

**UNICITY**SCIENCE  
FORSCHUNG UND ENTWICKLUNG

# BIOS 7: KLINISCHE STUDIEN

UNICITY

# BIOS 7

FORMULA FOR GLUCOSE SUPPORT\*  
WITH MICROBIOME BOOST

60  
7.95 g  
PACKETS

Dietary Supplement | Net Wt 16.8 oz (477 g)



# KLINISCHE STUDIEN #1

Studien Standort:	<b>USA</b>
Patientenzahl :	<b>50</b>
Studiendauer :	<b>12 Wochen</b>
Verwendete Produkte:	<b>Bios 7, 2x täglich</b>
Was wurde gemessen:	<b>Blutwerte &amp; Mikrobiom</b>



# LACTOBACILLUS

 BAD BACTERIA



LACTOBACILLUS

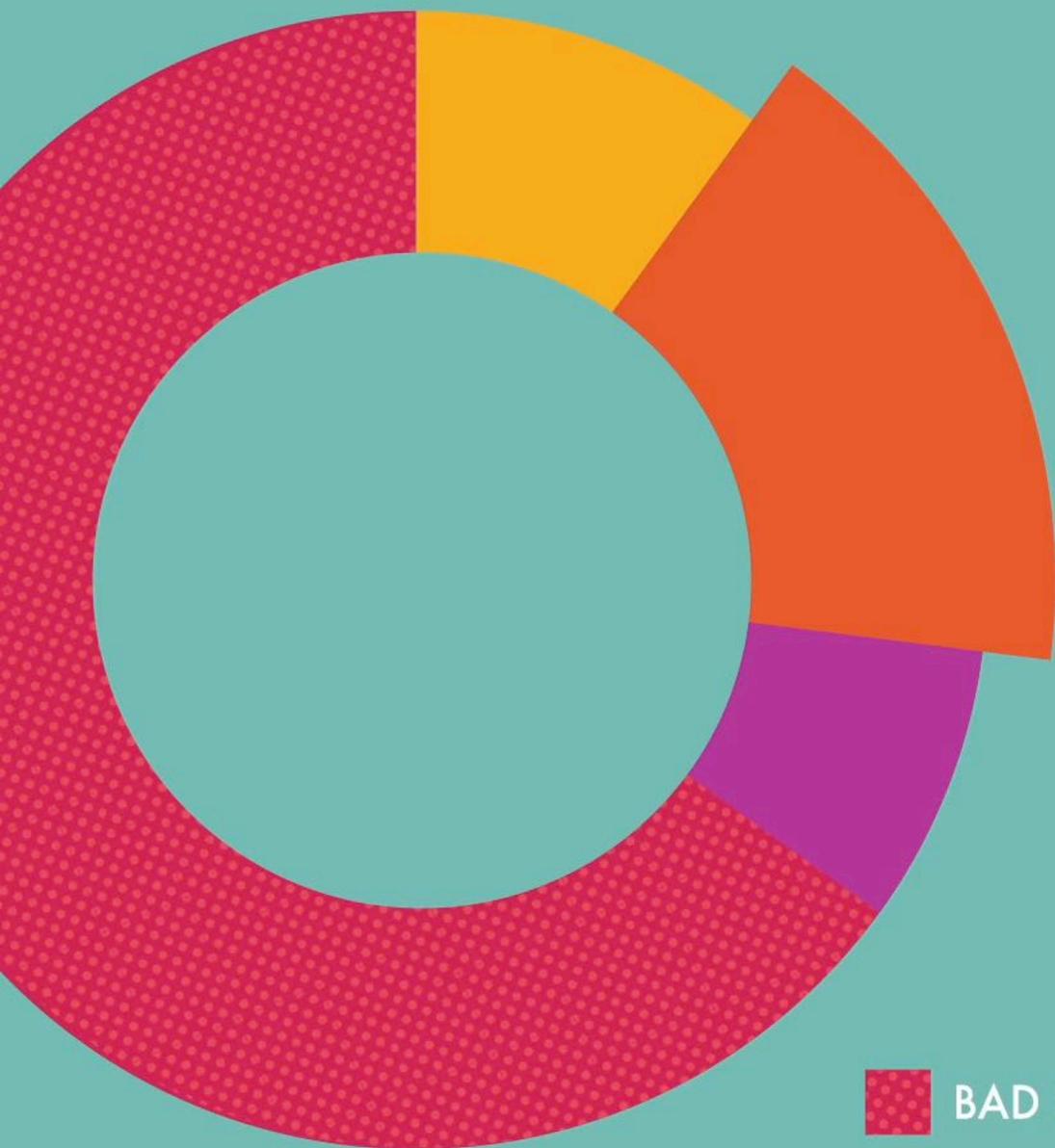
38x

 BAD BACTERIA



# ROSEBURIA

 BAD BACTERIA



ROSEBURIA

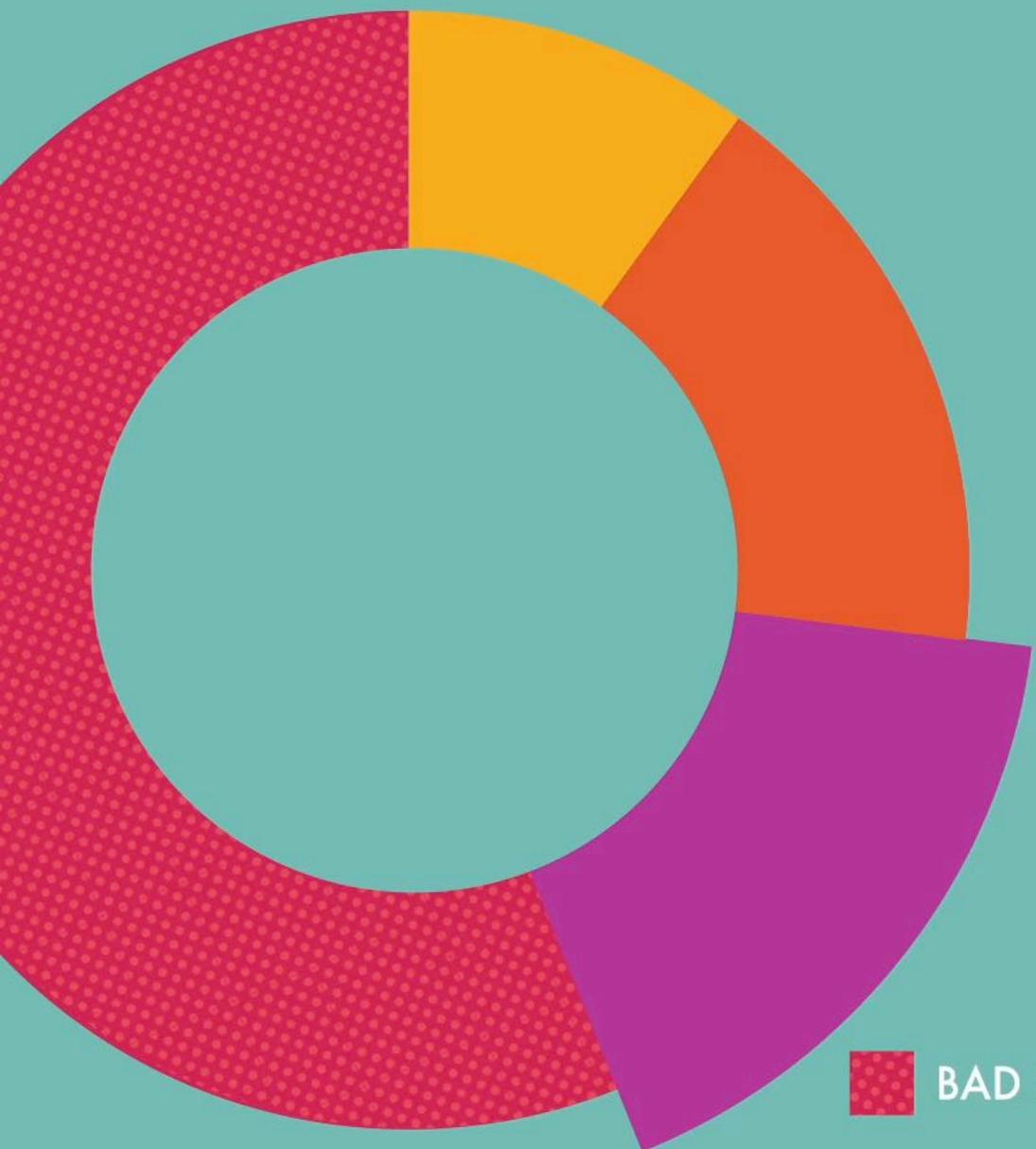
37x

 BAD BACTERIA



# PREVOTELLA

 BAD BACTERIA



PREVOTELLA

37x

 BAD BACTERIA



MICROBIAL DIVERSITY

58x

 BAD BACTERIA

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# The effects of a proprietary fiber supplement on blood markers and gut bacteria

