CLINICAL NUTRITION WHITE PAPER

Improving Senior Health Outcomes Through Resistant Starch Based Nutrition

A Population Health, Digestive Wellness & Preventative Care Framework for Institutional Healthcare

Prepared By

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Executive Overview

Seniors Farm proposes a clinically aligned functional nutrition intervention using Resistant Starch Type 2 naturally derived from green banana flour. The intervention is designed to support digestive wellness, bowel regularity, metabolic stability, and culturally inclusive nutrition within long term care and institutional healthcare environments.

1. Clinical Background

Digestive dysfunction, constipation, glycemic instability, and appetite irregularity remain persistent challenges within aging populations and institutional healthcare settings. Long term care residents frequently experience reduced dietary fiber intake, dehydration risk, medication related bowel disruption, and reduced gastrointestinal motility.

2. The Institutional Nutrition Problem

Many institutional breakfast systems continue to rely heavily on refined starches, highly processed cereals, and rapidly digestible carbohydrate systems that may contribute to poor satiety, blood glucose volatility, digestive inefficiency, and increased nursing intervention requirements.

3. Proposed Resistant Starch Intervention

Dina’s Jamaican Green Banana Porridge Mix utilizes green banana flour as its primary carbohydrate matrix. Resistant Starch Type 2 resists digestion in the small intestine and undergoes fermentation in the colon, supporting microbiome activity and short chain fatty acid production.

4. Potential Clinical Benefits

Emerging resistant starch literature suggests potential benefits including improved bowel regularity, slower glucose absorption, increased satiety, improved stool consistency, digestive wellness support, and reduced reliance on supportive gastrointestinal medications.

5. Scientific Validation

Food safety validation has been conducted through Public Health Ontario Laboratory under the direction of the Thunder Bay District Health Unit. Current findings confirmed Salmonella spp. and Escherichia coli were NOT DETECTED, while water activity levels ranged approximately from 0.07 Aw to 0.19 Aw.

6. Pioneer Ridge Pilot Findings

An institutional sensory evaluation and menu integration pilot conducted at Pioneer Ridge Long Term Care demonstrated positive operational feasibility, strong steam table holding performance, and a 66% resident approval rating during taste testing.

7. Population Health & Operational Impact

This intervention model aligns with preventative healthcare goals surrounding digestive wellness, reduced medication dependency, culturally inclusive nutrition, operational efficiency, and improved resident quality of life.

8. Proposed Observation Study

A future 90 day clinical observation initiative may evaluate bowel regularity trends, glycemic response patterns, appetite tolerance, medication utilization, and institutional operational outcomes associated with resistant starch based nutrition integration.

"We believe culturally relevant functional nutrition can become a meaningful part of preventative healthcare and senior wellness support."

CONTACT INFORMATION

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