventional diet programs: After twelve months, the Almased® diet resulted in greater weight loss than other popular programs such as Weight Watchers and Atkins.<sup>3</sup>

### Almased®'s superior weight loss success

Almased®	6.9 kg
Ornish	3.3 kg
Zone (40-30-30)	3.2 kg
Weight Watchers	3.0 kg
Orlistat	2.9 kg
Atkins	2.1 kg

<sup>2</sup> "Weight loss without losing muscle mass in pre-obese and obese subjects induced by a high-soy-protein diet"; Deibert P et al.; International Journal of Obesity, 2004, Oct., 28 (10): 1349-52.

<sup>3</sup> "Comparison of the Atkins, Ornish, Weight Watchers and Zone Diets for weight loss and heart disease reduction"; Dansinger ML et al.; JAMA, 2005, 293: 43-53, in "Weight Reduction through Lifestyle Intervention"; Berg A et al.; Ernährungsumschau 52, 2005, 8: 310-314.

## "We know today that Almased® improves the fat burning process"

An interview with **Prof. Dr. Aloys Berg**, Department of Medicine, University of Freiburg, Germany.

**Professor Berg, about 10 years ago you conducted the first major study on the effects of Almased®. What caused your interest in Almased® back then?**

My main medical interest was the prevention of metabolic disorders connected to malnourishment and inactivity. Obesity was and is a big challenge. Many overweight people are highly motivated but cannot find a successful and practical way to lose weight. I learned about Almased® from dieters that had successfully lost weight with Almased® and I was curious whether these subjective experiences could be explained with objective findings. That was the beginning of a successful scientific cooperation between the University of Freiburg, Germany, and Almased Germany GmbH.

**Many products promise help with weight loss. From your point of view, what is truly important? What does a product have to do to contribute to healthy and effective weight loss and therefore be recommendable?**

There are several prerequisites that a product has to meet in order to be considered a successful and healthy weight loss supplement. First of all, it has to be possible for a person to successfully lose more than 5% of the starting weight, regardless of age and gender, with a reasonable effort and within a reasonable time frame. At the same time, the process has to be reproducible and predictable. This can only be proven with controlled and randomized studies with defined goal parameters. After all, the success should not only affect weight loss but also body composition and the typical risk factors that accompany overweight in most cases. It is self-explanatory that weight loss should not be accompanied by unwanted side effects.

**In a second major study you researched the effects of the Almased® diet on body composition. Why is there no loss of muscle mass, unlike with many other common diets?**

The phenomenon that Almased® helps retain muscle mass despite significant weight loss has been documented in several studies at the University of Freiburg, Germany. Today, we know that Almased® is a protein-rich product



**Prof. Dr. Aloys Berg**,  
Rehabilitative and Preventive Sports  
Medicine, University Clinic Freiburg,  
Germany

made from fermented soy, skim milk yogurt powder and honey, that promotes fat burning and simultaneously healthy hormonal levels, protecting against the loss of muscle mass.<sup>4</sup> This "anti-catabolic" effect of Almased® can be held responsible for the positive effects on the body composition.

**In an additional study, you showed that a diet with Almased® promotes beneficial effects on the risk factors of the metabolic syndrome, more so than a regular low-fat diet. What is the explanation for this?**

Our study suggests that weight loss with Almased® supports a healthy insulin and leptin level after only 6 weeks. This is very likely caused by the fact that Almased® resets the metabolism and the body develops a better response to these neurotransmitters in the appetite center of the hypothalamus and reduces the release of these substances from the pancreas and the fat tissue. This results in a benefi-

cial influence on known risk factors for metabolic syndrome that attribute to being overweight.<sup>5</sup>

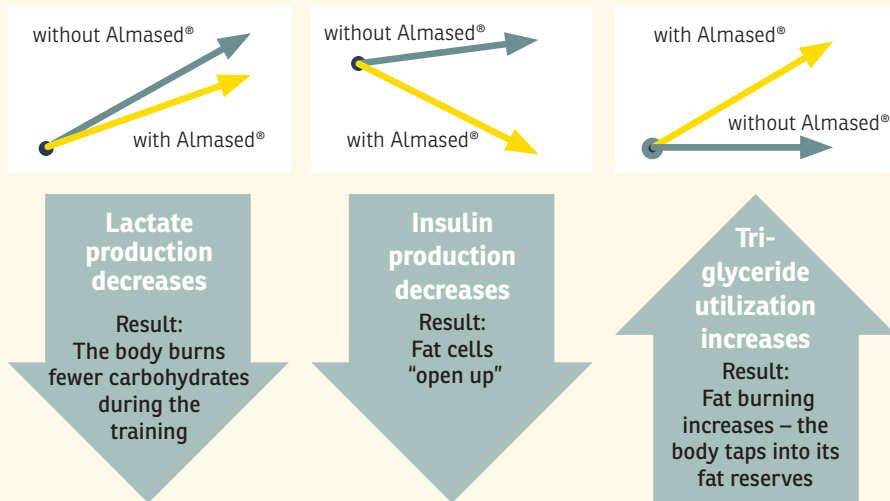
**Meanwhile, studies have shown that diets including Almased® have a supportive effect on a number of biochemical parameters, for instance the insulin level, but also on body values like overall well-being and quality of life. The effects are more positive than can be ex-**

**plained by just the weight loss itself. Do you have a suspicion about what might cause these various effects on health?**

We can assume that Almased® not only supports the metabolism and body composition but also cognitive and mental functions. We believe that Almased® triggers central mechanisms in the hypothalamus that are responsible for these complex changes and also

influence factors like mood, reaction to environmental stimuli and the ability to concentrate. These effects are not as important in the medical sense as the reduction of risk factors, but for those who are affected they are just as important for their quality of life. We hope that we can produce more findings about Almased® in this context in the future.

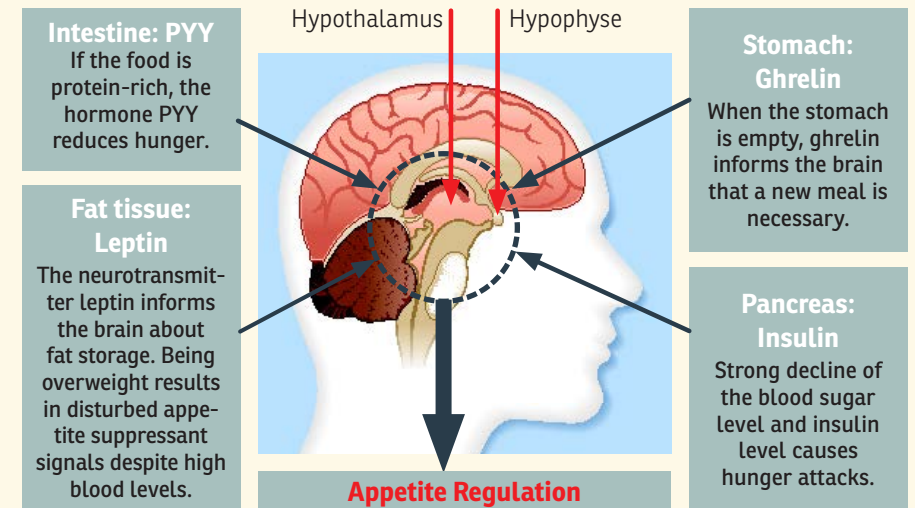
## Adjustments in the energy metabolism during endurance training: Almased® increases the fat burning process



With identical training conditions, consuming Almased® (2 x 50 g daily) in a controlled and randomized design has a positive effect on the adjustment of energy supply in the sense of increased utilization of fat reserves and decreased stress-induced insulin release and lactate production with simultaneously improved utilization of triglycerides.

