

Rice consumption and risk of type 2 diabetes

White rice consumption and risk of type 2 diabetes: meta-analysis and systematic review

Conclusion Higher consumption of white rice is associated with a significantly increased risk of type 2 diabetes, especially in Asian (Chinese and Japanese) populations.

Abstract

Objectives To summarise evidence on the association between white rice consumption and risk of type 2 diabetes and to quantify the potential dose-response relation

Design Meta-analysis of prospective cohort studies.

Introduction

Humans have a long history of cultivating rice crops; rice was first domesticated approximately 8000 to 9000 years ago by people living in the region of the Yangtze River valley in China.¹⁻³ Rice is now grown worldwide and provides food for





A Global Perspective on White Rice Consumption and Risk of Type 2 Diabetes

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Preventive policies to improve diet and stem the rising global burden of type 2 associated with a higher risk of type 2 high-carbohydrate diets (low in satution, and moderate-fat Mediterranean diets reduced diabetes risk (2). These findings suggest that diets with variable

prospective cohort studies in Asian countries, higher white rice consumption was with high intake levels.

association between white rice consumpthere was limited overlap in intake dis-

The PURE study is a large prospective cohort study using standardized methodology that facilitates comparing rated fat and high in fiber), combined tion contributes to the development of countries also represents challenges with physical activity and caloric restrictive 2 diabetes, particularly in populations for analyzing and interpreting the data. First, the differences in rice intakes Bhavadharini et al. (12) evaluated the for the various regions were so large that



"There is a correlation between high white rice consumption and the risk of developing type 2 diabetes. Research found that of the 10 countries with the largest number of diabetes cases, 6 countries in Asia and South America have rice as the main staple food."

Research needs throughout the value chains



Procurement – Related Agencies (Gov. and Non-gov. cooperations)

Human Resources Management – Expert consultants

Infrastructure – Low GI Center (One stop services)

Technology Development- Low GI kit / Standard in vivo GI services

breeding /
Agricultural
Extensions /
Cereal and
legumes / Fruits
and vegetables

Low GI products / Formulations / Pilot plants / Up scale In vitro test kit /
In vivo standard
method (ISO
26642:2010) /
R&D supports

Consumer survey
/ Public
awareness /

Total solution for low GI products

Primary Activities

