

Almased®

Scientific Research on Almased®

Scientific Information for Health Care Professionals



The principal studies into the
effects of Almased

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.

8 10 statements about Almased

All core claims about Almased have now been scientifically validated

10 Effective weight-loss with Almased

The underpinning studies into the superior weight-reducing effect of the metabolic activator

12 "We now know that Almased improves the fat-burning process"

Interview with Prof. Dr. Aloys Berg, Department of Medicine, University of Freiburg, Germany.

16 Almased keeps you feeling full for longer

Studies show that Almased regulates the hormones that control the feeling of satiety

18 Almased can help diabetics

Studies show that they can lose weight and improve their blood parameters with Almased

20 "Patients lost weight and lowered their blood sugar levels considerably "

Interview mit Dr. Kerstin Kempf of the West German Diabetes and Health Centre

25 Study of diabetics in five countries

AMDIT – a comparative study conducted in the USA, India, Brazil, England and Germany

26 "Lower insulin levels with Almased"

Interview with Professor Dr. Daniel König, AMDIT study leader

28 Almased combats fatty liver

A simple way of combating this often hidden condition

30 Almased is "kidney-friendly"

Two studies show that the high-protein Almased diet is not detrimental to kidney function

31 "The high-quality soya protein does not damage the kidneys"

Interview with Professor Dr. Peter Deibert, Consulting physician for internal medicine and gastroenterology

33 Soya as an antirheumatic agent

The soya contained in Almased acts as a natural antirheumatic agent

34 Almased combats metabolic syndrome

Studies shown that it has a beneficial effect on all metabolic biomarkers

36 The soya protein in Almased can lower blood-pressure

International studies validate the Almased research

38 Almased stimulates production of the youth hormone HGH

The amino acids arginine and lysine in Almased encourage the secretion of HGH (Human Growth Hormone)

40 A natural anabolic steroid

For intensified fat breakdown, faster muscle building and improved stamina

44 Stress-free diet

Almased ensures lower levels of the stress hormone cortisol

47 Protection against osteoporosis

The beneficial effects of soya protein

48 Soya isolate does not cause gout

A safe form of protein

50 This is how it works: the weight-loss plan

The four phases of the Almased diet

51 You want to know more?

Further information about Almased

Why Almased is conducting extensive research into 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 stimulates the metabolism biologically. My father's goal: people have to feel noticeably better when they take the product.

He realised that stimulating the metabolism of overweight people automatically results in a reduction in 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 soya, probiotic yogurt and especially enzyme-rich honey. Blending the raw ingredients during a fermentation process creates a synergistic effect, the ingredients enhance each others' effectiveness.

Since 1999, we have sponsored scientific research on Almased. Scientists have discovered that certain properties of soya, natural raw honey and probiotic yogurt have positive effects on the metabolism and improve sleep and regeneration. Because of these findings, I decided to commission more intensive research into Almased and the effectiveness of its ingredients.

Today we have study results from several renowned universities. They not only confirm the beneficial effects of Almased on body weight but also on the metabolism, performance levels and on many diseases. This brochure provides an overview of the status of our research. And I believe that it proves my hypothesis: Almased has important benefits to offer our society. It is not a short-lived fad diet but is already an established component of a healthy lifestyle for many people.

Read for yourself.
Sincerely,

André Trouillé

André Trouillé,
Owner, Almased UK Ltd.



What makes Almased® unique

Top-quality ingredients, exact mixing ratio, special production process – that is why Almased works so much better than traditional diets. What you need to know.

Everyone can lose weight – but Almased helps to sustain this weight-loss, without the so-called yo-yo effect where people regain the weight very quickly once they stop dieting. But Almased has even more to offer: Those who try Almased feel great while there are losing weight – cheerful, fit and energetic. Why is that? Firstly, it is because of the nutritious ingredients. Secondly, the complex production process ensures that Almased harnesses the synergistic forces of nature.

So why can't other products do the same?

The preparation of Almased involves much more than merely powdering soya protein, honey and yogurt and mixing them together. First of all, there is the question of the quality of the ingredients – and Almased makes no compromises on this: It contains only the finest quality grades of soya, which are also licensed for baby food, as well as probiotic yogurt and natural, enzyme-rich honey. And then there is the exact mixing ratio. But

still these two factors do not explain the Almased phenomenon: The key is in the preparation.

This is how the Almased phenomenon is created

Only the special Almased production process ensures that the crucial but delicate honey enzymes are preserved and that the bioactive phytochemicals from the soya plants and the precious yogurt cultures retain their efficacy. It is the combination of these raw ingredients that produces Almased's synergistic effects: The components of one ingredient intensify the effects of the other ingredients and new biologically-active substances are formed.

Analyses prove that tiny protein building blocks, so-called natural bioactive peptides, are formed from the soya and yogurt protein. These have a beneficial effect upon lipid metabolism, promote healthy cell formation and inhibit the deposition of fat. And so a brand new food is created – Almased.

100% natural: What is in Almased

High-quality soya protein. Almased uses a special quality of traditionally cultivated soya protein (GMO free), which is also licensed for use in baby food.

Probiotic yogurt. This enhances the effects of the soya protein and has a beneficial effect upon the immune system.

Enzyme-rich honey. This is what gives Almased its pleasant sweet taste. It has a positive effect upon body weight, promotes healthy sleep patterns and is beneficial to the immune system. Honey is a prebiotic. The natural enzymes contained in the natural liquid honey from nature conservation areas in North America are important to the manufacturing process.

What is NOT in it: Recent research has shown that food additives can irritate the endocrine system. That's another reason why Almased does not contain any artificial flavourings, sweeteners, bulking-agents or stimulants. Almased is gluten-free and contains no added sugar.



All-natural: Almased is made from high-quality soya, probiotic yogurt and pure natural honey.

Almased®: 10 statements

All core claims about Almased have now been scientifically validated. Eight scientists have drafted 10 statements about the effects of this powdered health food.

Almased can do a lot more than just help people lose weight. This is the conclusion of eight German scientists who have looked into the effects of this health food. Together they have drafted the following statements. They confirm all core claims about Almased, from the breakdown of fat and retention of muscle mass to the beneficial impact upon hormone levels and blood pressure and therefore to reducing the risk of metabolic syndrome.

1. Almased contains pure soya protein, yogurt and raw honey. A special processing method preserves the essential amino acids in Almased.
2. Obesity is associated with a severely increased leptin level, which, in turn, is linked to insulin resistance and considered to be a cause of metabolic disorders, such as diabetes mellitus. Almased supports a healthy leptin level, thereby favourably influencing the risk factors.

3. Almased supports healthy insulin levels, while stimulating fat reduction and inhibiting fat storage.
4. The tissue hormone ghrelin, which is produced by stomach cells, is an indicator of the feeling of satiety. Almased supports ghrelin levels, thereby reducing appetite for long periods.
5. Almased has a positive effect on the body fat vs. lean tissue ratio. If combined with physical activity, it can significantly reduce fat deposits around the abdomen and hips.
6. In a weight loss programme, Almased helps to burn body fat without reducing muscle mass.
7. Weight loss achieved with Almased is helpful in changing nutritional behaviour and keeps the weight off long-term.
8. 50 g of Almased per day supports healthy blood parameters (e.g. blood sugar, HbA1c value).

9. A weight loss programme with Almased supports healthy cholesterol and triglyceride levels.
10. A weight loss programme with Almased lowers both systolic and diastolic blood pressure.

Summary Almased has a beneficial effect upon all components of metabolic syndrome. It is recommended that it be used for at least 6 weeks. To lose weight, Almased should be used as a meal substitute (1 to 2 x 50 g daily). Even just 50 g once a day brings about an improvement in metabolic biomarkers.

The scientific conference on this subject took place in Frankfurt on 10 October 2006.

Together these scientists drafted the above statements:

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 Saueremann, Medical Consultant

Chairman of the Financial Committee of the German Association of CHI Physicians (KBV)

Professor Jörg Schulz, MD

Consultant of HELIOS Medical Centre, 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 Sports Science, Christian Albrechts University, Kiel

Reduces fat: Effective weight loss with Almased®

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

Hubertus Trouillé, holistic therapist and inventor of Almased, wanted to help his patients improve their metabolism with Almased powder. At first, he categorised all other positive effects under “side effects”, including the reason most people purchase Almased today: Almased makes it easy to lose weight because it keeps you feeling full for a long time, even though it is low in calories and because it stimulates the fat burning process.

The first scientific studies commissioned by André Trouillé, son of the Almased inventor, researched

Superior diet success with Almased: High fat loss without loss of muscle mass.



