

## NutriKane D™ FOR LOWER BLOOD SUGAR LEVELS

### For gut health to lower blood sugar levels.

Unlike many supplement companies that rely on old data to make claims, MediKane has sourced high quality foods from trusted sources, analysed their nutritional and medical value, then formulated them into a therapy. We then and specifically test the product that is in our sachet – in exactly the same way a pharmaceutical company would develop a new drug. In the last 7 years we have partnered with 3 of Australia's most prestigious universities and run 3 clinical trials with a major teaching hospital

that proves the effectiveness of NutriKane in treating (intestinal disorders) and improving blood sugar management. Even more important our products have been extensively tested "in the field" by health care professionals who have found that adding NutriKane D to a patients' normal lifestyle results in a better quality of life. Our commitment to good science and real products continues with 5 clinical trials and 4 new products planned.



NutriKane D is a safe, natural medical food provided in an easy to use sachet dose. It contains all of the types of dietary fibre (not just simple soluble fibre) and a wide range of essential micronutrients that have been shown to not only aid the maintenance of the microbiome but also reduce inflammation and ultimately help control blood sugar levels.



MediKane Holdings markets NutriKane D. MediKane takes a *farmercultural* approach to blend nature and science, creating a real complex food with a controlled dosage to obtain real (scientifically proven) results for our customers.



## How it Works



### Proven Prebiotic

Just like us the good bacteria living in our digestive tract need good nutrition to thrive. Unlike a vitamin tablet, the micronutrients in NutriKane D are bound in a natural fibre matrix. This means that the nutrients in NutriKane D are slowly released along the entire digestive tract feeding all the good bacteria that we need to thrive while starving the bacteria that do us harm.. As the fibre is broken down for food, scientifically it is very hard to identify a single bacteria that's good for us, rather it is well understood that having a healthy, and diverse, population is the most important thing.

NutriKane D is a broad spectrum prebiotic. It feeds all the good bacteria in the gut, which then reduces the inflammatory "bad" bacteria and provides essential "secondary metabolites" that have been proven to reduce inflammation and high blood sugar levels<sup>1,2</sup>. Simple prebiotics, such as fibre supplements and oligosaccharides, only feed one or two types of good bacteria. This could lead to an overpopulation of these types of bacteria. Even if it is considered a "positive" bacteria, an overpopulation in one type of bacteria reduces diversity, which is essential for overall health. NutriKane D is a true broad spectrum prebiotic that all of the good bacteria in the gut.



### Complex Micronutrients

Most foods focus on Macronutrients (protein, fat, carbohydrate, dietary fibre) and while these are important to survival, it is the micronutrients (vitamins, minerals, anti-inflammatories) that are essential to optimal health. Our bodies absorb nutrients as a whole and not as discreet molecules. supplements that have a large amount of a single micronutrient have been shown to often result in negative effects<sup>3</sup>. NutriKane D, as a medical food, contains different micronutrients at very high amounts compared to processed foods. However these micronutrients are still present at physiological levels. By having micronutrients present at the correct amounts in a natural form, the body is absorbing what it needs to repair damage and maintain homeostasis (the correct levels of biological functions). Because the nutrients are from natural foods, they are also bound to the fibre, so they slowly release over time, as the bacteria break the fibre down. It is well understood that a slow release of nutrients over the whole gut is far better than a quick release of single vitamins<sup>4</sup>.



### Soluble, Insoluble Fibre & Resistant Starch

The product contains a mixture of soluble and insoluble fibre, as well as resistant starch in the ratios that are found in vegetables. Insoluble fibre is fibre not used by us or the microbes in our gut, so there is something to physically pass through the whole length of the gut. It has been conclusively shown that this physical interaction with the intestinal lining is essential for good gut health, as well as preventing serious disease such as colon cancer<sup>5-7</sup>.



### Lowers BSLs

Blood sugar management is an incredibly complex issue because it is so important to human health. We now understand that there are several ways that diabetes can occur (virus infection, lifestyle choices, liver or pancreas damage etc.)<sup>8</sup>. By providing the body with the nutrition it needs NutriKane D can help the body adjust to many of these negative pressures. Additionally, one simple way to manage blood glucose levels is to lower the Glycaemic Index (GI) of foods<sup>9</sup>.

Meals with high GI are foods that are digested, absorbed and metabolised at a faster pace, resulting in blood glucose highs and lows. High GI foods make us hungry faster and have been shown to contribute to obesity and weight gain. These foods are particularly a problem for people with diabetes as they often cause large fluctuations in their blood sugar levels after eating. Foods with low GI are foods that result in smaller fluctuations in blood sugar levels.

Having a diet containing generally low GI foods is one key for your long-term health, partially by reducing the risk of type 2 diabetes and heart disease. Foods with a GI of 55 and below are considered low GI foods. Being a diabetic with a diet predominantly consisting of low GI foods is beneficial, as your blood sugar levels are more easily controlled. It is important to have a diet consisting of moderate amounts of low GI carbohydrate foods regularly over the day to keep blood sugar levels consistent<sup>10</sup>.

NutriKane has been proven to lower the glycaemic index of foods, as well as improving nutritional outcomes. During our 7 years of research on NutriKane D, we conducted experiments on most types of foods and showed that the GI of every food we tested is lowered when eaten with a glass of NutriKane D.

NutriKane does not need to be taken with food to see a benefit. However, studies have shown that the blood glucose lowering benefits of NutriKane are maintained for several hours after consumption. So if you happen to take NutriKane D between meals blood glucose highs are still reduced next time you eat.

