INGREDIENTS & ADDITIVES FOOD SCIENCE | 1



FOOD SCIENCE OCTOBER 2015

IBS AFFECTS MANY PEOPLE AND THE CAUSES MAY BE QUITE DIFFERENT FOR EACH PERSON. RESEARCHERS RECENTLY IDENTIFIED KIWIFRUIT EXTRACT. **ACTAZIN WHICH USES FOUR-WAY** ACTION TO SUPPORT DIGESTIVE **HEALTH AND WELL-BEING**

Kiwi for Irritable Bowel Syndrome (IBS)

- IBS is a chronic gastrointestinal disorder and its causes are currently unknown. Many consumers believe it is caused by dietary allergies or food sensitivities. The symptoms are also amplified during periods of stress
- Using a proprietary cold-pressed process, Actazin, a powdered ingredient derived from whole New Zealand green kiwifruit, is use in dietary supplements for the support of digestive health
- One in every four consumers suffering from IBS will approach a doctor or nurse for advice to alleviate the symptoms

Key causes and symptoms of IBS sparks opportunities in vitamins & minerals

Irritable bowel Syndrome (IBS) is a common disorder that affects the large intestine (colon). IBS commonly causes cramping, abdominal pain, bloating, gas, diarrhea and constipation. IBS is a chronic condition that one will need to manage long term. According to International Foundation for Functional Gastrointestinal Disorders (IFFGD), IBS affects between 25 to 45 million people in the United States; this makes up about 10- 15% of the population. In the wider worldwide population, it is estimated that between 1 in 10 and nearly 1 in 4 people; that is between 9-23% of total population has IBS.

It is not known what causes IBS, but a variety of factors plays a role. However, nearly two-thirds of consumers who have treated gastrointestinal (GI) ailments believe food or beverage consumption is a cause of their disorder, In particular, more than a third cite spicy foods and 31% say fatty foods caused their discomfort according to Mintel report Gastrointestinal remedies - US, July 2014. Some 39% consumers addressed stress as a leading

cause of GI disorders could provide opportunity for the vitamins and minerals market. Women also tend to identify stress as a culprit in GI health. (See Figure 1)

Kiwifruit improves bowel function in patients with IBS

New Zealand researchers led by Juliet Ansell have concluded that after four weeks of consuming supplements containing Actazin or Gold kiwifruitderived ingredients increased daily bowel movements by more than one bowel movement per week. The improved regularity and laxation without affecting the stool form can improve IBS symptoms. The researchers from The New Zealand Institute for Plant & Food Research Limited and the University of Otago also commented that an increase of greater than one bowel movement per week in a symptomatic population is considered a clinically meaningful magnitude of effect; the studies are published in Nutrition Research.

Actazin and Gold are powdered ingredients derived from whole New Zealand green (Actinidia deliciosa "Hayward") and gold (Actinidia chinensis "Zesy002") kiwifruit from which the skin

and seeds are removed and the remaining flesh cold pressed for use in food and dietary supplements. The kiwifruit is a good natural source of Vitamins C

FIGURE 1: CAUSE OF GI ALIMENTS AND DIGESTIVE ISSUES, US, MAY 2014

	%
Any food or beverage consumption	65
Stress	39
Spicy foods	36
Acidic foods or beverages	31
Over eating	31
Fatty foods	31
Eating too fast	26
Late night meals	25
Lack of exercise	20
Caffeine	19
Alcoholic beverages	16
Genetic trait	16

Base: 1006 internet users aged 18+ Source: Lightspeed GMI/Mintel

This is an excerpt from Gastrointestinal Remedies -US, July 2014: Figure 7. See full figure.

INGREDIENTS & ADDITIVES FOOD SCIENCE | 2

VITAMIN AND DIETARY SUPPLEMENTS CONTAINING KIWIFRUIT

Fitizen Multiple Enzyme Tablets, Taiwan

The enzymes tablets are made using first concept of yeast, 80 enzymes, which one of it is from kiwifruit and lactobacterias. They are claimed to help promote bowel movement and keep healthy digestion system.

Purelosophy Relax Multifruit Natural Drink, Russia

This multifruit natural drink is formulated to relieve stress, is free from gluten and preservatives, and features a low glycemic index.
The product is described as a 100% natural drink with herbal extracts.



GNC SuperFoods Berry Flavoured Super Foods Supreme Complete Formula, US

This product is a vegetarian blend of essential nutrients derived from some of nature's most beneficial super foods. This powerful formula blends ingredients that provide more antioxidant capacity than 13 standard servings of fruits and vegetables. It also provides more than 70 nutrients and antioxidant-rich super foods and is loaded with 5g of dietary fibre, digestive enzymes, super fruits, greens and antioxidants for optimal energy and support total digestive health.