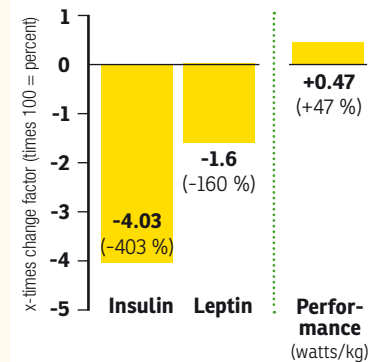
and validated the superior performance of diets that include Almased compared to traditional weight loss programmes. In 2000, a study conducted at the University of Freiburg, Germany, showed the effectiveness of a diet with Almased on body weight and body shape: Twelve overweight participants had Almased for breakfast and dinner as well as a normal, low-fat midday meal for four weeks. The participants lost an average of 4.8 kg (10.6 lbs). Researchers attributed the fat reduction to beneficial levels of the regulating variables insulin and leptin.¹

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

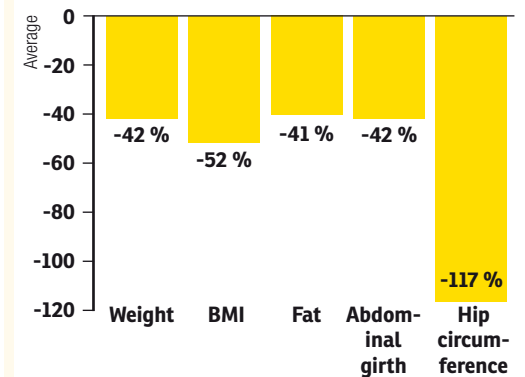
Significant advantages of using Almased

After 6 months on the Almased diet programme compared to a diet programme without Almased

Hormonal Regulation



Physical Reaction



Insulin reduction $p_{(exact)} = 0.012$ Performance increase
 Leptin reduction $p_{(exact)} = 0.012$ $p_{(exact)} = 0.054$

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 programme including Almased compared to a diet programme without Almased

**A+S/D: Diet programme including Almased and exercise compared to a diet programme without Almased

*** n. a.: not analysed

¹ "Using Almased in an Enriched Soya 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 but, unlike with other diets, they also retained muscle mass.²

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

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

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

³ "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 now know 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 into the effects of Almased. What caused your interest in Almased back then?

My main medical interest was the prevention of metabolic disorders connected to poor nutrition 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 who had successfully lost weight on it and I was curious whether these subjective experiences could be explained by objective findings. That was the beginning of a successful scientific collaboration between the University of Freiburg, Germany, and Almased Wellness GmbH.

Many products promise to help you lose weight. 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 their starting weight, regardless of age and gender, with a reasonable amount of effort and within a reasonable period of time. At the same time, the process has to be reproducible and predictable. This can only be proven by means of controlled and randomised trials with defined target parameters. After all, the success should not only relate to weight loss but also to body composition and the typical risk factors that usually accompany being overweight. It goes without saying that weight loss should not be accompanied by adverse 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 to retain muscle mass, despite significant weight loss, has been documented in several studies at the University of Freiburg. Today, we know that



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

Almased is a protein-rich product made from fermented soya, skimmed milk yogurt powder and honey, that stimulates fat burning and simultaneously promotes healthy hormone levels, thereby protecting against the loss of muscle mass.⁴ This "anti-catabolic" effect of Almased is responsible for the positive effects on body composition.

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

Our study suggests that weight loss with Almased promotes a healthy insulin and leptin level after only 6 weeks. This is presumably due to the fact that Almased resets the metabolism and the body develops a better response to these neurotransmitters in the appetite centre in the hypothalamus and so inhibits the release of these substances from the pancreas and fatty tissue. This results in a beneficial in-

fluence on known risk factors for metabolic syndrome that are associated with being overweight.⁵

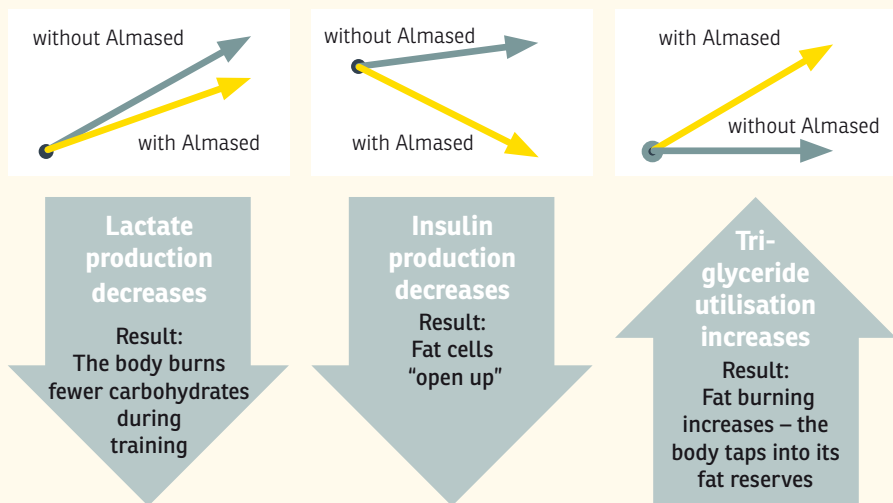
Meanwhile, studies have shown that diets including Almased have a supportive effect on a number of biochemical parameters, for instance insulin levels, but also on values like overall well-being and quality of life. The effects are more positive than can be

explained by the weight loss alone. What do you think might cause these various effects on health?

We can assume that Almased not only supports 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 connection in the future.

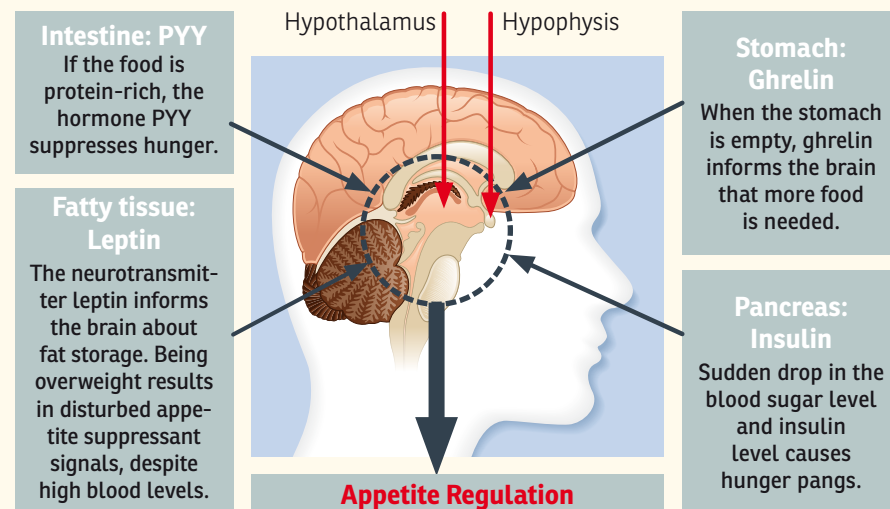
Adjustments in energy metabolism during endurance training: Almased intensifies the fat burning process



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

4 "A soya-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 neurotransmitters and thus decreases appetite



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

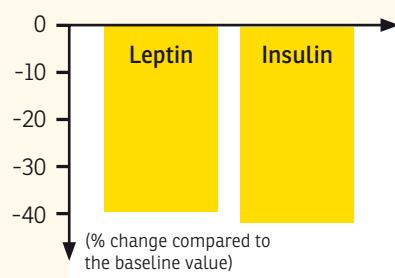
5 "Favorable metabolic properties of a soya-honey-yogurt product for meal replacement in overweight subjects with atherogenic risk"; Berg A et al.; Atherosclerosis, 2008, 9: 253.

Almased® keeps you feeling full longer

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

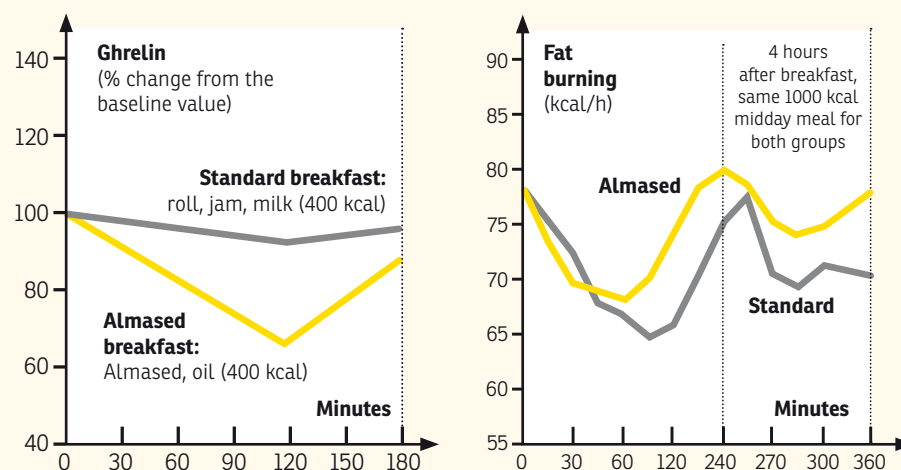
Satiety and hunger in humans are controlled by a very complex mechanism. The control centre for the system is located in the brain, in the hypothalamus. This is where the signals from the stomach, intestine and cerebrum come together. Three hormones that are transported via the bloodstream play a major role in this: ghrelin, leptin and insulin. Ghrelin is released when the stomach is empty and signals to 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 stabilised at a low level. The longer the insulin level remains low after consuming food, the longer a person feels full. Studies suggest that Almased has precisely this effect.

