

# MADE FROM NATURE BACKED BY SCIENCE

BioNeutra Global Corporation

## 2019 Report



**BioNeutra™**

# BioNeutra Global Corporation

## Edmonton Production Plant & HQ



## Company Overview

BioNeutra Global Corporation is a multiple award-winning life sciences and functional food ingredient company in the business of research, development and commercialization of science based health ingredients and products that improve public health. The Company was founded in 2003, is headquartered in Edmonton, Alberta, Canada and trades on the TSX-V Exchange (TSX-V:BGA). BioNeutra has developed and patented a proprietary process which is used to transform starch from agricultural crops such as wheat, non-GMO corn, tapioca and peas into an advanced, healthy, functional food ingredient - VitaFiber™ IMO, which is the Company's lead product. VitaFiber is an unique, low calorie sweetener and soluble dietary fiber available both in a basic or organic version as a syrup or powder. The Company currently manufactures it in three countries including Canada where a new production plant became operational in 2018. VitaFiber is sold to leading international manufacturers of protein bars, yogurt, beverages, ice cream and confectioneries. A retail product is sold on line and in specialty stores in Canada. It has undergone clinical trials and studies and has been recognized by Health Canada as a novel, dietary fiber; by the European Food Safety Authority as a novel food; and the FDA as safe (GRAS). It can be sold in 36 countries. BioNeutra is led by business professionals supported by a strong R & D, QA, QC team including 4 PhDs who are engaged in joint research projects with leading universities.

# CONTENTS

<b>4</b>	.....	BioNeutra Born from Science
<b>5</b>	.....	BioNeutra Research & QA/QC
<b>6</b>	.....	BioNeutra's Canadian Production Facility is Enormous
<b>7</b>	.....	The World is Facing Two Major Health Problems
<b>8</b>	.....	Helps Manage Weight
<b>10</b>	.....	Helps with 'Gut' Disorders
<b>12</b>	.....	BioNeutra's Science has Produced a New Canadian Product to Help
<b>13</b>	.....	Improving Gut Health
<b>14</b>	.....	Lead Product
<b>15</b>	.....	What On-Line Customers are Saying About VitaFiber
<b>16</b>	.....	Soaring Sales! International Expansion!
<b>17</b>	.....	BioNeutra on the TSX
<b>18</b>	.....	Publicly Traded
<b>19</b>	.....	Growth
<b>20</b>	.....	Canadian Government Department Calls BioNeutra - <i>A Leader</i>
<b>21</b>	.....	Sweeping the Awards
<b>22</b>	.....	Top Science and Business Awards & Recognitions
<b>24</b>	.....	What the Media & Others are Saying about BioNeutra
<b>25</b>	.....	Magazine & Newspaper Publications
<b>40</b>	.....	The BioNeutra Story
<b>42</b>	.....	Major Milestones
<b>47</b>	.....	2018 Financials
<b>67</b>	.....	Board of Directors



## BioNeutra Born from Science

**Scientific Related Institutions and Organizations BioNeutra Works with:**



National Research Council  
**NRC-CMRC**  
Canada



### Combining the Best of Science & Nature - 29 Years & 3 Countries

The research that has powered BioNeutra began 29 years ago and continues today. While engaged in manufacturing products, the Company's primary focus is in pioneering science that brings evidence-based functional food ingredients that support a healthy and active lifestyle to market.

### Science Team - 4 PhDs

The company has expanded its scientific team to include 4 PhDs with diverse, international backgrounds in biochemistry, organic and carbohydrate chemistry and nutritional science and head the departments of QA/QC; Production; New Product Research and Development and Regulatory Affairs. Collectively they hold nine international patents; have published more than 80 peer-reviewed scientific papers, authored a university post-graduate chemistry reference book, worked, held research fellowships or taught as professors or lecturers at universities or academic institutions in five countries, served as vice-dean of a major university chemistry department with 300 professors, appointed to a national chemistry committee and have worked for seven biotechnology companies.

### Multi-Million Dollar Research Collaboration

The Company's lead product is VitaFiber. It was developed as a result of research and collaboration at universities in three countries including Canada's National Research Council. BioNeutra invested two decades and \$13 Million in R & D to solidify its leadership and innovator role in its category.

It has embarked on its third decade of research including a co-funded study at one of Canada's leading universities - the University of Alberta. Its scientists are continuing to work on other new products to add to its VitaFiber product line.



# BioNeutra Research & QA/QC

NEW LABS



## QA & QC - Suite of 3 New Labs

QA and QC have been further improved by the addition of new staff and a suite of three new labs. BioNeutra's fundamental vision rests on its commitment to research, develop and commercialize science based, high quality natural products and ingredients to improve public health.

## First in the World

BioNeutra was the first and only company in the world to receive approval from the world's top three health regulatory bodies - the US-FDA, Health Canada and the European Food Safety Authority (EFDA) - for IMOs (Isomalto-oligosaccharides) as a food ingredient. IMOs are a special category of carbohydrates with health benefits that are not easily digested. The Company submitted the results of studies and a clinical trial to win the approvals.

## Four Patents

BioNeutra has been awarded four patents (U.S. & Canada) for its proprietary enzymatic process to produce VitaFiber.

**NEW PLANT**

# BioNeutra's Canadian Production Facility is Enormous

**NEARLY A CITY BLOCK LONG**



Tanks, tanks and more tanks



Plant Control Centre

# The World Is Facing Two Major Health Problems;

## TOO LITTLE FIBER & TOO MUCH SUGAR



### Daily Added Sugar Limit 12 Teaspoons



### The Average American Consumes Daily 20 Teaspoons



### 56 names for sugar you may not know

Barley malt, beet sugar, brown sugar, buttered syrup, cane juice crystals, cane sugar, caramel, corn syrup, corn syrup solids, confectioner's sugar, carob syrup, castor sugar, date sugar, demerara sugar, dextran, dextrose, diastatic malt, diatase, ethyl maltol, fructose, fruit juice, fruit juice concentrate, galactose, glucose, glucose solids, folden sugar, golden syrup, grape sugar, high-fructose corn syrup, honey, icing sugar, invert sugar, lactose, maltodextrin, maltose, malt syrup, maple syrup, molasses, muscovado sugar, panocha, raw sugar, refiner's syrup, rice syrup, sorbitol, sorghum syrup, sucrose, sugar treacle, turbinado sugar, yellow sugar.



# OVERWEIGHT CRISIS

## 14 MILLION CANADIANS

**“LOSING THE  
BATTLE OF  
THE BULGE”**



## TIPPING THE SCALES

- Stats Canada says 14 million Canadian adults are overweight
- CDC says 70% of American adults are overweight
- The liver can process 6 - 9 teaspoons of sugar per day
- The average American consumes 19.5 teaspoons of sugar per day
- A tablespoon of ketchup can contain up to a teaspoon of sugar
- Adding just one can of sugar sweetened soft drink a day to a regular diet can result in a weight gain of up to 15 pounds over 3 years
- Drinking one can of sugary beverage a day increases the risk of a heart attack by 20%
- 1600 Deaths a year in Canada are linked to sugary soft drinks according to a Tufts University Study





# **DIGESTIVE ISSUES**

**9 MILLION  
CANADIANS**

**“EXPERIENCING  
CONSTIPATION  
SYMPTOMS”**

## NOT ENOUGH FIBER

- One in four Canadians (9 million, have symptoms of constipation)
- One million constipation related visits to Canadian doctors each year
- Canadians spend an estimated \$100 million each year on laxatives
- Patient care for chronic constipation in Canada is estimated to be in the billions of dollars
- 42 Million Americans suffer from constipation according to the U.S. National Institute of Diabetes and Digestive and Kidney Diseases
- Americans spent \$6.4 Billion on laxatives over the past 5 years
- North Americans get an average of 15g-18g of fiber per day - half of the recommended 38g for men, 25g for women





# BioNeutra's Science has Produced a New Canadian Product to Help WITH WEIGHT MANAGEMENT & DIGESTIVE ISSUES

## We Call it VitaFiber! How Can it Help?

- It's a Low Calorie Natural Sweetener
- It's a Prebiotic
- It's a Dietary Fiber

## And it Came from our Science.

This healthy 'three in one' product is one of the newest entries into the marketplace. And we believe it can help with both weight management and digestive issues.

It is the result of 29 years of research conducted at universities in three countries including Canada. Canada's National Research Council helped in its development.

It's produced using an internationally patented process developed by BioNeutra that transforms starch from agricultural crops like potato, non-GMO corn, pea or tapioca into a product with a variety of health benefits which can help with weight management and digestive issues.

## 10 great reasons to use VitaFiber™ IMO

VitaFiber™ IMO offers a clearly superior, multi-functional alternative to sugar that can be used to sweeten your favourite foods and beverages.





# Improving Gut Health



## VitaFiber = Prebiotic = Gut Health

VitaFiber is a prebiotic so every bottle that rolls off the assembly line can help your gut. New Research on the 'gut' is telling us some amazing things about its role in keeping us healthy...everything from controlling the disease-fighting immune system to controlling our emotions. It's even being described as our 'second brain'.

## 50 Tons of Food

The average human consumes a staggering 50 tons of food in their lifetime. And researchers estimate we have 40 trillion bacteria cells in our colon helping to convert all that food into energy. VitaFiber is actually a food for the probiotics - the good bacteria - that line the gastrointestinal tract. So VitaFiber can play a big role in keeping you healthy.

That's why manufacturers put it in protein bars, ice cream, yogurt, beverages and confectioneries.

And that's why people like to bake with it and make DIY bars.

LEAD  
PRODUCT



CUSTOMERS  
LOVE IT

## What On-Line Customers are Saying About VitaFiber

“ Love, Love,  
Love this stuff! ”

“ Haven't been this excited  
about a product in a long time ”

“ Very, very  
impressed ”

“ Perfect for making Quest bars  
or Special K bars ”

“ I'm a giant fan of this stuff ”

“ Yum ”

“ Best stuff  
EVER ”

“ My new  
best friend ”

“ ..great for cookies ”

“ Worth the Value ”

“ Great price, fast shipping, great quality ”

“ ...home run ”

“ Delicious. ”

“ ...add it to my tea ”

“ This stuff is  
Ahhh-may-zing ”

“ ...bought **7 bottles** of this stuff in  
the past few months ”



# SALES

## Soaring Sales! International Expansion!



USA Trade Show



European Trade Show

### Five Year Sales Growth - 1,378%

BioNeutra continues to post record sales. In 2018, its revenue soared to \$37.7 million. BioNeutra had sales of \$8 million for Q1, 2019. And total cumulative sales for the Company since it became profitable in 2012 is about \$140 million.

### International Expansion

We continue to expand our commercial sales division in India, Asia and Australia as well as Europe by putting in place business development managers with science and business backgrounds. We see progressive growth in our retail department on-line sales through Amazon and Shopify.



# BioNeutra on the TSX

STOCK  
MARKET



Toronto Stock Exchange Officials join BioNeutra's Board of Directors and Senior Executives to begin trading on the Venture Exchange. December, 2015.

**PUBLICLY  
TRADED**

**THE  
GLOBE  
AND  
MAIL**

INSTANT MORTGAGES  
(WHAT COULD GO WRONG?) p. 20  
LET'S BUILD MORE SUBURBS p. 7

**CAN WE STILL TRUST  
THE AUDITORS?** p. 32 | **INVESTING 2019:  
THE YEAR OF FEAR** p. 38  
**PAUL MARTIN'S NEW CRUSADE** p. 11

# REPORT ON BUSINESS

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# REPORT ON BUSINESS

**2016 2017 2018 2019**

**GLOBE AND MAIL'S REPORT ON  
BUSINESS RANKS BIONEUTRA AS  
ONE OF CANADA'S TOP PUBLICLY  
TRADED COMPANIES  
FOUR STRAIGHT YEARS IN A ROW.**



GROWTH

# CANADIAN BUSINESS



Grow Your Business ~~100%~~ ~~200%~~ 798%

BECOME A TASTEMAKER P.14 • HIRE SALES SUPERSTARS P.22 • CAPITALIZE ON CANADIANA P.18

# CANADIAN BUSINESS



Grow Your Business ~~100%~~ ~~200%~~ 798%

BECOME A TASTEMAKER P.14 • HIRE SALES SUPERSTARS P.22 • CAPITALIZE ON CANADIANA P.18

**CANADIAN BUSINESS MAGAZINE  
RANKS BIONEUTRA ONE OF  
CANADA'S FASTEST GROWING  
COMPANIES. NO. 55 OUT OF 500.**

# CAN



Grow

BECOME A TASTEMAKER P.14 • HIRE SALES SUPERSTARS P.22 • CAPITALIZE ON CANADIANA P.18

# CANADIAN BUSINESS



Grow Your Business ~~100%~~ ~~200%~~ 798%

BECOME A TASTEMAKER P.14 • HIRE SALES SUPERSTARS P.22 • CAPITALIZE ON CANADIANA P.18

# CANADIAN BUSINESS



## Canadian Government Department Calls BioNeutra - A Leader



### BioNeutra: A Canadian Awards Leader - Ranked One of Canada's Fastest Growing Companies

#### Four of Canada's Institutional pillars single out BioNeutra as a leader:

- The **Canadian Government**
  - The **Globe and Mail** - Canada's oldest English daily newspaper
  - The **Conference Board of Canada** - Canada's foremost independent research organization
  - **Canadian Business** - Canada's oldest and most respected business magazine
- In 2013, the Conference Board of Canada referred to BioNeutra as a leading functional food company in Alberta in a 136-page report
  - In 2014, for the second time the Canadian Government chose BioNeutra - as a leader among the country's 750 functional food and natural health product companies along with - Kraft, Nestle, General Mills, Unilever, Danone and Cargill
  - In 2018 Canadian Business magazine ranked BioNeutra as No. 10 out of 88 of Canada's fastest growing manufacturers. It was No. 55 out of Canada's 500 fastest growing companies.
  - In 2019 the Globe and Mail, for the fourth consecutive year, ranked BioNeutra as one of Canada's top publicly traded companies.



