



MSM A Natural Choice

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MHCP Cinnamon and Diabetes

1. Are you over 25 years of age?
2. Are you overweight?
3. Do you have Type 2 Diabetes or are in high risk of developing Type 2 Diabetes?

If you answered yes to only question 1 and/or 2 then you may wish to read on just as a matter of general interest in pro-active health management.

If you answered yes to either 1 or 2 and yes to question 3, then you definitely need to read on, as this could be the answer to changing your life in regards to managing your health.

Let's start with a quick lesson on Type 2 Diabetes and what causes the development of Type 2 Diabetes:

People who suffer from Type 2 Diabetes have lost their sensitivity to insulin, even though their bodies produce it. After eating, the starches and sugars in food is broken down into blood sugar called 'glucose'. Glucose circulates in the blood, and insulin makes it possible for the body's cells to absorb glucose, which will either be for energy or stored as fat. If the body does not produce insulin (Type 1 Diabetes) or has lost its sensitivity to insulin (Type 2 Diabetes), higher levels of glucose will remain in the blood and long term elevated glucose levels are associated with many problems such as tiredness, weight-loss and blurred vision. In extreme cases the long term health effects of '*insulin resistance*' can lead to blindness, heart disease and premature death.

How does Insulin work or not work?

In Type 2 Diabetes, high blood sugar levels occur when glucose is prevented from entering cells of the body (eg: liver, muscle tissue and fat cells). This is caused by a '*short circuit*' in the insulin signalling pathway. Insulin is produced by the pancreas in response to elevated blood glucose levels, once insulin enters the blood stream, the body signals the body's cells to take up the excess glucose until normal levels are restored. When insulin molecules bind to insulin receptors on cell walls, tiny molecular '*gates*' open up and allow glucose molecules to pass through. If this system is impaired, the '*gates*' don't respond adequately to the insulin signal, thus preventing the glucose from entering the cells - this is known as '*insulin resistance*'.

With insulin resistance, glucose levels in the blood remain high, a very dangerous condition in the long run. The pancreas tries to compensate by making more insulin, but this works only for so long. Eventually, the pancreas becomes overburdened and starts making less insulin. When this happens you have developed Diabetes.

How will MHCP Cinnamon help?

In 1990 research by Dr Richard Anderson and his team established that the active component, known as methylhydroxychalcone polymer (MHCP Cinnamon), was highly effective in providing essentially the same biological activity as insulin. It was effective in increasing the uptake of glucose by cells by increasing '*insulin sensitivity*'. MHCP Cinnamon was also found to stimulate the synthesis of glycogen, a polymeric form of glucose that is primarily stored in the liver and muscle tissues for use at times of peak energy demand, such as exercise. MHCP Cinnamon improves insulin and glucose metabolism and can reverse insulin resistance in Type 2 Diabetes in a high percentage of cases.

Effectively, what MHCP Cinnamon does is to bind to the insulin receptors that have '*short circuited*' and opens up the pathway or '*gates*' and allows the glucose molecules to pass through into the body's cells so that glucose levels fall to normal and biochemical order is restored.



So what is the great news about MHCP Cinnamon?

MCHP Cinnamon is a natural product. MCHP Cinnamon is a water soluble chemical compound extracted from the Cinnamon Bark of the Cassia Tree (*Cinnamomum cassia*).

Uses of MHCP Cinnamon as part of your daily health regimen will not only assist in reducing blood glucose levels in your body, but research has also shown that MCHP Cinnamon reduces blood lipid levels. High blood lipid levels will lead to high cholesterol, which will lead to heart disease.

In the study with human patients with Type 2 Diabetes the end result was that total cholesterol was reduced by 12-26%; LDL-cholesterol (*'bad' cholesterol*) was reduced by 7-27%; HDL-cholesterol (*'good' cholesterol*) was unchanged; and triglycerides (*fats*) were reduced 23-30%;

So what is the downside or side effects? There is none that we have been able to establish through research and personal use. MCP Cinnamon is a natural product and 1 to 2gms a day is all you need to improve your health prospects.

I have been using MHCP Cinnamon for 2 months. While I do not suffer from Type 2 Diabetes, high blood, high cholesterol, or heart disease, I am over 25 years of age (I'm actually in my late 40's) and I'm overweight and have struggled with my weight fluctuations for 20 years.

