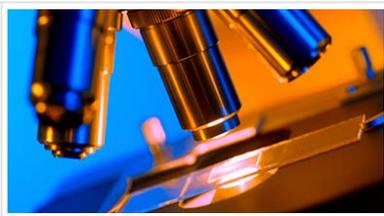




HealthlineNews

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A chemical found in ayahuasca has the potential to regenerate pancreas cells that have been lost to diabetes.



New [research published in Nature Medicine](#) may have unlocked a new line of treatment for diabetes.

The researchers honed in on the main culprits in diabetes: beta cells. These cells concentrate in the pancreas in little clusters called islets, and they produce the insulin necessary to keep the body's blood sugar

levels stable.

“In children and adults with type 1 diabetes, they’ve lost 99 percent of their beta cells, so they cannot make enough insulin. That’s the cause of their diabetes,” said Andrew Stewart, director of the Diabetes, Obesity and Metabolism Institute at the Icahn School of Medicine at Mount Sinai, New York City and senior author of the study, in an interview with Healthline. “People with type 2 diabetes also have about a 50 or 60 percent reduction in their number of beta cells in their pancreas, and so they too cannot make enough insulin.”

[Learn More About Diabetes »](#)

Growing Beta Cells

Although many drugs exist to control the symptoms of diabetes, there currently is no reliable way to replace beta cells and cure the disease. Stewart joined with lead author Peng Wang and others on a multidisciplinary team to tackle the problem.

“In the world of beta cell regeneration, you can do it in two ways. You can either use stem cells, create stem cells and then transplant them. Or you could take a drug that makes your own beta cells grow,” Stewart explained.

Although the stem cell transplant research is promising, it involves an invasive procedure and will have difficulty meeting the massive demand, he said.

Diabetes affects more than [20 million Americans](#), according to the Centers for Disease Control and Prevention (CDC).



“The need vastly outstrips the stem cell islet supply,” said Stewart. “It would be simply much simpler to take a pill to make your beta cells grow.”

Using a high-volume screening method, Stewart’s team checked more than 100,000 different chemicals to see which had the potential to make beta cells grow. They identified 86 possible solutions and tested each manually. Of these, a single drug triggered beta cell growth: harmine.

Harmine occurs naturally in a number of plants around the world. It’s one of the ingredients in the psychoactive mixture ayahuasca, which is used by some indigenous people for religious purposes.

[Related News: Scientists Make Insulin-Producing Cells from Stem Cells to Cure Type 1 Diabetes »](#)

The Path to New Treatments

To confirm that harmine would cause beta cell growth, the team took islets from the pancreases of deceased human organ donors.

Then, they transplanted the islets into diabetic mice. They used far fewer than were necessary to cure the mice’s diabetes. Dosing the mice with harmine triggered the beta cells to multiply enough that

they could restore the mice's blood sugar levels to normal.

Stewart cautions that harmine itself isn't the answer. Instead, harmine might inspire similar drugs that hone in on beta cells and leave the rest of the body, especially the brain, alone.

We have no way to target drugs specifically to human beta cells. That's what we need to do next.

Andrew Stewart, Icahn School of Medicine



"We have no way to target drugs specifically to human beta cells," Stewart said. "That's what we need to do next. We need to figure out a way to get harmine directed to beta cells specifically and to no other tissue."

It also won't cure diabetes on its own. Even if the beta cells regrow, there's still the problem that damaged them in the first place.

For example, in people with type 1 diabetes, the body's own immune system has attacked and destroyed the beta cells. Without complementary drugs to keep the immune system in check, newly grown beta cells might also be destroyed.

Still, the team's discovery is another important step toward developing a medication that may someday reverse diabetes.

Stewart adds that this research would not have been possible without the support of the National Institutes of Health and the Juvenile Diabetes Research Foundation.