# Sweeping The Awards

AWARDS



Thank You Speech by Dr. Jianhua Zhu upon receiving the "Most Innovative Entrepreneur" Award at Gala sponsored by the Business Development Bank of Canada (BDC)

**GROWTH INNOVATION ENTREPRENEURSHIP SCIENCE INNOVATION**



# Top Science and Business Awards & Recognitions

## 2019

Winner - **Global Exporter of the Year** presented by Alberta Chambers of Commerce

Cover Story - **Plant** magazine, May/June, 2019

Chosen - **Globe and Mail, Report On Business** magazine's ranking of Canada's top 1000 publicly traded companies - based on revenues

Nominee - One of Canada's Fastest Growing companies ranked by **Canadian Business** magazine & **Macleans**

Nominee - One of Canada's Top Growing companies by the **Globe and Mail**

## 2018

Cover Story - **Western Food Processors** magazine Sept, 2018

Chosen - **Business Innovation Award** by Edmonton Economic Development Corporation.

Winner - **Alberta Business Award of Distinction for Export** by Alberta Chambers of Commerce

Winner - **Royal Bank of Canada Leading Canadian Immigrant Award**

Chosen - **No. 55 - Canada's Fastest Growing Companies** - ranked by Canadian Business magazine

Chosen - **Globe and Mail, Report On Business** magazine's ranking of Canada's top 1000 publicly traded companies - based on revenues

Nominee - Canada's top Innovation Awards - **Ernest C. Manning Innovations Awards**

Nominee - PwC's **Vision to Reality Award**

Nominee - **Junior Achievement of Alberta & NWT Innovator Award**

Honoured by **Alberta Premier & Legislative Assembly** - an nominee for Manning Innovation Awards



## 2017

Winner - one of Canada's top **Science and Technology awards** presented by the ASTech Foundation

Winner - **Alberta Exporter award** (Consumer Goods) presented by the Canadian Manufacturers & Exporters

Winner - The **Most Innovative Entrepreneur** presented by Canada's top Chinese Business Association and sponsored by the Business Development Bank of Canada (BDC)

Winner - **Edmonton Business Leader** - chosen one of Edmonton's business leaders by *Business in Edmonton* magazine

Nominee - Canada's top Innovation Awards - **Ernest C. Manning Innovations Awards**

Featured - by Canada's top biotech magazine - **Biotechnology Focus**

Honoured by the **Alberta Legislative Assembly** - as nominee for Manning Innovation Awards.

Chosen - **Globe and Mail, Report On Business** magazine's ranking of Canada's top 1,000 publicly traded companies - based on revenues

## 2016

Chosen - **Globe and Mail, Report On Business** magazine's ranking of Canada's top 1,000 public traded companies - based on profits

## 2015

Chosen - **Alberta Venture** magazine's "Fast 50" ranking

Winner - **Ernst & Young's "Entrepreneur of the Year"** award/Prairie Region

## 2014

Winner - **BioAlberta's** "Company of the Year" award

Chosen - by **Canadian Government Department** - one of Canada's 22 leading functional food and natural health product companies along with **Kraft, Cargill, General Mills, Nestle, Unilever** and **Danone**

## 2013

Selected - by **Conference Board of Canada** as a leading Alberta functional food company

## 2012

Chosen - by **Canadian Government Department** as one of Canada's 26 leading functional food and natural health products companies

## 2006

Winner - **BioAlberta's** "Emerging Company of the Year" award



# What the Media & Others are Saying About BioNeutra



**"Bio Company finds millions in success  
with healthy sweetener"** - Published: Sept. 1, 2017



**"...we judged BioNeutra  
as the best biotech in  
Alberta [in 2014]"**  
- Published: 2014

## WESTERN FOOD PROCESSOR

**"...a Rising Star  
in Canada's  
Biotech World."**  
- Published: Fall, 2018



**"It's another quiet story  
of a huge world wild  
success, homemade  
right here..."**  
- Published: Sept. 12, 2016



**"[BioNeutra's team is,  
passionately consumed  
by their purpose.]"**  
-Michael Denham, CEO of BDC  
- Published: Mar. 25, 2017

## EDMONTON JOURNAL

**"Local company  
pioneers biosciences  
in agriculture"**  
- Published: Mar. 25, 2007



**"The story behind  
the Company  
is simply amazing."**  
- Published: Sept. 12, 2016



**"...a bright light."**  
- Published: June/July 2012



**"VitaFiber spells sweet  
success for Alberta  
biotech rising star."**  
- Published: Aug./Sept. 2017

## PLANT

**"...a winner with  
high fiber, prebiotic  
sugar alternative."**  
- Published: May/June, 2019



BUSINESS  
IN EDMONTON

LEADERS  
CELEBRATING 5 YEARS

# — DR. JIANHUA — ZHU

COMPANY: BIONEUTRA GLOBAL CORPORATION

BioNeutra Global Corporation is an award winning life sciences company with a patented process and 30-country approval of its lead product, VitaFiber™ IMO (low calorie, natural sweetener, prebiotic dietary fibre used by B2B makers of health bars, beverages and ice cream). This year, BioNeutra plans a retail roll-out of its product. To meet phenomenal growth, a production plant housing a suite of three labs, a quality control centre, training and corporate headquarters, is being built in Edmonton.

"I owe my university professors a great debt. They inspired me to become a scientist to investigate how science can help improve public health. I began a 20-year journey to develop a patented process to turn cereal grains into a low calorie sweetener, prebiotic, dietary fibre with some health benefits called VitaFiber." ~ Dr. Jianhua Zhu, Founder, President & CEO

## COMPANY SNAPSHOT

14

YEARS IN  
BUSINESS

34

EMPLOYEES

BIOTECHNOLOGY  
INDUSTRY SECTOR

Photo by EPIC Photography Inc.



Taken from *Business In Edmonton* Magazine, July, 2017

# BUSINESS

■ Homebuyers cry foul  
after contracts cancelled / E3

■ Forest industry cuts a profit / E4

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EDITOR: PAUL CASHMAN, 498-5669; business@thejournal.canwest.com

EDMONTON JOURNAL

WEDNESDAY, AUGUST 30 2006

## FOOD MANUFACTURING

### How sweet it is: U of A spinoff rolls out healthful sugar substitute

DAVID FINLAYSON  
Journal Business Writer  
EDMONTON

They started with a sweet idea and no money.

Now a U of A spinoff has a pilot manufacturing plant that produces 180 tonnes a year of artificial sweetener from Alberta wheat, barley and potatoes.

And under a deal with Red Deer grain processor Permutex, BioNeutra could be producing 18,000 tonnes a year of the valuable compound, called VitaSugar.

"It hasn't been easy. We had good science but not a single dollar when we decided to start the company two years ago," CEO Jianhua Zhu said Tuesday at the opening of the pilot plant.

But with the help of the provincial and federal governments, and some private investors, BioNeutra is already selling VitaSugar to a Las Vegas company that makes breakfast bars.

The icing on the cake is that not only is VitaSugar a viable sugar replacement, it's also good for you, Zhu said.

It has probiotic properties, which means it promotes the growth of "friendly" bacteria in the large intestine.

This change in gastrointestinal micro flora helps reduce constipation, blood lipids, blood cholesterol and intestinal toxins. "It has a lot of health benefits, especially for seniors with digestive problems," Zhu said.

The North American market for probiotics alone is estimated at \$180 million US and growing rapidly, he added.

See BIONEUTRA / E4



Jianhua Zhu, CEO of BioNeutra Inc., displays a flask of oligosaccharides in front of the vats where it is made. Tuesday was the official opening of the state-of-the-art oligosaccharides pilot plant.

### BioNeutra collaborates with university to create more value-added products

BIONEUTRA  
Continued from E1

The Edmonton Research Park plant, the first of its kind in North America, is a mini version of what BioNeutra expects to have operating in Red Deer, he said.

It's a fully automated array of stainless steel vessels and pipes that produces a low-calorie syrup that can be converted to a powder.

It can be used in any product that currently contains sugar or sugar substitutes, such as drinks and baked goods.

BioNeutra has an exclusive licence to two patents, and will continue research and development in collaboration with

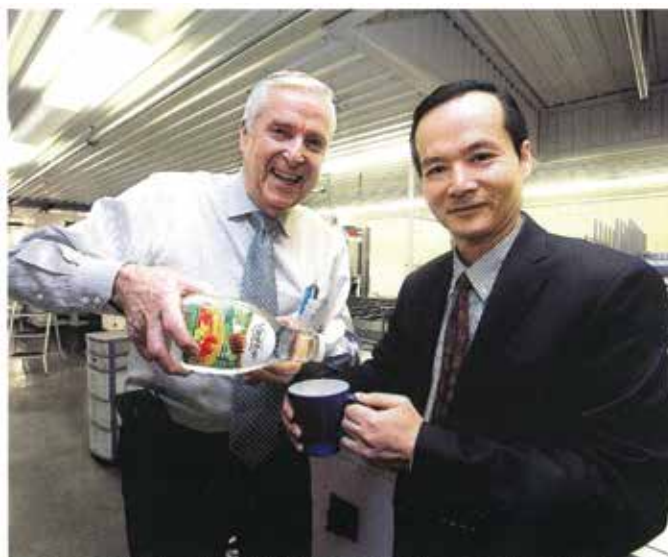
the U of A to perfect the production process and create other agricultural value-added products, Zhu said.

"We still have a lot of work to do to optimize the process, but the gross margins look good."

The starch used in the process sells for \$200 a tonne, while the VitaSugar made from it sells for \$5,000 a tonne in the U.S., he said.

Edmonton Economic Development Corp. president Allan Scott said a company like BioNeutra solidifies Edmonton's position as Canada's fourth-largest biotech cluster. It's essential to develop that next generation of knowledge-based companies, he said.

dfinlayson@thejournal.canwest.com



Former Edmonton mayor Bill Smith, now senior vice president of BioNeutra Global, shows off the company's flagship product — the low-calorie food sweetener VitaFiber — with BioNeutra president and CEO Jianhua Zhu. DAVID ALDRIDGE

### Booster Bill is now BioNeutra Bill, and he's lovin' it

Former mayor and city cheerleader having sweet time in biotech career



GARY LAMPIER

At the tender age of 80, while many of his peers are putting in the glow or settling into their favourite easy chair, the irrepressibly sunny fellow once widely known as Booster Bill is still running hard.

It has been a dozen years since Bill Smith completed his third and final term as Edmonton's mayor and chief cheerleader. But Smith's 2004 electoral loss to Stephen Mandel merely paved the way for an unlikely new career in the world of biotech.

A year after he left politics, Smith was named a director and senior vice president of BioNeutra Global, The Edmonton-based junior biotech firm was founded in 2003 by company CEO Jianhua Zhu, and its shares were listed in December on the TSX Venture Exchange.

BioNeutra's proprietary, patent-protected food product, VitaFiber, is a starch-based, prebiotic fibre, low-calorie food sweetener ingredient that's available in syrup or powder form. It's used in everything from baked goods and beverages to cereals, candies, toppings and frozen desserts.

In an increasingly sugar-averse, weight-conscious, healthy food loving world, BioNeutra believes VitaFiber could be the greatest thing since, well, sliced bread.

"Sugar is the elephant in the room these days," says Smith. "Of course there are natural sweeteners out there in the market, but none of them have the three components we have: a low-calorie, prebiotic fibre that is a naturally sweet organic product."

BioNeutra has invested about \$15 million in product research and development over the years.

It currently employs contract manufacturers in Indonesia and China to produce VitaFiber, which is marketed mainly in the U.S. and Europe, with some sales in Canada.

Revenues are expected to reach about \$25 million this year, says Zhu, or more than double the \$12.1 million in revenues reported for the first three quarters of 2005. He sees much greater growth ahead, once BioNeutra's new manufacturing plant two blocks north of the Edmonton Research Park comes online this summer.

As you might expect, Smith's enthusiasm for BioNeutra and its flagship product echoes his role as this city's most fervent cheerleader.

"At first I didn't know anything about the company, but I thought it looked kind of interesting. So I started on the board, then I ended up chairing the board, then I ended up working for them, and honestly, this is one exciting company," says Smith.

"Dr. Zhu (who holds a PhD in biochemistry) has done a wonderful job not only as a scientist but raising the initial capital. He

had the vision and did it all on his own after coming here from China. So it's a wonderful story."

As for Zhu, his impressive academic career brought him to Edmonton in 1996, where he did post-doctoral research in nutritional science at the U of A, after previous stints at Japan's Yokohama University and the South China University of Technology, where he served as the dean of chemistry.

Once Zhu completed his research at the U of A, he worked for a time at CV Technologies. Later renamed Astra Life Sciences, the local biotech firm created Cold-IX, the popular cold and flu remedy, and was acquired in 2001 by Quebec biotech giant Valeant Pharmaceuticals for \$76 million.

So what lies ahead for BioNeutra? The first step is to ramp up production of VitaFiber once the company's new plant is up and running this summer. BioNeutra acquired the 47,000-square-foot building, which also houses its head office, last summer for about \$2.9 million.

Millions of dollars worth of new production equipment are expected to be installed by August, Zhu says, and the company expects to hire 25 to 30 additional staff to operate the facility.

"This year we are targeting about \$25 million in revenues. Next year it could be over double that," he says.

"We are leaving for Thailand next month to set up another contract manufacturer. And we now have warehouses in New Jersey, Los Angeles, Amsterdam and the U.K. plus our two contract manufacturers in Indonesia and China. So we are a global company."

Although BioNeutra currently sells VitaFiber to food manufacturers only, the company is in talks with food retailers to launch a consumer product that will be available on store shelves sometime down the road.

Although BioNeutra's shares are now listed on the Venture Exchange, the company has no immediate plans to raise capital, since it can cover its costs through internal cash flow. Zhu says BioNeutra also plans to list its shares in Europe and in China, as a way to elevate its public profile.

"Our support has grown over the years. Now we have a lot of shareholders but nobody is selling their shares," says Smith. "They're hanging on to them. This is a real success story, and thank God we've got it here in Edmonton."