Dr. Dan Gubler

Unicity International, Orem, UT

## Introduction:

The standard American diet consists of a pathogenic blend of excessive refined carbohydrates and too little dietary fiber. Countless studies indicate the benefits of adding fiber to standard diets in numerous health outcomes, from diabetes to heart disease and more. While the majority of efforts have focused on the benefits of fiber on improving blood markers of disease (i.e. lipids and glucose), new efforts have revealed a benefit of dietary fiber on promoting healthy gut bacteria growth. The purpose of this study was to determine the degree to which a proprietary fiber blend improves blood markers of diabetes and heart disease, as well as supporting healthy gut bacteria.

## Methods:

To test the effect of a unique fiber blend on blood markers of cardiometabolic health and gut bacteria populations, 50 adult subjects were recruited to take a novel fiber supplement twice daily for 12 weeks. Blood and fecal samples were collected before and after the intervention for analysis.

## Results:

Parameter	Change	Bacteria Species	Fold Increase
Blood Glucose	-11%	<i>Lactobacillus</i>	38x
HbA1c	-9%	<i>Roseburia</i>	37x
Total Cholesterol	-10%	<i>Prevotella</i>	37x
LDL Cholesterol	-9%	<i>Ruminococcus albus</i>	28x
VLDL Cholesterol	-6%	<i>Akkermansia muciniphila</i>	21x
TG:HDL Ratio	-4%	<i>Bifidobacterium</i>	12x
Triglycerides	-2%	<i>Oxalobacter formingenes</i>	1.8x
		<i>Odoribacter</i>	1.5x
		<i>Anaerotruncus colihominis</i>	1.2x

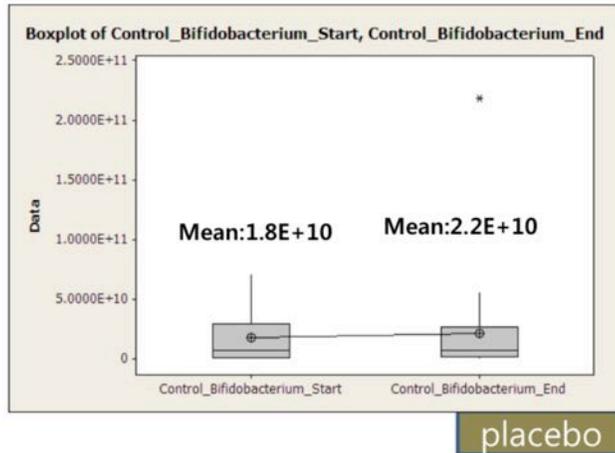
## Conclusions:

This study adds to the growing body of evidence suggesting a benefit to adding fiber to standard diets in humans. Every blood marker measured with regards to cardiometabolic health was lower following the study. Specifically, blood glucose and HbA1c levels dropped by roughly 10%. Moreover, blood lipids generally improved, as well, with the greatest reductions being observed in total and subtypes of cholesterol. Further, the fiber supplement elicited profound changes in gut bacteria, increasing the microbial diversity by 58%. Additionally, marked changes were noted in several bacterial species (e.g. *lactobacillus*, *roseburia*, *prevotella*, etc.) that are suspected in improving intestinal and chronic disorders. In sum, these data indicate clearly that the addition of a novel fiber blend to a standard improves multiple indicators of general and gut health.