Almased lowers leptin and insulin levels by approx. 40%



In a study with 25 overweight women, researchers at the Department of Sports Medicine at the University of Freiburg, 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 fell by approx. 40% over the course of the 24-week diet with Almased.¹

The "Breakfast Study" shows: Almased keeps you feeling full longer and optimises the fat burning process



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

insulin and ghrelin levels of the participants who had consumed Almased were noticeably lower. Furthermore, the fat burning rate 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 kept at bay.²

¹ "Effects of a meal replacement based on soya 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

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

Almased® can help diabetics

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

Over 3 million people in the United Kingdom suffer from diabetes - they have a hard time losing weight because of their high insulin level. Type 2 diabetics make up the majority of those affected. Type 2 diabetes is a metabolic disorder, which occurs predominantly in people who are overweight. Although their bodies produce insulin, their cells do not react to it in the normal way. They do not absorb sufficient glucose, so their blood sugar levels rise. In response to this, more insulin is produced to normalise their blood sugar levels. This high insulin level encourages fat deposition and inhibits fat breakdown.

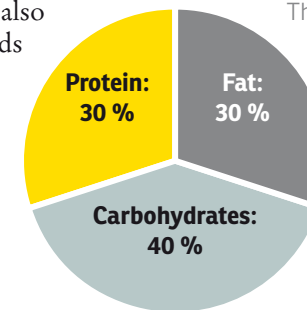
This is where Almased can help: It has been proven that a diet supported by Almased leads to higher weight loss, particularly in the abdominal region. That means that a diet supplemented by Almased regulates the feeling of satiety in the brain and also the fat-burning process much more effectively than a diet without Almased. This was first demonstrated in a study

conducted in 2005, which proves that diabetics can lose a significant amount of weight on an Almased diet. The study also showed that blood sugar and insulin levels are also lowered (*page 21*). Another study showed that many people with type 2 diabetes were able to reduce, or even discontinue their medication following an Almased diet (*page 22*), not only in the short term but also with ongoing success (*page 24*).

The argument for using Almased to treat overweight people who have diabetes is further supported by a study from the Cochrane Collaboration, an independent worldwide network of scientists, doctors and other medical professionals. Their aim is to scientifically assess medical therapies. The study comes to the conclusion that a diet with a low glycaemic index (which indicates the effect of a food on the blood sugar curve) is superior to other diets. Almased has an extremely low glycaemic index of just 27 (by way of comparison: potatoes

have a glycaemic index of 78 and glucose has a glycaemic index of 100).^{1,2,3} A recommendation from the renowned Joslin Diabetes Center in the USA also supports the argument for using Almased: Experts advise diabetics to eat a diet made up of approximately 40% carbohydrates, 30% fat and 30% protein.

The researchers at Joslin also discovered that a diet needs to contain significantly more protein than had previously been thought, in order for it to be effective for people with diabetes.



A diet according to the Almased plan – two Almased shakes with 50 g powder each, 45 g oil and one healthy, high-protein meal per day – provides diabetics with the exact combination of protein, carbohydrates and fat that is recommended.⁴

The Joslin Diabetes Center in the USA recommends that an effective diet for diabetics should supply 30% of total calories from protein. Replacing two meals a day with Almased provides the correct combination of protein, fat and carbohydrates.

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 of developing type 2 diabetes; Joslin Diabetes Center & Joslin Clinic; 2007, 03, 29.

"Patients lost weight and lowered their blood sugar levels considerably"

Dr. Kerstin Kempf speaking in an interview about the effects of the Almased diet on diabetics.



Dr. Kerstin Kempf
of the West German Diabetes and Health Centre (WDGZ) in Düsseldorf

In a scientific study conducted by the West German Diabetes and Health Centre (WDGZ) in Düsseldorf, people suffering from Typ 2 diabetes successfully lost weight with Almased. In an interview, Dr. Kerstin Kempf reports on the findings from the study.

Dr. Kempf, why is it so difficult for people with type 2 diabetes to lose weight?

Dr. Kempf: Type 2 diabetes is a metabolic disorder, which occurs predominantly in people who are overweight. Although their bodies produce insulin, their cells do not react to it in the normal way. Even though, in many cases, the body produces too much

insulin, the cells still fail to absorb sufficient glucose. However, this high insulin level encourages the deposition of fat and inhibits the breakdown of fat.

Why are you researching the effects of Almased on diabetics?

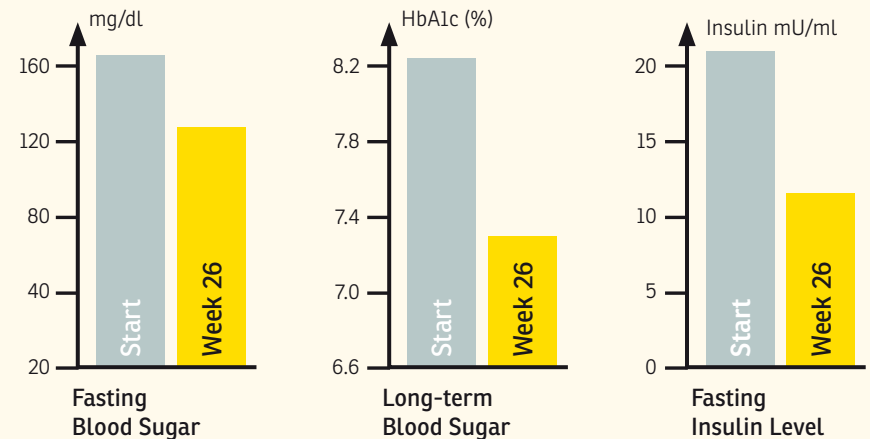
Studies from the USA have shown that high-protein diets can help people with Type 2 diabetes. We want to find out whether Almased can stimulate metabolism in diabetics to such an extent that they can reduce or even discontinue their medication.

Were the study participants able to reduce or discontinue their medication?

University of Witten study: Surprising results with diabetes mellitus

Greatly improved blood parameters: These are the results of an earlier study¹ led by Professor Kurt S. Zänker of the University of Witten with diabetics, who drank 50 g of Almased a day for six months but made no other changes to their lifestyle.

The volunteers displayed significant improvements in their critical blood parameters: fasting blood sugar, long-term blood-sugar values and fasting insulin level fell over the course of the six-month diet.



¹ Zänker KS, Erxleben-Neis J, Gottschalk G, Schweig N: Diabetes Typ 2 mellitus und Krebs. Deutsche Zeitschrift für Onkologie 2005; 37:114-121.

Yes, they were. We had two groups on different diet regimes: One group replaced all three meals with Almased in the first week and then had Almased 2 x day for three weeks plus a normal meal and then Almased 1 x day plus two normal meals for a further eight weeks. The second group was allowed one normal meal per day, even in the first week, and then the rest of the programme was the same.

What was the outcome?

An interim analysis shows that patients in both groups reduced their weight and blood sugar levels significantly. They were also able to reduce, or even completely discontinue, their medication. Those who started the regime with Almased 3 x day were on average 8.4 kg lighter after 12 weeks, whilst the others lost an average of 5.5 kg.

What conclusion do you draw from the preliminary study?

This is a practical way for someone with type 2 diabetes to lose weight. The rapid weight loss motivates patients so that they are much more likely to take physical exercise. Of course, you have to remember that the Almased diet is only the start of a permanent change in lifestyle.