I do eat healthy freshly prepared foods 90% of the time, I do not smoke and I rarely drink alcohol. What has been my experience? Well I have noticed that I don't feel as tired (especially in the afternoon), my energy levels seem more stable, my weight has seemed to stabilised and has started to decrease all be it slowly (which is the best way to lose weight). I have noticed that I don't get those sugar cravings that I usually get and I can look at a meal now and not feel the need to devour it.

'Spice Up' your health with MHCP Cinnamon

The recommended dosage is to take 1 to 2 capsules 30 minutes provide to your 3 main meals of the day. This will provide sustainable active benefits. Taking more capsules than 6 capsules a day will not improve the outcome and in fact has been demonstrated that it will have a negative effect on sustainable activity. In this case more is not necessarily better. Taking the capsules 30 minutes before your meals allows time for the MHCP Cinnamon to be absorbed into your system to assist with the intake of food to ensure your body is ready to read the correct blood glucose level.

Special note to Type 2 Diabetics: Please ensure that you continue to monitor your blood sugar levels as required and take your medication as prescribed by your medical practitioner while taking MHCP Cinnamon.

Where can you get MHCP Cinnamon in Australia?

ONLY from MSM a Natural Choice. We are the sole supplier of this exciting new product in Australia.

This product is pure 100% MHCP Cinnamon in vegetable gel capsules for ease of dose and consumption.

Place your order now on www.msmnaturalchoice.com.au

120 Capsules for an amazing \$39.95 includes shipping and GST

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INSULIN IMITATORS: Polyphenols found in Cinnamon mimic job of hormone



Chemists Richard Anderson and Marilyn Polansky use high-performance liquid chromatography to identify compounds from cinnamon that improve the action of insulin

ARS scientists and colleagues have isolated and characterized several polyphenolic polymer compounds from cinnamon bark that could one day become natural ingredients in products aimed at lowering blood sugar levels.

The newly identified chemical structures were recently named in a patent application and described in the *Journal of Agricultural and Food Chemistry*. ARS chemist Richard A. Anderson co-authored the study with colleagues at the Beltsville (Maryland) Human Nutrition Research Center and two universities.

Impaired sugar and fat metabolism is present in millions of people and may lead to type-2 diabetes and cardiovascular diseases. In test tube assays using fat cells, the polyphenolic polymers were found to increase sugar metabolism a whopping 20-fold.

Insulin is a hormone made by the pancreas to regulate sugar metabolism. In people with type-2 diabetes, either the pancreas doesn't make enough insulin or the body is unable to use it correctly. Both conditions lead to unhealthy blood levels of sugar that would otherwise provide energy to muscles.

During a decade of efforts to find natural compounds that could help maintain normal blood sugar levels, the scientists tested several components of cinnamon. The newly characterized chemical structures are closely related to a previously reported chemical derivative of cinnamon, MHCP—methylhydroxychalcone polymer. The researchers also tested scores of other plant extracts, but none displayed insulin-enhancing activity near that of cinnamon.

"These new compounds increase insulin sensitivity by activating key enzymes that stimulate insulin receptors, while inhibiting the enzymes that deactivate them," says Anderson, who is with the Nutrient Requirements and Functions Laboratory.

"Polyphenols are known for their antioxidant, anticancer, and anti-inflammatory functions, but they have not been commonly known to improve insulin function," he says. "The polyphenolic polymers in cinnamon bark have antioxidant effects, which may provide synergistic benefits to persons with various forms of diabetes." Another recently published human research study from the team showed considerable improvements in glucose and fat metabolism in volunteers who followed a diet that included modest amounts of table cinnamon for 40 days.

Table cinnamon is made from cinnamon bark and contains both water-soluble and fat-soluble compounds. Fat-soluble compounds may accumulate in the body if ingested over a long period. At this time, there is no data on potential effects of long-term ingestion of table cinnamon. But the newly defined chemical structures noted above are isolated from water extracts of cinnamon and appear to be nontoxic in any quantity, according to Anderson.

This research is part of Human Nutrition, an ARS National Program (#107) described on the World Wide Web at

www.nps.ars.usda.gov

Richard A. Anderson is with the USDA-ARS Nutrient Requirements and Functions Laboratory, 10300 Baltimore Ave., Bldg. B307C, Room 224, Beltsville, MD 20705-2350;

"Insulin Imitators: Polyphenols Found in Cinnamon Mimic Job of Hormone" was published in the April 2004 issue of Agricultural Research magazine.

by Rosalie Marion Bliss
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CINNAMON IMPROVES GLUCOSE and Lipids of people with Type 2 Diabetes

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Abstract

OBJECTIVE—The objective of this study was to determine whether cinnamon improves blood glucose, triglyceride, total cholesterol, HDL cholesterol, and LDL cholesterol levels in people with type 2 diabetes.