4 "A soy-based supplement alters energy metabolism but not the exercise-induced stress response"; Berg A et al.; Exerc Immunol Rev. 2012, 18: 18-31.

## The key factors of appetite regulation: Almased® influences the neurotransmitters and thus decreases appetite



As a protein-rich meal replacement Almased® supports acute and chronic appetite regulation through four important central neurotransmitters resulting in successful appetite suppression: Neuropeptid Y (PPY), leptin, ghrelin and insulin.

5 "Favorable metabolic properties of a soy-honey-yoghurt product for meal replacement in overweight subjects with atherogenic risk"; Berg A et al.; Atherosclerosis, 2008, 9: 253.

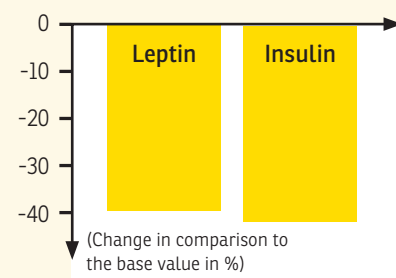


# Almased® keeps you full longer

**Studies show that Almased® supports levels of hormones that influence the feeling of satiety.**

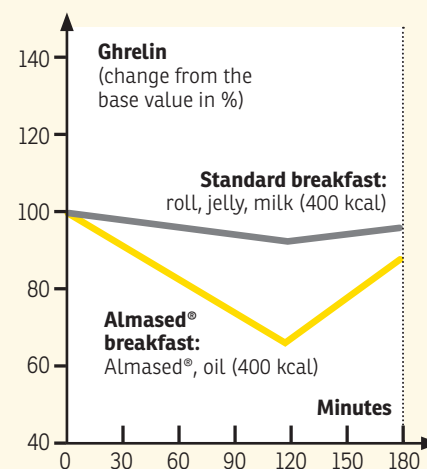
Satiety and hunger in humans are controlled by a very complex mechanism. The center of the system is located in the brain, in the hypothalamus. This is where the signals from the stomach, intestine and cerebrum come together. Three hormones that are transported via the bloodstream play a major role in this: Ghrelin, leptin and insulin. Ghrelin is released when the stomach is empty and signals the brain: Hunger. Leptin reports to the hypothalamus about the level of fullness of the body's fat cells. To achieve satiety and optimal fat burning, insulin has to be stabilized at a low level. The longer the insulin level remains low after consuming food, the longer a person feels full. Studies suggest that Almased® supports this effect.

## Positive influence on leptin and insulin level

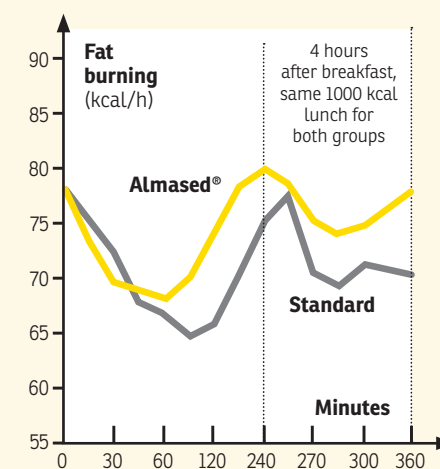


In a study with 25 overweight women, researchers of the Department of Sports Medicine at the University of Freiburg, Germany, proved that a diet with Almased® not only results in weight loss and improved body composition but also supports healthy leptin and insulin levels. On average, insulin and leptin levels in the participants decreased approx. 40% over the course of the 24-week long diet with Almased®.<sup>1</sup>

## The "Breakfast Study" shows: Almased® keeps you full longer and optimizes the fat burning process



In the so-called "Breakfast Study", researchers at the University of Freiburg, Germany, investigated the effects of an Almased® breakfast on the insulin and ghrelin level in the blood compared to a regular breakfast with a high amount of carbohydrates and low protein content. It was shown that after 4 hours, insulin



as well as ghrelin levels of the participants that had consumed Almased® were noticeably lower. Furthermore, the fat burning process was significantly higher. The hormone ghrelin controls the feeling of satiety - a low level means satiety. A low insulin level ensures that hunger pangs can be avoided.<sup>2</sup>

<sup>1</sup> "Effects of a meal replacement based on soy protein on hormonal and metabolic regulation in overweight and obese females"; Deibert, P, König, D, Frey, I, and Berg, A; Obesity Reviews, 2010, 11, Suppl. 1, 240

<sup>2</sup> "Fuel selection and appetite-regulating hormones after intake of a soy protein-based meal replacement"; König D et al.; Nutrition, 2012 Jan; 28(1): 35-9. Epub 2011 Jul 20.

# Almased® can help people with diabetes

**People with diabetes have a hard time losing weight because of their high insulin level. Almased® can help them.**

**A**lmost 24 million people in the United States suffer from diabetes. Because of their high insulin level it is hard for them to lose weight. Most people who are diagnosed with diabetes have type 2 diabetes. Type 2 diabetes is a metabolic disorder that mainly occurs in overweight people. The body produces insulin but the cells do not react to it in a regular manner. They absorb too little glucose and the blood sugar level increases. The body reacts by producing more insulin to normalize the blood sugar level. The high insulin level attributes to the storage of fat and inhibits fat reduction.