# KLINISCHE STUDIEN #2

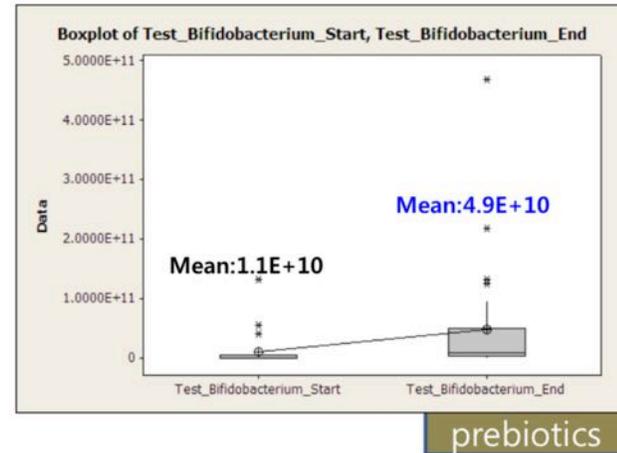
Studien Standort:	<b>Korea</b>
Patientenzahl :	<b>60 (aktiv &amp; Placebogruppe)</b>
Studiendauer :	<b>8 Wochen</b>
Verwendete Produkte:	<b>Bios 7, 2x täglich</b>
Was wurde gemessen:	<b>Mikrobiom</b>

# KLINISCHE STUDIEN #2: ERGEBNISSE



One-way ANOVA: Control\_Bifidobacterium\_Start, Control\_Bifidobacterium\_End

Source	DF	SS	MS	F	P
Factor	1	1.77275E+20	1.77275E+20	0.16	0.692
Error	55	6.16011E+22	1.12002E+21		
Total	56	6.17783E+22			



One-way ANOVA: Test\_Bifidobacterium\_Start, Test\_Bifidobacterium\_End

Source	DF	SS	MS	F	P
Factor	1	2.14747E+22	2.14747E+22	4.32	0.042
Error	56	2.78319E+23	4.96998E+21		
Total	57	2.99793E+23			

**4.5X**

**BESSERE  
Bifidobacterium  
WERTE!**

# Eight weeks of a novel prebiotic fiber supplement favorably alters human gut microbiota

Dr. Dan Gubler and Dr. Benjamin Bikman

Unicity International, Orem UT 84057, USA

## Introduction

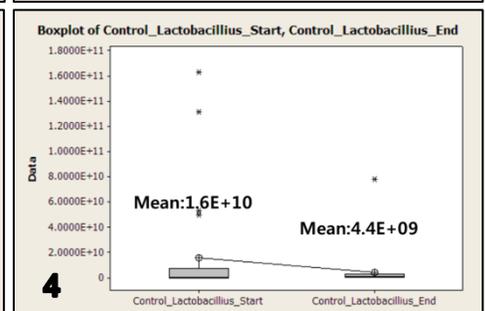
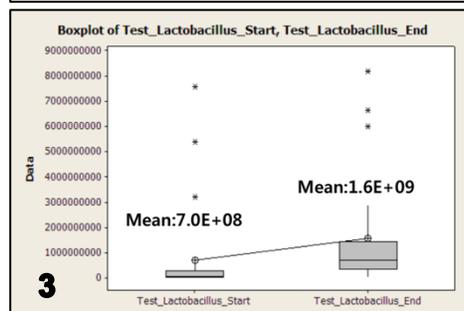
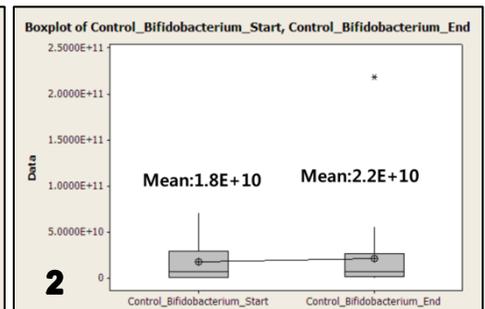
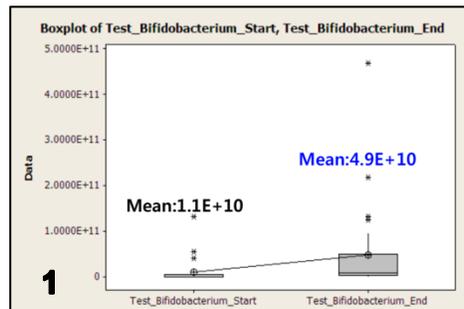
One of the most common conclusions across all published research in the realm of nutrition and health is that dietary fiber improves health. Dietary fiber has many benefits, including changes in blood lipids, glucose control, and body weight. However, the most exciting development is the recent focus on changes in intestinal bacteria. Bacteria prevalent in the gut, referred to as the gut microbiome, are known to alter human health in myriad ways, including immune and metabolic systems. To exploit the potential benefits of gut bacteria, supplements focus on either directly providing bacteria orally (i.e., “probiotics”) or providing fiber as fuel for beneficial bacteria (i.e., “prebiotic”). The purpose of this study was to determine the degree to which a relatively short-term exposure to a novel prebiotic fiber supplement favorably alters gut bacteria population.