WDGZ Study: The strict diet was the most successful

Inclusion criteria: Type 2 diabetes, insulin or oral medication

In a trial conducted in 2012, Professor Dr. Stephan Martin, diabetologist and Senior Doctor at the Gabba Association of Catholic Hospitals in Düsseldorf and Director of the West German Diabetes and Health Centre (WDGZ), was able to show that people suffering from type 2 diabetes and with severe insulin resistance (on average the volunteers were receiving up to 150 IU per day) were able to halve their daily insulin requirement within a few weeks by following an Almased diet.¹

Strict group

Initially Almased three times a day

Break fast	Almased shake	Almased shake	Normal meal
Middy meal	Almased shake	Normal meal	Normal meal
Evening meal	Almased shake	Almased shake	Almased shake
	1 week	3 weeks	8 weeks

¹ Kempf K, Schloot NC, Gärtner B et al (2013) Protein-rich meal replacement significantly reduces insulin demand, HbA1c and weight long-term in type 2 diabetes mellitus patients with >100 U insulin/day. J Hum Nutr Diet. DOI 10.1111/jhn.12145

The 77 participants in a follow-up study in 2013 were divided into two groups, which differed in terms of the structure of the diet. The greatest success was achieved by the group of patients with the stricter diet regime: during the first week they replaced all three meals with Almased. The other group initially only replaced two meals. The rest of the programme was the same: two Almased shakes plus one normal meal per day for three weeks, followed by one Almased shake plus two normal meals per day for eight weeks. Both groups were able to reduce their HbA1c values and their requirement for oral medication or insulin but the group that had started out with Almased only enjoyed by far the greater degree of success.²

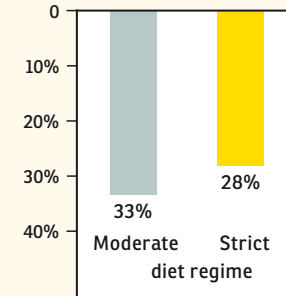
Moderate group

One normal meal even at the start

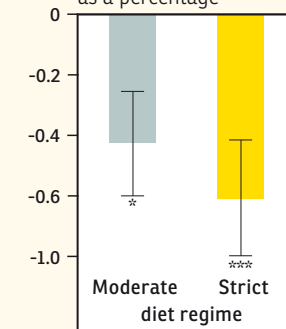
Break fast	Almased shake	Normal meal
Middy meal	Normal meal	Normal meal
Evening meal	Almased shake	Almased shake
	4 weeks	8 weeks

² Martin S, Gärtner B, Keil R, Kempf K (2013) Protein-rich meal replacement significantly reduces HbA1c, weight and antidiabetic medication in type 2 diabetes patients – a randomized controlled trial. Diabetes 62 (Suppl 1): 768-P

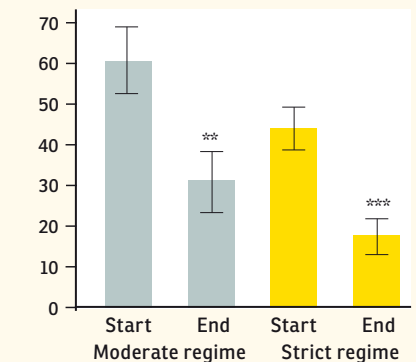
Patients who were able to discontinue their oral medication



Reduction in HbA1c as a percentage



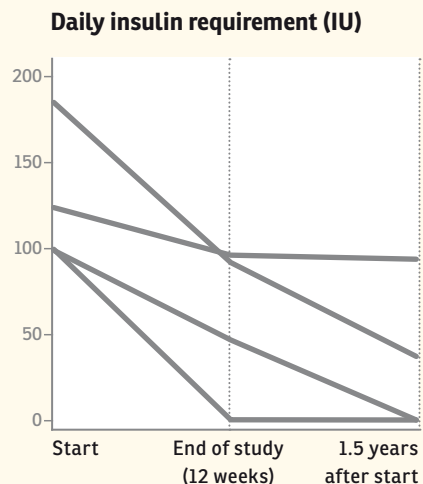
Daily insulin requirement (IU)



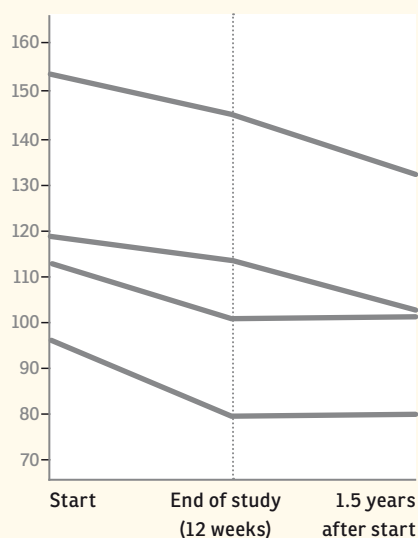
Measurable long-term success

It is worth continuing: The weight, HbA1c value and insulin requirement of WDGZ study participants, who continued to replace one meal per day with Almased, were measured over a period of eighteen months (see page 22). Results: The volunteers more or less maintained the improved values, or even managed to better them.¹

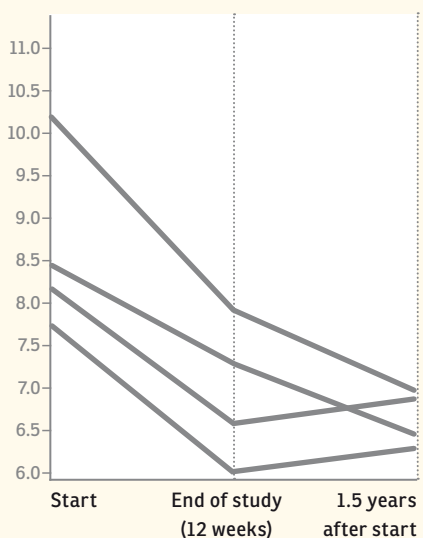
¹ Kempf K, Schloot NC, Gärtner B et al (2013) Protein-rich meal replacement significantly reduces insulin demand, HbA1c and weight long-term in type 2 diabetes mellitus patients with >100 U insulin/day. J Hum Nutr Diet. DOI 10.1111/jhn.12145



Weight (kg)



HbA1c value (%)



Almased: Study of diabetics in five countries.

Scientists from the USA, India, Brazil, England and Germany discussed interim findings of the five-nation study into the effect of Almased on diabetics.

German studies have already proven that Almased can help diabetic patients to reduce their weight and insulin requirements significantly. As part of a large-scale study, the "Almased Multi-center Diabetes Intervention Trial" (AMDIT), scientists from the USA, India, Brazil, England and Germany are currently determining whether these findings are valid internationally.

2 diabetes is increasingly becoming a national disease. It is no longer just the traditional industrialised countries such as Germany, England and the USA that are affected but also developing countries such as India and Brazil, where the new middle classes celebrate their new-found affluence with rich food.

In 2013, the researchers met in New Jersey to discuss the interim findings. Professor Dr. Daniel König from Freiburg University, who is heading up the international study, welcomed the "AMDIT family from around the world". The five participating universities come from countries where type

240 patients in five countries: In each of the five countries, overweight sufferers of type 2 diabetes are replacing meals with Almased. The study is focusing in particular on the patients' variable HbA1c value. Initial interim findings: In all five countries, patients who replaced meals with Almased were able to reduce this value significantly.



The AMDIT team meeting in New Jersey: Scientists from the University of Campinas, Brazil, the University of Mysore, India, London Metropolitan University, Wake Forest University (USA) and Freiburg University.

“Lower insulin and blood sugar levels with Almased”

Professor Dr. Daniel König, leader of the AMDIT study, speaking in an interview about the effects of the Almased diet on diabetics.

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

Prof. Dr. König: It is true to say 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.

A major reason for this is insulin. Insulin is responsible for ensuring that sugar from the food that we eat moves from the blood into the cells. In people with type 2 diabetes, the cells are less sensitive to insulin and so the insulin level increases to compensate. Because of their reduced 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 body to store fat, which results in weight gain.

The success of Almased for weight loss in people with type 2 diabetes can

be attributed to Almased's low glycemic index, as well as its high protein content.

Why should people with diabetes choose food with a low glycemic index in order 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 pure glucose. A low glycemic index equals a low increase in the blood sugar level during the time after the food is consumed.

What is important for people with diabetes is that a low increase in blood sugar level also means a reduced requirement for insulin. As far as losing weight is concerned, this means that the fat-burning process functions better because of the lower insulin level, making it easier to lose weight. Our own investigations have shown that, compared to a "normal" breakfast of white bread and marmalade, blood sugar and insulin levels were much lower after an Almased shake

and the rate of fat burning was significantly higher during the investigation period.

Again and again diabetics report that they have lost weight with Almased and now manage without their blood-sugar-lowering medication. What is the scientific explanation for this?

The sensitivity of the insulin receptors is improved by the weight-loss but also by the proteins and active phyto-ingredients, such as bioflavonoids, contained in Almased. This means that the amount of endogenous insulin is once again sufficient to maintain blood sugar levels within an acceptable range, even without medication.

In the past, high-protein diets were suspected of increasing the risk of cardiovascular disease. The Joslin Diabetes Center now recommends having 30% protein in the diet – do you agree with this? And, if so, why?

High-protein diets were criticised mainly because their high protein content consisted primarily of animal pro-



Prof. Dr. Daniel König

from the Freiburg University Hospital, Germany, works, among other things, on researching and implementing lifestyle intervention concepts based on physical exercise and nutrition.