RESEARCH DESIGN AND METHODS—A total of 60 people with type 2 diabetes, 30 men and 30 women aged 52.2 ± 6.32 years, were divided randomly into six groups. Groups 1, 2, and 3 consumed 1, 3, or 6 g of cinnamon daily, respectively, and groups 4, 5, and 6 were given placebo capsules corresponding to the number of capsules consumed for the three levels of cinnamon. The cinnamon was consumed for 40 days followed by a 20-day washout period.

RESULTS—After 40 days, all three levels of cinnamon reduced the mean fasting serum glucose (18–29%), triglyceride (23–30%), LDL cholesterol (7–27%), and total cholesterol (12–26%) levels; no significant changes were noted in the placebo groups. Changes in HDL cholesterol were not significant.

CONCLUSIONS—The results of this study demonstrate that intake of 1, 3, or 6 g of cinnamon per day reduces serum glucose, triglyceride, LDL cholesterol, and total cholesterol in people with type 2 diabetes and suggest that the inclusion of cinnamon in the diet of people with type 2 diabetes will reduce risk factors associated with diabetes and cardiovascular diseases.



MHCP Cinnamon US Testimonials

Nancy

"My husband is type 2 and uses Metformin for his diabetes; he also takes 2 cinnamon supplements a day (1 am and 1 pm) 500mg each. His sugar is usually around 120 or so. I started taking it because my triglycerides were HIGH (300 plus) and my cholesterol was always 280 or so. I've been taking 2 a day for about 8 months, and I just had my levels checked. My husband was 198 and my triglycerides dropped to 158! My ratio is 3.2. my doctor and I were both thrilled! In my case, it's ONLY the cinnamon ..oh we each take flaxseed oil tablets a day (1 am and 1 in the pm). We swear by cinnamon and flaxseed. My doctor told me with exercise and a better diet I'll be even healthier! I say to everyone try cinnamon it can't hurt you, I don't think it can anyway"

Bob Shreve

"Deb,
Thank you for article and particularly the link to Dr. Anderson's research. There is a further link to the 2004 Agricultural Research Magazine, where I found this quote 'table cinnamon is made from cinnamon bark and contains both water-soluble and fat-soluble compounds. Fat-soluble compounds may accumulate in the body if ingested over a long period'. Please let me know if I should be looking for water-soluble cinnamon"

Deb Manzella's Reply

"Hi Bob,
Thanks for your question. Here's a quote from Dr Anderson, 'We have also shown that the active compounds of cinnamon are found in the water-soluble portion of cinnamon and are not present in cinnamon oil, which is largely fat-soluble'.
It sounds like there is more fat-soluble component in cinnamon oil and not the powder. But you raise an interesting point. But as always, with all supplements, more is not necessarily better. Sticking to the recommended dose is probably a wise move. Dr Anderson did studies on 1, 3, 6 grams of cinnamon a day. It was shown that the lowest dose, 1 gram a day, was enough to give good results. 1 gram equals approximately ¼ teaspoon of cinnamon. ¼ teaspoon of cinnamon sprinkled on cereal, toast or in tea, is pretty small amount. There might be more concern if you are taking capsules of cinnamon several times a day. But it's always good to be cautious.
The USDA has published an article which states that 'Our recent human studies indicate that consuming roughly 1 half of a teaspoon of cinnamon per day or less leads to dramatic improvements in blood sugar, cholesterol, LDL-cholesterol and triglycerides. Intake of cinnamon, at these levels, is very safe and there should not be any side effects'.
The article also states that there are companies out there selling the water-soluble components of cinnamon, if you are interested in that. You could probably ask your local health food store personnel for companies that sell it"

Jim

"For about 5 years my glucose readings have hovered near the top or slightly above the lab's normal range. At about 101 to 129. My triglycerides were about 180, with medication. I started taking 3000mgs (3 grams) of cinnamon a day, and went for a lab test after 6 months on my cinnamon regimen. My latest glucose reading was 97, not a big drop, but my triglycerides were down to 88! The lowest they have ever been. (years ago before taking statins, they were at 485). I understand that triglycerides and glucose are somehow related...I intend to continue with this easy to take supplement"