[Read More: Newly Discovered Hormone Could Jump Start Pancreatic Cell Production in Diabetics »](#)

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Laci Sanford · Seminary, Mississippi

Iv been t1 for 26 years on the pump for the last 7, I have insulin resistance. And so



much scar tissue that finding a port is beginning to be next to impossible. I feel hopeless and that I'm running out of time. I'm a jdrf advocate and very proactive with my team of dr's, but nothing is working anymore. I have lost all symptoms. Of low b.s. and last week while driving with my daughter I chkd. My sugar after almost rear ending a big truck & it was 26, guess I had found a port sight that actually used the insulin. It's sad that more can't be done. Please please please keep up the good work it is most appreciated

Like · Reply · 6 · Mar 9, 2015 9:37pm



Tyler Tomasi · Utah State University

Look into some reputable ayahuasca retreats. There was a man at one I attended with pretty severe diabetes(not sure which type), and his blood sugar remained at healthy and stable levels for the entire two weeks. The symptoms that usually plagued him disappeared, and this was all while going off his meds during the whole process. Even if that isn't a viable option, it sounds like harmine on its own can have benefits, and that's available from various sources. Best of luck. Hang in there.

Like · Reply · 5 · Mar 10, 2015 8:24pm



Anders Bakken · Senior Software Engineer at Netflix

I've had type 1 for the last 27 years and been on the pump for 8 years. The last 3 or so I've used the Medtronic CGM and I have to say it's changed my life. I also have problems with noticing hypoglycemia at times but now my CGM will tell me. The last version has very few problems (the previous one was a little harder to trust since it produced quite a few false lows for me). I'm not a Medtronic employee but I would highly recommend looking into a good CGM system.

Like · Reply · 3 · Mar 11, 2015 2:41am



Poul Gryciuk · Drifttekniker at SBBS Solutions AB

Have you tried to eat a keto diet?

Like · Reply · 5 · Mar 11, 2015 2:42am

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mmail1969

for insulin resistance try eating "resistant starch" daily...hang in there and it might help you....interesting times are coming re Orgenesis, Viacyte etc best to you!

Like · Reply · Mar 10, 2015 5:34am



Carmen Neemre

LCHF diet no gluten and no sugar !!! Try and you don't regret

Like · Reply · 2 · Mar 11, 2015 4:57am · Edited



Sean Madden · Volunteer at Near Death Experience Research Foundation

Syrian rue contains harmine but it is sooo dangerous. Usually you would fast all day and night with this type of hayahuasca brew. Anyway it IS interesting. I believe they are carbolines which have a parent heterocycle ring similar to dimethyl methyl

tryptamine if you rotate some of the sp3 bonds and try to superimpose it.

Like · Reply ·  1 · Mar 11, 2015 9:02am



Barclay Losse · Owner Operator at Plant Based Pies

Plant Based Diet controls blood sugar in type 1 and 2 diabetics better than any other diet on Earth. It's not a surprise the cure will also come from plants.

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Antonio Maranhao · Web Manager at SBA-Marketing

Where do I sign up?

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Greg Yanick-Thompson · Lake Cowichan, British Columbia

@Laci Sanford I had mild type 2 diabetes , major fat problems ,, YET over last 2 years over 200 plus ayahuasca journeys ...I have experienced a 20 lb fat loss and incredible changes in blood work , strength , endurance and yes insulin sensitivity as well as growth hormone production ... this is my own experience and im soooo thankful for it and the beautiful sacred medicine ... peace

Like · Reply · Mar 11, 2015 2:23pm



Christopher Haigood · Owner at Mercenary Studios

Why not just buy the Harmine <http://www.tocris.com/dispprod.php?ItemId=396508>

Like · Reply · Mar 11, 2015 9:47pm



Susan L. Phillips · President, Marsu Properties, Inc. at Self Employed and Loving It!

Thanks for posting this. I am going to share it with my PD group as some also have diabetes.

Like · Reply · Mar 12, 2015 1:07am



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Big Pharma Invested Millions To HIDE This Diabetes Cure

watch the video here:> <http://tinyurl.com/curediabetesday>

Big Pharma are quivering at the thought of this Diabetes cure becoming public.

But why haven't you heard of it? It has the power to bring down the money hungry \$245

billion diabetes meds industry. And they are investing millions to hide this from you.

If you or a loved one suffers from diabetes then the following FREE presentation will be the most important thing you have watched this year.

Like · Reply · Jul 8, 2015 5:58pm

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