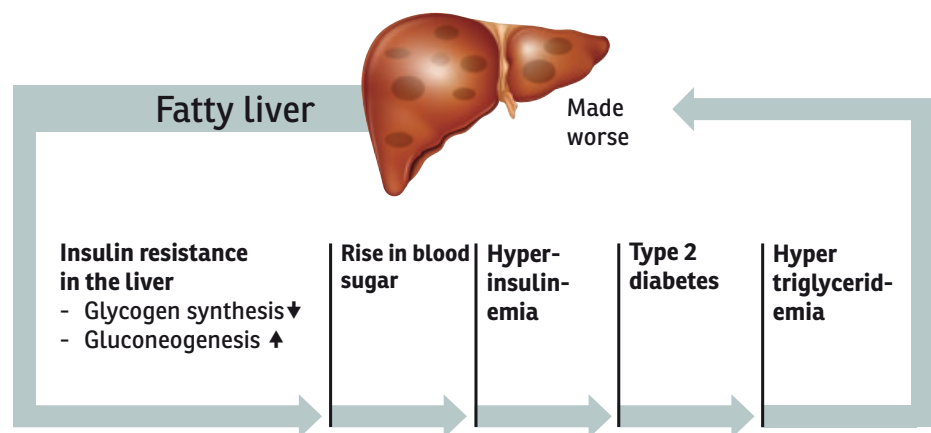
tein. This also meant an increased intake of animal fats and saturated fatty acids, which many scientists consider to be the cause of arteriosclerosis and heart attacks. If the high protein content comes from plant protein, such as soya protein, these arguments are no longer valid. A higher protein content results in a longer and better feeling of satiety and optimises the calorie burning process, so-called thermogenesis. Furthermore, an adequate protein intake promotes muscle growth. Muscles are the main burners of energy in the body.

Almased® combats fatty liver

The hidden problem: Most type 2 diabetics have a fatty liver.

In industrialised countries, up to 40% of adults have a fatty liver. Depending upon the group surveyed, this can even be as high as 60 – 90% of all type 2 diabetics – and most of them are completely unaware of it. Even scientists have ignored the problem for a long time. It is only now that specialist literature is starting to pay more attention to Non-Alcoholic Fatty Liver Disease (NAFLD) as a risk factor for diabetes and cardiovascular disease. Because there are no drugs to

cure a fatty liver, the only remedy up until now has been intensive lifestyle therapy. But there is a simpler way: A study conducted by Freiburg University Hospital has now demonstrated that a diet with Almased significantly reduces the critical liver parameters in overweight people¹ (see inset opposite). Unlike lifestyle therapies, the Almased diet also improves the quality of the liver tissue (liver stiffness) and the fat content of the liver is reduced more than by a lifestyle intervention.²



Fatty liver repairs: With Almased GPT drops from 47 to 29 in 6 weeks ¹

A vicious circle: Patients with a fatty liver develop insulin resistance in their livers. This favours the development of type 2 diabetes, which in turn adversely affects the condition of the liver. Up until now, patients who wanted to arrest this process had to resort to rigorous lifestyle therapy. A study from the working group led by Prof. Dr. Aloys Berg at Freiburg University

Hospital shows that there is an easier way. After only six weeks of a treatment with 2 x Almased shakes per day, participants significantly improved their GPT values. All diabetic risk factors improved at the same time. Although six weeks on an Almased diet is not enough to return patients with a fatty liver to full health, it sets them on the path to recovery.

	Before	After Almased intervention
Weight	103.2 ± 11.8	97 ± 11.8
Triglycerides (mg/dl)	328 ± 241	175 ± 79
BMI (kg/m2)	35 ± 3.9	33 ± 4.0
GGT (U/l)	55 ± 34.6	35 ± 13.4
Abdominal girth (cm)	113.9 ± 10.4	108.4 ± 9.6
GPT (U/l)	47 ± 27.7	29 ± 9.2

Study: After only six weeks on Almased, the volunteers' fatty liver was on the path to recovery.

¹ Berg A, Schaffner D, Stensitzky A, Deibert P, König D: Benefits of a short-time intervention concept for weight reduction and improvement of the metabolic milieu in overweight adults. Diabetes technology & therapeutics (2013); 15, Suppl. 1, A-124
² Sojaproteinbasierter Mahlzeitenersatz ist einer Lebensstilintervention bei NASH gleichwertig; Schaffner D, Lange T, Buechert M, König D, Berg A, Deibert P; Adipositas 2013; 7:A55

Almased® is “kidney friendly”

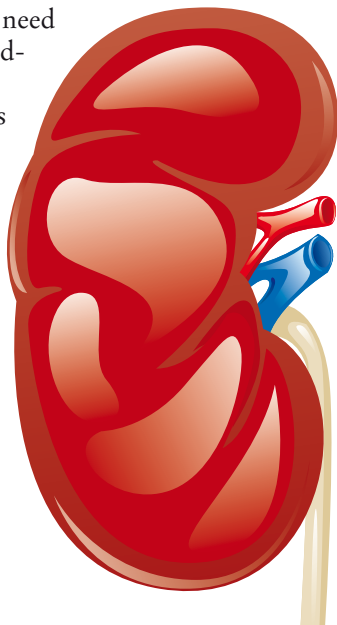
A study has shown that a high-protein diet with Almased may enhance kidney function.

The human kidneys filter the blood and excrete toxins, including urea and uric acid, which are by-products of the body’s protein utilisation. Therefore, some people fear high-protein diets because they argue that such a diet would stress the kidneys. Studies have shown that a diet with Almased does not stress the kidneys and that even elderly people with diminishing kidney function and people with limited kidney function have no need to worry: Almased is “kidney friendly”. A study conducted by researchers at the University of Freiburg with overweight patients suffering from metabolic

syndrome (overweight, lipometabolic disorders, high blood pressure and insulin resistance) showed that the high-protein Almased diet with approximately 1 g of Almased protein per kilogram of body weight per day (0.3 g protein per kg body weight daily at each meal) did not impair the kidney function of the participants. A follow-up study with type 2 diabetics came to the same conclusion.

The researchers even argue that the Almased diet may improve kidney function in the long run because of the beneficial effect on the hormones leptin and insulin, which may protect against kidney damage.¹

The high-quality soya protein in Almased is kidney friendly.



¹ "Acute effect of a soya protein-rich meal replacement application on renal parameters in patients with the metabolic syndrome"; Deibert P et al.; Asia Pacific Journal of Clinical Nutrition, 2011, n=10/10.



Prof. Peter Deibert MD,

Consulting physician for internal medicine and gastroenterology, nutritional science, sports medicine, cardiovascular preventive medicine, lipidologist. Senior physician at Freiburg University Hospital, Germany

"The high-grade soya protein in Almased does not harm the kidneys"

Interview with the consulting physician for nutritional science, **Prof. Peter Deibert MD.**

Rumour has it that protein can damage the kidneys – is this true?

Prof. Peter Deibert: It is indeed true that high protein consumption puts a strain on the kidneys. In the long term this can lead to kidney damage. Animal protein is said to be especially stressful. Poultry is less harmful than pork and fish is better still. Plant protein puts the least strain on the kidneys and soya protein is said to be the best one. However, we also need to factor in the general condition of the kidneys. A healthy kidney obviously

reacts differently than the kidney of a sick person. Over the past year, we have investigated how kidneys of patients with metabolic syndrome – a combination of being overweight, lipometabolic disorders, high blood pressure and insulin resistance – react to protein intake compared to the 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 increased the strain on the kidneys. However, giving one serving of Almased as a meal replacement did not result in any significant change. These scientific findings were recently published.

What about a high-protein diet for people who are ill – like people with diabetes or kidney problems, including those on dialysis?

Medical science has been discussing this for decades. A low protein diet used to be recommended to protect the kidneys but that led to even greater 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 quota of protein, especially in the form of high-quality protein. By choosing the right protein sources, excessive stress on the impaired 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 are not beneficial.

Kidney function slows down in elderly patients. Is a high-protein 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 protein they eat is important. We have shown that Almased supplementation combined with exercise improves the strength and metabolic function of the elderly. Especially at an advanced age, high-quality protein is important to maintain muscle mass and muscle function. Malnutrition is not uncommon in the elderly. Therefore, it is important to ensure that they consume sufficient high-quality protein at this stage in life. This does not harm a healthy “older” kidney. These study results were also recently published.

What do people need to watch out for? How much protein is too much?

Protein requirements are based on age, gender and lean body mass, as well as the amount of physical exercise. 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, it is important to consult a doctor.