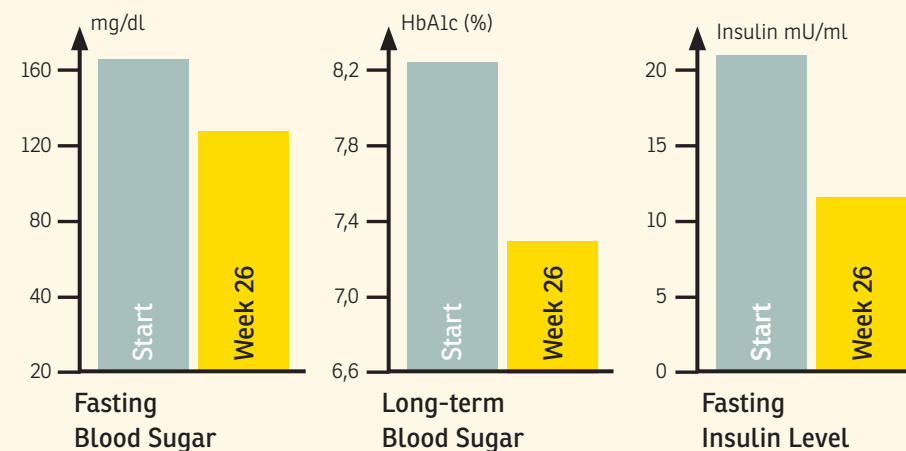
Almased® can help with this: It has been suggested that a diet with Almased® can lead to higher weight loss, especially in the abdominal area. This means that a diet with Almased® regulates the satiety mechanisms in the brain as well as the fat burning process more effectively than a diet without Almased®. This was evident for the first time in a 2005 study which showed that people with diabetes can lose weight signifi-

cantly with a diet that incorporates Almased®.

The argument for using Almased® to treat overweight people who have diabetes is further supported by a study of the Cochrane Collaboration, an independent worldwide network of scientists, doctors and other medical professionals. Their goal is to scientifically assess medical therapies. The study comes to the conclusion that a diet with a low glycemic index (it indicates the effect of a food item on the blood sugar curve) is superior to other diets. Almased® has an extremely low glycemic index of 27 (compared to potatoes at 78 and glucose at 100).<sup>1,2,3</sup>

A recommendation by the renowned Joslin Diabetes Center also supports the argument for Almased® consumption: The experts suggest that people with diabetes consume a diet consisting approximately of 40% carbohydrates, 30% fat and 30% protein. The researchers at Joslin also discovered that a diet needs to contain significantly

## Surprising results with diabetes mellitus



"Type 2 diabetes mellitus and Cancer"; Zänker KS et al.; German Journal of Oncology 2005; 37: 114-121.

more protein than what had been assumed until now in order for it to be effective for people with diabetes. A diet according to the Almased® concept – two Almased® shakes with

50 g powder each, 45 g oil and one healthy, protein-rich meal per day – provides people with diabetes with exactly the recommended mix of protein, carbohydrates and fat.<sup>4</sup>

1 "Low glycaemic index or low glycaemic load diets for overweight and obesity"; Thomas DE et al.; The Cochrane Library, 2007, Issue 3.

2 "Protein Content in Diabetes Nutrition Plan"; Hamdy O et al.; Curr Diab Rep, DOI 10.1007/s11892-010-0171-x.

3 "Fad Diets in the Treatment of Diabetics"; Feinman RD; Curr Diab Rep, DOI 10.1007/s11892-011-0178-y.

4 "Clinical nutrition guideline for overweight and obese adults with type 2 diabetes, prediabetes or those at high risk for developing type 2 diabetes"; Joslin Diabetes Center & Joslin Clinic; 2007, 03, 29.

## “Supported insulin and blood sugar levels with Almased®”

Prof. Dr. Daniel König talks about the effect of the Almased® diet on people with diabetes.

**People with diabetes have an especially hard time losing weight. How does Almased® make weight loss possible for them?**

It is indeed correct that successful and permanent weight loss is not easy for overweight people with type 2 diabetes. Many studies have shown that people with diabetes lose less weight and lose it more slowly than overweight people who do not have diabetes.

An important reason for this is insulin. Insulin is responsible for ensuring that sugar from the food that is consumed moves from the blood to the cells. In people with type 2 diabetes, the cells' sensitivity to insulin is lowered and the insulin level increases as a regulatory counter mechanism. Because of their lower sensitivity to insulin, many people with type 2 diabetes have to take medication that increases the body's release of insulin, or they have to inject insulin. However, high insulin levels slow down the fat burning process and cause the organism to store fat, which results in weight gain.

The success of Almased® for weight loss in people with type 2 diabetes can be contributed to Almased®'s low glycemic index as well as its high protein content.

**Why should people with diabetes choose food items with a low glycemic index to lose weight?**

The glycemic index indicates to what extent a certain amount of food containing carbohydrates increases the blood sugar level over a period of two hours compared to glucose. A low glycemic index equals a low increase in the blood sugar level during the time after the food is consumed. It is important for people with diabetes that a low increase in the blood sugar level also means a lower demand for insulin. Regarding weight loss this means that the fat burning process functions better because of the lower insulin level, thus weight loss is easier. Some studies have shown that in comparison to a “typical” breakfast consisting of white bread and jelly, an Almased® shake supported healthy blood sugar and insulin levels. Additionally the fat burning process was significantly higher during the study period.

**Protein-rich diets used to be under the suspicion of increasing the risk for cardiac diseases. Now the Joslin Diabetes Center recommends a 30% protein content in the diet. Do you share this opinion? And if yes, why?**

Protein-rich diets were criticized mainly because their high protein content came from animal protein. This also meant an increased intake of animal fat and saturated fatty acids which many scientists consider to be the reason for arteriosclerosis and heart attack. If the high protein content comes from plant protein, such as soy protein, these arguments can no longer be sustained. A higher protein content results in a longer and better feeling of satiety and optimizes the calorie burning process, the so-called thermogenesis. Furthermore, a sufficient consumption of protein fosters muscle growth. Muscles are the most important organ for energy consumption.



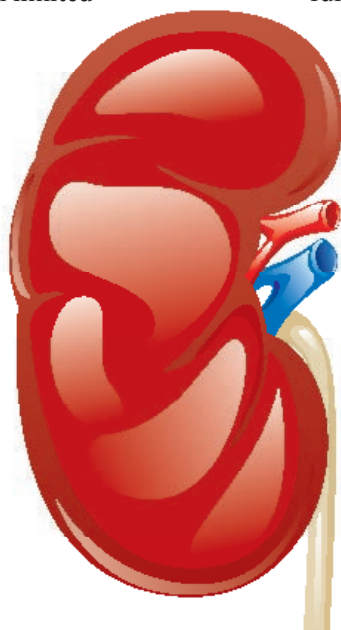
**Prof. Dr. Daniel König**  
from the University Clinic Freiburg, Germany works, among other things, on the investigation and practical implementation of lifestyle intervention concepts on physical activity and nutrition

# Almased® is “kidney friendly”

**A study has shown that a protein-rich diet with Almased® may promote kidney function.**

The human kidneys filter the blood and excrete contaminants, including urea and uric acid, which are by-products of the body’s protein utilization. Therefore, some people fear protein-rich diets because they argue that such a diet would stress the kidneys. Studies have shown that a diet with Almased® does not strain the kidneys and that elderly people with decreasing kidney function and people with limited kidney function do no to worry: Almased® is “kidney friendly”. A study conducted by researchers at the Uni-

versity of Freiburg, Germany, with overweight patients that suffer from metabolic syndrome (overweight, lipid metabolic disorders, high blood pressure and insulin resistance) showed that the protein-rich Almased® diet (0.3 g protein per kg body weight daily) did not affect the kidney function of the participants negatively. The researchers even argued that the Almased® diet may promote kidney function in the long run because of the supportive effect on the hormones leptin and insulin, which may protect against kidney damage.<sup>1</sup>



The high-quality soy protein in Almased® is kidney friendly.