Jane Donut

"I am pre-diabetic and have been taking 1000mg of cinnamon with each meal, along with a dietary fibre, acai and gymnema sylvestre. I have noticed a huge difference!! I have also been able to lose 21lbs so far.. not that it's a cure-all, because I have been doing 20 minutes of exercise everyday also.. but it it's a placebo effect, I don't care! I haven't felt this good in years! "

Royce Sherrod

"I KNOW that my sister has improved since taking cinnamon capsules. She has diabetes and has gotten off her medication. The person who wrote in about the doctors not approving the cinnamon, of course, believe the doctors. Doctors push medications and only suggest alternative ways to help your health when you cannot take their meds because of all the side effects. So, why not try something simple when YOU KNOW without a doubt that it has helped you and you are healthier, no matter the studies that doctors so. You know your own body better than they – don't you"



MHCP Cinnamon US Testimonials

Rose Standart

"I have been taking 2 cinnamon capsules daily for 2 years and use cinnamon sticks in tea. Although I have not noticed a lowering of blood glucose, I have seen a significant improvement in total cholesterol, triglycerides and LDL numbers"

Coastwatcher

"I have been making my own cinnamon capsules for months now. My experience is about a 25 point blood glucose drop after I take the capsules. It is cheap and easy to do, and even if studies show it doesn't work, the placebo effect is working for me. I have to watch and make sure I don't drop to low. Regardless, I have also lost around 80 pounds. So I think it is no harm to try cinnamon as long as you are also doing all the other things you need to do to control your sugars. Nothing will lower sugars if you are eating trash"

Tom Servo

"Over the last few months I've mixed one teaspoon of cinnamon powder into my morning cereal every day and I've noticed a marked decrease in my considerable sugar cravings. It has made weight loss easier for me"

Amy P

"I purchased cinnamon supplements in 1000mg capsules. The label indicates they are pure cinnamon. I take 2 capsules after every meal. I am Type 2 and in about 10 days, my morning blood glucose readings are down from an average of 120 or so to 101 this morning. My post-meal numbers have improved and also my fasting numbers. I don't know if it's the placebo effect either, but my body doesn't care. Lower blood sugar readings are a good thing. I also take 1500mg of Metformin per day, diet and exercise. I saw a significant decrease in my glucose readings after just a couple of days on cinnamon. I'm a believer! I know it won't hurt me, so I'm going to keep taking it!"

Joy

"I'm Type 2 been about 2 years – I ran out of Meds, didn't take anything – went to the Doctor was up to 378 blood count they wanted to put me on the 'dreaded shots' and I don't mean Tequila. All be 50 in 2 days. I jumped into my pills and gave this Cinnamon thing a try. 2 weeks later, I'm running at a steady 115-120 which prior to running out of my exact same meds I was running at 150-175. So call it what you will, I take the capsules – 2 500s at lunch and I'm good – Happy Happy Joy Joy..."

Matt

"I have been taking cinnamon for a month now and I cannot believe the change. I was very sceptical and only started taking it at my wife's insistence. To my surprise I do not have sugar cravings at all and do not feel the need to eat often. So far I have lost 15lbs and there seems to be no other explanation to the weight loss and aversion to eating. I used to eat constantly and the more carbs I ate the more I wanted to eat"

Brenda Lee

"Hi, I've been on 500mg of cinnamon for 2 weeks now and I've had a tremendous drop in my blood sugar, my fasting sugar went from 175 to 210 to 108 to 120 and that is with me not eating the way I really should be eating. So, it really works for me and I think anyone with type 2 diabetes should give the cinnamon a try and if you don't see a difference as fast as others you should not give up on it. I am well pleased with my results"

Ron

"After taking three meds daily for two years, my morning fasting glucose reading was 130-140. I started putting cinnamon on my morning toast (low carb) and my readings went to 85-95. If I travel, after a few days without cinnamon, my numbers are back at 130-140. Two days back on cinnamon and the number drops back to 85-95. I've gone through this cycle several times. Cinnamon works for me"

Barb J.L.

"Two yrs ago when I was told that I'm a type 2, my H1C was 6.95% with diet it went down to 6.5% after taking cinnamon for 2 months it is now 5.9%. Next month my blood test should show an improvement again. GO CINNAMON"