In fact, he says, with a mischievous twinkle in his eye: "I will say it's the most exciting company in the best city in the best province in the best country in the world."

Yup, Booster Bill hasn't changed one bit. glampier@postmedia.com

**This is a real success story — I will say it's the most exciting company in the best city in the best province in the best country in the world.**



# Local company pioneers biosciences in agriculture

STORY BY JANE CARDILLO

Tucked away on a quiet street in Edmonton's research park is a little processing plant with a sweet future.

The pilot facility, which takes up less than a whole floor in an office building, is the culmination of years of work by scientist Jianhua Zhu and his team at BioNeutra, Inc.

It is here that the company makes VitaSugar, a natural sweetener manufactured from the starch of Alberta wheat, barley and potatoes.

The product, which BioNeutra at the present time is aiming at commercial food and drink manufacturers, is not only low in calories but has health benefits associated with it too, says M. Qureshi, the company's chief scientific officer.

VitaSugar stimulates the growth of good bacteria – needed to maintain body health – in the colon, says Qureshi.

"It is the source of the growth of the good bacteria, it is nutrition for them," says Qureshi. "It is good for suppressing the (bad) bacteria."

Zhu, the company's president and CEO, notes that because VitaSugar is non-digestible in the stomach and small intestine, it also has qualities similar to a dietary fiber.

"Sweetness is just one of its properties," says Zhu, whose past positions include senior scientist at a local biopharmaceuticals company.

Both men believe the product holds great promise not only as a sugar substitute, but as a health food.

"In North America we have obesity and a lot of sugar consumption," says Qureshi, who holds a doctorate degree in biological sciences. "A lot of diabetes problems, heart, blood pressure problems. So many dairy products and soft drinks and other industries use a lot of sugar and that's not good for the health."

BioNeutra says its food additive, which is aimed at replacing sugar, can reduce cholesterol levels and prevent cavities.

Because the product can be made from a number of different grains, it could eventually be custom designed for allergy sufferers, says Zhu and Qureshi. In other words, someone allergic to wheat could choose the sweetener with a potato or barley base.

And unlike many sweeteners on the



CEO & President Dr. Jianhua Zhu and Marilyn Sharp, chair of the Agriculture and Food Council, at the opening of the BioNeutra's manufacturing pilot plant in August 2006.

market, VitaSugar is a natural product with no sharp after-taste, says Qureshi. "Our sweetener is not chemically synthesized... there are no chemical modifications."

BioNeutra is a rising star in Alberta's growing biotechnology industry.

Last August, the company opened its pilot plant, capable of producing 180 tonnes of VitaSugar a year from starch supplied by Red Deer grain processor Permoles.

It was also named emerging company of the year for 2006 by BioAlberta, a private, not-for-profit industry association that represents Alberta's bioindustry.

Now, plans are under way to build a full-

scale plant in the research park. When it opens in about a year-and-a-half, it will be able to produce 18,000 tonnes of VitaSugar annually, says Zhu, who holds a patent on the product name.

And the fact that a California company has started using the product in its breakfast bars sweetens the pot for the BioNeutra team. Eventually the company hopes to see VitaSugar in other products like yogurts, jams, soft drinks and desserts.

But success didn't come overnight to Zhu, Qureshi and a handful of colleagues who began looking at ways to start up the company in 2003.

The group tried for years to get the project off the ground.

*"Alberta has a lot of good raw material and this is a start."*

"We are scientists only," says Zhu with a smile. "We were struggling to raise the money and to get support from investors or from the bank."

They were so confident of their product's capabilities, members of the group even took out personal loans in an attempt to get the company started.

It was when the project came to the attention of the federal and provincial agriculture departments that good things finally started happening.

The BioNeutra pilot plant opened with a \$200,000 cash infusion from the Advancing Canadian Agriculture and Agri-Food (ACAAF) program.

"ACAAF proved very helpful and very supportive," says Zhu. "With the help of ACAAF we set up the facility and we had some training."

The objective of the ACAAF program is to position the agriculture and agri-food industry on the leading edge, says executive director Tom Switzer. "So whether to assist industry applicants in capturing opportunities, identifying new markets, anything that is unique and innovative."

Grants like the one given to BioNeutra help on a number of different levels, says Switzer.

"The grant is important in the formative stages. The ACAAF program and the Agriculture and Food Council act as somewhat of a catalyst to assist some of the emerging companies at a time when they need the assistance the most."

It all benefits the Alberta agriculture industry as a whole, says Switzer.

"Hopefully at the end of the day it will not only assist companies like BioNeutra, but the industry right down to the primary producers receiving more from their product."

"Plus diversifying is also very important. Not only selling the commodity on the world market, but also right at home, here in Alberta and using it for a product like BioNeutra."

Zhu and Qureshi agree that it would have been uphill work to get their company going without government support. "ACAAF was very important to start the company," says Zhu.

BioNeutra director and former Edmonton mayor Bill Smith agrees. "This is quite an exciting little company and the science and technology of what they have under Dr. Zhu is really quite exciting."

Adds Smith, "This is a food additive that has huge potential and scientific data to back it up to help with digestive systems. Clearly, start-up companies like this in biosciences need support provincially and federally."

Zhu and Qureshi believe companies like theirs are broadening the face of the agriculture industry in Alberta.

"It's an agriculture process but not traditional," Zhu says. "It's biotechnology combined with agriculture."

Qureshi points out that VitaSugar is a made-in-Alberta product. "We are using the starch processed from the Alberta-grown wheat, corn, potato and other crops."

But BioNeutra still has a long way to go, says Zhu, who notes that the company continues to look for investors to move it forward.

"Alberta has a lot of good raw material and this is a start," he says.

Qureshi says BioNeutra needs money to continue its expansion, which includes plans to establish a research team to investigate more health derivatives from agricultural products.

"We're still looking for other grants because we have to expand the plant and we have to expand our laboratory and other in-house facilities," he says.



BioNeutra manufactures VitaSugar, a natural sweetener made from the starch of wheat, barley or potatoes. Not only does it have health benefits, but it's also low in calories.

Zhu believes everyone involved in an endeavour like this will reap the benefits.

The starch used to make VitaSugar sells for \$200 a tonne while the sweetener itself sells for \$5,000 a tonne in the United States, Zhu says.

"The benefit is we have enough raw materials – starch, wheat barley. Alberta is an agriculture province. This is our raw material. At the same time, we are the first company to make this product, so the timing and location is very good."

## Grant dollars help industry in start-up phase

The Advancing Canadian Agriculture and Agri-Food Program (ACAAF) is one way emerging agriculture-related businesses in Alberta can get some financial help, says the program's executive director Tom Switzer.

"The grant is important in assisting them when they need it the most, and that's when they're just starting up," Switzer says. "They have a new idea, a unique concept and they do need that money to really assist the industry in capturing that unique opportunity."



The Agriculture and Food Council of Alberta administers the program in Alberta on behalf of Agriculture and Agri-Food Canada. The council is a non-profit society formed in 1994. It is an industry-led organization comprised of volunteer member representatives from across Alberta's agri-food industry.

The council is a catalyst for the agri-food industry to encourage growth, sustainability, competitiveness and profitability. This is accomplished through major programs such as ACAAF.

"The program has a five-year framework that's from April 1, 2004, to March 31, 2009," says Switzer. "In Alberta we have just under \$30 million over the five years to fund innovative projects."

The program funds projects under one of three pillars, says Switzer. The first is industry-led solutions to emerging issues. "So that's where industry identifies a market opportunity or a challenge and comes up with an approach as to how they will successfully manage that situation – so anything unique and innovative."

The second pillar aims at capturing market opportunities by advancing research.

"That's where maybe there's a piece of research and it's, 'How can we take that research and capture a market opportunity for the industry?'"

The third pillar is the sharing of information to advance a sector. "That could be policy dialogues, workshops, conferences, again, anything unique and innovative to assist the industry in moving forward," explains Switzer.

BioNeutra received a \$200,000 grant from the program to help it get its pilot processing plant built.

BioNeutra, like any other company that has already received funds under the program, can apply for more financial help, says Switzer.

"Certainly applicants can re-apply and we would view the new proposal in that it is innovative, unique, benefit to industry, supported by industry. That's always a key aspect in our committee's review."

## BISTRO Report

MISSED the Edmonton Journal's special publication, **BISTRO Report**? Go to Special Sections on [edmontonjournal.com](http://edmontonjournal.com).



# Booster Bill's work continues



**MARTY FORBES**  
@mjforbes

I'm a firm believer in mentorship and as my late father taught me the benefit of "hanging around with successful people."

As such I've been a friend and fan of one of Edmonton's biggest Boosters — in fact that's his nickname — Booster Bill Smith for many years now.

A former Edmonton Eskimo, business owner, and Mayor (1995-2004) Bill is now consulting with BioNeutra, which is a health and functional food company turning agriculture crops into natural products with nutritional benefits here in E-Town.

The story behind the company is simply amazing and the short version is an Edmontonian of Asian descent came to the U of A here many years ago with an idea. CEO Dr. Jianhua Zhu fell in love with the city/province and carefully built his idea into a world-wide product that is currently enjoying huge success selling low calorie sweetener ingredients to companies in Canada, the United States, and Europe. This year's sales could top \$24 million.

BioNeutra took over the old 47,000 square foot noodle factory on 99 Street by 23 Avenue, the company is in full construction mode to launch VitaFiber products that feature a low calorie food sweetener used in a multitude of products including energy bars for athletes.

Bill, now 80 years old, still works a full 9 to 5 (and more) job; travels all over the world co-ordinating business needs for the company; advising them on Canadian business practices all the while still proudly wearing his Edmonton hat in everything that he does.

It's another quiet story of huge world wide success, homemade right here in our own backyard, with a distinctly Edmonton connection



SUPPLIED

**Former mayor Bill Smith is now working with BioNeutra.**

providing mentorship, guidance, and sage advice.

So the gent who coined the phrase "the best city in the best province in the best country in the world" continues to be an impressive mentor and proudly states "I love to work and I've still got a lot of gas in the tank."

Good on you, again, Booster Bill Smith.

Now I'm a big Mayor Don Iveson fan, but I can't help but think that an invitation to have a coffee or lunch with Bill Smith might just give him a better insight into some of the past activity in our city (LRT for instance) that is an integral part to the future success of our city. Over to you Mr. Mayor(s).

Another huge "booster" of our city steps down soon — as the Downtown Business Association big guy Jim Taylor retires. This man deserves his own set of keys to our city having lived through the very low to the very highs of downtown development. If timing was an element in your decision Jim — well done — and thank you for all that you've done.

YEGMEDIA news — a few months back I wrote about our Heritage Minister, the Hon. Melanie Joly, announcing a big media review. This past week the formal announcement was released and is called "Canadian in a Digital World."

It's a full look at all media; radio and television, the arts,

film, music, etc. and it's an open consultation for Canadians to get involved in what the media of the future will be — focussed on expanding the success of our artists, writers, musicians, producers, actors, etc. beyond our borders to help reach success around the world as the products they produce enjoy exposure via the world wide web on digital platforms like YouTube, Spotify, iHeart Radio, Pandora (yet to arrive in Canada...but...) Roku, Apple TV, Hulu, as well as on all future digital platforms.

Under discussion will be the role of the CBC, the National Film Board, and the CRTC — and it's the first full review of media in several decades and also the first time 'digital' has ever been part of the conversation.

It's a coast-to-coast study and the Edmonton session will be on Monday, Nov. 7 (location to be determined).

You can participate in several ways. All information is available on the Canadian Heritage site via the Government's website, and you can follow them on Twitter @CdnHeritage with the hashtag #DigiCanCon

A whole new ball game is about to unfold. Long overdue. Speak up now, Canada.

Locally, congrats to CISN FM for scooping a few more industry awards. Last week the Canadian Country Music Awards were held back east and CISN picked up the highly coveted Station of the Year Award as well as a tie for the best On Air Team for the CISN morning show. Nobody works the community better than Chris Scheetz and his team of Jacqueline (soon to be a Mom) Sweeney and Matt DeBeurs.

Over at Bell (CTV) Sales Manager Susan Reade, a long time fixture in Edmonton radio, has been restructured out last week. Susan goes back to the Rob Christie morning show when it was on 630 CHED a few decades back as "Janet from another Planet." Her career has taken her to top sales and management positions in the market and is one of media's finest ambassadors. Best wishes my friend. Cliche or not "when one door closes...." so see you soon.



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## FOOD INDUSTRY

# SWEET SUCCESS

## BIONEUTRA WINS WITH THREE-IN-ONE VITAFIBER

Recent growth is backed by almost 30 years of ground-breaking research.

BY CAROLYN COOPER

Bill Smith chuckles a little when he recalls how he became involved with Edmonton biotechnology firm BioNeutra North America roughly 14 years ago. “To tell you the truth I never even thought about joining another company at that stage in my life,” he says.

It was 2005, the year after he stepped down as mayor of Edmonton, when BioNeutra founder, president and CEO Dr. Jianhua Zhu asked him to join the fledgling company’s board. “I did some investigation, and I thought, Wow! This is a new and exciting little company,” says Smith, who earned the nickname “Booster Bill” during his tenure as Edmonton mayor from 1995 to 2004, due to his unwavering promotion of the city.

“I thought the timing was great because the world was looking for healthier products, and sugar was the big elephant in the room at the time, so their sweetener product, VitaFiber, fit right in,” Smith explains. “It was also the only product in the world that we knew about that was a three-in-one ingredient: it was a fibre, it was naturally sweet and it was a prebiotic for digestion. I didn’t know much about the process, but I met Dr.

Zhu and I was very impressed with his knowledge and with what he wanted to do with the company – he had a sincere desire to create healthy products for people. So I started out on their board, then chairing the board, and I ended up working for them full time in 2007.”

Today the 83-year-old former mayor, business owner and Grey Cup champion (Smith played for the Edmonton Eskimos during the 1950s and early 1960s) is still chair of BioNeutra’s board, as well as senior vice-president of the company. His belief in the product has been more than validated, and the now publicly traded company has grown sales of its proprietary sweetener alternative VitaFiber IMO an incredible 1,378% in the past five years.