<sup>1</sup> “Acute effect of a soy protein-rich meal replacement application on renal parameters in patients with the metabolic syndrome”; Deibert et al.; Asia Pacific Journal of Clinic Nutrition, 2011, n=10/10.

## How does soy protein affect the kidneys?

An interview with the consulting physician for nutritional science, **Dr. Peter Deibert**.

### Rumor has it that protein can damage the kidneys – is this prejudice true?

It is indeed true that high protein consumption puts strain on the kidneys. This stress can lead to long-term kidney damage. Animal protein is said to be especially straining. Poultry is less harmful than pork and fish is even better. Plant protein puts the least strain on the kidneys and soy protein is said to be the best one. However, we also need to factor in the general kidney condition. A healthy kidney obviously reacts differently than the



**PD Dr. Peter Deibert,**

Consulting physician for internal medicine and gastroenterology, nutritional science, sports medicine, cardiovascular preventive medicine, lipidologist. Approbation 1991, senior physician at the University Clinic Freiburg, Germany

kidney of an ill person. Over the past year, we have investigated how kidneys of patients with metabolic syndrome – a combination of overweight, lipid metabolic disorders, high blood pressure and insulin resistance – react to protein intake compared to kidneys of healthy people. We found that the kidney filtration rate in patients with metabolic syndrome was increased on an empty stomach even when they had completely normal kidney values. With increased protein intake, the filtration rate continued to increase, which made the strain on the kidneys even worse.

However, giving one serving of Almased® as a meal replacement did not result in a significant change. These scientific findings were recently published.

**What about a protein-rich diet for people with diseases – like people with diabetes or kidney problems, including those that have to have dialysis?**

Medical science has been discussing this for the past decades. A diet low in protein used to be recommended to protect the kidneys but that caused even worse muscle loss in some kidney patients who already lose protein through their kidneys. Today it is assumed that patients definitely need the regular daily recommended dose of protein, especially in the form of high-quality protein. By choosing the right protein sources, excessive stress on the ill kidneys can be avoided. Protein supplementation beyond that is not recommended. The same applies for healthy people. It has also been shown that the high amounts of protein that are often consumed by athletes do not have any benefits.

**Kidney function in elderly patients slows down. Is a protein-rich diet dangerous for the elderly? After all, they are supposed to consume more protein to avoid age-related muscle loss. Is this correct?**

As long as the kidneys function normally, the daily protein requirements should be met. The quality of the consumed protein is important. We have shown that Almased® supplementation combined with exercise improves the strength and metabolism of the elderly. Especially at an older age, high-protein supplementation is important to retain muscle mass and muscle function. Malnutrition is not uncommon in the elderly. Therefore, it is important to ensure sufficient supplementation with high-quality protein in this life phase. This does not harm a “healthy” older kidney. These study results were also recently published.

**What do people have to pay attention to? How much protein is too much?**

Protein requirements are based on age, gender and lean body mass as well as the activity level. For inactive people, 0.8 g/kg body weight daily is plenty. For people who exercise moderately, 1 g/kg daily is ideal, endurance athletes need 1.2-1.4 g/kg and strength athletes are advised to consume up to 1.7 g/kg per day. This only applies to people with healthy kidney function. If kidney disease is present, a doctor should be consulted.

## Soy as an antirheumatic

### Soy has antioxidant effects and works as a natural antirheumatic agent.

A basic diet recommendation for people with rheumatism is to reduce the consumption of foods rich in arachidonic acid. Arachidonic acid is a fatty acid that is mainly found in meat, meat products and eggs. However, this recommendation means taking important protein sources off the daily meal plan. This can be problematic for people with rheumatism as protein provides the amino acids that are necessary for the development and retention of muscles, bones and articular cartilage. Patients with inflammatory rheumatism (rheumatoid arthritis) can have an especially increased protein requirement since they metabolize more protein due to their disease. Additionally, the cortisone used in rheumatic therapy increases the breakdown of protein in the body.

Therefore, people with rheumatism can have a protein deficit for several reasons and this deficit needs to be balanced through the food intake. The soy protein in Almased® can supply that. Isoflavonoids in the soy have antioxidant effects. Rheumatic diseases cause an increased release of free radicals that maintain or even increase inflammatory processes in the joints. Combined with other micronutrients that have antioxidant effects, soy isoflavonoids can help to lessen oxidative stress.<sup>1</sup>

Soy protein has also been shown to be effective in fighting pain, one of the main symptoms of rheumatic diseases. Animal testing has shown that a diet rich in soy can lessen chronic nerve pain.<sup>2,3,4</sup>

- 1 "Inhibitory effects of isoflavones on lipid peroxidation by reactive oxygen species"; Toda S et al.; Phyt Res, 1999, 13 (2): 163-65.
- 2 "The correlation between dietary soy phytoestrogens and neuropathic pain behavior in rats after partial denervation"; Shir Y et al.; Anesthesia and analgesia, 2002, 94 (2): 421-26.
- 3 "Consumption of soy diet before nerve injury preempts the development of neuropathic pain in rats"; Shir Y et al.; Anesthesiology, 2001, 95 (5): 1238-44.
- 4 "Soy containing diet suppresses chronic neuropathic sensory disorders in rats"; Shir Y et al.; Anesthesia and analgesia, 2001, 92 (4): 1029-34.



# Almased® and metabolic syndrome

**Almased® may promote beneficial effects that work against many of the components of the metabolic syndrome, such as being overweight, having lipid metabolic disorders, high blood pressure and insulin resistance.**

**M**etabolic syndrome is a combination of diseases that are jointly called the “deadly four”: Overweight, lipid metabolic disorders, high blood pressure and insulin resistance. The eight scientists that already researched Almased® in its early stages agreed that the powder has supportive effects on the markers of the metabolic syndrome (see pages 7-9).