## Methods

60 adults were evenly divided into two groups, one which received daily prebiotic fiber and the other placebo. The study measured fecal bacteria populations at baseline and at the conclusion of the study eight weeks later. Bacteria populations were quantified via RT-qPCR (Korea Research and Institute of Biomedical Science). Specific bacteria explored were *bifidobacteria* and *lactobacillus*, which are both considered beneficial to metabolic health, and *clostridium*, which, in contrast, is considered harmful.

## Results

Despite the relatively short term of this intervention, we observed a robust increase (~4.5-fold;  $p=0.03$ ) increase in *Bifidobacterium* in the group receiving daily prebiotic fiber, with no difference in the placebo group (Figures 1 and 2). *Lactobacillus* tended to increase in the prebiotic group and decrease in the placebo group (Figures 3 and 4). Lastly, *clostridium*, a pathogenic bacterium, was unchanged in both groups, with a trend towards increasing in the placebo group (not shown).



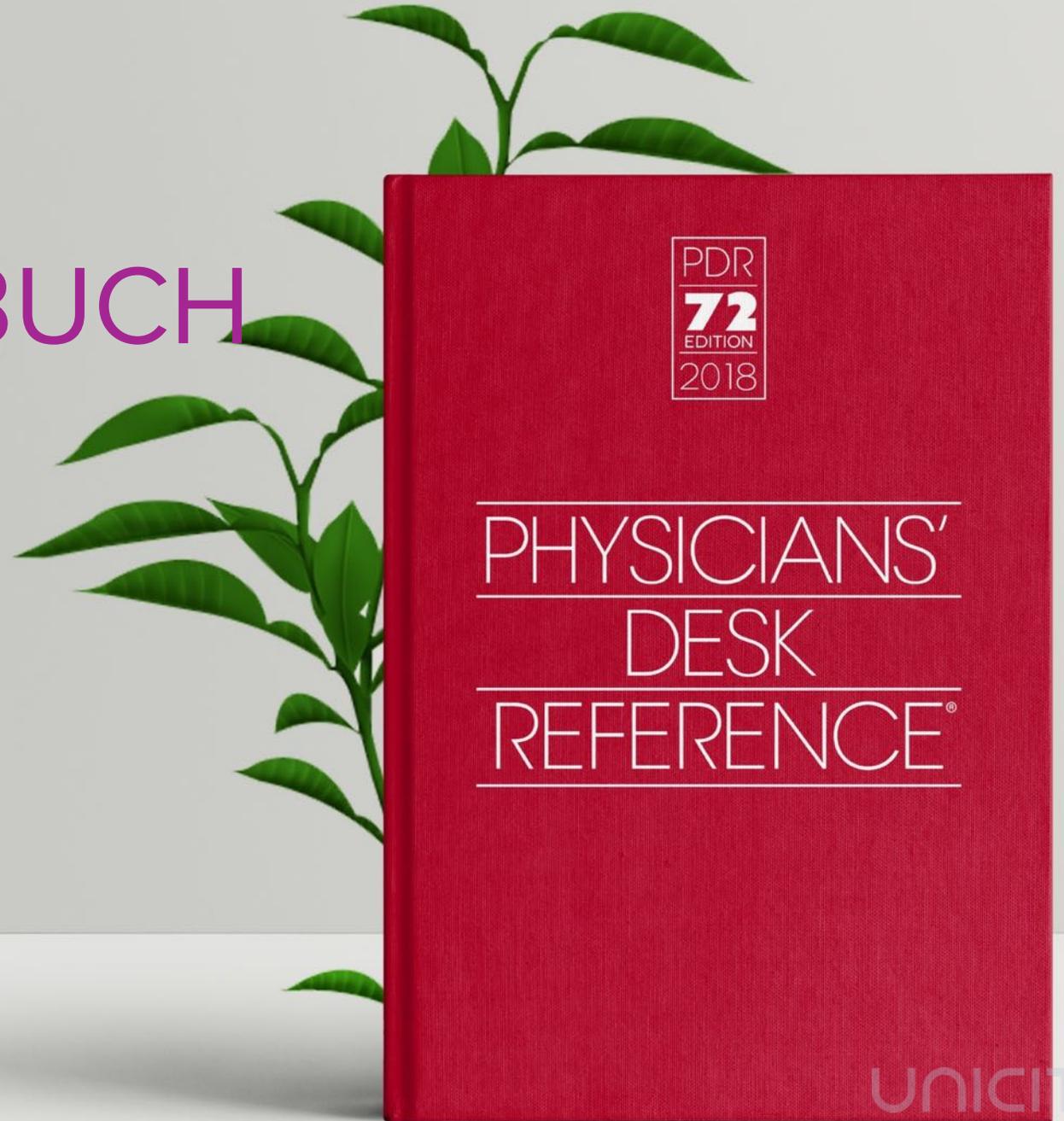
## Conclusions

One of the most significant advances in our understanding of human health is the relevance of bacteria naturally found within the gut. Despite much remaining unknown, the sum of evidence suggests that *Bifidobacterium* and *Lactobacillus* improve human health. The general increase in these two bacteria, particularly *Bifidobacterium*, in the intestines of people taking a prebiotic fiber supplement for 8 weeks indicates a favorable shift. Moreover, the lack of increase *clostridium* rise suggests this shift was exclusive to bacteria considered beneficial. In conclusion, eight weeks of a daily prebiotic fiber improves the population of beneficial gut bacteria in humans.

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**BIOS 7:  
ALLEINSTELLUNGSMERKMAL**

IM 2018  
US-ÄRZTEHANDBUCH  
(PDR)



# BIOS 7 :

# PATENT ANGEMELDET

PTO/AIA/14 (11-15)

Approved for use through 04/30/2017. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>Application Data Sheet 37 CFR 1.76</b>		Attorney Docket Number	UNIN:1005
		Application Number	
Title of Invention	COMPOSITIONS AND METHODS FOR CHOLESTEROL, GLUCOSE AND MICROBIOME CONTROL		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