While many biotechnology companies fail, crushed by cash and regulatory challenges, BioNeutra continues to rack up awards and accolades. It hasn’t always been an easy road, Zhu admits, although his determination to develop more accessible, healthier products has never wavered.

“I’m not one to throw in the towel, and though we’ve had some close calls with the banker, I was certain that eventually we would succeed, and we did,” Zhu says. “Most importantly, we are helping to improve people’s health – that was always the goal.”

BioNeutra’s sweet success is actually the result of 27 years of



Highly automated production control centre.

innovation and research, starting in 1990s China, where Zhu, a chemical engineer, worked as a divisional vice-dean at the South China University of Technology.

“I came from a family that was dedicated to public health,” he says. “My parents and two sisters are medical doctors and my grandparents were involved





*Operator at a purification control station.*  
PHOTOS: ROBERT BRAY

the innovators, while also helping supplement the low pay the faculty received across the board.”

That was when Zhu first began working with four colleagues on a novel process to produce what would become the functional food ingredient VitaFiber IMO, based on his own goal of developing “a healthy new food ingredient to improve people’s health that could be produced commercially and inexpensively.”

### Committed to innovation

Research continued when Zhu was offered visiting professorships at Japan’s Yokohama National University and at the University of Alberta in Edmonton, where he and his family eventually settled in 1998.

After moving to the private sector and working for a succession of under-funded biotechnology companies, Zhu realized his concept would only be commercialized through his own efforts, and in 2003 established BioNeutra. When Smith joined the firm two years later it was housed at the Edmonton Research Park, a business incubator for start-ups and growing businesses, using a pilot plant for R&D.

Financing was an enormous challenge for the struggling company, and because Zhu was developing a novel process and functional ingredient, there were considerable regulatory hurdles to clear before getting VitaFiber to market. Regardless, interest from investors and government grew steadily, which Zhu says, “was key to getting private investment. The money was important, but the government funding provided a halo effect and legitimacy. That reassured investors the project was viable.”

Roughly \$13 million went into research to fund collaborative projects at the University of Alberta, including clinical studies and human trials in Canada and



*Plant manager checking the syrup purification process.*



*Bill Smith, senior vice-president of BioNeutra.*

in developing eastern medicines, so I had some entrepreneurship in my blood. Inspired by them and university professors, I wanted to make a difference in

public health, but by pursuing research.”

At that time universities “were being called upon to play a key role in China’s drive towards

industrialization,” explains Zhu, who enabled some of the 300 scientists working under him to commercialize their research and “use the profits to reward





*Dr. Jianhua Zhu discusses lab test results with company scientists.*

the US.

In 2009 Zhu and his four colleagues were awarded two patents in the US for the enzymatic conversion process that produces VitaFiber, followed by two Canadian patents in 2010. As a result, VitaFiber became the first IMO approved by Health Canada, the US Food and Drug Administration, the European Food Safety Authority, and Food Standards Australia New Zealand, allowing it to be sold in 30 countries. Food and beverage products containing the ingredient are allowed to use a health claim on the label that it “contributes to healthy digestion and weight management.”

VitaFiber IMO is an Iso-malto-oligosaccharide (IMO), a sweet, digestion-resistant carbohydrate found naturally in honey, miso, sake and soy sauce. IMO is manufactured through the “enzyme-catalyzed hydrolysis of starch” from various plant sources, according to Health Canada, and is a prebiotic and a soluble dietary fibre, meaning that it isn’t metabolized in the small intestine. Instead it ferments in the colon to produce beneficial bacteria in the

digestive system. Because it’s 50% to 60% as sweet as sucrose, IMO can be used as an inexpensive, low-calorie, natural sugar alternative, while offering the additional advantage of overall good gut health and weight management.

“We use a patented, highly controlled enzymatic process to transform starch molecules into branched-chain molecules made of four to seven units of glucose that contain a series of alpha (1-6) bonds,” Zhu explains. “The bonds are poorly digested by humans, they deliver fewer calories while providing fibre-like benefits.”

### Patented process

BioNeutra uses starch from peas, potatoes, tapioca, and non-GMO corn to produce VitaFiber in syrup or spray-dried powder format for use in a wide range of manufactured products, including bars, beverages, baked goods, confectionary and ice cream toppings. The versatile ingredient is vegan, certified halal and kosher, and is free of allergens, artificial colours and preservatives.

Smith believes BioNeutra’s patented process and commit-

ment to continual improvement has kept it growing while so many biotechnology companies fail. “The difference really is the product,” he says. “Dr. Zhu came around at the right time – the world was looking for good, clean healthy products, and for more natural ingredients, and we had the right product at the right time. When we started we had virtually no money to do advertising and promotion. We had one salesman going out and talking to manufacturers. It was a lot to do with word of mouth.”

As well as its functional properties, VitaFiber works well as a binder in food and beverage products, which Smith says, “helps in manufacturing and gives us a big edge up with some companies.”

Although BioNeutra has some direct-to-consumer sales, the majority of VitaFiber IMO is sold as an ingredient to manufacturers, with the largest demand coming from the US. Interest in IMO has grown significantly in recent years, as consumers increasingly avoid sugar due to health concerns, and as the market for digestive solutions matures along with our aging population. That’s been a boon to business for BioNeutra, which went public in November 2014. Zhu says sales of VitaFiber grew to “more than \$750,000 per week in the first nine months of 2018,” pushing total sales to between \$125 million and \$130 million in the past five years. Along its journey the company has been recognized with numerous business and innovation awards, including Bio-Alberta’s Emerging Company of the Year Award in 2006, the 2015

Ernst & Young Entrepreneur of the Year – Prairie Region award for Zhu, an Alberta Export Award in 2017, and an Alberta Business Award of Distinction in 2018.

Last year BioNeutra opened an \$11-million research and production complex in Edmonton featuring 5,000 square-feet of office and lab space, and a 45,000-square-foot plant with the capacity to produce 5,000 tonnes of product annually. The majority of production (roughly 15,000 tonnes annually) takes place at contract manufacturing plants in Indonesia and China, where Smith says the enzymatic process is identical, guaranteeing quality consistency. “We also have our own personnel in the plant in Indonesia checking on it all the time, and the [production] in China is a joint venture with us, so the control of the product is very tight.”

Smith says BioNeutra will launch branded products for retail later this year, while continuing to develop new functional food ingredients. “We’ve got great research and development people within the company, and I’m looking forward to some next-generation products that we’re working on. It’s an exciting time for the company, and I hope I can be around long enough to watch it grow.”

*Carolyn Cooper is a freelance business writer based in Kawartha Lakes, Ont. who has deep roots in the food and beverage industry. E-mail [cjcooperbrown@outlook.com](mailto:cjcooperbrown@outlook.com).*

**Comments?**  
**E-mail [jterrett@plant.ca](mailto:jterrett@plant.ca).**



*(L-R) Lab preparation for Q&A testing. Lab technician checks a high-performance liquid chromatography machine used for product analysis. Scientist prepares pH standard samples for calibrating equipment.*

FALL 2018

# western Food Processor

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Jianhua Zhu, PhD,  
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## Success is Sweet

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## on our cover

By Kathy Kerr

### BIONEUTRA – A RISING STAR IN CANADA'S BIOTECH WORLD

Edmonton-based BioNeutra is a runaway success story growing right alongside the skyrocketing worldwide demand for healthier and more natural foods.

The producer of natural food ingredient VitaFiber™, a low-calorie natural sweetener which is also a source of dietary fibre, is increasing staff and inaugurating a major new production facility in Edmonton.

"We're one of the major business and science success stories in Canada," says Warren Michaels, vice-president communications for the firm.

BioNeutra had about 37 employees in late summer and was adding more every week as it worked toward opening its new 45,000 sq. ft. facility in south Edmonton.

"We've retrofitted it top to bottom, spending about \$13 million, and start-up production in Canada is now underway," says Michaels in an August interview.

Although headquartered in Edmonton, the company has until now had its product produced in Indonesia and China.

The firm is also making some growing waves in the wider business community and national media. BioNeutra appears at number 55 in Canadian Business magazine's Growth 500 list announced this

fall, with revenue growth of 1,378 per cent between 2012 and 2017. The company's revenues for 2017 were \$32.1 million, an increase of \$6 million over the previous year, and are running at \$900,000 a week this year. The company has been described as an industry leader by the federal government, the Globe and Mail and the Conference Board of Canada. Biotechnology Focus, the country's top biotech magazine, featured BioNeutra in a three-page article calling it an innovation leader.

Many organizations have recognized the firm, including the ASTech Foundation, which awarded BioNeutra with its 2017 award for Outstanding Commercial Achievement in Alberta Science and Technology and the Association of Chinese Canadian Entrepreneurs, which named Dr. Jianhua Zhu, BioNeutra's founder and CEO, the recipient of its 2017 Most Innovative Entrepreneur award. In 2018 the firm is also a nominee for a prestigious Manning Award for Innovation.

All BioNeutra's products are variations on the core product, says Michaels. BioNeutra uses a patented process to use starches from a variety of agricultural crops, including wheat, barley, non-GMO corn and tapioca, to create a high-fibre prebiotic low calorie sweetener, known as an



# Success is Sweet



18 WFP





isomalto-oligosaccharide, or IMO for short. The product, which is available in syrup and powder form, is 50 to 60 per cent as sweet as sugar and can be used in beverages and a variety of foods.

The VitaFiber™ IMO products are primarily sold as a bulk ingredient to food manufacturers. The company has a global scope, says Michaels, with warehouses in Europe and the States and elsewhere.

VitaFiber™ is also good for home use and BioNeutra has also broken into the online retail market and is about to begin selling in natural health speciality stores.

"We're doing it in a measured way,"



says Michaels, starting in four or five U.S. states including California, Oregon and Washington state.

All this growth hasn't come overnight.

BioNeutra was founded by Zhu in 2003. The PhD in chemistry had been a vice-dean

of a university faculty of 300 professors in China. A visiting professor post in 1998 brought him to the University of Alberta. That led to positions at two biotech companies in Alberta, one of them CV Technologies, producer of COLD-FX.

And in 2003 he decided to start his own business with his patent for making VitaFiber. A U.S. patent for the VitaFiber process was awarded in 2009 in the U.S. and a Canadian patent in 2010.

It took patience and perseverance, but in 2012 BioNeutra became profitable.

Along the way the firm has had to prove its credentials as the producer of a healthy product.

"Science is a big driver for the company," says Michaels. "The product has been recognized by the world's top three health regulatory bodies: the FDA, Health Canada and the European Food Safety Authority among others."

One of the keys to VitaFiber's appeal for food manufacturers and health-conscious consumers is the fibre content of the product and its low calories. The product can be used in protein bars, beverages, ice cream and baked goods.

"Clearly we can help with weight management and clearly we can help with digestive issues, says Michaels and adds, "It's extraordinary how much money is spent on those problems alone."

The company's report points out that Canadians spend an estimated \$100 million each year on laxatives.

Publicly traded BioNeutra has been listed on the TSX-Venture exchange as BioNeutra Global Corporation (BGA) since 2015.



Back in the beginning the firm's first financing came from family, friends and grants from three levels of government.

Michaels says Zhu's long involvement with the University of Alberta is one of the factors which has led to the company's plans to expand in Edmonton.

"Part of the give-back is building a plant here, employing people here, paying taxes here and just contributing to the agribusiness here," he says.

Another factor may well be the company's chairman of the board and senior vice-president Bill Smith. Smith, who served as

mayor of Edmonton from 1995 to 2004, is well known as one of the city's biggest boosters. For a time the company had another prominent Edmontonian, former premier Dave Hancock, on its board as well. However, he stepped down when he was appointed a provincial court judge.

Now the company is coming full circle with its major manufacturing facility in Edmonton. There are challenges to growth, admits Michaels.

"This plant...we had hoped it would be running a little bit before now," he admits.

"When you look down our plant, it's almost a block long," says the former

television journalist who admits he has a soft spot for the visuals of assembly lines. "It is a pretty impressive picture."

While BioNeutra's retail products sold online are made from tapioca starch, Michaels is unwilling to reveal what the feedstock starch is for the Canadian production line. The product can be made from a variety of grains and crops but there are proprietary reasons to keep the base ingredient under wraps, he says.

"There are other people that make IMOs so we try to be cautious as to how much we share with them. They're out for our business and they try to eat our lunch." **WFP**



Many organizations have recognized BioNeutra.







# VITAFIBER SPELLS SWEET SUCCESS FOR ALBERTA BIOTECH RISING STAR

BioNeutra's bet on a natural prebiotic sweetener pays back big time



**B**utter is back in style – with a vengeance. Pea and hemp proteins are the de rigueur powders for smoothies. And forget about cutting carbs, it's all about sugar detox these days.

The trillion-dollar health and wellness industry is a fickle field and its road to success is littered with failed ventures.

This is a fact not lost on Dr. Jinhua Zhu, a bioengineer from China who is the founder and president of one of Alberta's fastest rising biotechnology companies making a name for itself in the lucrative health food and beverage market. Zhu's BioNeutra North America Inc. made half a million dollars in sales each week in 2016. VitaFiber IMO, the

company's starch-derived, prebiotic natural sweetener in syrup and powder form, generated \$70 million in sales over the last four years.

How Zhu, 58, and his team managed to transform raw agricultural products easily found in Alberta into a commercially successful product is instructive for any biotech startup seeking to take their scientific research from the laboratory to the market place.

Zhu pointed out that while his company is 14-years-old, he actually began working on the idea behind VitaFiber 27 years ago.

"But all that time, I was very conscious that I needed to commercialize my research," he said. "The scientific research is essential but it's critical that you also know your market."



### The entrepreneur mindset

It is a mindset that is not typically associated with scientists, but it was an idea that was inculcated into Zhu very early on in his career. His grandparents were entrepreneurs in China.

When he was 18, Zhu entered university in 1978, a time when China was still re-organizing its university system following the Cultural Revolution. Competition to get in was stiff, but Zhu managed to get in and thrive.