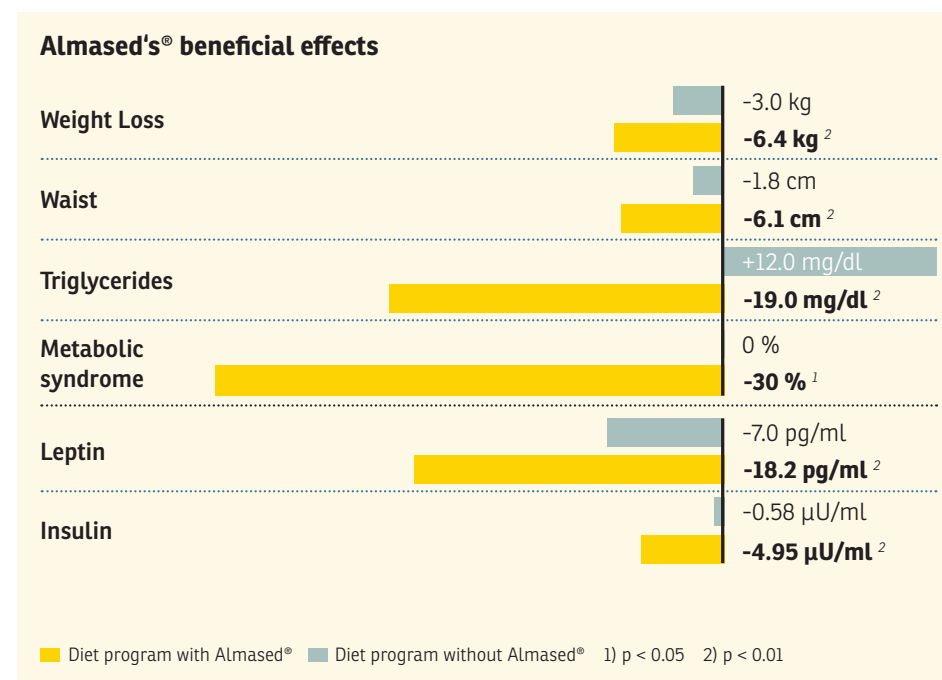
Many times, treating obesity is a causal therapeutic approach that also treats hypertension, lipid metabolic disorders or diabetes mellitus. Losing 10 kg (22 lbs) of weight reduces the systolic blood pressure by 12 mmHg and the diastolic blood pressure by 8 mmHg, lowers triglycerides by 30%, increases HDL-cholesterol by 8% and lowers the HbA1c value by 1.5 units. Weight loss also results in 2 out of 3 people with diabetes no longer suffering from the disease.<sup>1</sup>

A 2008 study has shown: After only 6 weeks on the Almased® diet, over-

weight participants (60 took Almased®, a control group of 30 was on a weight loss program without Almased®) showed improved biomarkers – significantly more than in the comparative group that was on a regular low-fat diet.<sup>2</sup>

Almased® can also help menopausal women, who are known to have an especially “sluggish” metabolism. This was shown in a study at the University of Freiburg, Germany, which compared the reaction of pre- and postmenopausal women to Almased®. Healthy blood fat levels of HDL-cholesterol, LDL-cholesterol and triglycerides were supported in both groups.

Healthy insulin and ghrelin levels were also seen, more so in postmenopausal women than in younger ones. Therefore, the positive effects were not only seen on the important parameters of the metabolic syndrome but also on the hunger and satiety messages that are controlled by the central nervous system. The Almased® diet was able to reduce the occurrence of the metabolic



syndrome in premenopausal women from 23% to 18%. In postmenopausal women, almost half showed having

metabolic syndrome at the beginning of the study and that number was lowered to 16%.<sup>3</sup>

1 "Obesity in Scotland. Integrating prevention with weight management", SIGN (Scottish Intercollegiate Guidelines Network), 1996.  
 2 "Effect of meal replacement on metabolic risk factors in overweight and obese subjects"; Koenig D et al.; Annals of Nutrition and Metabolism, 2008, 52: 74-78.  
 3 "Effect of a weight loss intervention on anthropometric measures and metabolic risk factors in pre- vs. postmenopausal women"; Deibert P et al.; Nutrition Journal, 2007, Oct., 6(1): 31.

# The soy in Almased® can support a healthy blood pressure

**Almased® studies confirm what international studies claim:  
Almased® supports healthy blood pressure levels.**

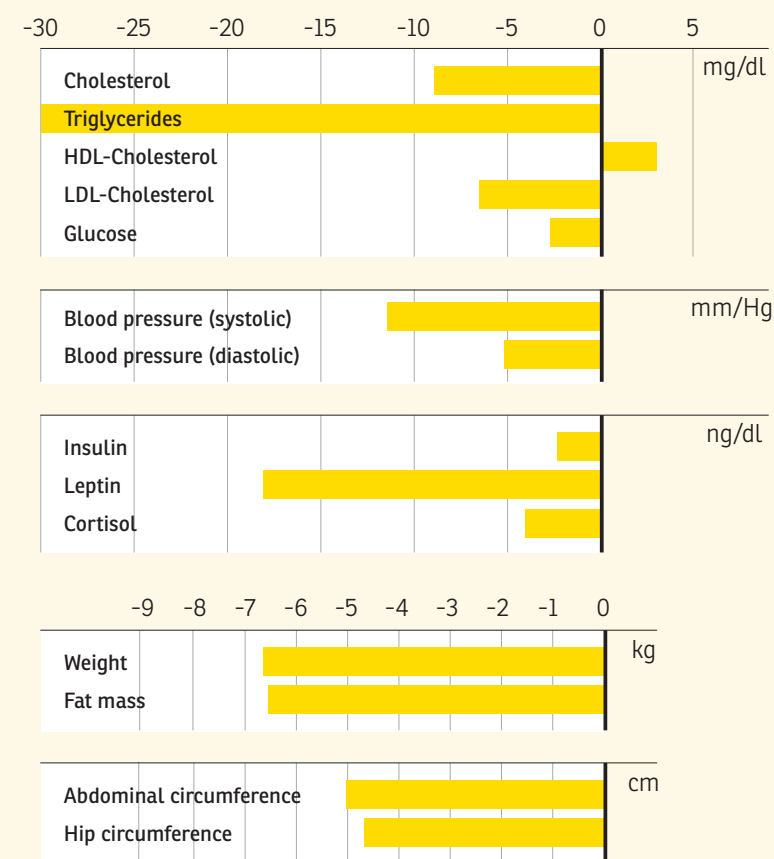
Many people who suffer from high blood pressure may benefit from the use of plant ingredients that may lower blood pressure as an alternative to medication.