7-Select Prune healFlavoured Beauty Drink, Taiwan

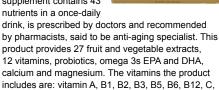
The beauty drink contains kiwifruit extract, American prune and Japanese patent formula to help promote metabolism. This product is high in fibre and contains 0g fat. It is suitable for vegans.



Solal Child Multivitamin Supplement, South Africa

This multivitamin supplement contains 43 nutrients in a once-daily

D. E. biotin and folic acid.



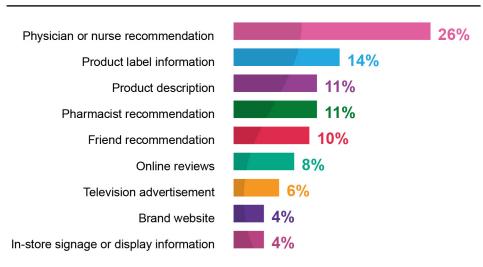
and E, potassium, antioxidants and the kiwi-unique enzyme Actinidin. Actazin is believed to support digestive health and well-being with its prebiotics, fibre, polypohenols and enzymes properties.

Recently in August 2015, Anagenix which produces Actazin and distributed in the US by Stratum Nutrition announced that the digestive health ingredient from green kiwifruit has been verified by the Non-GMO (non-genetically modified organism) Project as being Non-GMO Project Verified. New Zealand is GMO free by law, but Chris Johnson, Group Managing Director for Anagenix wanted to take a leadership role and ensure that the product aligned with consumer insights and global demand, and chose the Non-GMO Project because they believe they have the most credibility.

Different channels sufferers of IBS seek for help

Mintel report Gastrointestinal remedies - US, July 2014 also suggests that a physician or nurse is the source consumers most commonly rely on for information when purchasing an Overthe-counter (OTC) GI remedy. About one in four consumers (26%) are most confortable approaching their doctors or nurses when it comes to addressing GI remedies. Product label information is also important to 14% of the consumers who have treated GI ailments with OTC products, and another 11% consumers think product description is crucial. Manufacturers can invest in describing the active ingredients in kiwifruit extracts to educate consumers on its benefits with regards to treating IBS. Another 11% sufferers also turn to pharmacists for recommendations. (See Figure 2)

FIGURE 2: INFORMATION SOURCES FOR GI REMEDIES, US, MAY 2014



Base: 806 internet users aged 18+ Source: Lightspeed GMI/Mintel

This is an excerpt from Gastrointestinal Remedies – US, July 2014: Figure 6. See full figure.

INGREDIENTS & ADDITIVES FOOD SCIENCE | 3



- Since the majority of consumers think IBS is caused by certain food and drinks they
 consumed, manufacturers of kiwifruit extracts can demonstrate that this supplement
 can allow them to indulge in what they want and minimize the discomfort.
- Addressing the lead cause of GI disorders could provide greater market opportunity for kiwifruit extracts because consumers rely greatly on product label and product description to educate themselves on the effects of the vitamin supplements.
- Manufacturers of kiwifruit extracts can better promote their supplements if they go
 through the professionals since many consumers often heed the advice of doctors,
 nurses and pharmacists regarding the treatment of IBS.



Gwen Crothers
Global Food Science Analyst
gcrothers@mintel.com

INGREDIENTS & ADDITIVES 4



Gwen Crothers
Global Food Science Analyst
gcrothers@mintel.com

Biography

Gwen joined Mintel in 2014. She brings with her a wealth of food science and food industry knowledge after holding positions ranging from Research and Development to Technical Support and subsequently Key Account Management. Gwen has worked at many renowned companies namely, Nestle R&D Centre, Fraser & Neave Pte. Ltd., FMC Biopolymer and DSM Nutritional Products. She has lived in the UK, China and Australia, and currently based in her home country Singapore. She graduated with BSc(Hons) Food Science from University of Reading, UK.

Terms and Conditions of use

Any use and/or copying of this document is subject to Mintel's standard terms and conditions, which are available at http://www.mintel.com/terms

If you have any questions regarding usage of this document please contact your account manager or call your local helpdesk.

Published by Mintel Group Ltd

www.mintel.com email: info@mintel.com

Help desk

•	
UK	+44 (0)20 7778 7155
US	+1 (312) 932 0600
Australia	+61 (0)2 8284 8100
Japan	+81 (3) 5456 5605
China	+86 (21) 6386 6609
Singapore	+65 (0)6 818 9850