Zhu earned a PhD in biochemistry and later, at the age of 30, he was appointed vice-dean of the Institute of Chemistry and Chemical



"You can't imagine how many presentations I had to make to raise money. If you have passion, you can convince people of the merit of your idea. One university chairman said to me: 'I realize I might never see my money again, but I believe in you.' That was pretty humbling."

— Dr. Jinhua Zhu



Engineering – a division of South China University of Technology. He was placed in charge of three departments and about 300 professors.

"Universities were called upon to play a key role in China's drive towards industrialization, and I was eager to get involved," he said. "I helped my professors commercialize some of their research. I used the profits to reward the initiators while helping supplement the low pay the faculty received across the board."

Zhu also did a stint in Japan's Yokohama University. He came to Canada in 1998 after receiving an invitation from the University of Alberta to work in its chemical engineering department.

It didn't take long for the new immigrant to realize that the challenges he encountered in China were also present in his new home.

Two years after arriving as a visiting professor, Zhu was hired – and laid off twice by two biotech companies that were struggling to stay afloat.

"At that time, it was common for companies to open and close, open and close," he recalled. "These spinoffs were launched by university professors who had great ideas, but weren't usually trained to run a business." Many had no experience in raising the money needed by their businesses. Nor did they usually have any training in hiring or managing staff or how to market their products. "...often, they were poorly financed and before they knew it, they had given away the farm to survive. Today things have significantly improved," Zhu said.

### Starting BioNeutra

Zhu himself had no money when he set out to build BioNeutra.

His wife, Dr. Jiangyan Qin, a QA/QC scientist at an Edmonton pharmaceutical company, knew the venture would require Zhu's maximum effort and attention. She agreed to pitch in.

"My wife and I discussed the matter," he said. "She agreed that she would pay for the mortgage, car and household expenses for six months to see if I could make a go of it."

Then, Zhu approached family and colleagues. Alberta Agriculture and Forestry also agreed to provide \$15,000 for a feasibility study if he could match the amount.

"You can't imagine how many presentations I had to make to raise money. If you have passion, you can convince people of the merit of your idea," said Zhu. "One university chairman said to me: 'I realize I might never see my money again, but I believe in you.' That was pretty humbling."

### Knowing your market

Zhu had done his research.

Stats Canada was predicting that by 2019 more than 14 million Canadians would be considered overweight. Numerous studies already indicate that North Americans are suffering from digestive problems. In the U.S. alone, statistics show that 42 million people suffer from constipation. Americans have spent \$6.4 billion on laxatives over the past five years.

"In Canada, experts say our diet is fibre starved," Zhu explained. "On average, our daily fibre intake should be 38g for men and 25g for women. Instead, we are getting 15 to 18g per day."

At the same time, the public was increasingly becoming averse to sugar and consumers were in search of an ideal alternative.

Zhu, however, did not want to simply introduce another low-calorie, natural sweetener. He wanted to focus on something that provided additional health benefits.



Today, BioNeutra sells VitaFiber to food manufacturers in the U.S. and Europe. The product is added to protein bars, ice cream, beverages, and confectionaries.

This was where the idea of creating VitaFiber, a starch-based, prebiotic sweetener, came from.

"We all know that fibre is something that helps us with regularity and cholesterol," said Barry Charnay, VP/Business Development for BioNeutra. He noted numerous reports show that fibre claims on food packaging are on the rise and that consumers have been seeking out fibre-rich products and supplements.

It was also at this time, Charnay said, that the public was being educated through the media about the benefits of prebiotics.

From the start, Zhu said he was determined to make VitaFiber from naturally derived sources available locally in Alberta. For instance, potato, which is a source of starch, is abundant in the province.

VitaFiber is isomalto-oligosaccharide (IMO), a new category of health food ingredient which is known for its weight management properties. It is derived from cassava, corn, potato and other cereal crops.

BioNeutra uses a patented, highly controlled enzymatic process to transform starch molecules into branched-chain molecules made of four to seven units of glucose which contain a series of alpha-(1-6) bonds. The bonds are poorly digested by humans, so they deliver fewer calories while providing fibre-like benefits.

## Early challenges

One of Zhu's first moves was to get the technology patented. Then, he needed to leap over the regulatory hurdles.

BioNeutra had to conduct multiple tests to prove that VitaFiber was safe and that it provided the benefits the company claimed it did.

The company spent \$13 million to conduct a series of collaborative research projects with the U of A and then presented the findings of the studies and human clinical trials to Health Canada, the U.S. FDA and the European Food Safety Authority. It was only after this, that BioNeutra received the green light to sell VitaFiber in 30 countries.

Today, BioNeutra sells VitaFiber to food manufacturers in the U.S. and Europe. The product is added to protein bars, ice cream, beverages, and confectionaries.

By 2012, BioNeutra became profitable. The product has been featured in various media outlets, and Zhu was honoured by the Alberta Legislative Assembly for his business and scientific achievements.

The company manufactures VitaFiber in Indonesia and China and will be opening its own plant in Canada soon.

This year, Zhu is also a nominee for the innovation category and

BioNeutra is a finalist in the company category for the 2017 ASTechs science and technology awards.

During the last two years, BioNeutra has been successful in selling a retail line of VitaFiber to consumers through Amazon and Shopify. This year, BioNeutra will be slowly rolling out VitaFiber through select health stores and retailers.

To aspiring bio entrepreneurs, Zhu gives these pointers which he has learned over the years:

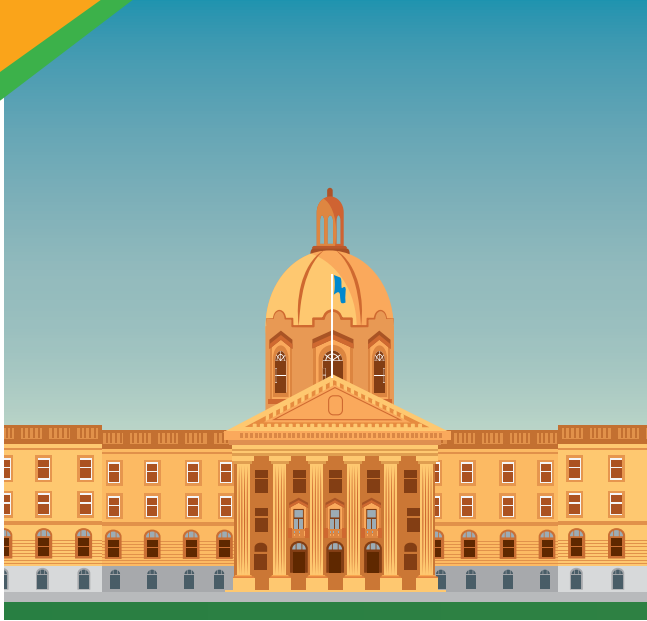
- Be strategic in choosing your market and build on success.
- Keep tight control of your expenditures. Whether your revenues are small or great, it's important to keep an eye on the bottom line.
- Pursue awards. They provide peer and media recognition.
- It's a cliché, but surround yourself with smart people.
- If you're passionate, prove it. If you're a university professor with a project that can be commercialized, go for it; otherwise, it's just pure research.

"Take a chance," said Zhu. "And as you grow, display a healthy degree of skepticism regarding the many pitches that will come your way."

► To see this story online visit  
<https://biotechnologyfocus.ca/vitafiber-spells-sweet-success-for-alberta-biotech-rising-star/>

## The BioNeutra Story

### INNOVATION! DIVERSIFICATION! RESEARCH!



Governments have long positioned themselves as supporters and promoters of innovation, diversification and research - three key societal drivers. And back in 2003, for a little Edmonton start-up, they were critical.

Today, BioNeutra is one of Canada's newest science and business success stories with sales running at more than \$1/2 million a week. But 17 years ago it was a different story. BioNeutra founder and CEO, Dr. Jianhua Zhu recalls the struggles he faced in starting the company. "We knew we had great science, but we didn't have a single dollar to invest."

He adds, "Government support was key to getting private investment. The money was important, but the government funding provided a halo effect that reassured investors that the project was viable."

Dr. Zhu says, "It wasn't easy convincing either of them. You don't know how many presentations I had to make. But in the end I received the money from people who believed in the idea. One university department chairman told me, 'I realize I might never see my money again, but I believe in you.' That's pretty humbling. I'm truly grateful to them for their faith in me."

Much of BioNeutra's initial funding went for research - about \$13 million. It funded collaborative research projects at the University of Alberta and other research NGOs involving clinical studies and human trials in both Canada and the U.S. Three levels of governments provided \$3.5 million in funding including research grants. Their return on their investment has been jobs, taxes, scientific knowledge and the development of patented technology. "And in the case of the U of A, in 2016 we donated a pilot plant to them valued at \$1.5 million," says Dr. Zhu.

BioNeutra owes some of its development to cooperation between two countries - Canada and China. In the Company's early years, the Alberta government joined with its provincial counterpart in China in funding a research project which was key to the development of BioNeutra's patented technology.

In looking back, Dr. Zhu says, "I owe a debt of gratitude to a number of government departments and related agencies and to the University of Alberta for their commitment and support at key steps along the way as we grew."

So how did it all start? It began 29 years ago with the 'dream' of a young chemistry professor in China's third largest city. China was slowly opening the door to the West. The young idealist was Jianhua Zhu who was just starting his teaching career at the South China University of Technology after being awarded a PhD a year earlier. The year was 1990.

Dr. Zhu came from a family which was dedicated to public health, his parents and two sisters are medical doctors and his grandparents were involved in development eastern medicines. Inspired by them and his university professors he had an idea to develop a new health food ingredient to improve people's health that could be produced commercially and inexpensively. To do so, he knew he needed a team of researchers with diverse experience. So he convinced various colleagues to join him on his scientific journey. Soon they were hard at it. And soon too, he was appointed vice dean of the chemistry faculty with about 300 professors reporting to him. So now he had to juggle administrative duties with his research work. Six years later he accepted a position as a visiting professor in Tokyo and in 1998 he was offered yet



another appointment as a visiting professor at the University of Alberta in Canada. In both countries he continued his research.

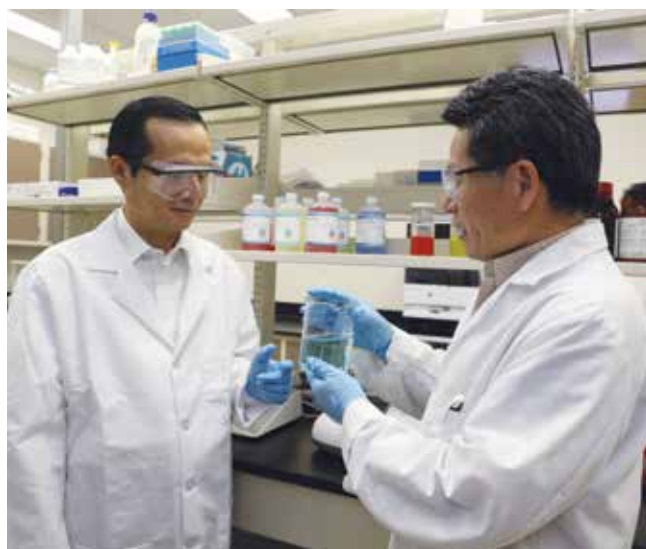
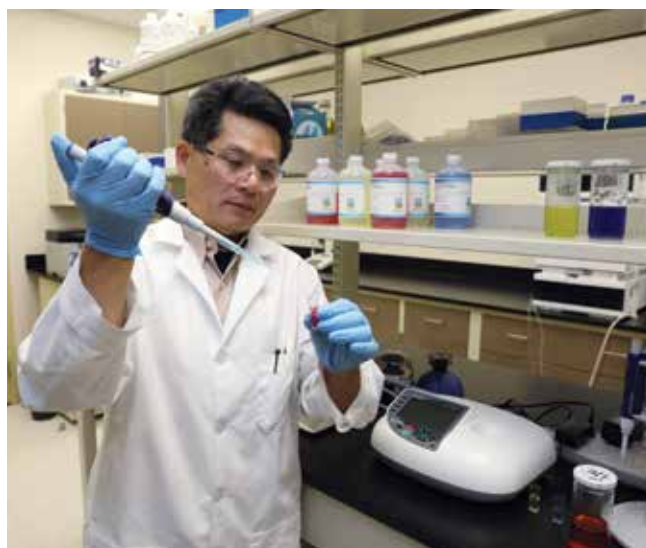
In 2000, he was offered the job of senior scientist at an Edmonton biotech. It ran into financial trouble and he was laid off. He went to his second biotech and the same thing happened. It was at his third biotech that in 2003 he made an important but risky decision to found his own biotech company which he called BioNeutra.

It was make or break time. And he was intent on making it. For the next seven years he raised money to keep his struggling start-up afloat while leading the Company's research efforts which included collaborating with the U of A. All that persistence and hard work paid off in 2009 when he and his four colleagues were awarded two patents in the U.S. for their unique natural enzymatic conversion process. In 2010 they were awarded two Canadian patents.

The patents were for a process that transformed starch from agricultural crops like wheat, barley, non-GMO corn and tapioca into a low calorie, natural sweetener which wasn't just a new alternative sweetener, but one which was also a prebiotic and dietary fiber and which because of those unique features could provide health benefits, too. Dr. Zhu believed in food could be medicine as did Hippocrates - the father of modern medicine - who said 2,400 years ago - "Let food be they medicine and medicine be they food." Around the same time the world's top three health regulatory bodies reviewed the Company's research studies and trials. They gave the Company the green light to sell the new, healthy sweetener in 30 countries.

2012 was a banner year for BioNeutra - it was the Company's first profitable year, In 2014 BioNeutra was listed on the Canadian Stock Exchange. In 2015 it moved to the TSX-V Exchange. And during those years sales grew and grew and grew. They're now soaring. In 2018, **Canadian Business** magazine ranked BioNeutra as one of Canada's fastest growing companies with a five-year growth rate of 1,378%. To date it has sold a cumulative \$140 million of VitaFiber. To meet growing customer demand it built and in 2018 opened a brand new, massive 45,000 sq. ft. production plant in Edmonton, Canada to compliment its contract manufacturers in Indonesia and China. The struggling start-up of 2003 has become one of Canada's top award winners in both science and technology. Cover story of various magazines have described it as "...a rising biotech star."