In 2006, a team of researchers for the international cross-sectional study INTERMAP questioned 4,700 people with regular blood pressure (between 40 and 59 years of age, from Great Britain, the USA, China and Japan) about their diet habits and investigated urine samples of the participants to find a relation between diet and high blood pressure. People whose daily intake of plant protein was just 2.8% higher than the average had a systolic blood pressure that was 2.7 mmHg lower than the average and a diastolic value that was 1.7 mmHg below the average. People who took over-proportional amounts of animal protein did not show this result.<sup>1</sup>

The particularly successful effect of soy protein was shown by Dr. Jiang He at Tulane University in Louisiana. On a daily basis, he gave one group of adults cookies that consisted of 40 g soy protein, while another group ate cookies that consisted mainly of 40 g high complex carbohydrates from wheat. On average, people with hypertension that ate the soy cookies lowered their systolic blood pressure by 7.1 mmHg and their diastolic blood pressure by 4.7 mmHg. On average, people with regular blood pressure lowered their values by 2.5 mmHg and 1.3 mmHg.<sup>2</sup>

A study conducted by Dr. Deibert and his team showed supportive effects on blood pressure levels. 50 women over 40 participated in a weight loss program with Almased® over 48 weeks. They lost an average of 7 kg (15.4 lbs) of fat mass, and achieved healthy hormone and blood pressure levels.<sup>3</sup>

**Influence of a weight reduction program on health risks of postmenopausal women (n=50)**



1 "INTERMAP-Study"; published in Arch Intern Med 166, 2006, 79.

2 "Effect of soybean protein on blood pressure: a randomized, controlled trial"; He J et al.; Ann Intern Med, 2005 Jul 5; 143(1): 1-9.

3 "Effect of a weight loss intervention on anthropometric measures and metabolic risk factors in pre- vs. postmenopausal women"; Deibert P et al.; Nutrition Journal, 2007, Oct; 6(1): 31.

# Almased® supports the youth hormone HGH

**Study: The amino acids arginine and lysine in Almased® promote a healthy level of the hormone HGH (Human Growth Hormone).**

In a study of 25 overweight women, researchers with the Department of Sports Medicine at the University of Freiburg, Germany, showed that a diet with Almased® can not only achieve weight loss, improve body composition and support healthy leptin and insulin levels but also promote the level of the growth hormone HGH. HGH helps the body break down fat and improve muscle growth. It is often used as an anti-aging method.

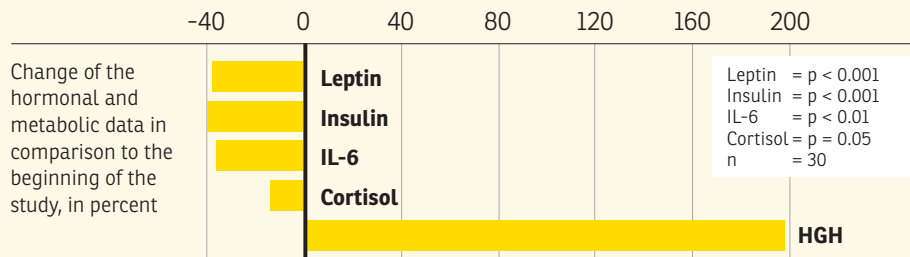
The researchers in Freiburg also tested Almased®'s effect on HGH in men as well. They had overweight, untrained older men undergo a strength training. One group combined the training with Almased®, a control group simply followed the general recommendations for a healthier lifestyle. The results suggested that only the combination of strength training and Almased® supported body composition, metabolic functions and diminished age-related restrictions.

The "youth hormone" HGH is also used as an anti-aging method.



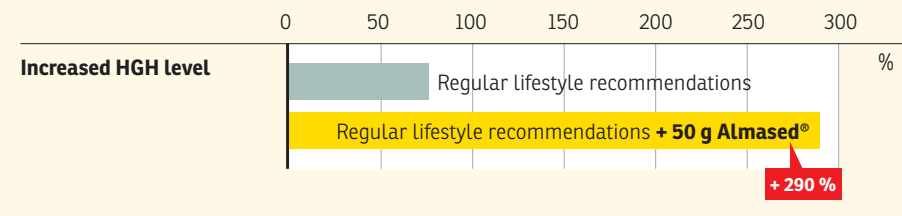
A healthy HGH level was also noticeable in male individuals. Consuming the soy protein and honey supplement supports the effects of training and diet as well as hormonal regulation in several ways. The amino acids arginine and lysine in soy protein promote a healthy level of the hormone HGH. Additionally, soy protein seems to support the food intake by influencing the hormones that regulate the hunger and satiety messages in the central nervous system.<sup>1</sup>

## The influence of Almased® on the hormonal system in women between 35 and 65 years after 24 weeks



## Strength training in men over 50 with and without Almased®

Time frame 12 weeks, n = 40



<sup>1</sup> "Effects of a meal replacement based on soy protein on hormonal and metabolic regulation in overweight and obese females"; Deibert P et al.; Obesity Reviews, 2010, 11, Suppl. 1, 240.

# Almased® as a natural anabolic agent

## Almased® for athletes: Improves fat burning and muscle growth.

Athletes need more protein after their training than non-athletes for strength and regeneration: 1.2 to 1.8 g per kg of body weight daily, depending on the kind of sport. Professor Dr. Arno Schmidt-Trucksäß of the University of Munich, Germany, showed in a study that Almased® is especially suitable for athletes. His reasoning is that Almased® is a protein supplement with a balanced amino acid composition and a high amount of essential and branched-chain amino acids and therefore causes a targeted physiological reaction. Thirty minutes after consuming 40 g of Almased® combined with 37.5 g glucose, the insulin kinetics showed a peak that was significantly higher than after consuming carbohydrates only. This caused an important stimulus for the build up of muscle protein. Additionally, the combination of 63% protein and 36% carbohydrates in Almased® supports quick regeneration after training.<sup>1</sup>

The researcher refers to the positive effects of Almased® experienced by

Strength training with Almased® achieves better results: More fat loss plus increased muscle growth.

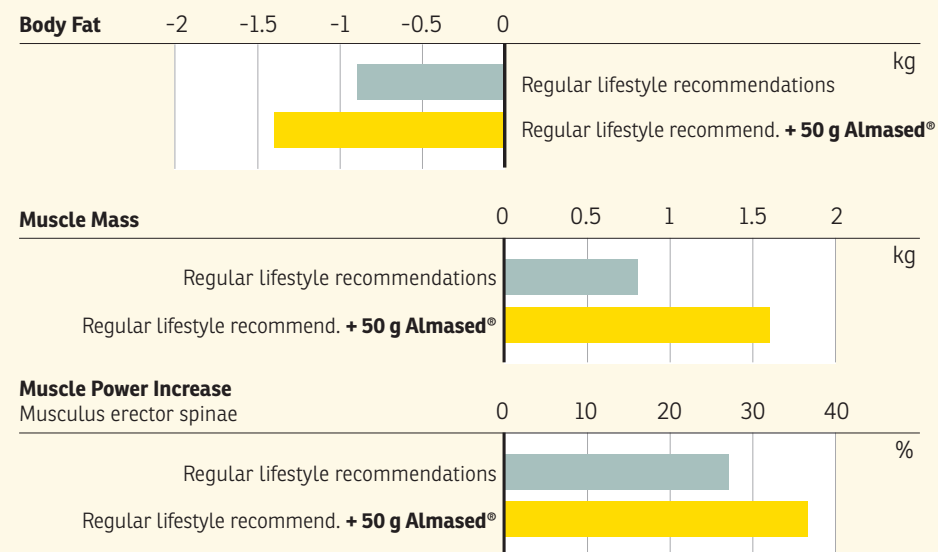


professional athletes in Germany, including members of two major league soccer teams and the national swim team.