Soya as an antirheumatic

Soya 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 menu. This can be problematic for people with rheumatism, as protein provides the amino acids necessary for the development and maintenance of muscles, bones and articular cartilage. Patients with inflammatory rheumatism (rheumatoid arthritis) can have an especially high protein requirement, since they metabolise 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 be protein deficient for several reasons and this deficit needs to be balanced through their food intake. The soya protein in Almased can supply that. Isoflavonoids in soya have an antioxidant effect. 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, soya isoflavonoids can help to lessen oxidative stress.¹

Soya protein has also been shown to be effective in combatting pain, one of the main symptoms of rheumatic diseases. Animal testing has shown that a diet rich in soya can alleviate chronic nerve pain.^{2,3,4}

- 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 soya 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 soya diet before nerve injury preempts the development of neuropathic pain in rats"; Shir Y et al.; *Anesthesiology*, 2001, 95 (5): 1238-44.
- 4 "Soya containing diet suppresses chronic neuropathic sensory disorders in rats"; Shir Y et al.; *Anesthesia and analgesia*, 2001, 92 (4): 1029-34.

Almased® against metabolic syndrome

Almased has a beneficial effect on those who are overweight, have lipometabolic disorders, high blood pressure or insulin resistance.

Metabolic syndrome is a combination of diseases that are jointly called the “deadly four”: being overweight, lipometabolic disorders, high blood pressure and insulin resistance. The eight scientists who researched Almased in its early stages agreed that the powder has beneficial effects on the biomarkers of metabolic syndrome (see pages 8–9).

Often, treating excess weight and obesity involves a causal therapeutic approach that also treats hypertension, lipid metabolic disorders or diabetes mellitus. Losing 10 kg (22 lbs) of weight reduces systolic blood pressure by 12 mmHg and diastolic blood pressure by 8 mmHg, lowers triglycerides by 30%, increases HDL-cholesterol by 8% and lowers the HbA1c value by 1.5 units. In 2 out of 3 cases, people with type 2 diabetes find they no longer have the disease after they have successfully lost weight.¹

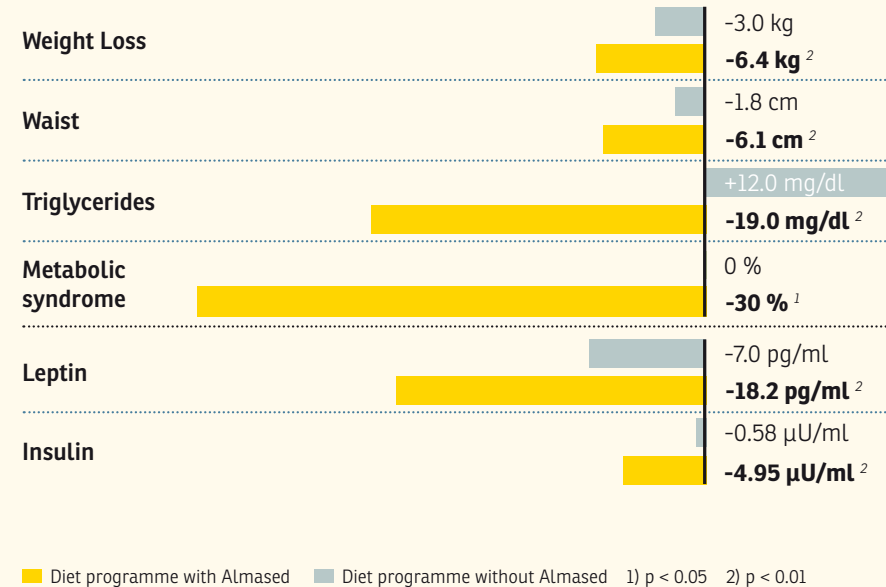
A study conducted in 2008 showed: after only 6 weeks on the Almased

diet, overweight participants (60 took Almased, a control group of 30 was on a weight loss programme without Almased) showed improved biomarkers – significantly more than in the comparative group that was on a traditional low-fat diet.²

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, which compared the reaction of pre- and postmenopausal women to Almased. Healthy blood fat levels were promoted in both groups, with a rise in protective HDL cholesterol and a marked drop in harmful LDL cholesterol and triglycerides.

Insulin and ghrelin levels were also significantly reduced, more so in postmenopausal women than in younger ones. Therefore, the positive effects not only related to the important parameters of metabolic syndrome but also to the hunger and sati-

Almased's® beneficial effects



ety messages that are controlled by the central nervous system. The Almased diet was able to reduce the occurrence of metabolic syndrome in premenopausal women from 23%

to 18%. In the postmenopausal women, 42% showed signs of metabolic syndrome at the beginning of the study and that number was drastically reduced to 16%.³

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 soya protein in Almased® can lower high blood pressure

Almased studies confirm what international studies claim: Almased lowers high blood pressure.

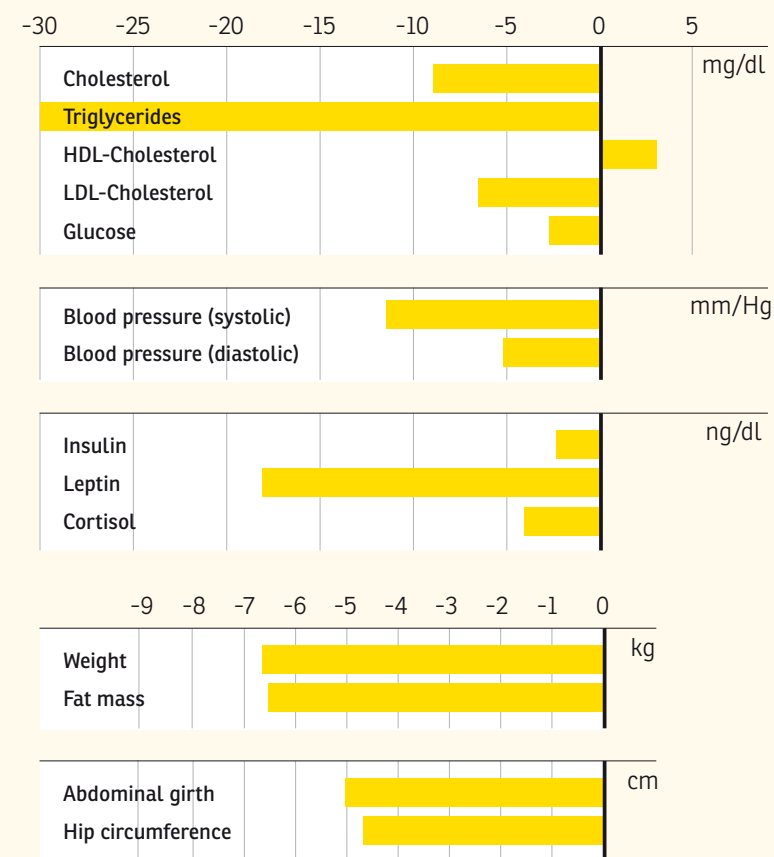
Many people who suffer from high blood pressure may benefit from the use of plant ingredients that may lower blood pressure, as an alternative to medication.

In 2006, a team of researchers for the international cross-sectional study INTERMAP questioned 4,700 people with normal blood pressure (between 40 and 59 years of age, from Great Britain, the USA, China and Japan) about their dietary habits and analysed urine samples of the participants to find a correlation 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 average and a diastolic value that was 1.7 mmHg lower than average. People who ate excessive amounts of animal protein did not show this result.¹

The particularly successful effect of soya protein was identified by Dr. Jiang He at Tulane University in Louisiana. On a daily basis, he gave one group of adults biscuits containing 40 g of soya protein, while another group ate biscuits comprising mainly 40 g of complex carbohydrates from wheat. On average, the people with hypertension who ate the soya biscuits lowered their systolic blood pressure by 7.1 mmHg and their diastolic blood pressure by 4.7 mmHg. On average, the people with normal blood pressure lowered their values by 2.5 mmHg and 1.3 mmHg.²

A study conducted by Dr. Deibert and his team showed beneficial effects on blood pressure values. 50 women over 40 participated in a weight loss programme with Almased over 48 weeks. They lost an average of 7 kg (15.4 lbs) of fatty tissue. They achieved healthy hormone levels, lowered their blood pressure significantly and reduced their health risk.³

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



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

2 "Effect of soyabean 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.