And each day that star shines ever brighter.



# Major Milestones

## 2003

- Dr. Zhu launches BioNeutra in Canada, seeks financing from family, friends, colleagues, government and other funding agencies

## 2006

- Pilot Plant opened in Edmonton Research Park

## 2010

- Canadian Patent Office issues patent
- Agreement signed with contract manufacturers in Indonesia & China

## 2013

- EFSA approval for VitaFiber is issued for Europe

## 2015

- BioNeutra begins selling VitaFiber on line
- BioNeutra stock listed on TSX -V (BGA)

## 2018

- Canadian production plant operational

## 2005

- BioNeutra begins \$13 million collaborative research program (human trials, studies) with various University of Alberta departments and other research NGOs. BioNeutra is currently working with the U of A on the development of new products.
- First patent for scientific process issued by Chinese Patent Office

## 2009

- U.S. FDA/GRAS approval, Health Canada approval of VitaFiber
- U.S. Patent Office issues patent

## 2012

- BioNeutra's first profitable year

## 2014

- BioNeutra stock listed on CSE-X
- Plant purchased in Edmonton for Canadian VitaFiber production plant, training, education, QA, QC and corporate headquarters

## 2016

- Equipment Installation and retrofitting Canadian production plant begins

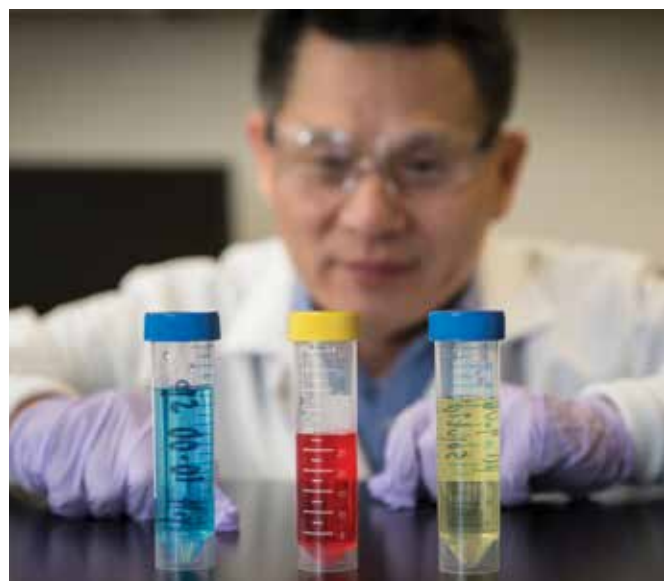
## 2019

- Ranked by Globe and Mail and Canadian Business among Canada's top businesses.





Totes for Commercial Sales







Edmonton Production Plant



Quality Control, Bottling line











**BioNeutra Global Corporation**

# **2018 FINANCIALS**

# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### INTRODUCTION

The following Financial Report for BioNeutra Global Corporation (“BioNeutra” or the “Company”), prepared as of April 26, 2019, should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2018 and the notes thereto.

The Company prepares its financial statements in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standard Board (“ISAB”). BioNeutra’s Management is responsible for the information disclosed in this report and is also responsible for ensuring procedures and controls exist within the Company that will provide reasonable assurances regarding the reliability of the Company’s financial reporting and its compliance with IFRS. In addition, the Company’s Audit Committee and Board of Directors provide an oversight role with respect to the Company’s accounting and audit procedures and its public disclosures. The Audit Committee and Board of Directors have reviewed and approved this Report and the accompanying audited consolidated financial statements.

Additional information on the Company, including its annual audited consolidated financial statements, is available on SEDAR ([www.sedar.com](http://www.sedar.com)).

### FORWARD-LOOKING INFORMATION

This report may contain “forward-looking statements” within the meaning of applicable Canadian securities legislation. All statements, other than statements of historical fact, included herein may be forward-looking statements. Generally, forward-looking statements may be identified by the use of forward-looking terminology such as “plans”, “expects” or “does not expect”, “proposed”, “is expected”, “budgets”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates” or “does not anticipate”, or “believes”, or variations of such words and phrases, or by the use of words or phrases which state that certain actions, events or results may, could, would, or might occur or be achieved.

These forward-looking statements involve risk and uncertainties, reflect the Company’s current beliefs and are based on information currently available to the Company and on assumptions the Company believes are reasonable. These assumptions include, but are not limited to, demand for the Company’s products, meeting budgets and forecasts and future costs and expenses being based on historical costs and expenses, adjusted for inflation. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from any future results, level of activity, performance, or achievements expressed or implied by such forward-looking statements. Such risks and other factors may include but are not limited to: the stage of development of the Company’s products; general business, economic, competitive, political and social uncertainties; the customer base for the Company’s products; competition; delay or failure to receive regulatory approvals; changes in laws and regulations affecting the Company; timing and availability of external financing on acceptable terms; intellectual property risks; and loss of key individuals.

Although the Company has attempted to identify important factors that could cause actual results to differ materially from those described in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking statements. The Company does not undertake to update any forward-looking statements, except in accordance with applicable securities laws. Please see the section titled “Risk Factors and Uncertainties” below for a discussion of the risks, uncertainties and assumptions used to develop our forward-looking statements.

# BIONEUTRA GLOBAL CORPORATION 2018 FINANCIALS

## OVERVIEW OF THE BUSINESS

Through its wholly-owned subsidiaries, BioNeutra North America Inc. ("BioNeutra North America") and BioNeutra International Limited ("BioNeutra International"), the Company is in the business of research and development, production and commercialization of ingredients for nutraceutical, functional and mainstream foods and beverages, with a focus on oligosaccharides. The company is listed on the TSX Venture Exchange (the "TSXV") under the symbol "BGA".

The Company's lead product, VitaFiber™ IMO is an advanced functional and health food ingredient naturally derived from agricultural products, is generally regarded as safe (GRAS) by the U.S. Food & Drug Administration, and is European Food Safety Authority and Health Canada approved. VitaFiber™ IMO is naturally sweet and lower in calories than regular sugar and is a natural source of dietary fiber as it provides low calorie soluble prebiotic fiber for human digestive health.

The Company produces VitaFiber™ IMO using its patented processes that naturally transform starch molecules from agriculture cereal crops including corn, wheat, barley, potato, tapioca, or pea into the functional health molecules of isomalto-oligosaccharide (IMO). The VitaFiber™ IMO manufacturing process is based upon a natural enzymatic conversion of starch molecules without any chemical additives, making VitaFiber™ IMO a natural food ingredient. VitaFiber™ IMO is also non-GMO, vegan-friendly, gluten-free, Kosher and Halal certified and available as certified organic.

The Company's customers include a mix of small and medium enterprises and a number of high-profile food manufacturers in Canada, the U.S.A, Europe, and the United Kingdom. VitaFiber™ IMO is also available for retail purchase across the globe through Amazon.com, Shopify.com.

Further information about BioNeutra is available on the Company's website at [www.bioneutra.ca](http://www.bioneutra.ca), the SEDAR website at [www.sedar.com](http://www.sedar.com) and on the TSXV website at [www.tsx.com](http://www.tsx.com).

## HIGHLIGHTS FOR THE YEAR ENDED DECEMBER 31, 2018

BioNeutra's financial situation remained healthy and continued to increase market share in 2018 after significant sales growth in 2017. Overall sales performance increased 18% or \$5.6 million during 2018 compared to 2017, driven by higher sales of corn, Tapioca and other IMO Products. The sales increased year-over-year in each of the geographic segments.

In order to respond to customer demand for products, BioNeutra has invested in a Canadian production facility.

- Sales for the twelve-month periods ended December 31, 2018 were \$37,717,111 respectively. Sales increased 18% or 5.6 million during 2018 compared to 2017. The Company continually focus on bringing its VitaFiber™ IMO products to food and beverage manufacturers targeting functional and health food markets and growing retail sales for personal uses.
- For the year ended December 31, 2018, the company generated \$3,103,014 in net income, as compared to a loss of 1,160,897 in fiscal year 2017, an increase of approximately 4.26 million net income. The increase in net income was primary due to the increase in customer demand, the strength in foreign currencies relative to the Canadian dollar, and the expansion its worldwide distributions
- For fiscal year of 2018, Accounts payable was \$12.3 million as compared to 6.6 million for fiscal year 2017. The increase in accounts payable is mainly attributable to the purchase of inventories from suppliers to support increased of sales
- At December 31, 2018, the Company had cash of \$1,497,580. This represents an increase over the cash of \$1,385,689 as at December 31, 2017.

BioNeutra continues its leadership role with VitaFiber™ IMO approved by the world's top three regulators – Health Canada, FDA and the European Food Safety Authority for sale in 30 countries. BioNeutra's sales territory is expanding further to India, Australia, Spain, Poland, Sweden, New Zealand and South America.



# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### SUMMARY OF QUARTERLY RESULTS

FOR THE FISCAL QUARTERS ENDED:

	FY 2018				FY 2017			
	31-Dec	30-Sep	30-Jun	31-Mar	31-Dec	30-Sep	30-Jun	31-Mar
Consolidated								
Total revenue	7,280,734	8,389,824	12,193,507	9,853,046	8,031,267	7,868,787	8,885,299	7,352,690
Cost of sales	6,233,157	6,042,560	8,211,162	6,827,693	5,512,642	6,675,847	5,746,546	4,933,591
Gross profit (loss)	1,047,577	2,347,264	3,982,345	3,025,353	2,518,625	1,192,940	3,138,753	2,419,099
Net income (loss)	1,712,465	(839,122)	604,339	1,625,332	(679,995)	(1,214,142)	620,384	112,856
Comprehensive income (loss)	2,413,198	(1,111,485)	841,327	1,959,037	(636,577)	(1,662,704)	234,966	(3,709)
Current assets	23,178,380	22,796,977	21,953,839	17,467,821	14,272,051	13,201,417	17,608,128	18,113,598
Non-current assets	16,808,183	16,634,204	17,526,706	17,290,548	16,698,674	16,239,495	16,135,059	16,728,037
Total assets	39,986,563	39,431,181	39,480,545	34,758,369	30,970,725	29,440,912	33,743,187	34,814,635
Current liabilities	13,849,412	14,036,467	13,034,609	10,695,633	8,837,804	8,976,776	8,424,795	10,008,701
Non-current liabilities	8,078,432	9,749,183	9,688,920	8,147,047	8,176,279	7,749,384	9,062,468	9,053,245
Total liabilities	21,927,844	23,785,650	22,723,529	18,842,680	17,014,084	16,726,160	17,487,263	19,061,946
Cash	1,497,580	3,838,033	5,004,004	590,205	1,385,689	1,054,202	1,324,658	685,025
Working capital	9,328,968	8,760,510	8,919,230	6,772,188	5,434,247	4,224,641	9,183,333	7,984,897
Equity	18,058,719	15,645,531	16,757,016	15,915,689	13,956,642	12,714,752	16,255,924	15,779,689

Notes:

<sup>1</sup> For the net income per share for quarter ended March 31, 2017 to December 31, 2018, weighted average number of shares of 45,949,787 was used.

## BIONEUTRA GLOBAL CORPORATION

# 2018 FINANCIALS

The table above shows the company's financial performance. Over the past eight quarters, the general trend of the Company's revenues and gross profits have been positive. In addition, the Company's working capital and asset base remains strong.

The Company continues to exploit its worldwide distribution rights for VitaFiber™ IMO and has increased its sales with access to new international markets in the United Kingdom and other European region. International sales are supported by warehousing facilities in Port Reading, Fontana, Youngwood, Amsterdam, Brampton, Quebec, Edmonton, Melbourne, Arshiya-India.

Consumers worldwide are recognizing the positive lifestyle and health benefits of VitaFiber™ IMO, and the Company is taking advantage of increasing market demand for functional and health food and beverage ingredient products on both business-to-business and business-to-consumer levels. Consumers around the globe are now purchasing VitaFiber™ IMO from numerous direct-to-consumer retail outlets, including from prominent global online retailer Amazon.com and Shopify.com.

In the twelve-month period ended December 31, 2018, the Company recorded a net income of \$3,103,014, as compared to a net loss of \$1,160,897 for the twelve-month period ended December 31, 2017. The expansion of its worldwide distribution, the increase in customer demand, the growth of gross margin percentage and the strength in foreign currency gain had favorable impacts on the net income during 2018.

## SUMMARY OF CONSOLIDATED FINANCIAL RESULTS

### REVENUE

Revenue from:

	Twelve Months Ended December 31, 2018	Twelve Months Ended December 31, 2017	Twelve Months Ended December 31, 2016
Sales	\$ 37,717,111	\$ 32,142,432	\$ 25,990,616

Total sales were \$37,717,111 for the twelve-month period ended December 31, 2018, as compared with \$32,142,432 for the twelve-month period ended December 31, 2017.

The Company's strong sales are a result of continually increasing sales to major functional food and beverage manufacturers who in turn continue to experience significant growth in their own sales. In addition, the Company's customer base continues to grow as mainstream functional and health food and beverage manufacturers and nutraceutical companies are creating products incorporating VitaFiber™ IMO.

# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### SUMMARY OF CONSOLIDATED FINANCIAL RESULTS

#### GROSS PROFIT

Revenue from:

	Twelve Months Ended December 31, 2018	Twelve Months Ended December 31, 2017	Twelve Months Ended December 31, 2016
Sales	\$ 37,717,111	\$ 32,142,432	\$ 25,990,616
Cost of Sales	27,314,572	24,901,288	16,773,645
Gross Profit	10,402,539	7,241,144	9,216,971
Gross Margin %	28%	23%	35%

The Company's gross profit was \$10,402,539 for the twelve-month period ended December 31, 2018. This compares with \$7,241,144 for the twelve-month period ended December 31, 2017.