A study at the University of Freiburg, Germany, supports the claim that Almased® helps to improve muscle growth and muscle power. In a comparative study the researchers had two groups of older men conduct a strength

### Strength training in men over 50 with and without Almased®

Time frame 12 weeks, n=40



training for 12 weeks: One group received regular lifestyle recommendations, the other group was given the same recommendations as well as 50 g of Almased® daily. The participants who did not take Almased® lost an average of 0.9 kg (2 lbs) of fat and

gained 0.8 kg (1.8 lbs) of muscle mass. The participants who took Almased® every day lost an average of 1.4 kg (3.1 lbs) of fat and gained 1.6 kg (3.5 lbs) of muscle mass – twice as much as the group that did not take Almased® and with the same amount of training.<sup>2</sup>

- 1 "Early postexercise muscle glycogen recovery is enhanced with a carbohydrate-protein supplement"; Ivy JL et al.; J Appl Physiol, 2002, 93(4): 1337-44. "Favorable metabolic properties of a soy-honey-yoghurt product for meal replacement in overweight subjects with atherogenic risk"; Berg A et al.; Atherosclerosis Supplements, May 2008, Volume 9/1: 253.
- 2 "Soy protein based supplementation supports metabolic effects of resistance training in previously untrained middle aged males."; Deibert P, Solleder F, König D, Vitolins MZ, Dickhuth HH, Gollhofer A, Berg A. Aging Male. 2011; 14(4): 273-9.

# Almased® ensures a stress-free everyday life

**Almased® supports healthy cortisol levels and improves health-related quality of life in seven dimensions.**

When people consume less food during a diet it often results in stress for the body. As a result, the body releases a higher amount of the stress hormone cortisol. Its concentration indicates the level of physical and psychological stress. A diet with Almased® supports a healthy cortisol level. The stress factor drops.

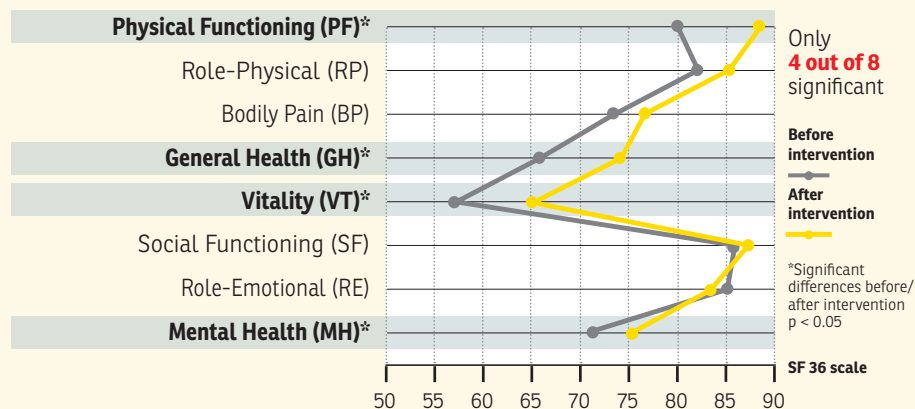
These are the findings of a recent scientific study with overweight women conducted by Prof. Dr. Aloys Berg at the University Clinic Freiburg, Germany. It is also a possible scientific reason why people who are on a diet with Almased® report that they are in an especially good mood and feel balanced.<sup>1</sup>

Another study conducted with 381 obese women between the ages of 40 and 65 and with a BMI of 30 to 40 kg/m<sup>2</sup> as well as identical fitness levels showed that diets including Almased® result in a higher improvement of health-related quality of life than other diet programs, even if the weight loss results are the same.

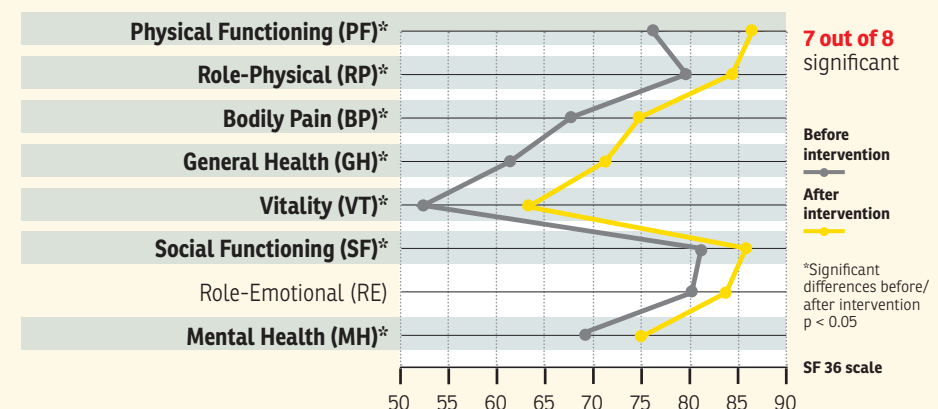
The data for the health-related quality of life was gathered with a standardized questionnaire (SF 36) before and after a one-year long intervention program for clinically controlled weight loss.

SF 36 is a measuring instrument that includes several diseases and evaluates

**Quality of life of overweight women, Intervention without Almased®**



**Quality of life of overweight women, Intervention with Almased®**





health-related quality of life. SF 36 includes 8 dimensions, that can be categorized in “physical health” and “mental health”:

- Physical efficiency
- Physical daily activity
- Physical pain
- General health awareness
- Vitality
- Social efficiency
- Emotional daily activity
- Psychological well-being

The following conclusion can be drawn from the results at hand:<sup>1</sup>

- The Almased® group reported significant improvements in 7 of the 8 dimensions after one year. The group who did not take Almased® only reported improvement in 4. Even though the Almased® group started out with noticeably worse values than the other group, they made up this leeway after one year and were on the same level as the other group regarding the assessment of their quality of life.

- Obese women with formerly limited health conditions were able to normalize their health-related quality of life by using Almased® as a meal replacement.



Tests with women show that the Almased® diet improved health-related quality of life more than conventional programs.

## Protection of osteoporosis

### Scientists refute the claim that protein from food has a negative influence on bone health.

Osteoporosis is characterized by continuous loss of bone substance and impairment of the specific structure of bone mass. The elderly, especially women in menopause, have the highest risk of osteoporosis.