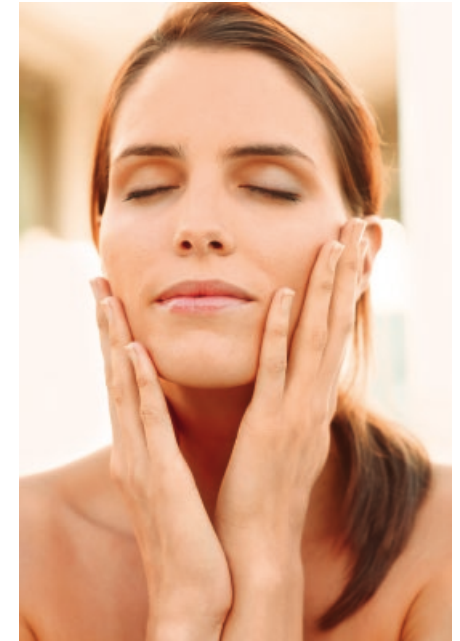
Almased® stimulates HGH – the youth hormone

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

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

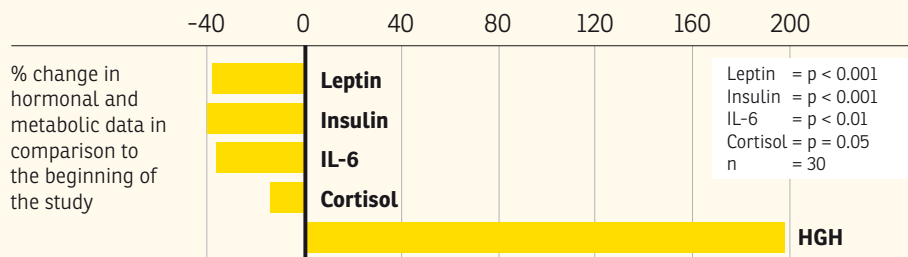
The researchers in Freiburg also tested Almased's effect on HGH in men. They asked overweight and unfit older men to undergo a strength training programme. One group combined the training with Almased, a control group simply followed the general recommendations for a healthier lifestyle. The results show that only the combination of strength training and Almased had a beneficial effect upon body composition and metabolic functions and relieved age-related restrictions.

The "youth hormone" HGH is also used as an anti-ageing treatment



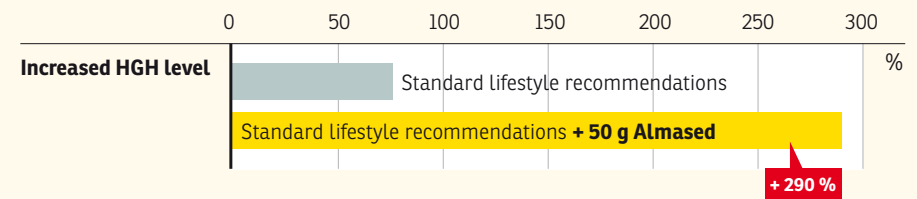
A healthy HGH level was also noticeable in men. Consuming the soya protein and honey supplement supports the effects of training and diet, as well as hormone regulation, in several ways. The amino acids arginine and lysine in soya protein stimulate the release of HGH. Additionally, soya protein seems to optimise food intake by influencing the hormones that regulate the hunger and satiety messages in the central nervous system.¹

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



Strength training in men over 50 with and without Almased

Duration 12 weeks, n = 40



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

Almased® acts as a natural anabolic agent

Almased for athletes: Improves fat burning, muscle building and stamina.

Athletes need more protein than the general population, to enable them to build strength and to recover after training: Depending upon the type of sport, they need between 1.2 and 1.8 g per kilogram of body weight per day. 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 content 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 of glucose, the insulin kinetics showed a significantly higher peak than that following the consumption of carbohydrates alone. This constituted an important stimulus for the development of muscle protein. The combination of 63% protein and 36% carbohydrates in Almased also supports rapid recovery following training.

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

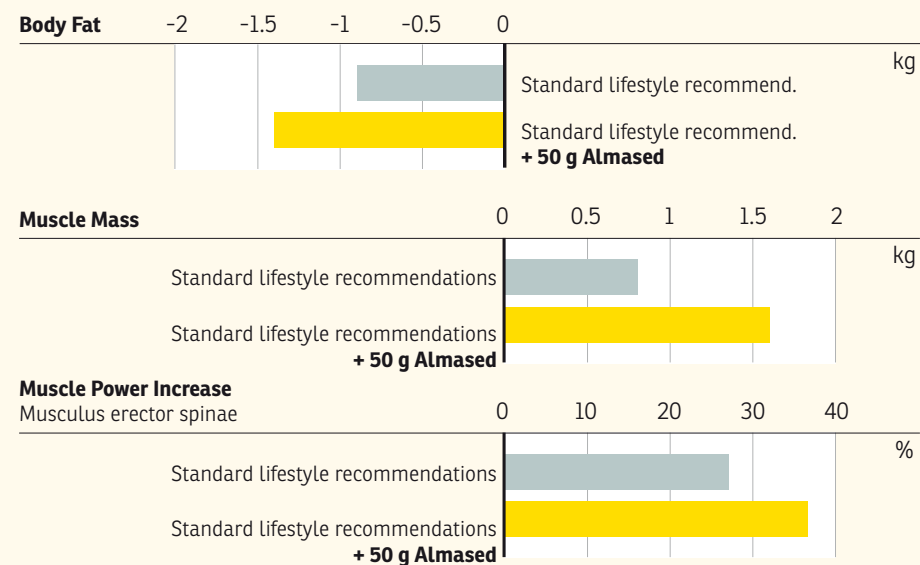


The researcher refers to the positive experiences professional footballers (at Bayer Leverkusen and 1 FC Cologne) and the German swimming team have had with Almased.^{1,2}

A study conducted by Freiburg University supports the premise that Almased improves muscle development and muscular strength. In a comparative study, researchers asked two groups of older men to take part in a 12-week strength training programme:

Strength training in men over 50 with and without Almased

Duration 12 weeks, n=40



- "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 soya-honey-yogurt product for meal replacement in overweight subjects with atherogenic risk"; Berg A et al.; Atherosclerosis Supplements, May 2008, Volume 9/1: 253.
- "Soya 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.

One group received standard lifestyle advice, whilst the other was given the same advice plus 50 g of Almased per day. The volunteers who did not receive Almased lost an average of 0.9 kg of fat and built up 0.8 kg of muscle mass. The volunteers who received Almased lost an average of 1.4 kg of fat and put on 1.6 kg of muscle mass – twice as much as the non-Almased group for the same training programme.²

However, Almased not only promotes muscle development but also increases stamina: Using a sample of 32 sports students, scientists at the Sports Institute at Freiburg University investigated whether the regular consumption of Almased as a soya-based, high-protein nutritional supplement had any observable effect upon aerobic performance and energy provision under load and whether there were any associated metabolic changes. Defined performance parameters were checked in both the test group (2 x 50 g of Almased per day)

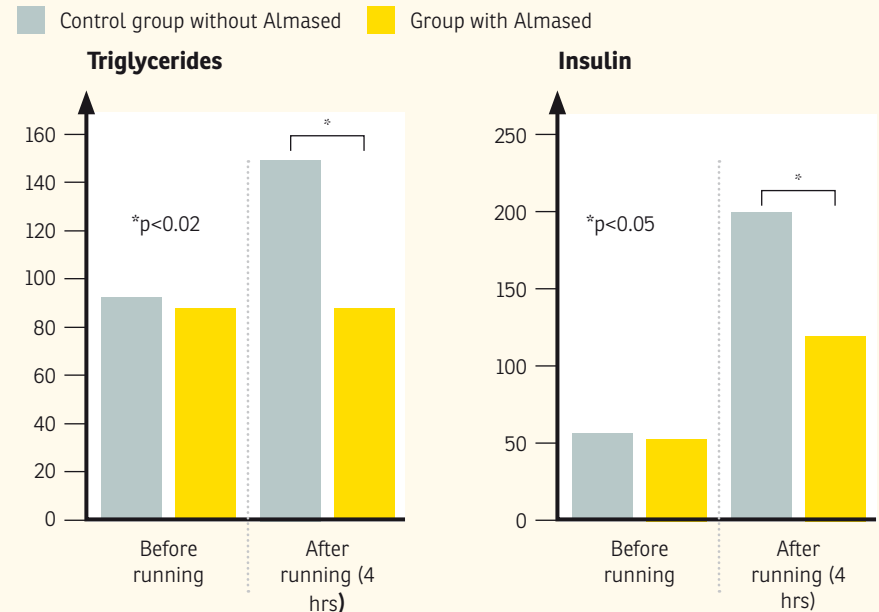


Building up fitness: Almased even helps recreational joggers.

and the control group, before and after a 6-week controlled training and intervention phase. The students in the Almased group showed a significant change in their energy provision under load. For one thing, they used less anaerobic energy. Lactate production fell by 12.5%, for example. In parallel to this, there was no load-induced rise in serum triglycerides and the rise in insulin level during the recovery phase was also significantly lower (see inset opposite). This suggests better utilisation of fats and can be interpreted as an improvement in aerobic energy provision in the muscle cells and therefore in endurance capacity.³

The Almased group developed more stamina

Mean values for fasting serum concentration of triglycerides (mg/dl) and fasting serum concentration of insulin (pmol/l) before exercise and 4 hours after exercise



² Soy protein based supplementation supports metabolic effects of resistance training in previously untrained middle aged males.; Deibert P, Solleder F, König D, Vitoliens MZ, Dickhuth HH, Gollhofer A, Berg A. Aging Male. 2011; 14(4): 273-9.
³ Berg A, Schaffner D, Pohlmann Y, Baumstark MW, Deibert P, König D, Gollhofer A: A soya-based supplement alters energy metabolism but not the exercise-induced stress response. Exerc Immunol Rev.; 18: 128-41, 2012.