The Company's gross margin as a percentage of sales was 28% for the twelve-month period ended December 31, 2018. This compares with 23% for the twelve-month period ended December 31, 2017.

Gross Margin increased in 2018 compared to 2017 primarily due to the increase in price of certain products, partially offset by higher product cost structures. In addition, the strength in foreign currency gain due to the strong US dollar had played a positive role in gross margin and gross margin percentage during 2018.



# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### SUMMARY OF CONSOLIDATED FINANCIAL RESULTS

#### EXPENSES

	Twelve Months Ended December 31, 2018	Twelve Months Ended December 31, 2017
Professional fees	685,932	600,181
General and administrative	1,157,190	1,186,250
Sales and marketing	1,144,896	742,549
Salaries and benefits	2,433,916	1,960,569
Share based compensation	-	241,268
Amortization of intangible assets	818,466	742,549
Research and development	476,726	227,517
Management fees	-	22,080
Warehouse costs	1,128,610	1,194,923
Interest on long-term debts	493,391	461,607
Depreciation of property, plant and equipment	157,976	285,038
Interest and bank charges	70,493	57,202
<b>Total expenses</b>	<b>8,567,596</b>	<b>7,824,088</b>
<b>As a percentage of revenue</b>	<b>23%</b>	<b>24%</b>

Total expenses were \$8,567,596 for the twelve-month period ending December 31, 2018, representing increases from \$7,824,088 for the twelve-month period ending December 31, 2017. The increases were mainly due to the following:

- (1) an increase in professional fees of \$85,751
- (2) an increase in sales and marketing expenses of \$402,347
- (3) an increase in salaries and benefits expenses of 473,347
- (4) a decrease in share-based compensation of 241,268 and management fees
- (5) an increase in R&D costs of \$ 249,209
- (6) a decrease in Depreciation of 127,062 is mainly due to depreciation allocated to the cost of production.

# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### OTHER INCOME

	Twelve Months Ended December 31, 2018	Twelve Months Ended December 31, 2017
Grants	-	\$ 41,500
Interest and other	8,584	21,242
Debt forgiveness	-	393,034
Gain on extinguishment of liabilities of previous discounted operations		
Foreign exchange gain (loss)	1,612,271	(952,152)
<b>Total Other Income (expenses)</b>	<b>\$1,737,666</b>	<b>(\$496,376)</b>

The increase in other income for the year is mainly due to foreign currency exchange gain of \$1,612,271 (loss of \$952,152 in 2017).

### INCOME TAX EXPENSE (RECOVERY)

As of December 31, 2018, the Company had Canadian tax losses with a tax benefit of \$564,198 (2017 - \$386,455).

The Company recognizes the benefit of tax losses only to the extent of anticipated future taxable income that can be reduced by the tax losses. These losses may be carried forward and expire as follows:

Year	Tax Loss Expiring
2031	\$931,284
2033	30,331
2038	1,128,006
<b>Total</b>	<b>\$2,089,621</b>

### NET INCOME (LOSS)

#### Net Income

	Twelve Months Ended December 31, 2018	Twelve Months Ended December 31, 2017	Twelve Months Ended December 31, 2016
Net income (loss)	\$ 3,103,014	\$(1,160,897)	\$ 1,079,557

The Company recorded a net income of \$3,103,014 for the twelve-month period ended December 31, 2018 as compared with a net loss of \$1,160,897 for the twelve-month period ended December 31, 2017.

The Company's net income in the twelve-month period ended December 31, 2018 is the result of the expansion of its worldwide distribution, the increase in customer demand, the growth on the gross margin percentage, the offset by increased cost, the strength in foreign currency gain and the positive effect of foreign currency.

# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### FINANCIAL CONDITION & LIQUIDITY

	Twelve Months Ended December 31, 2018	Twelve Months Ended December 31, 2017
<b>Cash provided by:</b>		
<b>Operating Activities</b>		
Net income (loss)	\$ 3,103,014	\$ (1,160,897)
Items not affecting cash		
Inventory write down	2,106,699	2,856,646
Inventory recovery	(1,483,670)	-
Depreciation of property, plant & equipment	157,976	285,038
Amortization of intangible assets	818,466	844,904
Deferred income tax	543,610	81,577
Share-based compensation	-	241,268
Interest income on investment	(7,582)	(3,691)
Debt forgiveness	(105,986)	(393,034)
Change in non-cash working capital balances	(2,740,518)	(963,929)
	<b>2,906,875</b>	<b>2,245,798</b>
<b>Investing Activities</b>		
Redemption of investment	2,047,413	2,023,276
Purchase of investment	(2,047,413)	(2,023,276)
Purchase of property, plant & equipment	(770,649)	(1,975,881)
Purchase of intangible assets	(52,633)	(37,331)
	<b>(823,282)</b>	<b>(2,013,212)</b>
<b>Financing Activities</b>		
Proceeds from mortgages	376,648	2,159,116
Repayment of mortgages	(1,444,829)	(1,713,545)
Financing fee paid	-	(8,725)
Interest paid	(495,851)	(438,401)
Repayment of government contribution	(31,250)	(31,250)
Repayment of capital lease	(49,818)	(53,168)
	<b>(1,645,100)</b>	<b>(85,973)</b>
<b>Increase in Cash</b>	<b>438,493</b>	<b>146,613</b>
<b>Effect of foreign exchange</b>	<b>(326,602)</b>	<b>647,371</b>
<b>Cash, beginning of year</b>	<b>1,385,689</b>	<b>591,705</b>
<b>Cash, end of year</b>	<b>\$ 1,497,580</b>	<b>\$ 1,385,689</b>
<b>Cash consist of</b>		
Cash on deposits	1,586,242	1,385,689
Bank indebtedness	(88,662)	-
	<b>\$ 1,497,580</b>	<b>\$ 1,385,689</b>



# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

At December 31, 2018, the Company had a working capital of \$9,328,968. The working capital as at December 31, 2017 was \$5,434,247.

During 2018, Cash generated by operating activities of 2.9 million was a result of 3.1million of net income and a decrease in the net change in operating assets and liabilities of 2.7 million, particiially offset by non-cash adjustments to net income of 2 million, as compared to cash of \$2.2 million generated by operating activities during 2017.

The Company has a credit facility of \$2,000,000 to assist with working capital needs that is due on demand, bears interest at prime plus 1.50% per annum and is secured by a first charge on accounts receivable and inventories. The Company also has a revolving facility of \$500,000 to assist with the acquisition of equipment and/or leasehold improvements.

The Company believes that its existing balance of cash and cash equivalents and operations will be adequate to fund the needs of its working capital, outstanding commitments and other liquidity requirements associated with its existing operations over the next 12 months. In addition, management is confident that the increasing consumer demand for functional and health food product ingredients like VitaFiber™ IMO will not only result in recurring sales but continue to increase revenues and profitability of the Company. The Company is committed to having VitaFiber™ IMO included in the development of new and healthy functional food products that the market and consumers are demanding from food manufacturers.

### TOTAL ASSETS

The total assets of the Company were \$39,986,563 on December 31, 2018, as compared to \$30,970,725 on December 31, 2017 and \$36,598,291 on December 31, 2017. The increase in the Company's asset base was primarily due to the purchase of inventories, and the increase of account receivable as the result of the rise of customer demand.

The Company's inventories increased to \$16,874,431 at December 31, 2018, as compared to \$9,894,448 at December 31, 2017.

The Company's property, plant and equipment increased to a net book value of \$14,407,341 at December 31, 2018, as compared to \$13,596,242 at December 31, 2017. The change in the Company's property, plant and equipment is primarily attributable to the capitalization of borrowing costs, the purchase of production line assets and the strength in foreign currencies that offset by depreciation and amortization.

### TOTAL LIABILITIES

At December 31, 2018, the total liabilities of the Company were \$21,927,844, compared to \$17,014,083 on December 31, 2017. This increase in total liabilities was primarily as the result of purchase of increased inventories during 2018. Total non-current liabilities of the Company were \$8,078,432 on December 31, 2018, compared to \$8,176,279 on December 31, 2017 and \$8,953,407 on December 31, 2016. The change of total non- current liabilities of the Company was mainly due to the Canadian tax losses with a tax benefit of \$564,198 and the tax effects of temporary differences.

In 2010, the Company executed an agreement for funding with the federal Government of Canada. As at December 31, 2014, the Company has received \$250,000 under that agreement. This funding is a repayable contribution to fund activity for a period from November 24, 2009 to December 31, 2014. The Company is required to repay the contributions in annual installments of \$31,250 from 2015 to 2022. Four repayments totaling \$125,000 have been paid as at December 31, 2018.

# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### OFF-BALANCE SHEET ARRANGEMENTS

The Company did not enter into any off-balance sheet arrangements during the twelve-month period ended December 31, 2018.

### RELATED PARTY TRANSACTIONS

Key management includes all persons named or performing the duties of Chief Executive Officer, Chief Financial Officer, President, Vice-President and Directors of the Company. The compensation paid to key management for services is shown below:

	2018	2017
Salaries	\$ 1,020,276	\$ 799,310
Post-employment benefits	24,000	-
Directors fees	79,500	98,250
Share-based compensation	-	187,514
Management fees paid to Pak-Alberta Consultant Inc.; a company owned by a former member of management	-	22,080

### SHARE DATA

As at December 31, 2018, BioNeutra had 45,949,787 common shares outstanding and purchase warrants exercisable for 3,170,000 common shares.

### SHARE CAPITAL (COMMON SHARES)

	December 31, 2018	December 31, 2017
Issued and Outstanding	45,949,787	45,949,787

# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### WARRANTS

	Number of Warrants	Exercise Price
Balance, December 31, 2018 and 2017	3,170,000	\$0.50

The outstanding common share purchase warrants of 3,170,000 were issued as part of a private placement of units that closed March 27, 2015. Each warrant entitles the holder to purchase one additional common share at a price of \$0.50 per common share for a period of 36 months following the date of closing, provided that if after four months and one day following the closing date the closing price of the common shares is equal to or exceeds \$1.00 for 20 consecutive trading days, then the warrants shall accelerate to expire on the date which is 30 days following the date a press release is issued by BioNeutra announcing the reduced warrant term or the date that written notice has been given to the warrant holder. There was no warrant activity during the year ended December 31, 2018.

### STOCK OPTIONS

During the year 2018, there were 415,000 stock options which were expired. As at December 31, 2018, the Company had stock options outstanding and exercisable for 2,670,000 common shares at a weighted average exercise price of \$0.43 per common share pursuant to the Company's stock option plan.

### STOCK OPTIONS

	Number of Options	Exercise Price
Balance, December 31, 2016	2,620,000	\$0.40
Options granted	965,000	\$0.55
Options expired	(500,000)	\$0.45
Balance, December 31, 2017	3,085,000	\$0.44
Options granted	-	-
Options expired	(415,000)	\$0.46
<b>Balance, December 31, 2018</b>	<b>2,670,000</b>	<b>\$0.43</b>

The Company uses the Black-Scholes option pricing model to estimate the fair value of the stock options. There were 965,000 stock option granted during the year ended December 31, 2017.



# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### RISK FACTORS AND UNCERTAINTIES

The Company is exposed to a number of risks and uncertainties that may affect the operations and success of the Company. Management and the Board work to identify and manage these risks on an ongoing basis. Risk management is carried out by financial management in conjunction with overall corporate governance. Several of the most important risks facing the Company at the present time are as follows:

#### ECONOMIC CONDITIONS

Changes in economic conditions, including without limitation, recessionary or inflationary trends, commodity prices, equity market levels, consumer credit availability, interest rates, consumers' disposable income and spending levels, unemployment, and overall consumer confidence can have a material adverse effect on the Company's business, financial condition, results of operations and cash flows.

#### DEPENDENCE ON THIRD PARTIES

The Company's operations rely on arrangements with third parties related to the manufacturing, production and commercialization of the Company's products. The Company's revenues are therefore dependent on the successful efforts of these third parties.

The Company's management has long-term relationships with multiple offshore manufacturers dating back to 1998. The Company works closely on an ongoing basis with these manufacturers to establish and enhance their quality control systems and improve synergies with the Company's demands and operations. Since the Company produces its VitaFiber™ IMO using its own patent-protected processes, it can effectively control the quality of the IMO that is produced using these patent-protected processes.

# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### COMPETITION

The functional food and beverage industry is characterized by competition and ongoing product development in all its phases. The Company competes with numerous other organizations in the development and sales of functional food and beverage ingredient products, including companies that have significant financial resources, marketing, sales, staff and facilities. The Company's ability to remain viable in the future will depend on its ability to develop, maintain and exploit its intellectual property, remain cost effective, and develop markets for its products. Competitive factors in the manufacture and sales of functional food and beverage product ingredients include price, methods of production, and the ability to deliver products to market. If the Company is not able to compete effectively in this regard, its future growth may be negatively impacted.

### KEY PERSONNEL

The success of BioNeutra depends upon the personal efforts of its senior management. The Company has in place a qualified and experienced senior management team that has successfully led the Company to increase revenues and expand market share in Canada, the United States, Europe, and the United Kingdom.

### REGULATION

BioNeutra, its subsidiaries and the products it sells are subject to a variety of laws and regulations, such as those enforced by Health Canada, the American FDA, the European EFSA and others, and may become subject to additional laws, regulations and guidelines in the future. The financial and managerial resources necessary to ensure such compliance could escalate in the future which could have a material adverse effect on the Company's business, financial condition, results of operations and cash flows.

Legal, tax and changes in the regulatory framework may occur that could adversely affect the Company, its subsidiaries and/or the shareholders of the Company. There can be no assurance that income tax, securities laws and other laws will not be changed in a manner which adversely affects the Company, its subsidiaries and/or the shareholders of the Company.

In order to manufacture and sell functional food and beverage product ingredients, the Company and its subsidiaries will require licenses from various governmental authorities. There can be no assurance that the Company and its subsidiaries will be able to obtain all of the licenses and permits that may be required to conduct operations that it may wish to undertake.