Publications, Trials & Presentations					
	Focus	Title	N*	Publication	Summary of Outcomes
1	Diabetes Management	Efficacy of a defined food product (NutriKane D™) in improving blood sugar level and bowel dysfunction in adult diabetic subjects: a randomised controlled trial	51	Physical and rehabilitation medicine journal int. Peer reviewed Journal	<ul style="list-style-type: none"> <li>• Significant drop in fasting glucose levels under controlled hospital stay that were more effectively maintained when the patients went home (compared to hospital care alone).</li> <li>• Significant reduction in BMI whilst in the hospital.</li> <li>• HbA1c reduced in just 3 weeks (average).</li> <li>• Over 70% of participants were happy with NutriKane (compared to less than 50% for medications)</li> </ul>
2	Hospital Induced Constipation	Evaluation of the structured bowel management program in inpatient rehabilitation: a prospective study <sup>11</sup>	100	J Rehabil Med. 2015 Sep 3;47(8):734-40. doi: 10.2340/16501977-1999.	<ul style="list-style-type: none"> <li>• 63% of participants were displaying constipation even though they were using current treatments including fibre supplements and stimulant laxatives</li> <li>• 85% of participants experienced improvements in bowel function and overall wellbeing as a result of the trial</li> <li>• Cognitive function and overall quality of life was also increased as a result of the intervention.</li> </ul>
3	Intestinal & Digestive Health	Rehabilitation outcomes in persons with spina bifida: a Randomized controlled trial <sup>12</sup>	54	Journal of Rehabilitation Medicine Peer Reviewed Journal, October 2015	<ul style="list-style-type: none"> <li>• The NutriKane group experienced significant improvement in bowel function, cognitive function and overall quality of life compared to the control group.</li> <li>• 55% of participants in the control group reported improved bowel function with NutriKane use after the direct intervention stage had ceased</li> </ul>
4	Modes of Action	3 x PhD Theses on microbiome interactions, anti-inflammatory effect, and nutrient composition.  Third thesis is yet to be submitted.		<p>Bucio-Noble, D. Nutraceutical properties of whole dried sugarcane extracts studied by proteomics. 2017, PhD thesis, Macquarie University, Sydney, Australia.</p> <p>Gamage H. K. A. H. Investigating the impact of dietary fibre on the gut microbiota. 2017, PhD thesis, Macquarie University, Sydney, Australia.</p> <p>Chong, R., W., Investigating the influence of dietary fibre on intestinal health. 2018, PhD Thesis Macquarie university, Sydney Australia</p>	<ul style="list-style-type: none"> <li>• Proven positive effect on the microbiota in the intestines which in turn produces secondary nutrients that improve blood sugar control and reduce inflammation</li> <li>• Identified anti-inflammatory pathways and determination that they are different from those found in resveratrol.</li> <li>• Identification of several essential micronutrients and proof that they are bound to the matrix in a biologically active form.</li> <li>• Identification of disease specific improvements to blood sugar management and inflammation.</li> <li>• Proof that including NutriKane into an intermittent fasting diet maintains healthy microbiome resulting in better health.</li> <li>• Proof that consuming NutriKane results in changed interactions between the gut microbiome and the intestinal wall that results in modified signalling in the body.</li> </ul>

\* Number of participants



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Minerals	mg/kg	% RDI per serve	Benefit
Chromium	7.6	88.67%	Essential to blood glucose management and insulin sensitivity
Selenium	2.4	12.92%	Antioxidant, essential to enzyme function
Iron	217	5.84%	Haemoglobin
Molybdenum	0.4	7.78%	Essential component for the bodies detoxification enzymes
Potassium	541	0.06%	Essential to neural function
Sodium	15	0.01%	Essential to neural function
Zinc	21.7	0.25%	Essential to immune system and enzymatic function
Magnesium	795	0.75%	Multiple functions including sugar metabolism and insulin sensitivity, muscle and enzyme function
Manganese	123	8.20%	Essential for bone formation and the metabolism of carbohydrate and amino acids.
Calcium	690	0.21%	Essential for bone development. Important for enzymatic function
Silica	175	*	Essential for bone and connective tissue development. Aids in the absorption of other minerals. *No RDI has been determined though maximum tolerance is 30mg.
Copper	17.5	4.22%	Essential for Iron utilisation, connective tissue and the immune system

**All ingredients are tested for purity and presence of nutrients with each production run to guarantee efficacy.  
Recommended Daily Intake / Adequate Intake values are the average of male and female - NHMRC**

NUTRITIONAL INFORMATION		
Serving size: 6.5g		
	Ave Qty Per Serve	Ave Qty Per 100g
Energy	65 kJ	973 kJ
Protein	0.3 g	3.9 g
Fat, Total	0.1 g	1.9 g
- saturated	0.0 g	0.2 g
Carbohydrate	1.7 g	22.3 g
- sugars	0.1 g	1.2 g
Dietary Fibre	3.4 g	44.7 g
Gluten	Not Detected	Not Detected
Sodium	1 mg	17 mg
		<b>RDI</b>
Chromium	26.6 µg	88%
Selenium	8.4 µg	13%
Vitamin C	70 mg	150%
Vitamin A *	500 µg	25%

## Directions for Use

Pour sachet contents into a glass and add approximately 250ml of water, stir thoroughly and drink before or during a meal. Add additional water to reduce the natural sweetness if required.

Alternatively, NutriKane D can be stirred into juice, yoghurt or smoothies.

The recommended dose is:

- **Adults:** Take one sachet twice a day before or during meals.
- **Children 5-11 years:** Take one sachet once a day before or during a meal.
- **Children under 5:** Not recommended for children under 5, although there is no evidence that it will adversely affect them in any way.

\* As β-carotene; a natural source of pro-vitamin A found in vegetables such as carrots, with no known toxicity.

## References

Representative References below; for a full list of references please visit [www.nutrikane.com.au](http://www.nutrikane.com.au)

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