The influence of food protein on bone health is often judged negatively. The reason is that a high protein intake increases the renal excretion of calcium, the most important mineral for bone composition. Independent scientific studies have refuted this claim and shown the contrary: Soy protein, a main component in Almased®, may have especially supportive effects – recent scientific studies have shown that consuming 2.1 g/kg body weight in comparison to 0.7 g/kg can result in increased intestinal absorption of

calcium, while the renal excretion of calcium does not increase significantly. There are many factors that suggest that soy protein may protect against osteoporosis. Soy protein, unlike animal protein, decreases the excretion of calcium from the body. Additionally, the isoflavonoids in soy protein are said to have properties that help maintain bone mass. Animal studies have shown that soy consumption can prolong loss of bone mass that is related to estrogen deficiency.

Several intervention studies in pre- and postmenopausal women have also shown that consuming soy protein can reduce the concentration of bone resorption parameters in the urine (e.g. deoxypyridinoline) and can have partially positive effects on bone density.<sup>1</sup>

<sup>1</sup> "Meal replacement based on soy protein improves benefits of a weight reduction program on health related quality of life (HRQOL) in middle-aged obese females"; Berg A et al.; Obesity Reviews (2011), 12, Suppl. 1, 73.

<sup>1</sup> "Dietary phytoestrogens and their effect on bone: evidence from in vitro and in vivo, human observational, and dietary intervention studies"; Setehell K D et al.; Am J CUn Nutr, 2003, 78 (3): 593-609.

# Soy isolate, gout and inflammation

**Almased® is low in purine and a great source of protein for people who suffer from gout. Additionally, it has anti-inflammatory effects.**

**G**out is a typical disease of affluence and is related to too much calorie intake, overweight and alcohol consumption. Scientific findings suggest that Almased® is a well suited protein source for people with gout.

Gout is the result of an increased uric acid level. Uric acid is produced by the breakdown of purine in the body, endogenous and exogenous. Food with high protein content, especially animal protein, contains a lot of purine. But certain carbohydrates also increase the risk of developing gout. People who have gout or are at risk for developing

gout should consume little fruit and not more than 30 g of fruit sugar per day. And since keto acids, which are produced by the breakdown of fat during a diet, inhibit the excretion of uric acid through the urine, people at risk for gout should always ensure an alkaline counterbalance, for instance by drinking lots of water rich in hydrogen carbonate and minerals.

Not all purines act in the same harmful manner: Soy is a purine-rich food. Nevertheless, studies show an increased uric acid clearance for soy as well as for milk.<sup>1</sup>

Studies that researched the effects of the soy product tofu on the uric acid metabolism show that it is an exceptional protein source for gout patients.<sup>2</sup>

The soy protein in Almased® has been enriched with valuable soy isolate which makes it especially suitable for a diet low in purines. To ensure a suffi-

cient supply with protein while simultaneously reducing calorie intake, Almased® is an ideal choice.

Additionally, Almased® has a great “side effect”: A study with overweight patients has shown that a diet including Almased® not only has a supportive influence on the metabolism but also on the regulation of inflammation.<sup>3</sup>



Soy is a great protein source for people suffering from gout, especially the valuable soy isolate that is in Almased®.

- 1 "Milk- and soy-protein ingestion: acute effect on serum uric acid concentration"; Garrel D R et al.; Am J CU Nutr, 1991, 53 (3): 665-69.
- 2 "Effect of Tofu (bean curd) ingestion and on uric acid metabolism in healthy and gouty subjects"; Yarnakita J et al.; Adv Exp Med Biol 1998, 431: 839-42.
- 3 "Influence of a defined reduction diet on body composition, metabolism and inflammation regulation"; Walther W et al.; German Journal of Sports Medicine 51, 2000, Nr. 1: 39.

# This is how it works: Weight loss according to plan

The four phases of the Almased® diet – applied to a two-week program. All phases can be extended.

Delicious recipes for healthy meals can be found in the Almased® Figure Plan: The 14-Day Program.

**1. Starting Phase - Day 1-3**  
The metabolism is reset to increase the fat burning process.



Three Almased® shakes per day, each prepared with water, skim milk or soya milk are ideal. During this phase you should have as few carbohydrates as possible. Bread, rice, pasta, potatoes, sugary drinks (soda, fruit juice, beer) and sweets are off-limits. Since the body detoxifies heavily during this phase, it is important

to drink plenty of fluids (ten to twelve cups per day). This flushes out acidic by-products that are released while the body breaks down fat. Water (ideally mineral-rich), unsweetened tea or one to two cups of coffee are recommended. It is ideal to begin the phase on a weekend.

**2. Reduction Phase - Day 4-7**  
Now you burn the fat. Two Almased® shakes as well as one regular meal per day are ideal.



The recipes for regular meals are low in carbohydrates so that the fat burning process can work at its best. If having your regular meal for dinner instead of lunch fits your lifestyle better, you can exchange them. Since a low intake of carbohydrates is espe-

cially important in the evening, avoiding high-carb side dishes (bread, potatoes, rice, pasta) can speed up the weight loss process. This applies to the evening meals in all phases. Please avoid snacking. This will further increase the fat burning process.

**3. Stability Phase - Day 8-10**  
Now we ensure that the metabolism continues to function ideally.



This phase is meant to stabilize the metabolism on a level where fat is actively burned. In this phase, you should have one Almased® shake and eat two regular meals. You can exchange the Almased® shake for any meal. For example, choose one of the breakfast

suggestions from the Life Phase and have your Almased® shake either for lunch or dinner. For best results, drink Almased® in the evening.

**4. Life Phase**  
Three regular meals and one Almased® shake daily – live life to the fullest.



During the Life Phase, you can have three regular meals per day. Avoid eating snacks. To keep the metabolism active, 50 g of Almased® (= one serving) should be taken daily in addition. You can have Almased® with breakfast, consume it as a drink or add it to your cold cereal. If you want to

continue losing weight, you should eat fewer sides for dinner or avoid them altogether. If you want to extend the Reduction Phase or the Stability Phase, you may do so.

# Learn more about Almased®

Find more information in our FREE brochures, by contacting us or visiting our website.

## Figure Plan

The 14-day Programme to lose weight with Almased® is available for FREE at your pharmacy or health food store or for download at [www.almased.co.uk](http://www.almased.co.uk).

Important information for you, the retailer is also available for FREE.

## Almased® Wellness Tea

The Almased® Wellness Tea is the perfect complement to the Almased® Synergy Diet. The tea is a blend of select all-natural herbs, including whitethorn, elder blossom, marjoram, woodruff and celery. The tea is naturally caffeine-free and promotes restfulness and sleep.

## Customer service

Call Almased UK at 020 7969 1886 or visit our website at [www.almased.co.uk](http://www.almased.co.uk) for more information.