The Company's senior management team monitors regulatory changes daily and is qualified and prepared to adjust to any significant regulatory changes to ensure that the operations of the Company will not be adversely affected.

### FUTURE FINANCING

BioNeutra's principal source of funds is cash generated from its subsidiaries. It is expected that funds from these sources will provide it with sufficient liquidity and capital resources to meet its current and future financial obligations at existing business levels. The Company intends to raise capital for its future business development.

# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### LITIGATION

In the normal course of the Company's operations, or the operations of its wholly-owned subsidiaries, the Company may become involved in, named as a party to, or be the subject of, various legal proceedings, including regulatory proceedings, tax proceedings and legal actions, related to personal injuries, property damage, property tax, and contract disputes. The outcome of outstanding, pending or future proceedings cannot be predicted with certainty and may not be determined in the Company's favor.

Currently, BioNeutra North America is a party to ongoing litigation matters in Canada, the adverse outcome of which could have a material adverse effect on the Company's assets, liabilities, business, financial condition and results of operations.

Vita US Inc. has filed an originating application against BioNeutra seeking the followings:

- A declaration that agency agreements between the parties are binding upon the Defendants;
- An order requiring the Defendants to disclose all records they have with their dealings with leads provided to them by Vita US Inc.;
- Costs of the application; and
- Such other relief as the court deems just

No amount has been accrued in the Company's financial statements as the outcome of this matter cannot be determined and the amount of the loss cannot be reliably determined.

A claim has been made by Mohammad Hassan Qureshi and Pak-Alberta Consultant Inc. as the plaintiff, against BioNeutra North America Inc. The action was filed March 17, 2017. BioNeutra has filed a Statement of Defense and a counterclaim in this matter. No amount has been accrued in the Company's financial statements as the outcome of this matter cannot be determined and the amount of the loss cannot be reliably determined.

A claim has been made by one of the customers, seeking for various compensations and damages resulting from alleged mislabeling caused by the Company, in the amount of approximately \$1,300,000 USD. No amount has been accrued in the Company's financial statements as the outcome of this matter cannot be determined and the amount of the loss cannot be reliably determined. The Company will continue to assess the outcome and whether a provision for this claim can be reliably estimated, and will record an amount in the period at the earlier of when a reliable estimate of liability can be determined or the matter is ultimately resolved. In the case this claim materialized, the management plans to seek for possible recovery from the products liability insurance.

### PRODUCT LIABILITY CLAIMS

The Company has implemented a stringent quality control program with its manufacturers and has never experienced a product recall or product liability claim. In the event of a product recall or product liability claim, the Company has in place insurance to cover such risks.

### FINANCIAL RISK

The Company may become exposed to a variety of financial risks, including but not limited to: credit risk, concentration of risk, foreign currency risk, interest rate risk, and liquidity risk.

### ADVERSE WEATHER CONDITIONS, NATURAL DISASTERS, AND ENVIRONMENTAL FACTORS

Adverse weather conditions, natural disasters, and environmental factors for prolonged periods can materially impact the business, operating results and financial condition of the Company's subsidiaries and the operations of third parties collaborating with the Company. As a result, the revenues and operating results of the Company may be adversely and negatively affected.



# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### CUSTOMERS

There is a risk that the Company's customers may not purchase the same amount of the Company's products as in the past, or that purchases may not be on similar terms. To mitigate customer-based risks, the Company's management works continually to increase the breadth and depth of the Company's customer base on both business-to-business and business-to-consumer fronts.

### SUPPLIERS

There is a risk that a major unexpected change in the supply of the Company's products could have a material adverse effect on the Company's business and financial condition. To mitigate supplier-based risks, the Company's management has developed long-term relationships with multiple offshore manufacturers, dating back to 1998. The Company works closely on an ongoing basis with these manufacturers to nurture mutually beneficial relationships. In addition, the Company minimized this risk when operated its own production plant in 2018.

### EXPOSURE TO BUSINESS RISKS ASSOCIATED WITH INTERNATIONAL OPERATIONS

The Company intends to continue efforts to increase its international operations beyond the U.S. and Europe and anticipates that international sales will continue to account for a significant portion of the Company's revenue. The Company's international operations are subject to certain risks and costs, including the difficulty and expense of administering business and compliance abroad, compliance with domestic and foreign laws, costs related to localizing products for foreign markets, translating and distributing products in a timely manner. International sales may also expose the Company to risk from political and economic instability, unexpected changes in governmental policies concerning import and export of goods, regulatory requirements, tariffs and other trade barriers. International earnings may be subject to taxation by more than one jurisdiction.

Management is confident that regulatory approvals received from Health Canada, the US FDA, and the European Food Safety Authority will aid and facilitate the Company's entry into new international markets. Additionally, Management of the Company has extensive experience with international business and a keen understanding of the risks associated with international expansion and operations.

### INTELLECTUAL PROPERTY

The Company's competitive advantage is dependent on its intellectual property, including its patents and trademarks. As with all intellectual property, a risk exists that the Company's intellectual property could be challenged or struck out.

In light of such intellectual property risks, the Company vigorously monitors and defends against any infringement of its patents or trademarks. Additionally, the Company is involved in continuous research and development to grow and diversify its intellectual property asset base.

# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### INVESTMENT IN RESEARCH AND DEVELOPMENT

BioNeutra has made and will continue to make significant investments in research and development, production and commercialization of food and beverage ingredients, product development and related product opportunities. The Company donated its pilot plant equipment to University of Alberta and partnered with the university in innovative projects to develop a number of oligosaccharide related products. Commercial success of such efforts depends on many factors including the degree of innovation of the products developed, sufficient support from our strategic partners, and effective distribution and marketing. Significant revenue from new product and service investments may not be achieved for a number of years, if at all. Moreover, new products and services may not receive regulatory approval, and even if they do receive regulatory approval, they may not be profitable.

In order to ensure that the Company makes informed decisions in allocating its research and development efforts, the Company's Board has implemented a Scientific Advancement Committee. The primary functions of this Committee are to advise the Board and management on scientific matters involving the Company's research and development programs, to interact with academic and other outside research organizations, and to help the Company stay ahead of the curve and anticipate emerging concepts and trends in the functional food and beverage ingredient industry.

### CYBER SECURITY

BioNeutra has implemented various IT technology provisions, processes and practices designed to protect corporate networks, computers, programs and data from attack, damage or unauthorized access. This includes on-site, off-site aspects of IT systems and physical security of all aspect of the Company's business operations.

## FINANCIAL INSTRUMENTS

The Company's financial instruments consist of cash, accounts receivable, investment, accounts payable and accrued liabilities, note payable, mortgages payable, capital lease and repayable government contribution.

### FINANCIAL RISK MANAGEMENT

The Company's activities are exposed to a variety of financial risks: credit risk, concentration of risk, foreign currency risk, interest rate risk, and liquidity risk. The Company's overall risk management program focuses on the unpredictability of financial and economic markets and seeks to minimize potential adverse effects on the Company's financial results. Risk management is carried out by financial management in conjunction with overall corporate governance.

### FAIR VALUE

The following provides an analysis of financial instruments that are measured at fair value, grouped into levels 1 to 3 based on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within level 1 that are not observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data.

As at December 31, 2018, no financial instruments is measured at faire value. All other financial instruments are measured at amortized cost using the effective interest rate method.

# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

The carrying amounts and fair values of the Company's financial instruments are presented in the table below:

	December 31, 2018			December 31, 2017		
	Carrying Amount		Fair Value	Carrying Amount		Fair Value
<b>Amortized cost:</b>						
Cash and cash equivalents	\$ 1,497,580	(A)	\$ 1,497,580	\$ 1,385,689	(A)	\$ 1,385,689
Accounts receivable	4,543,507	(A)	4,543,507	2,985,537	(A)	2,985,537
Investment	515,651	(A)	515,651	508,069	(A)	508,069
Accounts payable and accrued liabilities	12,316,469	(A)	12,316,469	6,605,430	(A)	6,605,430
Repayable government contribution	125,000	(B)	N/A	156,250	(B)	N/A
Mortgages payable	9,026,119	(C)	9,010,723	10,115,656	(C)	10,031,596

- (A) The fair value of accounts receivable, investment, accounts payable and accrued liabilities, note payable approximate their carrying amounts due to the relatively short periods to maturity of these financial instruments.
- (B) The fair value of repayable government contribution cannot be determined as there is no market for financial instruments which bear no interest.
- (C) The fair value of mortgages payable and capital lease are determined by discounting the future contractual cash flows under the current financing arrangements at a discount rate that represents an approximation to the borrowing rates presently available to the Company for debts with similar terms to maturity. The fair value of mortgage payable and capital lease is measured at fair value-Level 2.

### LIQUIDITY RISK

The Company's exposure to liquidity risk is dependent on the collection of accounts receivable, purchasing commitments and obligations or raising of funds to meet commitments and sustain operations. The Company controls liquidity risk by management of working capital and cash flows. As at December 31, 2018, the Company was holding cash of \$1,497,580 (December 31, 2017 - \$1,385,689), accounts receivable of \$4,543,507 (December 31, 2017 - \$2,985,537) and had a working capital of \$9,328,968 (December 31, 2017 - \$5,434,247). Non-derivative financial liabilities of \$13,849,412 (2017 - \$8,837,804) will be settled within one year.

### CREDIT RISK

The Company's exposure to credit risk relates to cash, accounts receivable and investment arises from the possibility that the third party does not satisfy its contractual obligations. The Company minimizes its exposure to credit risk by keeping the majority of its cash with major chartered banks, reviewing new customers' credit history before extending credit, conducting regular reviews of its existing customers' credit performance and insuring the receivable amount with a third-party insurance company. An allowance for doubtful accounts is established based upon factors surrounding the credit risk of specific accounts, historical trends and other information.



# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### CONCENTRATION OF RISK

The Company is exposed to credit risk on the accounts receivable from its customers. As at December 31, 2018, approximately 46% (December 31, 2017 – 53% from three customers) of the trade accounts receivable balance is owed from two customers. The Company minimizes its exposure to the concentration of risk by developing a larger client base.

The Company obtains inventory from companies in Asia and is dependent on them to supply substantially all its inventory for resale. Should these suppliers substantially change their dealings with the Company, management is of the opinion that continued viable operations could be maintained through obtaining inventory from other manufacturers and until construction of a full-scale facility can be completed.

### FOREIGN CURRENCY RISK

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate as a result of a change in foreign exchange rates. The Company is exposed to foreign currency risk on cash, accounts receivable and accounts payable held in U.S. dollars and accounts receivable held in Euro. The Company does not use derivative instruments to reduce its exposure to foreign currency risk.

The table below indicates the foreign currency to which the Company had exposure as at December 31, 2018 and 2017 in Canadian dollar terms. The table also illustrates the potential impact to the Company's net equity as at December 31, 2018 and 2017 if the Company's presentation currency had strengthened or weakened by 5% in relation to the U.S. dollar, with all other variables held constant. In practice, the actual result may differ materially from this sensitivity analysis.

	Total Exposure		Impact on Net Equity	
	December 31, 2018	December 31, 2017	December 31, 2018	December 31, 2017
U.S. dollar	\$ 18,058,719	\$ 13,645,121	\$ 903,875	\$ 761,239
As a % of Net Equity	100.10%	97.77%	5.01%	4.89%

### INTEREST RATE RISK

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Company is exposed to interest rate price risk on its mortgages payable and capital lease which bear a fixed interest rate, and interest rate cash flow risk on its floating rate mortgage payable. Management does not believe this risk is significant.

# BIONEUTRA GLOBAL CORPORATION

## 2018 FINANCIALS

### CAPITAL MANAGEMENT

The Company's objective, when managing capital is to maintain adequate cash resources to support planned activities which include the continuing operations of the business. The Company includes shareholders' equity of \$18,058,719 (2017 - \$13,956,642) and mortgages payable of \$9,026,119 (2017 - \$10,115,656) in the definition of capital.

In managing capital, the Company estimates its future cash requirements by preparing a budget. The budget establishes the activities for the upcoming year and estimates the costs associated with these activities.

Historically, funding for the Company's plan was primarily managed through the cash generated from operations and through obtaining financing. There are no assurances that funds will be made available to the Company when required.

The company is not subject to externally imposed capital requirements.

### CONCLUSION

BioNeutra continues to post record sales. In 2018 we posted sales of \$37 million with a five year growth rate of 1,378%. We continue to expand our commercial sales division and see progressive growth in our retail department.

BioNeutra continues to stand out among its competitors by winning awards, honours and recognitions which continued in 2018. For the third year in a row the **Globe and Mail Report on Business** included BioNeutra in its prestigious ranking as one of Canada's top publicly traded companies. **Canadian Business** magazine ranked the Company at No. 55 among Canada's fastest growing companies.

BioNeutra's Edmonton-based production plant was certified for FSSC 22000 becoming the first manufacturer to do so in North America based on the Company's patent. QSA has conducted an audit of our plant and on March 5, 2019 certified BioNeutra's Edmonton with an organic status.

Creating and sustaining growth and shareholder value demands a skilled and experienced management team. One of our priorities has been to work on developing a strong executive team to manage our processes and best practices so that we can increase sales, continue to drive profitable growth and build brand equity.



**BioNeutra™**



**Stock Exchange**  
*Listing: BGA-V*

## BOARD OF DIRECTORS

(AS OF JULY 2019)

**Bill Smith**

Chairman and Senior Vice President

**Anita Liu**

Director

**James Li**

Director

**Branko Jankovic**

Director

**Jianhua Zhu PhD**

Director, Chief Executive Officer, President

**Darren Kostiw**

Director, Vice President/Sales & Marketing

## SENIOR MANAGEMENT TEAM

**Jianhua Zhu PhD**

President/CEO

**Bill Smith**

Sr. VP/Finance & Investor Relations

**Kent Wang**

Interim CFO

**Darren Kostiw**

VP/Sales & Marketing

**Gonglai Yan PhD**

VP/Manufacturing

**Vinti Goel PhD**

VP/Scientific & Regulatory Affairs

**Warren Michaels**

VP/Communications & HR





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