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# BIOS 7: ZUSAMMENFASSUNG



1990



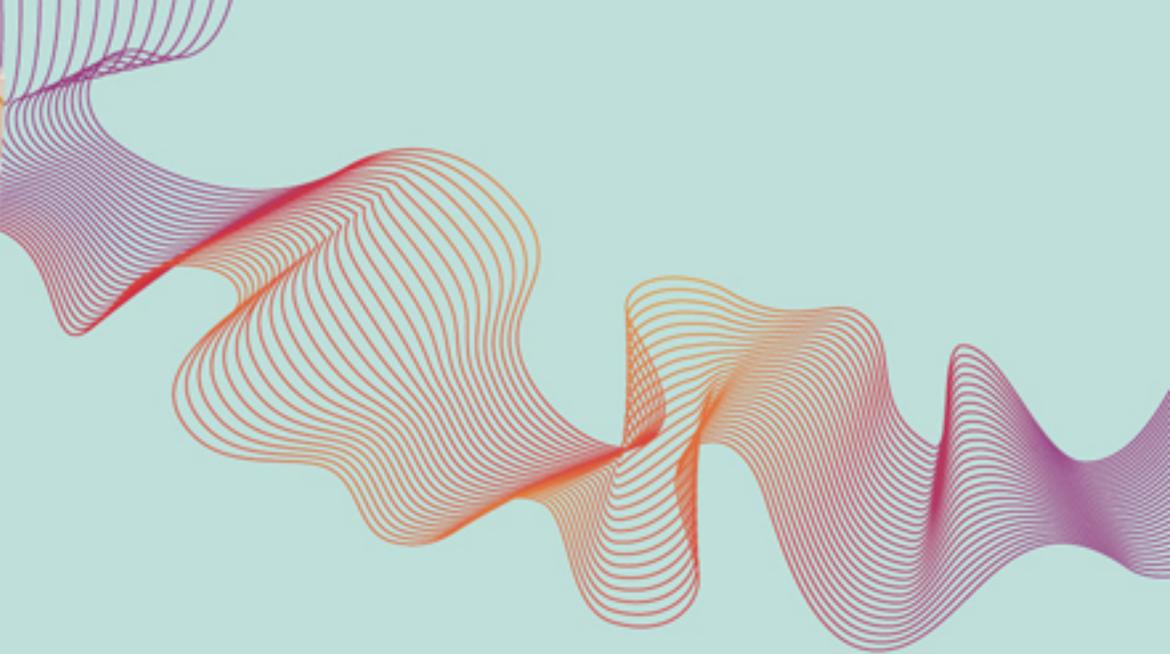
2006



2013



2015



2002



2009



2018



### BLOOD GLUCOSE DATA



### BLOOD LIPID DATA



### MICROBIAL DIVERSITY



HUMAN BODY

ANALYZE

DNA SCANNING...

# STARTEN SIE IHR KÖRPERSYSTEM NEU

BLOOD  
PRESSURE

UNICITY



# DIE 8 SÄULEN VON UNICITY SCIENCE



## FORSCHUNG

Schätzungsweise nur 4% der 600.000 Pflanzenarten auf der Erde wurden bisher auf ihre chemische Zusammensetzung und bioaktive Substanzen untersucht. Unser Team reist um die ganze Welt und entdeckt Pflanzenwirkstoffe, die die menschliche Gesundheit voranbringen können.



## LEIDENSCHAFT

Für die Wissenschaftler von Unicity ist Forschung und Entwicklung nicht nur ein Job – es ist vielmehr ihr Lebensstil. Unsere Forscher essen, schlafen, trinken und atmen Wissenschaft. Sie arbeiten hart und liefern Ergebnisse – weil sie lieben, was sie tun.



## BESTÄTIGUNG

Unicity ist das einzige Nutrazeutika-Unternehmen, das 16 Produkte in der 'Physicians' Desk Reference'-Liste (PDR) aufweisen kann. Als wichtigste Referenzquelle für Mediziner weltweit, informiert die PDR-Liste über Arzneimittel, die nachweislich eine positive Wirkung auf die Gesundheit haben.



## SCHUTZ

Unicity Science liefert neue, einzigartige und selbst entwickelte Rezepturen. Wir patentieren und schützen unsere Entdeckungen und Rezepturen. Sie sind damit exklusives Eigentum von Unicity.