Almased® ensures a stress-free everyday life

Almased promotes healthy cortisol levels and improves health-related quality of life in seven different dimensions.

When people eat less food during a diet it often causes stress in 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 promotes a healthy cortisol level. Stress levels drop. These are the

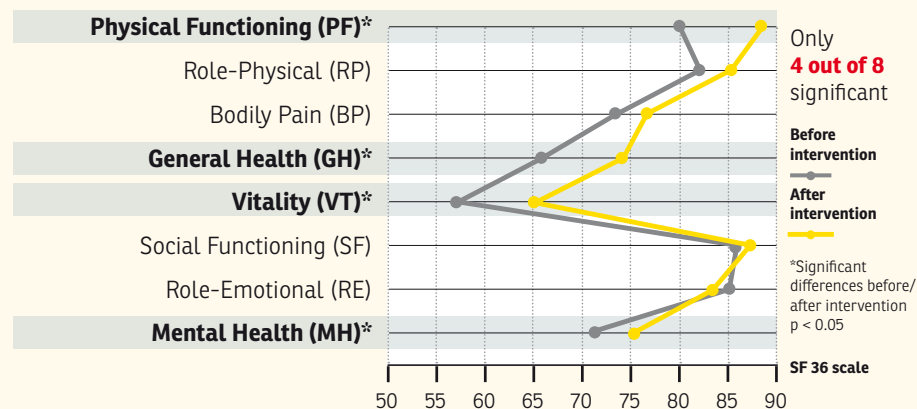
findings of a recent scientific study with overweight women conducted by Prof. Dr. Aloys Berg at the University Hospital in Freiburg. It is also a possible scientific reason why people who are on a diet with Almased report that they are in an especially good mood and feel well-balanced.¹

Another study conducted with 381 obese women between the ages of 40 and 65 and with a BMI of 30 to 40 kg/m² and identical fitness levels showed that diets including Almased result in a greater improvement in health-related quality of life than other diet programmes, even if the weight loss results are the same.

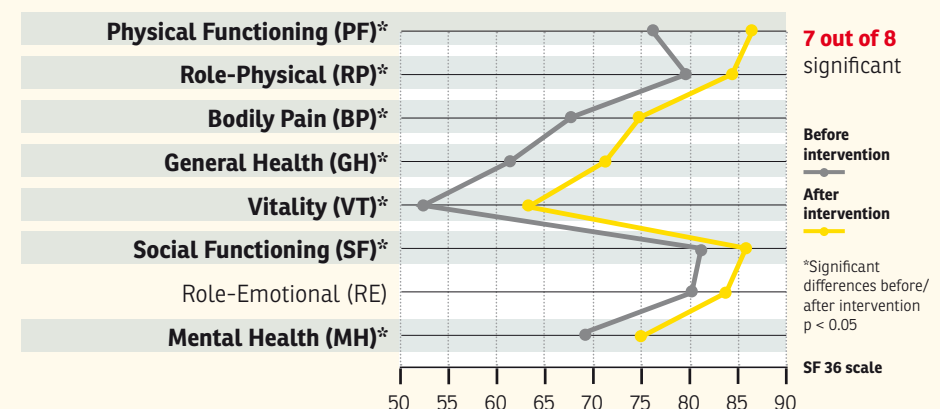
The data for the health-related quality of life were gathered with a standardised questionnaire (SF 36) before and after a one-year intervention programme for clinically controlled weight loss.

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 categorised as “physical health” and “mental health”:

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

The following conclusion can be drawn from the results available:¹

- 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 poorer values than the other group, they made up this gap after one year and were on the same level as the other group in terms of their quality of life assessment.
- Obese women with formerly limiting health conditions were able to normalise 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 programmes.

Protection against osteoporosis

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

Osteoporosis is characterised by continuous loss of bone mass and deterioration of the specific structure of the bone. The elderly, especially postmenopausal women, 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 now refuted this claim and shown that quite the opposite is true: Soya protein, a major component of Almased, may have especially beneficial 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 in-

testinal absorption of calcium, while the renal excretion of calcium does not increase significantly. There are many factors that suggest that soya protein may indeed protect against osteoporosis. Soya protein, unlike animal protein, reduces the excretion of calcium from the body. Additionally, the isoflavonoids in soya protein are said to have properties that help maintain bone mass. Animal studies have shown that soya consumption can hold off the loss of bone mass that is related to oestrogen deficiency.

Several interventional studies in pre- and postmenopausal women have also shown that consuming soya protein can reduce the concentration of bone resorption markers in the urine (e.g. deoxypyridinoline) and, in some cases, can have positive effects on bone density.¹

¹ "Meal replacement based on soya 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.

¹ "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 CU Nutr, 2003, 78 (3): 593-609.

Soya isolate, inflammation and gout

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

Gout is a typical disease of affluence and is related to excessive calorie intake, excess weight and alcohol consumption. Scientific findings suggest that Almased is a suitable protein source for people with gout.

Gout is the result of a raised uric acid level. Uric acid is produced by the breakdown in the body of endogenous purine and exogenous purine incorporated from food. Food with a 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 of developing gout should consume very little fruit and no 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 in the urine, people at risk of 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: soya is a purine-rich food but studies show an increased uric acid clearance for soya, as well as for milk.¹

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

The soya protein in Almased has been enriched with valuable soya isolate, which makes it especially suitable for a diet low in purines. To ensure a sufficient supply of 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 beneficial influence on the metabolism but also on the control of inflammation.³



Soya is a great protein source for people suffering from gout, especially the valuable soya isolate contained in Almased.

- 1 "Milk- and soya-protein ingestion: acute effect on serum uric acid concentration"; Garrel D R et al.; Am J CUn 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.

How it works: The weight-loss plan

The four phases of the Almased diet – in this case relating to a two-week programme. All phases can be extended.

1. Initial Phase - Days 1-3

The metabolism is reset to kick-start the fat burning process.



Three Almased shakes per day, each prepared with water or skimmed milk and two teaspoons of oil, are ideal. During this phase you should have as few carbohydrates as possible. Bread, rice, pasta, potatoes, sugary drinks (fizzy drinks, fruit juice, beer) and sweets are off-limits. Since the

body detoxifies intensively during this phase, it is important to drink plenty of fluids (2 to 3 litres per day). This flushes out acidic by-products that are released when the body breaks down fat. Recommended drinks include water, coffee, herbal tea or tea without sugar.

2. Reduction phase - Days 4-7

This is when fat is burnt. Two Almased shakes and one main meal per day are ideal.



The main meal must be low in carbohydrates so as not to impede fat loss. If an evening meal fits into your day better than a midday meal, you can swap these over. Since a low carbohydrate intake is particularly important in the evening, weight loss is accelerated by doing without high-car-

bohydrate accompaniments (bread, potatoes, rice, pasta). This applies generally to evening meals in all phases. Please avoid snacking between meals. That improves fat burning significantly.

3. Stabilising phase - Days 8 – 10

We now ensure that the metabolism continues to operate optimally.



The purpose of this phase is to stabilise the metabolism at a level where it actively burns fat. You therefore still have one Almased shake, in addition to two main meals. Again, you can swap meals over and choose a breakfast option from the living phase. The midday or evening meal

is then replaced by an Almased shake. The best results are achieved with an Almased shake in the evening.

4. Living phase – Day 11 onwards

Three meals a day and an Almased shake – that's living!



During the living phase you can have three meals a day from the plan. Snacks are not allowed. You should continue to drink Almased to keep your metabolism active. Almased, either as a drink or on cereal, is ideal at breakfast-time, as part of the daily plan. If you still want to lose more weight,

cut down on high-carbohydrate accompaniments in the evening or cut them out altogether. If you want to achieve a greater weight loss, you are free to extend the reduction phase or the stabilisation phase as you wish.

You can find more information about Almased in any pharmacy, in our brochures or on the Internet.

Figure Plan

The 14-day programme to lose weight with Almased is available FREE at your pharmacy or health food shop or for download at www.almased.co.uk.



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



Customer service

Call Almased UK on 020 7969 1886 or visit our website at www.almased.co.uk for more information.

Almased Wellness Tea

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 relaxation and sleep.



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

Phone: 020 7969 1886
Email: info@almased.co.uk
Website: www.almased.co.uk