## INNOVATION

Unicity Science lebt von der Innovation. Unser Team erforscht Inhaltsstoffe und entwickelt Produkte, die eine lebensverändernde Wirkung zeigen. Unsere Ausrichtung auf wissenschaftliche Innovation und Umsetzung hebt Unicity von unseren Mitbewerbern ab. Deshalb können wir Produkte anbieten, die sonst nirgendwo zu finden sind.



## PRÜFUNG

Das Unicity Science Team konzipiert, modifiziert, entwickelt und testet Unicity Produkte in unserem eigenen Forschungszentrum in den USA. Somit ist sichergestellt, dass Unicity Science unsere wissenschaftlich fundierte Produktlinie auch in Zukunft weiter ausbauen wird, um den Unicity-Vertriebspartnern und -Verbrauchern die wirksamsten und hochwertigsten Produkte weit und breit anbieten zu können.



## TRADITION

Unsere wissenschaftlichen Wurzeln reichen über 100 Jahre zurück. Unicity entstand durch den Zusammenschluss von Rexall und Enrich International. Mit diesen beiden Unternehmen verbanden sich wissenschaftlicher Entdeckergeist und wirtschaftliche Innovationskraft – es entstand ein Branchenführer. Heute baut Unicity weiter auf diesem Fundament auf und entwickelt wissenschaftlich geprägte Produkte.



## ZUSAMMENARBEIT

Unicity Science gründete das Unicity Scientific Advisory Board (USAB) und ist damit eines der wenigen wissenschaftsbasierten Unternehmen der Branche. Dieses Gremium besteht aus weltweit führenden Wissenschaftlern, die eng mit Unicity Science zusammenarbeiten, ihre Forschungsergebnisse teilen, auf unseren Konferenzen referieren und an aktuellen Unicity Science Projekten mitarbeiten.